A treatise on the eclectic southern practice of medicine / by J. Cam. Massie.

Contributors

Massie, J. Cam.
National Library of Medicine (U.S.)

Publication/Creation

Philadelphia : Thomas, Cowperthwait & Co., 1854.

Persistent URL

https://wellcomecollection.org/works/n7unjyna

License and attribution

This material has been provided by This material has been provided by the National Library of Medicine (U.S.), through the Medical Heritage Library. The original may be consulted at the National Library of Medicine (U.S.) where the originals may be consulted.
This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.

wellcome collection

Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

A

TREATISE

ON THE

ECLECTIC SOUTHERN PRACTICE

OF

MEDICINE.

BY

J. CAM. MASSIE, M. D.

"He who does his best, however little, is always to be distinguished from him who does nothing."—DR. JOHNSON.

Surgeon Gen'l's Office
Library
No. 25151
Washington, D. C.

PHILADELPHIA:
THOMAS, COWPERTHWAIT & CO., NO. 253 MARKET ST.
NEW ORLEANS—J. B. STEEL.
ST. LOUIS—A. H. SHULTZ & CO.
1854.

WBJ
M417t
1854

Film no. 10390, item 3

Entered according to Act of Congress, in the year 1853, by
J. CAM. MASSIE, M. D.,
in the Clerk's Office of the District Court of the Eastern District of Pennsylvania.

CRISSY & MARKLEY, PRINTERS,
Goldsmiths Hall, Library Street, Philadelphia.

TO

THE MEDICAL GENTLEMEN,

WHOSE PARTIALITY INDUCED THEM TO

SOLICIT THE WRITER TO PREPARE THIS WORK,

IT IS INSCRIBED, WITH SENTIMENTS OF ESTEEM,

BY THEIR FRIEND AND OBEDIENT SERVANT,

J. C. MASSIE, M. D.

33750

Medical Correspondence.

CHAPPELL HILL, September 11, 1852.

DR. J. C. MASSIE:

DEAR SIR—The profession is much in need of a work on the Theory and Practice of Medicine; and such a work written by one of their own number, and presenting the various modifications which diseases assume in Texas, has long been needed. You being an eclectic in its broadest sense, and enjoying an enviable reputation, both as a Physician and Medical Correspondent, and from our knowledge of you, personally, we are confident there is none better qualified by enlarged reading and ample experience to supply this desideratum than yourself.

We, therefore, hope that you will not fail to present to the public, at as early a period as possible, the result of your reflections and experience in this interesting department of Medical Literature.

Entertaining the hope that you will oblige your friends by embarking in this undertaking, we have the honor to be, with high appreciation,

Very truly your friends,

WM. S. ROGERS, M. D., Chappell Hill,
W. LEIGH TUNSTALL, M. D., Do.
J. W. LOCKHART, M. D., Do.
R. J. SWEARENGIN, M. D., Do.
J. RANDOLPH WEIR, M. D., Do.
J. BLACK, M. D., Fort Bend,
J. A. WOOLFOLK, M. D., Texana,
J. L. IRION, M. D., Montgomery,
D. C. DICKSON, M. D., Grimes county,
F. T. WELLS, M. D., Texana,
WM. A. MINNOCK, M. D., Spring Creek.
LOUIS A. BRYAN, M. D., Houston,
SIM. HOPKINS, M. D., Leon county,
W. C. McGOWN, M. D., Frelsburg.

REPLY.

HOUSTON, TEXAS, November 17, 1852.

GENTLEMEN:—In acknowledging the receipt of your letter of the 11th of September, I cannot refrain from expressing my grateful acknowledgments of the complimentary manner in which your partiality has induced you to speak of me: such kindness has more than its ordinary value, when coming from gentlemen occupying the distinguished position in society as well as in our common profession, which universal assent accords to you.

There are few among us who would not entirely agree with you in the great utility of such a work as you speak of—a work on the Theory and Practice of Medicine, particularly on the practice as specially adapted to the peculiar manner in which diseases manifest themselves in Texas, for the existence of such peculiarities has often been observed by our most intelligent physicians: indeed, I may say, all medical men have more or less felt the necessities of such a treatise. Situated as we are, scattered over a wide spreading country, without the opportunities of association, which in the great metropolitan cities give so much impulse to the progress of every science, and of which so many glorious institutions attest the readiness of mankind to avail themselves, our experience becomes isolated and individual, and we live, learn and die, without contributing the results which our acquisitions of knowledge have produced, or warning against the errors which we have committed, either to our cotemporaries or those who come after us. Such reflections have often been present to my mind, and it has always been with me an object of desire and ambition to produce a work of the kind, which might be worthy of attention, and procure for me, if not the recompense of applause, at least the consciousness of having endeavored to be useful. Our profession is eminently philanthropic, and to all worthy members, the pecuniary gratifications we are compelled by circumstances to receive, and even the rewards of well-earned reputation itself, however dear it must be to every sensitive mind, are both secondary to the happiness we derive from relieving suffering humanity—such, also, should be the sentiment of the medical

writer. I had even gone so far as to prepare many notes upon this subject, and had accumulated a mass of facts, derived from the experience of others as well as my own most careful observation, and, while I admit that this intention has never been entirely dismissed from my mind, yet the cares of a most laborious practice, and an unaffected diffidence of my ability to ensure or merit success, together with a fear of being deemed presumptuous and the dread of failure, have hitherto deterred me. Encouraged by your most flattering invitation to undertake what so many of you are equal, if not more competent to perform, I will venture on the task; but in doing so, I shall not rely alone on my own feeble and unsupported abilities, which you are pleased so much too highly to estimate, but shall expect to receive from each of you, and the members of the profession generally, a cordial and welcome assistance.—We have a common, not an individual aim to accomplish.

Some observations upon the manner in which, in my opinion, such a work ought to be written, may not be here inappropriate, and I rely upon your indulgence if I detain you with a few.—Works styling themselves of "Domestic Medicine," have deluged the country, not only to the prejudice of the profession, (which is in this respect of minor importance) but to the abuse of the public, and the great sacrifice of human life. Any work upon medicine which pretends to dispense with the necessity of calling professional aid in all cases of importance, is in general a wicked imposture, or where presented in good faith, a preposterous idea. The great desideratum is, a treatise, not so strictly technical as to be confined in usefulness to the profession alone, but while purely scientific, at the same time composed in that SIMPLE and POPULAR style which renders subjects, however abstruse, comprehensible and even entertaining to the general reader. I do not mean that it should not possess the necessary formulas of practice, but these should be so blended with theory as to render the reason and the philosophy of the employment of the remedies indicated clear and intelligible—in short, a book, which would be a desirable addition to the library of the practitioner, and moreover a valuable aid to every father of a family, enabling him to act with understanding in cases of emergency, to judge of the qualifications of the physician he might be compelled to employ, and guard him against the imposition of those ignorant empirics, the great number of whom I am surely not severe

in regarding as the curse of this country; such a work, as you justly intimate, must be thoroughly eclectic, and not (as we have seen so many of late) devoted to the absurd and ephemeral theories of the day, which seem to succeed one another as season succeeds season, and however contradictory or opposite they may be, can yet each become the fashion of the hour. These I shall leave to those who delight in them. Attention should be called to whatever are already acknowledged facts, and for practice, these facts should be appropriately classified and distinctly presented to the mind. Neither novel views nor fanciful theories ought, in such a treatise, to be advanced or advocated. How far you may approve such a plan, or I may be able to carry it out with success, remains to be proved. My main reliance is on your generous aid. After the accomplishment of my task, should I, indeed, be permitted to fulfill it, I shall be more than rewarded, if I can say in the words of Sir William Temple—"If I have not been able to inform men more than they knew, I may yet have given them occasion to consider more than they do."

Renewing my thanks for the honor you have conferred upon me, with my best wishes for your personal welfare, I remain, respectfully, your obedient servant,

J. C. MASSIE, M. D.

To Messrs. W. S. ROGERS, R. J. SWEARENGIN,
W. LEIGH TUNSTALL, J. RANDOLPH WEIR,
J. W. LOCKHART, F. T. WELLS,
J. BLACK, WM. A. MINNOCK,
J. A. WOOLFOLK, LOUIS A. BRYAN,
J. L. IRION, SIM. HOPKINS,
D. C. DICKSON, W. C. McGOWN.

PREFACE

It would be a grateful task to us, by way of introduction to the following essay, to give our readers a rapid sketch of the history of the practice of medicine. We should delight to journey with them through the labyrinths of times long gone by, and hand in hand to trace with them the paths of the science of medicine from its first rude beginning when superstition was its principal means of action and a few simple herbs formed its whole body of agents, through its various advances, retrogressing and occasional declines, until it at length assumed the proportions of a correct and continually progressive science, and became exclusively practiced by a particular class of persons, as a distinct art. But time and space and the practical nature we have endeavoured to give to our work, preclude this attempt, which after all might prove more curious than useful, and we shall confine ourselves to a few remarks on the influence which the different theories that have from time to time prevailed, have exerted over the practice of medicine.

Let us commence by examining the notions of the Egyptian physicians, the earliest of whom we have any record. How

would their theories sound to us? They taught that there were thirty-six demons, each of which was supposed to have the power of exercising an influence over a particular part of the body; and the physician called to relieve the sick invoked the demon, according to the part affected.

The Greeks surpassed them not. On the contrary, borrowing from them, they deified the first physician who appeared amongst them, made the healing art hereditary in his family, and for the cure of all diseases relied upon incantations.

Even Hippocrates, one of those sublime geniuses whom Providence from time to time raises up and who so far surpass their cotemporaries as to create and mark an era in any science they touch, who won from his own age and maintains to the present day the title of Father of Medicine—even he was not free from this all pervading influence of theory.

Imbued with the principles of the Pythagorean philosophy—a philosophy which teaches that fire is the first origin of all matter, producing by its agitations and peculiar combinations the four elements: fire, earth, air and water. He considered that the human body itself was composed of these four elements, and taught that the fluids are the primary seat of all diseases, an opinion which still prevails in the school of the Humoralists.

But he enjoyed the peculiar advantage which so few physicians possess of not allowing himself in practice to be carried away by his own favourite theory. Relying, perhaps, too much on the curative powers of nature, which he called φυγίς, he delayed applying his remedies until the fatal crisis, when neither science nor art could avail. And some of his more sanguine followers in this particular gave rise to that system of treatment which we may be permitted to term the expectant school.

From the time of Hippocrates to the days of Galen, various schools and theories had prevailed, all of which we do not deem it necessary to notice. The Methodists, or rather the Methodics, which latter term we prefer as distinguishing them from the religious sect of the former name, far from relying too much, as did Hippocrates, upon the curative powers of nature, rushed into the other extreme, and taught that the efforts of nature in disease should be positively counteracted. And to this school we are, perhaps, indebted for the still prevailing maxim "*contraria contrariis curantur.*"

Two schools of diametrically opposite principles at the same time divided the medical world—the Dogmatists and the Empyrics. The Dogmatists taught that in the treatment of a disease we must first study its nature and causes, and apply remedies philosophically indicated by the supposed theory to which their previous investigations led them. The Empyrics, on the other hand, discarding all inquiry into the origin and cause of the malady, and the constitution or idiosyncracy of the patient, attempted its removal by the administration of such remedies as had heretofore been found to give relief in similar cases, however contrary they might appear to any supposed theory of the disease.

Of these two rival sects and their opinions, Celsus has given us a most interesting history. He himself servilely followed neither of them. He reverted to the Hippocratean doctrine of the four humours, and like his great master, in the treatment of disease was too prone to watch for and rely upon the operations of nature herself, a practice which in acute diseases can never be indulged in without extreme danger.

Of the Dietetics and Pharmaceutics, two other rival sects, one word is all we can pause to say. The former professed to cure all diseases by particular regulations of diet, and the latter relied exclusively upon the action of drugs.

All of the different theories of which I have hitherto spoken were in vogue when Galen appeared, to throw new light, order, system and sound philosophy into the science of medicine, which undoubtedly owes him much. But he was not free from the influence we are condemning and allowed himself to be swerved by his own peculiar theories. He insisted on the existence of three gases or spirits, which, he contended, exerted a peculiar influence upon the organs in which they were located; that the natural spirit had its abode in the liver, the vital in the heart, and the animal in the brain. Still adhering to the notion of the four elements and four humours of Hippocrates, and believing the fluids to be the seat of all diseases, he yet contrived to embarrass that doctrine by so many minute subdivisions and fantastic combinations as to deprive it of the only merit it had—*its simplicity*. Wedded to his theories, and like the Dogmatists forcing his treatment to conform to his system, he closed his eyes to a variety of facts and phenomena which were daily surrounding him, and which it is to be regretted so great a mind did not notice, record and transmit to posterity.

Between the times of Hippocrates and Galen the Alexandrian school had grown up, which, under the patronage of the Ptolemies, had drawn together the professors and students of medicine from all the then known countries, and formed a kind of university from which much might have been expected. But after the death of Galen, all such hopes were disappointed.

Original genius, paralyzed, as it were, by his immense authority, suffered progress in the healing art to cease, and obedient to his nostrums, men carried science and rational practice no farther. It cannot be denied, that from his death, medical science declined. That individual merit continued to live in it, such names as Sextus Empyricus and others prove. But medicine took no active march until the prevalence of the teachings of the Arabian school.

The accidental preservation of the writings of Hippocrates and Galen, at the destruction of the Alexandrian library, gave to the few Mahometan men of genius a turn towards medical inquiry. Several Arabian physicians of eminence flourished. The names of Avicenna, Avinzoa, Avaroes are too well known to require even mention from us. It is true that to them we owe no theoretical progress. Not original in their character, their theories were based upon the writings of their Greek predecessors. Yet their industry was the means of introducing to the profession many remedial agents not before known, of which, when vegetable, their climate, soil, and overland commerce with the more distant East, were singularly prolific; and candour compels us to acknowledge that to them is due the improvement of extracting from vegetable substances their more active principles, thereby giving rise to the chemical school, and the special art of the apothecary.

Chemistry, that noble science, emerging from the obscurity in which it had been so long detained by the alchymists—those blind and greedy searchers after the philosopher's stone, which was supposed to have the power to commute all metals into gold —and profiting by all that had been really valuable in their labours, (the preparations of mercury, antimony, and other

medicines of metallic bases, being almost exclusively due to the alchymist,) became of incalculable influence in the practice of medicine. But, like every thing else useful, carried too far when attempted to be reduced to a universal system, it was applied by a medical sect to explain the causes of life, disease and death. The various parts of the human body, they endeavoured to subject to a chemical analysis, (an analysis which, in those times, must have been very imperfect, and for the most part conjectural,) and such remedies were employed for the cure of diseases, which were supposed to be analogous to the chemical composition of the vital organs. As if chemistry could create! as if the living body could be acted on by the same process as the matter of which they supposed it to be composed in its inert and unorganized state.

At the head of this school stood Paracelsus, the greatest and most sublime of quacks, in ancient or modern times. He pretended to have discovered the great panacea, the universal cure of all diseases, the vain dream of the older alchymists—not without interest for its tinge of romance—which he professed to hold concealed in the hilt of his dagger, an imposture which his own death satisfactorily exposed. He publicly burnt the writings of Galen, on the grounds that they could no longer be of any utility, and were calculated to check, by their authority, the discovery and advancement of truth. Nor did he and his followers disdain to resort to astrology and magic, vain incantations, idle rites and ceremonies in the treatment of their patients. Sad comment on the superstition of the age in which he lived!

Between this school and the Galenists, an exterminating war was for a hundred years carried on, and cannot be said to have finally terminated till the seventeenth century. They persecuted

each other with an unrelenting activity, to which the annals of religious bigotry can alone furnish a parallel. It is not for us to estimate the comparative merits of these two schools. It may suffice to say that if the former was too "expectant," the latter was too daring and experimental in the treatment of disease.

At length the Galenists gave way to a gradual revival and preference of the doctrines and practice of Hippocrates and the Chymists, to what we shall call the modern chemical school. This last, under the lead of such great men as Sylvius and Willis, and Sydenham, applying chemical knowledge, now truly scientific, with physiology, which the practice of anatomy had by this time made a certain science, discarding the vagaries of their predecessors, Paracelsus and company, yet not divested of the Hippocratian theory, that the fluids are the seat of all diseases, that the fluids themselves are the result of a certain chemical fermentation of the material elements of the human body, some of which fluids, in the healthy action of this kind of human still, should be acid, others alkaline, and that disease is caused by the deranged fermentation of these fluids, and their improper production; for instance, that fever arises from the too great acidity of those fluids which ought to be alkaline, and in the treatment of disease, faithful to the before quoted axiom: "*contraria contrariis curantur:*" they administered acids or alkalies, respectively, according to the supposed diagnosis. As a rare proof of the imprudence of rejecting entirely any proposed system, experience has established the fact that alkalies are valuable remedies in cases of fever; but this by no means proves the correctness of the theory, nor justifies the attributing all diseases to one common cause.

Even this modern chemical sect had, in its turn, to give way

to a new system, a new school. The mathematical, or rather mechanical physicians, making extreme deductions from the truth that the construction of the skeleton, the muscular action, the motion of the limbs and other large organs, are evidently mechanical, taught that all the vital system was constructed on the same principles, controlled by similar motive powers, and in like manner subject to the laws of gravity and impulsion. Looking upon the whole body as a kind of machine, put together upon the principles of hydraulics and hydrostatics, composed of its tubes, canals, &c., they could consider disease in no other light than as the consequence of the obstruction, or laxity, or other derangement of these mechanical forces, arising from the contraction or enlargement of the pores, &c. This system for a long time prevailed. A glance of the mind will convince any one, that its indiscriminate pursuit in the treatment of disease, would occasion the alternate abuse of purgatives and astringents, stimulants and narcotics, according to the supposed seat and cause of the special disease. Yet even this school has contributed its share to the progress of medical science, by causing to be more minutely studied and explained a variety of phenomena; the vermicular motion of the bowels, for instance, which without it would have remained much longer unknown.

Pending the contest between these two opinions, appeared Van Helmont, in Holland, who laid the foundation of a new sect—the Vitalists. He was followed by Stahl, who enlarged and improved upon the theory of his predecessor. They taught that the functions of life depend neither upon a chemical nor a mechanical action; that the organs of the body are of themselves inert, and controlled by a certain invisible and unsubstantial spirit, or agent, which the former called *archeus*, and the latter

anima; that it was the business of this agent (which they did not suppose to be an intelligent and independent being, but a kind of property of the living body,) to preserve the body in health, to prevent its natural tendency to plethora—for that it had such a tendency was a part of their doctrine—to counteract which was the sole duty of the physician, to watch the operations of the supposed *anima*, and to co-operate with it by regulating the evacuations.

Hoffman, the contemporary of Stahl, approaching nearer the truth, attributed the phenomena of life, health and disease to the exclusive action of the nervous system. To this nervous influence he added the supposition that diseases, though sometimes originating in the fluids, more generally found their seat in the solids. He supposed the body to contain a certain moving fibre, possessing a certain tone necessary to its healthy action, spasmodic or atonic, according to its too great or too little action. How far he, individually, allowed his theory to rule his practice, we cannot say; systematically followed, it is clear that it would indicate nervous stimulants or anodynes as the almost exclusive remedies.

Throughout the prevalence of the schools we have mentioned, the humoral pathology had maintained its sway; but this was destined now to be utterly denied, and the Solidists arose, who taught that all diseases are the results of the morbid action of the solids, although they admitted that through them the fluids might be secondarily affected,—a doctrine, though not sufficing to establish a perfect theory, yet certainly containing a great deal of truth, and which, to this day, maintains a very general prevalence.

About this time appeared the great Boerhave, whose ambition

it seems to have been to form an eclectic school. He, indeed, selected from the doctrines of his predecessors whatever he deemed valuable; but out of this selection he built a system of his own, which, with the authority of a master, he passed upon his pupils, *as a system*, and so far fell short of true eclecticism, which the University of Edinburgh, in the person of Cullen, was destined more nearly to approach. This great physician exploded the idea of there existing in truth any one peculiar theory, of itself sufficient to account for and relieve the symptoms of all diseases. Edinburgh may well glory in the honour of having produced him to the world. He must ever be looked upon as a great benefactor of the human race.

Notwithstanding the rationality of Cullen's teachings, such is the proneness of the human mind to be misled by the apparent simplicity of systems, which, attractively yet deceitfully, promise science without toil, that he found, in his life-time, and from amongst his own pupils, too, a rival, who opposed his efforts for the real progress of medicine, by attempting to set up a new theory. Brown taught, in the very university where Cullen flourished, as a theory applicable to all diseases, that there exists in the body a certain property, which he called "*excitability;*" that every thing acted upon the body, through this property, as an *excitant*, and that disease is the result of excessive or defective excitement; consequently, that its treatment must be solely directed to increase or diminish this excitement, as the case may be, without paying the slightest attention to, or endeavoring in the least to allay the specific symptoms with which it may be attended.

One other practitioner of great eminence we cannot refrain from mentioning, as an instance of the mischief, we are labouring

to condemn, of a systematic adherence in practice to a favourite theory. We allude to the celebrated Broussais. This French physician, struck by the constant recurrence of inflammation in so many diseases, especially in that most numerous class, fevers, considered irritation the primary cause of all diseases. Acting on the maxim, "*ubi irritatio, ibi flux*," he applied his whole treatment to allaying this supposed irritation or inflammation, to accomplish which he could find no better instrument, one which many of his followers, at least, have wielded with an unsparing hand, the indiscriminate use of the lancet. To bleed locally and generally was their incipient treatment, to which, if the disease yielded not, re-leech! re-cup! re-bleed! and when some stalwart patient survived this drain of vital energy, behold the cure! He was pointed out as an instance of the truth of the theory.

In this hurried sketch of the different medical schools and sects, we have not spoken of the Anatomists, because, incalculable as are the services rendered to the curative art, their influence upon the *practice* of medicine—our theme—has been altogether indirect in its character. But, to give our readers some idea of the labours of these great men, and a specimen of the gradual development by which a knowledge of the human body has been acquired, we will trace, in a few words, the successive steps which led to the discovery of the circulation of the blood. We cannot do this better, more clearly, nor yet more briefly, than in the words of England's eminent Cardinal, the Archbishop of Westminster. Some of our readers may be tempted to smile at our quoting from a theologian on a medical subject, but they must be little aware of the vast fund of general and scientific knowledge to be found in the writings of the dig-

nitaries of the Church; and the true disciple of the eclectic school culls flowers wherever they may grow, appreciates a gem in whatever casket. Cardinal Wiseman says:

"The school at Padua had flourished for many years, and perhaps it has given to the world the greatest series of extraordinary men in the medical profession which it has ever seen in one place. Cuvier, one, certainly, of the best authorities of modern times, says that the science of animal physiology is due to three men who ought to be considered fathers of that science. These are Vesalius, Fallopius, and Eustachius. The two first belong to the school of Padua. Fallopius and Eustachius applied themselves more particularly to the examination of the veins, which were then but little understood and known. Realdus Columbus, a pupil and successor of Vesalius, published a work upon the veins in 1559; and for the first time communicated the knowledge of a really great discovery—that of the lesser circulation of the blood through the lungs. What he had discovered he makes known so clearly, that so far there is no doubt that it belonged to him. The next great man who succeeded Vesalius was Fabricius ab Aquapendente, who held the chair of medicine at Padua for fifty years. The existence of valves in the veins had been discovered by a Dutch physician, Sylvius; but it was Fabricius who first discovered that the valves of the veins opened towards the heart, so that he concluded and taught that in the veins the blood flows to the heart, and cannot return from it. Now, see how near you are to the circulation of the blood. You need only one element more; you only require to know how it flows through the arteries. Harvey was the pupil of Fabricius in Padua. He made one more experiment, and the grand dis-

covery was made. It is only wonderful that it had not occurred to his venerable preceptor. He made a ligature of an artery; he found that the inturgescence of the artery caused by the arrest of the blood, was above, not below the ligature, and therefore established that the blood is propelled from the heart to the extremities through the arteries, and then returns through the veins to the heart. Thus he incorporated in his discovery what had already been established by Columbus and Fabricius. Now, is not glory, and very great honor due to the men who prepared the way for this great discovery, and are they not entitled to share it with Harvey?"

But why should we dwell any longer in examining the diversity of opinion and practice in those who have gone before us? Is not the mischief of an exclusive adherence to false theory sufficiently manifest among us? Is there a physician that has not his peculiar notion, and consequently a practice of his own? One traces the origin of all diseases to the liver, another to the heart, a third to the spinal column, a fourth to the nervous system, a fifth to the digestive apparatus, and so on.

More "*pathies*" exist than we have time or inclination to describe, but however unpleasant the task, on account of their general prevalence, and because we have ourselves given them a thorough test, we feel it a duty to speak with candor upon two. We mean Homeopathy and Hydropathy.

And for the first. Finding that a burn could be sometimes cured by the approach of the burnt part to the fire, noticing the specific effect of preparations of bark in the cure of intermittent fevers, Hahneman, from behind the mountains of Saxony, invented and proclaimed to the world his new theory; that those

remedies will cure the disease which produce its symptoms in the well person, and the medical world stood in astonishment at the announcement of the new maxim: "*similia similibus curantur.*" Hahneman lacked not ingenuity to sustain, by plausible arguments, his new idea, and seconded his notion by the Hippocratean doctrine of watching and assisting nature, and, as he extended it, anticipating her action. Joined to this, he taught that the nerves are the seat of all diseases, and this portion of the human frame being the most susceptible, he came to the conclusion that the remedies he recommended should be exhibited in doses infinitesimally small. Like most other theories, his system has not been without its use. In some maladies of a chronic character, the former part of his theory may be beneficially employed, his error consisting in applying it in both its parts to all diseases. Any practical physician knows, that in acute and inflammatory cases, in those diseases which so suddenly attack and so speedily and fatally terminate, such a practice would be worse than idle, for even the most active remedies, and the most prompt in their operation, are sometimes and too often inefficient.

The second can be more summarily disposed of. Doctor Stewart, of London, in a lecture before the classes of the Middlesex Hospital, has already done it to our hand. He thus describes the Hydropathists, the enlightened and philosophical followers of *Doctor* Pressnitz: "those who profess to cure every disease by packing in a wet sheet, and flushing the sewers of the animal microcosm twice a day with oceans of cold water."

From this review of the vagaries of the human mind, from which so many and so great men have not been exempt, out of these contradictions and conflicts of opinion, what lesson should

the wise physician learn? No theory so absurd but may contain some germ of truth, and none so well established as to command a blind obedience. No observation of facts, no application of remedies from experience of their good effects, can make the physician, unless he understands the physiology and pathology, the constitution, construction, normal and abnormal action of the human body. And, on the other hand, no science so complete, no theoretical information so copious, can suffice to form the medical character, without the strictest attention to the most minute observation of facts and phenomena, and a just regard to the experience of others in the application of medicinal agents. Truth is generally found between extremes. And the eclectic physician, as his name implies, culls from all theories what they may contain of good, and, free from prejudice and bigotry, never disdains a practice which experience and reason have proved to be beneficial; at the same time he is no slave to antiquity, no violent hater of novelty. He knows no dread of innovation, simply as such, and is as ready to avail himself of any new lights and discoveries, as he is considerate and regardful of the past.

Unfortunately, there is too great a tendency in the human family to adhere with dogmatical tenacity to old errors, rather than search after truth, and even truth, when ascertained, is often rejected, or with too much reluctance adopted. When Harvey discovered, or rather demonstrated the circulation of the blood—to which we have already had occasion to allude—history tells us, that not a single physician in England, over forty years of age, appreciated or acquiesced in the discovery. Even at the present day, an old physician of high reputation, Doctor Cartwright, of New Orleans, forgetting that a fact once

affirmatively proved can never afterwards be overthrown, has published a new hypothesis upon this subject. Times have been, when to promulgate a new discovery, was to invite persecution, and to be the open advocate of a new truth, frequently led to the prison or the stake. Mankind seems to have an appetite for falsehood. And when a truth is for the first time ascertained and promulgated, many persons, too ignorant to investigate, too stupid to comprehend, or too bigoted to admit, stir up the prejudices of the unlettered multitude, and after having cried on the pack, are reckless, for their part, if the truth itself, were it possible, should perish with its advocates. Enoch and Noah, as a great man said, were not the only ones derided by the multitude for adherence to duty. Truth has always had her martyrs. Socrates, with smiles received the hemlock—the popular reward of his labours and devotion for his country and his race.

No matter how beneficial to the human family, no matter how calculated to relieve suffering, let a mode of cure be new, it is met with sweeping denunciations of humbug and quackery. Pretension, alas! is more common than knowledge. An empty nod from an old official head has, too often, more influence over the masses than real merit in the young. He who has the manliness to lift up his voice in defence of newly discovered truth against old theory, though acting in behalf of the best interests of the human family, is too often doomed to penury and persecution. Such has been the case in our own day, and in this land of liberty. But "the school-master is abroad in the land," and we may hope to realize a better state of things. Henceforth, those who would sway and control public opinion in respect of science, must themselves be scientific. Age, as age, can claim no extra privilege, unless the mind has been improved in

proportion. The will of the old doctor is no longer omnipotent, and his *ipse dixit* has ceased to be oracular.

The true school of medicine, the Eclectic school, may now be said to reign—a school that is no slave of antiquity, while no encourager of rash experiment. Eclecticism teaches, not to attribute diseases to one common cause, but to behold in them the operation of an immense variety of internal and external causes, the exact and respective influence of which it is extremely difficult to ascertain. Does Eclecticism lay herself down at the feet of old authority? No! Does she run after every new fangled doctrine? No! Does she galvanize into existence exploded theories? No! Does she strain the intellect and pervert facts, to find reasons for a new theory? No! Steering safely between Scylla and Charybdis, she looks upon no phenomenon as too humble to arrest her attention, no precedents so respectable as to challenge their imitation. With a diligence untiring, she investigates the cause of the disease; with indivertible patience and magnetic certainty, she watches its symptoms and progress; and, as a sound philosophy indicates, applies the remedy which experience has approved. In this school have we studied, in this school have we laboured, and the following pages are our feeble tribute to the profession we love.

We have not taken up an ambitious pen, nor written with the expectation of distinction or reward. Upon the call of our brethren, we have crudely and hastily, in the midst of distracting cares and anxieties, thrown together our experience; we have mingled with it some unsophisticated reasonings, and submitting the work to an indulgent public, we trust that it may be of some utility.

Houston, *Texas, Sept.* 1853.

NOTE.—Not having the original authorities at hand, in the historical portions of the foregoing preface, we have relied upon the able compilation of Doctor Boztock, the correctness of whose citations of ancient writers, we once had an opportunity to verify. We shall never forget the impression his able work on the History of Medicine made upon us, many years ago, when we first entered upon its study, and we regret that circumstances have never since enabled us to give it a re-perusal. We have not attempted a strictly chronological order, and had to rely greatly on memory. We by no means present it as a complete account of the matters on which it treats, but convinced that such a treatise as it contemplates would be useful to the profession, and in the hope that it might be suggestive to some abler pen.

GENERAL PREFACE.

You are aware that this volume was solicited by my medical brethren; I have endeavoured to write a purely scientific work, and at the same time have tried to compose it in a simple and popular style, which renders abstruse subjects comprehensible and even entertaining to the general reader. We are not of that class who believe every man capable of being his own doctor, and candor and truth compel us to give you warning, that he who is not thoroughly acquainted with anatomy and physiology, should not tamper with medicine, unless in cases of emergency.

I claim for the work something more than a mere compilation. I have consulted numerous works, and I profess I am indebted to each for some of the best materials in them. Where quotations appear, I have named the author, or noted the part as quoted.

I have written this work at the solicitation of my friends, unaided and unadvised; and disrobing myself of those declarations of diffidence that seem to depress some authors, and viewing honestly and candidly that such feelings are most chastely felt when they are least expressed, I have only to assure you that this work was written, as I before observed, in the midst of many distracting cares. Imperfect as it may be, I respectfully present and submit it to the public taste, confident it will meet the fate it justly claims.

TABLE OF CONTENTS.

PREFACE.

With a Condensed History of the Science of Medicine to the present time.

INTRODUCTION.

Practical, General, and Local Remedies.

MEDICINES AND THEIR USES.

GENERAL DIAGNOSIS.

The Faculty of distinguishing one Disease from another.

GENERAL PROGNOSIS.

The Course and Termination of Disease.

THE PULSE.

The Mode and Manner to be adopted in examining the same, and its Pathological conditions.

SPECIAL PATHOLOGY AND THERAPEUTICS.

General Diseases.

1. Idiopathic Fever.
2. Remote Causes of Fever.
3. The Origin of all possible Cause of Fever.

FEVERS.—FEBRES.

Intermittent, and Ague, and Fever.—Febres Intermittens.

1. *Quotidian*, Paroxysms coming on every 24 hours.
2. *Tertian*, Paroxysms coming on every 48 hours.
3. *Quartan*, Paroxysms coming on every 72 hours.

Simple Remittent Fever.—Febres Remittens.

Continued Fever.

Typhus Fever, *Typhus Mitior.*

Congestive Fever, *Febris Congestia.*

Yellow Fever, *Typhus Icterodes.*

EXANTHEMATICA—ERUPTIVE FEVERS.

Small Pox.—*Variola.*

1. Distinct. 2. Confluent.

Varioloid, Variola—Small Pox in a modified form.

Varicella.

Chicken Pox.

Measles, *Rubeola or Mobilli.*

Scarlet Fever—Scarlatina.

Dengue.

CONSTITUTIONAL DISEASES.

1. Rheumatism.
2. Gout.—Podagra.

INFLAMMATIONS.—PHLEGMASIA.

1. Phlegmon—Phlegmonons Inflammation.
2. Erysipelas—Erysipelatons Inflammation.
3. Erysipelas of Children.

DISEASES OF THE BRAIN.

Inflammation of the Brain and its Membranes.—*Phrenitis.*

DISEASES OF THE EYE.

1. Inflammation of the Eye.—*Ophthalmia*—Simple Conjunctivitis.
2. Chronic *Inflam.* of the Eye.—Chronic Ophthalmia.
3. Catarrhal and Purulent Opthalmia.
4. Gonorrhoeal Opthalmia.
5. Scrofulous Opthalmia.

Dimness of Sight.—*Amaurosis.*

DISEASES OF THE LIVER AND ITS APPENDAGES.

Inflammation of the Liver or Hepatitis.
Induration, Softening, etc.
Jaundice.—*Icterus.*

DISEASES OF THE SPLEEN.

1. Acute Inflammation of the Spleen.—Acute Splenitis.
2. Chronic Inflammation of the Spleen.—Chronic Splenitis.

DISEASES OF THE PULMONARY TISSUE AND PLEURA.

1. Winter Epidemics.
2. Miasma.—A Cause of Pulmonary Disease.
3. Inflammation of the Pleura, or Pleurisy.
4. Inflammation of the Lungs or Pneumonia.
5. Inflammation of the Bronchia, or Bronchitis, Acute and Chronic.
6. Various Organic Affection of the Lungs.
7. Pulmonary Consumption, or *Phthisis Pulmonalis.*
   1. Catarrhal. 2. Tubercular.
8. Difficult Respiration.—Asthma or Phthisic.

DISEASES OF THE STOMACH.

1. Inflammation of the Stomach or Gastritis.
2. Chronic Inflammation of the Stomach, or Chronic Gastritis.
3. Indigestion or Dyspepsia.
4. Nausea and Vomiting, or Vomitus.
5. Heartburn or Gastralgia.

DISEASES OF THE INTESTINES, STOMACH, AND BOWELS.

1. Inflammation of the Small Intestines, or *Enteritis.*
2. Constipation or Obstipatis,
3. Dysentery, or Dysenteria.
4. Diarrhœa, or Purging.
5. Colic, or Colica.
6. Flatulent Colic, or Colica Flatulenta.
7. Bilious Colic, or Colica Biliosa.
8. Painters Colic, or Colica Pictonum.
9. Constipated Colic, vulgarly called "Patent Dry Belly Ache."
10. Piles—*Hæmorrhoids.*
11. Falling of the Fundament, or Prolapsus Ani.
12. Diseases of the Stomach and Bowels, conjointly.

13. Cholera Morbus, or Puking and Purging.
14. Cholera.
15. Cholera Infantum. or Vomiting and Purging of Infants.

DISEASES OF THE MOUTH AND THROAT.

1. Diffused Inflammation, Aphthæ or *Thrush.*
2. Ulceration Inflammation, or Canker—*Cancrum Oris.*
3. Inflammation of the Tonsils, or *Tonsillitis.*
4. Croup—Catarrhal and Pseudo Membranous—*Cynanche Trachealis*
5. Mumps—*Cynanche Parotedea.*

DISEASES OF THE URINARY ORGANS.

1. Inflammation of the Kidneys, or *Nephritis..*
2. Infiammation of the Bladder, or Cystitis.
3. Chronic Inflammation of the Bladder, or Chronic Cystitis.
4. Suppression of Urine—*Ischuria Dysuria.*
5. Retention of Urine.
6. Incontinence of Urine —*Eneuresis.*
7. Immoderate flow of Urine—*Diabetis.*

1. Insepidus. 2. Meletus.

DISEASES OF THE SKIN.

1. Vesicular Diseases, *Tetter or Herpes.*
2. Scaly Diseases, *Itch—Scabus or Psora.*
3. Carbuncle, or *Anthrax.*
4. Malignant Carbuncle.
5. Cytogamus Affections—*Scald Head—Tinea Capitis.*
6. Nettle Rash, or *Urticaria.*

DISEASES OF THE NERVES, VEINS, AND BRAIN.

CONVULSIVE DISEASES.

1. Nervous Headache— *Cephalalgia.*
2. Neuralgia, or Tic Doloreaux.

1st. Facial Neuralgia, (Lip) 2d. Lumbago. 3d. Sciatica, *Pain in the Hip.*

3. Epileptic Fits—*Epelipsia.*
4. Apoplexy—*Apoplexia.*
5. Whooping Cough—*Pertussis.*
6. Hiccough, or *Singuttus.*
7. St. Vitus' Dance—*Chorea.*

8. Convulsions of Children—Convulsiones.
9. Tetanus—Cramps.

1st. Body thrown backwards—*Opisthotonos.*
2d. Body bent forwards—*Emprosthotonos.*
3d. Body thrown to one side—*Pleurosthotonos.*
4th. Lock Jaw—*Trismus,* Confined to the Jaw.

10. Lock Jaw of Infants—*Trismus Nascentium.*
11. Delerium Tremens—*Mania-a-potu.*
12. Paralysis—Palsy.
13. White or Tumid Leg—*Phlegmasia Dolens, or Crural Phlebitis.*

HEMORRHAGES.

DISEASES OF THE BLOOD AND BLOOD-VESSELS CONJOINTLY.

1. Hemorrhage from the Nostril—*Epistaxis.*
2. Hemorrage from the Lungs—*Hæmoptysis.*
3. Hemorrhage from the Stomach—*Hæmatamesis.*
4. Hemorrhage from the Urinary Organs—*Hæmaturia.*
5. Hemorrhages from the Uterus—Womb—*Hæmorrhagia.*
6. Flooding—Excessive Uterine Hemorrhage.
7. Hemorrhage from the Bowels—*Melænae.*

DISEASES OF THE SEROUS AND CELLULAR TISSUE.

1. Dropsy of the Abdomen—*Ascites.*
2. Ovarian or Encysted Dropsy.
3. Dropsy of the Brain—*Hydrocephales.*
4. Dropsy of the Chest, or *Hydrothorax.*
5. Dropsy of the Scrotum—*Hydrocele.*
6. Anasarca Dropsy of the Cellular Membrane, or General Dropsy.

VENEREAL DISEASES.

1. Clap—*Gonorrhea.*
2. Pox—*Syphilis* or *Lues Venera.*
3. Impotency—*Anaphrodisia.*

DISEASES OF THE ABSORBENT SYSTEM.

SCROFULOUS DISEASES.

1. Kings Evil—*Scrofula.*
2. Rickets—*Rachitis.*
3. White Swelling—*Hydrarthos.*

DISEASES OF THE EAR.

1. Inflammation of the Ear—*Olitis.*
2. Deafness—*Paracusis*

DISEASES OF THE ORGANS OF REPRODUCTION.

1. Retention of the Menses—*Amenorrhœa.*
2. Suppression of the Menses—*Amenorrhœa Suppressiones.*
3. Difficult Menstruation—*Dysmenorrhœa.*
4. Whites— *Leucorrhœa* or *Flour Albus.*
5. Falling of the Womb—*Prolapsus Uteri.*

DISEASES

THAT I HAVE NOT REFERRED TO ANY PARTICULAR CLASS.

1. Scurvy—*Scorbutus.*
2. Tumors—*Tumores.*
3. Sprain—*Luxatio.*
4. Ulcer—*Ulcus.*
5. Worms—*Vermes.*
6. Scalds and Burns—*Vulmus ex Ustione Factum.*
7. Frostbitten—*Gelatus.*
8. Teething—*Dentitio.*
9. Milk Fever—*Febris Lactæ.*
10. Excoriated Nipples—*Papillæ Excoriatæ.*

OPERATIVE SURGERY, ETC.

PRACTICE OF MEDICINE.

Practical, General and Local Remedies.

An ill directed application of almost any remedy may lead to grave errors and may cost lives. And every practitioner of medicine should be fully impressed with the importance of this fact, and at the same time be well informed as to the most scientific modes of applying them; this can only be done by investigating all of the different theories, embracing those facts and remedies which we deem to be valuable, and discarding that which to us may seem absurd. By adopting this rule we will be well informed as to the resources of our art, and our exertions will seldom result in failure, but by adopting one theory, you may embrace a wrong mode of applying remedies, which is sure to result in a positive harm.

We will have many remedial measures to recommend in this work, some of which we flatter ourselves are generally unknown to the profession. Our object is to lay before you a practical work, one that every line may be relied upon, and in doing so we will commence with the use, the abuse, and still more common neglect of BATHING. We have no remedial means more generally

available, and none more capable of exerting a beneficial influence; it has, however, power to do evil as well as good, and it requires some skill to apply properly cold or warm water, and still more vapor or medicated baths.

You have frequently heard parents talk of *hardening* their children by exposing them to all vicissitudes of weather, teaching indifference in regard to the variations of temperature. This process is often put into practice with children of delicate constitution, and to such it is very hazardous. The experiment should never be tried on any child or person who is the least unsound, or has a scrofulous diathesis.

The best and most direct mode of guarding the body against injury from cold, is probably afforded by the use of the COLD BATH or shower bath. When this is taken in the morning, or at least every other morning, the surface of the body becomes familiar or inured to a degree of cold, greater, it is probable, than it is likely to encounter during the remainder of the day; and it is extremely fortunate that we possess a criterion of the propriety of continuing this expedient; for instance, when the sense of cold does not remain long, but is followed by a glow of warmth, the cold shower bath is sure to do good. If, on the other hand, however, after you have taken the bath, headache supervenes, and you feel chilly and languid, it should at once be abandoned, at least for a while.

By observing these simple rules, you can make yourself and children hardy, without the risk which their neglect would impose. Whilst upon this subject I would remark that, *cold water* is preferable to warm, as a general rule; the former has a tendency to produce active reaction, and less apt to occasion a chill.

WET SHEET.

This is an invaluable remedy in many instances; when properly applied, it has a great tendency to produce reaction in debilitated patients, who would not be enabled to endure, probably, the application of cold in any other mode; in its application, however, I have generally succeeded best by immersing the sheet in weak lye, which can be done by adding saleratus to the bath. This application is strengthening, and if there is hyperremia (congestion) in any one organ, it has a great tendency in relieving the congestion and equalizing the circulation. In extreme prostration, where the circulation is very feeble, (especially from deficiency of blood,) it then requires great care in its application. "When properly modified to meet the actual state of the patient, it may be said to be the most soothing application that can be administered to the external sentient surface." It may in truth be compared in its calming effects to a soothing poultice placed over some portion of the body; but its great remedial power is in the fact, that it carries off feverish heat, which heat is employed in converting the moisture in the sheet to vapor, which is produced by the heat of the body acting on the moisture of the sheet, forming a steam bath of its own making. As a general rule, if the wet sheet should be applied for the purpose of reducing irritation, it should not be allowed to remain on long enough to induce sweating. It is perfectly applicable where there is morbid irritation; a valuable remedy in internal and external inflammation, either acute or chronic. In its application, when your patient is laboring under a high fever, it may be necessary to employ a blanket or two for covering. It can

be applied with success in reducing fever and inflammation, counteracting the necessity of the lancet; it produces no actual loss of strength to your patient, which is quite the opposite from bleeding, and which latter remedy is almost always followed by debility. You will frequently find cases where it will only be necessary to apply the wet sheet over the body, leaving the extremities covered with a blanket; for there are persons whose organic energy may suffice to supply the surface immediately over the vital organs with caloric, but would fail to do so in regard to the extremities; these are the cases where you are required to exercise judgment. I have never had a case requiring its application over thirty-five minutes, but have frequently suffered them to remain an hour, followed by good results. Whatever may be the principle upon which the wet sheet acts, the southern physician will find, during the treatment of most of our diseases, that it is an indispensable remedy, and one on which he can safely rely. The wet sheet, in a great variety of cases, will be found an excellent substitute for the vapor bath.

VAPOR BATH.

Water, in the state of warm vapor, exerts a very powerful and depressing influence over the animal economy. There are a great variety of modes for its application, none of which has precedence over another, and all so simple that any one is capable of giving it. I am fully sensible to the fact, that this powerful remedial agent has been badly abused, and carried to a very ridiculous extent, under the old application of "*steaming.*" Nevertheles, when properly applied, it has considerable claims in allaying inflammatory excitement,

and in violent acute disease is entitled to great consideration. When used, the viscid matter, which will be found on the surface of the body after its application, should be washed off by the alkaline bath, and rubbed dry with a coarse towel.

ALCOHOLIC VAPOR BATH.

This bath has many advantages over the simple Vapor bath; it possesses all of its advantages, accompanied with stimulating effects of the alcohol which rises in vapor. In administering this bath you place the patient in a solid bottomed chair, and a very good mode is to place his feet in a warm pedeluvian bath, place a blanket around him, and let him drink freely of some diaphoretic tea. Horse mint is found here in great abundance, and makes a good ptisan. Place your alcohol in a saucer or open dish, and put it under the chair; if the vapor becomes too warm, you will open the blanket and let in fresh air. When your patient complains of fatigue, you will wrap him up in the blanket, and place him in bed, and suffer him to perspire for some length of time; you will then rub his body with weak lye, and rub dry with a coarse towel.

I flatter myself when you use this bath for the purpose of producing perspiration, that you will afterwards frequently have recourse to it; it does not have that tendency to prostrate which follows the simple vapor bath, nor is your patient so liable to take cold afterwards. I have had great success with this remedy, in relieving rheumatic and other inflammatory fevers. This remedy I suggested some years ago to some medical friends, who entertain for it an opinion equal to my own.

THE ACID BATH.

This bath may be made by adding cider vinegar to water. The Acid bathing has been highly extolled in mercurial cases. The vegetable acids are far more preferable in the great variety of cases to those of a mineral origin. Circumstances frequently arise which may indicate the application of the Sulphuric, or Nitro-muriatic dilutions, in which cases I generally use about 2 ʒ of the latter to a quart of water, and sponge the body; a very good criterion is to have the water about as sour as distilled vinegar. When employed in this manner it is a useful auxiliary in chronic induration, or abscess of the liver, in cutaneous diseases, and in syphilitic or mercurial cachexia. It is highly extolled in the proportions of Nitro-muriatic acid ʒiii, to water three gallons, as a foot bath. When employed in this way, Dr. Scott says, it acts like a charm during the passage of biliary calculi through the duct.

THE ALKALINE BATH.

There are a great variety of baths, such as the Artificicial Barege bath, Sulphuric-gelatinous bath, Sublimate bath, and Artificial Harrowgate bath, all of which baths are suited generally to Prurigo, (Itch) and other cutaneous diseases, and all of which are too well known to require any particular notice; but of all the medicated baths, and probably the most simple, I conceive the Alkaline bath the most important. While in the act of perspiration there is a secretion from the subcutaneous glands, this secretion is of an oleaginous character; it deposits itself upon the surface of the cuticle, and there forms in many instances a positive mechani-

cal obstruction to perspiration, by closing the mouths of the capillary vessels. And an author of some celebrity asserts, by this alone, sometimes, the escape of a large portion of fluid from the system is prevented, and the effete matter which it was destined to carry off in solution is thrown back upon the different tissues, and acts upon them as an irritant, or rather re-enters as a poison. "*Now, water, either cold or warm, will not affect this oily deposit,* but an alkaline wash combines with the oleaginous substance, and thoroughly cleanses the skin, while at the same time it is a gentle tonic, and stimulates the mouths of the cutaneous vessels, which is highly conducive to the healthy performance of their functions. In my own practice I generally use the wood ashes, by pouring scalding water on them—saleratus or soda, either of which is a good substitute. It should be so diluted as not to produce any unpleasant sensation to the surface; if it is desirable to have it stimulating, alcohol or capsicum can be added. The temperature should be about luke warm, and if properly persevered in it will produce desquamation from the skin, and allay itching in all its various forms."

EMOLLIENTS

Have a very great tendency to diminish the vital tone of the solid tissues of the body; they render them more flexible, and protect the surface from the action of acrid matter; their action, in my opinion, is directly on the part to which they are applied, and indirectly through the medium of the circulation. I frequently use them in the treatment of inflammation, either general or local, in painful ulcerations, and diseases of the urinary organs. The ulmus fulva (elm bark) is

one of the best applications of this character, it is impervious to air; when the bark is ground very fine, it is a good addition to other substances to make them adhesive. I regard flaxseed as the next best application. In a case of anthrax (malignant carbuncle) I employed a recipe of my friend Dr. Ewing of this city; I esteem it highly, especially where there is a tendency to mortification; it is flaxseed, cinchona bark, and charcoal; the seeds should be boiled until the whole becomes a soft pulp. The carrot is a valuable article in many cases; it should be grated fresh, with boiling water poured on. Of the non-medicinal substances employed as emollients, warm water is decidedly the most important, and the higher the temperature at which it can be applied, without the actual production of pain, the greater will be its emollient power; and for this reason, when applied in the form of vapor, it will be found productive of the most advantage.

MEDICINES AND THEIR USES.

UNDER this head I have determined to introduce an article for the benefit of the profession, devoted entirely to the heading of this subject, deeming it one of the most important to have it constantly before the eye of the reader, as nothing is more important than having a proper knowledge of the *modus operandi* of medicines. We have another reason, articles of this character are seldom introduced into a work on practice; and our object is to make this work one of practical utility, saving the labor of referring to a multiplicity of volumes

to ascertain some particular fact. My views on the medical definition of terms, and their peculiar action on the human system, vary from the large mass of authors upon this subject; my opinion of their action is *founded entirely* from experience, and as such I have no hesitation in laying them before you, knowing that what action I attribute to them can be strictly relied upon.

Antacids, are medicines which correct acidity of the stomach and digestive organs, by combining chemically with free acid existing there, and neutralizing it. Their action is manifestly only *temporary* and *palliative*, as they do not correct that peculiar state of the digestive organs which favors the formation of acid; and their continued use *produces* a precisely *similar disease* in the alimentary canal. This is of great importance, for I have often seen dyspepsia result from the incautious use of alkaline earths; they are strictly chemical remedies, and when taken beyond what is required to correct free acid, they become irritants, and produce morbid affections of the stomach; to use them as a palliative, and employ suitable *regimen* is, in my opinion, much more preferable. In most cases abstinence, and a proper attention to regimen, will soon repair the evil; the best antacids are prepared chalk, lime water, magnesia, and bicarbonate of potash.

Anthelmentics, are remedies which possess the property of destroying worms. They are only temporary in their action. In most cases worms are not the primary cause of disease; in a multitude of cases anthelmentics are given for weeks, when the history of the patient proves that he has only suffered from the suspicion of worms, while his malady has been of a different character. The

truth is, no certain diagnosis of worms other than their appearance in the discharges is worthy of confidence, and hence, without this positive proof, remedies for their expulsion are of equivocal propriety. It need scarcely be said that medicines which are styled anthelmentics are best adapted to remove them. It is only when the presence of worms is positively ascertained that any of the specific anthelmentics are at all adapted to the case. Kousso at the present time occupies the highest position for expelling tape worm. I have never administered the article, and cannot speak of my own knowledge, but I have no doubt of its great value; from the experience of some gentlemen in whom I can rely, I would have no hesitation in giving it. My friend Dr. Holland, of Galveston, speaks of it in the highest terms. A very interesting case is reported in the "Eclectic Medical Journal," March No., 1852, published at Cincinnati. Turpentine was well thought of in tape worm, but with my experience, unjustly so. There is a variety used; worm seed, garlic, Carolina pink root, tansy, &c.

Anti-spasmodics, are medicines which counteract irregular or inordinate muscular action—spasm. This deranged state of the system depends on so many causes, that its successful treatment will very frequently depend on the employment of remedies calculated to remove the more immediate cause by which the spasmodic affection is produced. There are certain medicines which appear to exert a direct control over spasmodic action. Emetics are among our most useful and efficient anti-spasmodics. The lancet, although I am free to deprecate its use generally, nevertheless, in violent cases it is a speedy and effectual anti-spasmodic. The patient should be placed in the erect position so as to favor syncope. It should

never be resorted to until all else failed. The warm bath is a valuable auxiliary in severe and protracted spasm, especially when the bowels are involved in the disease. There are a variety of anti-spasmodics: assa-fœtida, musk, castor, rue, amber, valerian, &c.

Astringents, are those substances which produce contraction and condensation when they come in contact with living matter. Much difference of opinion exists as to the *modus operandi* of this class of agents. In cases where the use of astringents is indicated, it will be necessary to ascertain the cause by which the morbid discharge is produced, as it frequently arises in opposite states of the system, and, therefore, very different remedies will, in different cases, assume the character of an astringent. Thus, where irritability exists opium will often prove our most useful remedy. If a state of plethora of the vascular system exist, the pure tincture of aconite, I use 10 to 12 drops to 1 oz. of water, and give a tea spoonful every ten minutes; when properly administered, where there is any inflammatory action it will control the circulation more readily than the lancet, and in pneumonia and yellow fever it is indispensable. Nauseants with other depletory measures will be indicated, or if the discharge, as in some forms of diarrhœa, be caused by acrid or acid matter, demulcents and anti-acids must be employed. Those that are in best repute are, sulphuric acid, alum, catechu, creasote, blue vitriol, green vitriol, gall nuts, logwood, kino, oak bark, borax, beanberry, zinc, &c.

Cathartics, are those medicines which quicken or increase the alvine discharge. Cathartics differ considerably in their action upon the human system, and hence, have been generally divided into three classes: 1st

Laxatives, which operate so mildly as to produce the evacuation of the intestinal contents without causing increased secretion or stimulating any of the neighboring viscera.

2d. Purgatives, properly so called, which, besides remarkably increasing the peristallic motion of the intestines, occasion increased secretion of fluids from the exhalant vessels, and also extend their stimulant effects to the system in general.

3d. Drastic Cathartics, which operate in the same manner as purgatives, but with much greater energy. There are a great variety in use; we will mention some that we hold in high estimation.

The Podophylline, which in my own impression, exerts as ready an influence as calomel, without any of the constitutional effects which is frequently the result of the latter; it is a remedy which is inestimable, and of which we will say more hereafter. The Septandrine is another very valuable remedy. There are others: gamboge, colocynth, aloes, castor oil, &c.

Diaphoretics, are those medicines which augment the cutaneous exhalations, or more properly speaking, produce a termination to the surface by copious perspiration. We frequently find obstructed perspiration associated with fever, and those remedies should be selected as will act by relaxing the morbid construction of the cutaneous capillaries, and at the same time have a tendency to lower the action of the heart; warm, tepid, diluent drinks assist in producing perspiration. The most efficient diaphoretics are, mindererus spirit, which is a solution of the acetate of ammonia, antimonial powder, tartar emetic, common burdock, woody nightshade, (or bitter-sweet.) Dovers powder, sarsaparilla,

sassafras, sanguinaria, (blood-root,) hydrastis canad, (golden seal,) asclepia, (pleurisy-root,) xanthox, (prickly ash,) &c. Beach's sudorific tincture is a good remedy; substitute for the opium cypripedium pubescens (ladies slipper) 8 oz., and you will have it far better.

Diuretics, are medicines which augment the secretion and promote the discharge of urine. In whatever manner the action of diuretics is produced, their general effect is to diminish the watery part of the blood, and by this means promote the absorption of fluid effused into any of the cavities or into the cellular membrane. Much obscurity, however, rests upon the subject. They are too often prescribed without reference to the pathological state upon which the disease depends. Those most in use are, sweet spirits of nitre, cantharides, common juniper, nitre, squill, oil of turpentine, scalding water on honey bees, &c.; this latter is very good to relieve strangury.

Emetics are those medicines which are used for the purpose of producing vomiting; the number employed with this intention is small. In selecting a remedy of this class, we should be guided by the nature of the indication which is to be fulfilled; they should be employed with great caution where there are symptoms of determination of blood to the head, in consequence of the obstruction of the circulation which is occasioned during the act of vomiting; from the great action of the abdominal muscles which is caused, the act of vomiting is attended with great risk in the advanced stages of pregnancy, in hernia, and in prolapsus uteri. An English author, I find, recommends their use in reducing hernia; I should pause before I would try it, but I do not condemn it. There are but few remedies of

this class—tartar emetic, sulphate copper, ipecacuanha, squill, sulphate zinc, an acetous mixture, and an emetic powder of my own, I have found best suited to this climate.

To make the Acetous emetic, take

Sanguinaria,
Lobelia seeds,
Ictodes foetidae, (skunks cabbage root.)
Aa. ʒ iss.
Good cider vinegar 1 quart.

These articles to be well pulverized, and the whole made quite moist with alcohol, then let them stand 24 hours, tightly covered; after which add the vinegar, let it stand a few days, then strain and subject the drug to pressure, after which apply a gentle heat to your solution, and it will drive off the alcohol.

Dose, 1 dr. every ten or fifteen minutes; it may be increased up to 4 or 5. To be taken in some warm diaphoretic tea. Under all ordinary circumstances, you will find this will never disappoint your expectations.

The emetic powders are equal portions of the three first ingredients, in acetous mixture, with equal parts of pul. ipecac. Dose, 10 gr. to half dr., given in warm infusion, repeated every ten or fifteen minutes.

Emmenagogues are medicines which are supposed to be capable of promoting the menstrual discharge; there is uncertainty in their operations, but there are a few which are employed to promote the menstrual secretion, and which appear to act solely on the uterus. These remedies are saffron, which is a valuable remedy to remove those severe lumbar pains which so frequently precede or accompany menstruation, ergot, rue, savin, sepia, and macrotin, the most valuable of the whole.

Epispastics are substances which produce redness, inflammation, or vesication, when applied to the skin. They are employed in the practice of medicine principally with the intention of relieving or removing the diseased condition of some internal organ, by producing a new irritation, or determination to the surface of the body, or some remote part. Independently of this, however, blisters, which are the most important medicinal agents in this division, act also as general stimulants to the system, and as such are frequently used, with much benefit in the advanced stages of fevers, and in spasmodic affections arising from debility. This stimulant effect of blisters should be borne in mind, and, consequently, their application should be avoided in the very acute stages of inflammatory diseases, until the general excitement be previously subdued by antiphlogistic means. A distinguished author says:—"*Epispastics are generally applied as near the seat of disease as possible*," unless, we suppose, when the intention is to produce a determination to some remote part of the body, as in the application of sinapisms to the feet in affections of the head. We greatly differ in one portion of the paragraph, and that we have italicised; and we do contend that in most diseases in which Epispastics are necessary, whatever other objects may be contemplated, one of the first indications to be fulfilled by these agents is that of counter irritation, revulsion; and hence we do conclude, and we are supported by the large mass of scientific men in the United States, *that blisters should be applied remote from the seat of disease.* Most of the colleges teach that blisters to the extremities are more serviceable in inflammations of the viscera of either the great cavities of the body, than when ap-

plied over the part affected. Especially is this the fact in phrenitis, (inflammation of the brain,) for though in bad cases shaving the head for the application of ice is often resorted to, yet blisters, instead of being applied to the scalp, *thus aggravating the disease*, are judiciously placed upon the thighs, or upon the spine. Blisters to children should be applied with great caution, and never suffered to remain more than two or three hours. Those in use are, tartar emetic, cantharides, capsicum, oil of turpentine, and a preparation I use, the irritating plaster, which we will treat of hereafter.

Narcotics may be defined medicines which produce a primary stimulating effect on the nervous and vascular systems, but which is rapidly followed by a depression of the vital powers. In large doses, the stage of excitement is very short, and the depression of vital power almost immediate. There are numerous remedies used in the present day, nightshade, Indian hemp, henbane, hops, morphia, opium, poppy-heads, thorn-apple, &c.

Sedatives are medicines which depress the vital powers, without inducing any previous excitement; they have been termed contra-stimulants. The diseases in which sedatives are employed are those of over excitement of the nervous and vascular systems; some of the remedies, for instance, aconite, act directly on the nervous system. They are, Prussic acid, one drop of which has been known to produce death, peach leaves, hemlock, creosote, digitalis, tobacco, hydrocyanate of potassa, &c.

General Stimulants are medicines which, in their effects upon the system, are closely allied to tonics; immediately after their administration, a feeling of tone or increased power is produced, which is not permanent,

but is generally followed by depression of vital powers. There are a great number contained in this class—nitrous ether, sulphuric ether, ammonia, camphor, &c.

Tonics are substances, the continued administration of which in debilitated and relaxed conditions of the body imparts strength and vigor, without producing any sudden excitement. There is no class of remedial agents which requires more discrimination in their administration than tonics; nor any, the injudicious use of which more frequently produces evil consequences. The diseases in which they are employed must be diminished power; in no case should they be prescribed when there is irritation or inflammation of the digestive organs, or where the secretions are in a depraved state.

GENERAL DIAGNOSIS.

By the term, diagnosis, is understood the peculiar faculty of distinguishing one disease from another. The exact appreciation of the several organic alterations, chiefly constitutes diagnosis. This is one of the most important branches of our profession, *and without doubt one of the most difficult.* The number of those who are remarkable in diagnosis is *extremely small;* but in the practice of medicine, how important is a correct diagnosis, for when correct in that, it necessarily tends to a rational treatment. In order, therefore, to form such a diagnosis, one that can be relied upon, it is necessary to know the organs and functions in their normal state; without this knowledge we cannot appreciate the changes induced by disease. Anatomy and physiology

are, therefore, preliminary and indispensable. That great and distinguished author, *Liebig*, says:—"From what a different point of view should we contemplate the abnormal, or diseased conditions of the human body, if we were first thoroughly acquainted with its normal conditions—if we had established the science of physiology upon a satisfactory basis. How differently would the treatment of diseases be conducted, if we had perfectly clear notions of the process of digestion, assimilation and excretion. Without just views of force, cause and effect—without a clear insight into the very essence of natural phenomena—without a solid physiological education, the object of the empiric (those who know nothing of physiology or chemistry) is only whether a remedy, in any given case, had a good or bad effect. This is all he cares about. He never asks *why?* He never inquires into the cause of what he observes, consequently is it to be wondered at that men should be found advocating the absurd notions of *Homeopathy* and the like."

The study of mere symptoms, without endeavoring to ascertain the signification of these symptoms, has at all times been the cause of producing much mischief in the treatment of diseases.

It is quite embarrassing to a great many, the examination of a patient; this only arises from a want of order and method. The first thing is to examine the exterior, and you should extend the examination to every portion of the body. I have a case in point which will demonstrate this necessity. I was called in consultation with a medical gentleman some years ago, to a patient who, some six or eight days before we were sent for, had been thrown from his horse. My friend had examined the

patient before my arrival; he said he had cough and was spitting up some blood, which fact he viewed as conclusive that his lungs were the seat of disease. He had acute pain in the side, which was aggravated by percussion; pulse full and strong, some fever, and considerable thirst; a slight crepitous-rale was observed by the aid of the stethoscope. My friend's diagnosis was, that this man had pneumonia; his reasoning was very correct from principle, but if he had examined the exterior, he would have found, as I did, a fracture of the ribs, and he would have avoided his error. I hope this one illustration will point out the necessity for a close and rigid examination; every symptom should be noted, and when your examination is over, every symptom should be studied one by one in the order in which they presented from the commencement of the attack, to the period when the patient comes under your charge. Having ascertained the affected organ, your next and most immediate object will be to ascertain the nature of the disease of which it is the seat. This is the important consideration, and the difficulty is generally occasioned by the want of anatomical examinations carefully conducted at different periods of the same disease. When you have ascertained the organ which is the seat of disease, the prognosis will then present itself for your consideration, and in arriving at a just prognosis, you must take into consideration the amount of fever present, the age, the idiosyncrasy and strength of your patient, &c.

The pulse is an important consideration, and it must be attentively and deliberately examined. Great attention must be paid to the alimentary canal; and recollect that a slight inflammatory affection at the

origin of a spinal nerve, "not unfrequently manifests itself by severe and protracted pain in some *remote* part of the body; as in the chest, the abdomen, or inferior extremities." Another important consideration, and which you will frequently find in this climate, is that inflammation of the mucous membrane of the alimentary canal, often attends in a variety of diseases with symptoms so *slight* as often to escape the notice of even the most acute observers, and in relation to diagnosis on this point, especial care and attention must be paid to the examinations of the symptoms, and *especially* in regard to the condition of the tongue.

It will be well to consider the Diagnostic Signs which I have divided into those exhibited by the countenance; the attitude; the nervous system; the digestive organs; the circulatory system; the respiratory organs; the circular surface; the lymphatic system and the secretions.

The Countenance.—The features to be particularly examined are: the eyes, the nostrils, the lips, the brows.

In acute simple fever.—Eyes and face red; respiration hurried; motions of the nostrils rapid. In acute sympathetic fever these signs are absent. (Hall.)

Acute pain from inflammation in the chest.—Features much contracted; the alæ nasi acute and elevated, the nostrils contracted and expanded by the acts of respiration, sometimes a vivid flush terminating abruptly; heat inconsiderable.

"*Dull pain in the chest.*—Less constriction of the features; an expression of great anxiety; nostrils widely dilated before inspiration.

Effusion into the lungs.—Countenance livid, anxious, turgid, with great dyspnœa (difficulty of breathing) and dilation of the nostrils on inspiration.

THE PHTHISICAL COUNTENANCE.

Acute pain in the abdominal viscera.—Features acute; forehead wrinkled; brows knit; nostrils drawn up and acute; under lip drawn down exposing the teeth."

Organic affections of the heart.—(This term is used to distinguish a disease of structure from a functional disease, thus, when the liver is converted into a hard, tuberculated, or other structure, it is called an organic disease.) Countenance anxious; vividly flushed; prolabia (lips) livid; face turgid, oedematous, (to swell) cold. "In hydrothorax the face has a pale livid aspect."

Soporose affections.—(A term given to those diseases that produce sleep.) Flushes livid, tumid; eyes closed or open and fixed; mouth frequently drawn to one side.

In syncope.—(By this term we mean that the respiration and action of the heart either cease or becomes much weaker than usual, arising from diminished energy of the brain, or from organic affections of the heart.) Pale, shrunk, cold and death-like.

In chlorosis.—(This is vulgarly termed "green sickness;" it is a retention or suppression of the menses.) Pale; puffy; a peculiar darkness occupying the eyelids, and sometimes surrounding the mouth, frequently ulcers on the extremities.

Chronic irritation of the bowels.—"Puffy countenance; upper lip pale and swollen; occurs in verminous affections and scrofula.

Attitude.—The healthy attitude; advantages to be obtained from position in the treatment of diseases. "Preternatural determination to a part diminished by elevating such part;" the head to be raised in *apoplexy*, the extremities when affected with inflammation, the

chest or body in affections of the thorax and the legs, and more especially with an old ulcer.

"*Supine position*, with tremulous motion, indicates much muscular debility."

Fever from acute local inflammation, is not attended with muscular prostration unless the patient has been neglected, and if death should ensue from neglect, more muscular power in the latter stage will be evinced than could be possibly expected, to that extent at times as to throw the attendant from off his guard.

Characteristic position in hydrothorax.—By this term we mean dropsy in the chest; in severe cases inability to lie down; great fatigue with the least exercise; when in bed the patient involuntarily raises his head and shoulders high; sleep interrupted; pulse irregular and hard; thirst urgent; urine scanty and high colored; a dry cough present; and as the disease advances the patient is unable to lie down, but generally rests by placing his forehead upon the back of a chair."

"*Thoracic effusion.*—Distinguished from mere organic disease of the heart and lungs, by effects of firm pressure on the epigastric region and bodily exertion. Effects of pressure in effusion; general agitation, cough, and a sense of suffocation; not so, or but slightly, in organic affections of the heart and lungs; bodily exertion excites more dyspnœa (difficulty of breathing) and distress in effusion than in organic affections."

"*Position assumed by the patient, in abdominal inflammation, with acute pain.*—Fixed, carefully avoiding all motion and pressure; generally on the back, knees drawn up, head and shoulders a little elevated.

Position assumed in spasmodic pains of the abdomen.—Constantly changing posture, desirous of pressure on the

abdomen, recumbent on the belly, &c.; position on the back, with knees constantly elevated in the latter stage of acute diseases, a sign of retention of urine.

THE TONGUE.—Great attention and close observation must be paid to its color, its surface, its shape, and the manner in which it is protruded.

A white and slightly loaded tongue, indicates inflammation or high irritation of the mucous membrane of the stomach and intestinal canal. Tongue seldom much affected in acute symptomatic fevers, from wounds or external inflammation.

A pale and tumid tongue, with large papillae, indicative of gastric debility—met with in chlorosis.

A contracted and pointed tongue, frequently an attendant on cerebral or meningeal inflammation.

A yellow and bitter tongue, indicative of biliary derangement.

Florid papillae protruding through a layer of white fur, characteristic of scarlatina.

A flabby and dilated tongue occurs in congestive states of fever.

A white, and sometimes brown tongue, dry and clammy, indicative of remittent fever.

MORBID STATES OF THE NERVOUS SYSTEM.

Disturbed Sleep.—Coma always denotes oppression of the brain.

Sudden Startings in Sleep.—Intestinal irritation from worms, or spasmodic pains of the abdomen.

Hurried Wakings, with a horrific sense of suffocation, a sign of organic disease of the heart.

PAIN may arise from inflammation, from spasm, and

from nervous irritation. They have each their peculiar character.

Inflammatory Pain.—Tenderness of part, increased by pressure; throbbing or burning continuous, and attended by febrile excitement.

Spasmodic Pain.—Paroxysmal, not throbbing nor burning; relieved by pressure, and seldom attended with fever.

Neuralgic Pain.—By this we mean pain in a nerve; is transient but violent, no swelling, no heat, and easily renewed by touch.

Alimentary Canal.—Appearances of the alvine discharges—*clay-colored* faeces indicate deficiency of bile, met with in *jaundice* and *hepatitis.* Watery and reddish stools, like the washings of flesh; the same mucous and bloody stools also.

Respiratory Organs.—The function of the lungs differ from the other organs in this circumstance—it is performed with a noise;—in sound physiology it must be expected that when the function of these parts are disturbed, the physiological sound will become pathological; that the sound will be altered, and such is the fact. Accelerated respiration is always attended with frequency of the pulse; slow, irregular, and stertorous breathing attends a high degree of cerebral compression. The peculiar respiration in hydrothorax, is that the inspiration is quick and with great effort, and that the respiration is slower and without effort. The effects of corporeal exertion on respiration produces great dyspnoea (difficulty of breathing) in hydrothorax, and still more in organic cardiac affections.

Wheezing Respiration.—In asthma, cynanche trachealis, (croup,) hurried, panting and heaving respiration,

with sighing, often attends intestinal irritation and exhaustion from hæmorrhage.

Cough.—When the efforts of coughing are anxiously repressed, there is probably inflammation in the chest or abdomen.

Spasmodic Cough.—In pertussis (whooping-cough) sometimes from irritation of the stomach.

Sputa.—We have it of thin mucus, sometimes thick and opaque, of a whitish color; sometimes mixed with purulent matter, as in *chronic bronchitis.*

Cuticular Surface.—Its temperature, its color, its state of dryness or moisture, its fullness or constriction, its roughness or smoothness.

A yellowish tinge indicates biliary derangement; not, however, to be confounded with that peculiar sallowness which occur in *cancer* and *chlorosis.*. Permanently dry and husky skin indicates torpor or chronic disease of the liver.

Urine.—Small in quantity and red, in inflammatory affections; *copious* and limpid in nervous diseases.

Bilious Urine.—The various sediments—lithates, phosphates; the former are red or purple, the latter white or pale yellow.

Violent Inflammation of the Brain.—The pupils are dilated or much contracted, the eye generally red; if there should be lesion, you have squinting, and the eye lids become paralyzed.

Inflammation in the Abdomen, to be distinguished from spasmodic pains of the stomach and bowels. In inflammation, the patient lies on his back, knees drawn up, head and shoulders raised, and resists all pressure on the abdomen. In spasmodic pains or colic on the con-

trary, patient writhes and changes posture frequently, and rather desires pressure over the abdominal region.

Inflammed or highly irritated condition of the Mucous Membrane of the Alimentary Canal.—There is a clean and red appearance of the tongue, sometimes rough. In chronic gastritis and enteritis, the tongue invariably exhibits a dark red appearance; sometimes it is granulated.

Dyspepsia.—The tongue loaded, mouth clammy, taste bitter, breath fetid. The tongue does not differ materially from that which is presented in chlorosis, except that the latter is pale instead of red, and indicates in addition to gastric derangement, a defect in the process of sanguification.

Synochus Fever.—One of the first symptoms is that of a tremulous tongue; as the disease progresses, it turns a dark brown.

"Wakefulness is indicative of great cerebral irritation or exhaustion. It is particularly apt to occur from sympathetic excitement of the brain, depending on intestinal irritation, and exhaustion from loss of blood." When morbid wakefulness depends on these causes, it is almost invariably attended with great restlessness or jactitation, (to toss about,) a distressing feeling of anxiety in the region of the heart, a constant disposition to draw long breaths, with a pale and contracted countenance. Sudden starting during sleep is generally connected with latent indigestion. Similar symptoms occur in organic affections of the heart. I was called in consultation to a patient, with my friend Dr. McCraven, laboring under the above symptoms, and we were annoyed to arrive at a just diagnosis, whether it was cerebral irritation or an organic affection of the heart.

Morbid Sensation.—*Neuralgic pain* differs widely from

inflammatory or spasmodic pain; it is transient and extremely violent in its paroxysms. It passes with telegraphic rapidity along the ramifications of the affected nerve.

In regard to *pain* I wish to impress upon your mind a very *important fact*—there is a variety of pain, and we frequently obtain important diagnostic indications from the different character it assumes in each structure of the animal system. For instance in the *mucous* membranes, inflammation is accompanied with a *burning* or *stinging* pain, and generally not very violent; and again in the *serous* membranes the pain is sharp and lancinating, and remarkably acute; in the *fibrous* tissues it is dull, aching and boring; in the *nerves* it is rapid, darting and excruciating; in the *cellular* structures it is throbbing, heavy and dull. Consequently we find the pain experienced from inflammation of the *pleura* acute, piercing and severe; whilst that from inflammation of the substance of the *lungs*, is dull, pressing and inconsiderable in violence. Another important fact, that in *hip* disease, pain in the knee is felt for a considerable time before any unpleasant sensations are complained of in the hip.

Organic Disease of the Heart is accompanied with laborious breathing on muscular exertion, or strong mental excitement. (We have already given the symptoms of wakefulness and jactitation under this head.) A cold clammy state of the extremities, nose and cheeks, with heat in the rectum and under the tongue, and a puffy swelling under the eyes, are also indicative of organic affection.—(*Eberlee.*)

Coughing.—We alluded to this before, and it is a symptom which requires close observation, and like pain

there is quite a variety of cough; patients affected with inflammation of the pluera, lungs, or peritoneum, always endeavor to repress the cough as much as possible. The cough attending acute inflammation of the mucous membrane of the bronchia has a much duller sound, and a rattling in the chest; these you seldom find in acute inflammation of the pluera; this only applies to the early period of these affections. In *phthisis laryngea* the cough comes on in violent and spasmodic paroxysms, particularly in the morning on rising from bed, whilst in *phthisis pulmonalis* (consumption) the cough is much less sudden and violent, and destitute of the spasmodic character of the former.

The character and appearance of the matter expectorated afford important diagnostic indications; and a variety of tests have been proposed, and with just claims to confidence. The muriate of ammonia coagulates pus, but it has no effect upon mucus. Heat coagulates mucus, but not pus.

A purple or bluish color of the skin, if not the result of cold, indicates deficient decarbonization of the blood in the lungs, seen in a striking manner in cholera.

Urine.—This secretion affords frequently valuable diagnostic signs,—in *inflammatory* affections it is red and in small quantity; in *nervous* and *hysterical* affections it is copious and limpid; in *biliary* derangements almost invariably tinged with bile.

GENERAL PROGNOSIS.

Prognosis is that peculiar prescience or fore-knowledge of the course and termination of diseases. It is essential and frequently necessary to predict how a disease will terminate, and a correct knowledge of prognosis is a sure source of credit and reputation. To form an accurate opinion on this head is, however, one thing—to divulge it, another. There is great risk of losing instead of gaining credit, by strong statements and confident predictions of the death or recovery of a patient. If your prognosis is unfavorable, the friends naturally conclude that you are not infallible, and they will grasp at any quack who makes pretensions to cure such diseases; this is not always so, but in a large majority of cases it is. You will frequently see Doctors who affirm they cure cases in advanced *phthisis* (consumption); if they cure anything, it is generally chronic inflammation, with puriform discharge of the mucous membrane of the bronchi. The profession as well as the public should view with suspicion such statements, let them come from whatever quarter they may. Certain symptoms may disclose to us what the malady is, and where it is situated; other symptoms teach whether our patient is likely to survive or not. In a work of this character, devoted exclusively to practice, we will have to condense many articles, and especially the one under this head; but we conceive the subject of sufficient importance to give the most prominent characteristics in regard to prognosis, of our own observation, and take pleasure in referring the medical reader to Watson's practice of physic, by Condie, to a very elaborate and scientific article upon this subject.

The mere fact of a single symptom cannot be sufficient to the scientific practitioner to base a positive prognosis; all the causes, as well as the general phenomena, the habits and temperament of the patient, must be carefully taken into consideration.

Alterations in the face.—A great many important signs are discernable from this portion of the human system. If the heart's action is great, we see it in the face. If there be congestion in the body, we have coldness of the face, especially the cheeks, nose and lip. If hectic fever, we soon perceive the redness of the cheek. If we have jaundice, we soon discover it in the face, especially the eyes. Two of the chief marks of scrofula are shown in the face—the dilated pupil and the tumid under lip.

The countenance is a sure indication to the state of your patient, and especially in cases of a serious and dangerous character. We frequently find a countenance that strikes us forcibly, and we view it as the harbinger of death, that is almost indescribable; it is termed the *Hippocratic countenance*, and described by some authors viz: "nose pointed, eyes sunk, temples hollow, ears cold and shrivelled, the lobes everted, skin on the forehead hard, tense and dry, countenance pale, livid or leaden." We are satisfied immediately from the countenance, whether the patient is in pain or not, if he has colic, it is depicted on his countenance, and to all the numerous mental diseases, we need not capitulate, as the countenance affords the best indication of their character.

The attitude.—We learn from observation considerable in regard to position. It is an alarming symptom to discover your patient first on his side and gradually getting on his back, until he is in a supine position; unfavorable, when we have great restlessness of the whole

body; it betokens great prostration, when we find the patient upon his back, his mouth and pupils dilated, and still worse when we find he has involuntary discharges. Insensibility, with mouth closed and eyes fixed, a sure sign of convulsions. A great desire to sit up, with difficulty of breathing, or laying upon the back with the knees drawn up, and one leg flexed over the other, in pneumonic diseases, almost certainly fatal, but still *more* so when attended with a *good pulse*; reaching into the air, picking the bed clothes, visceral inflammations, tumefaction of the abdomen, are alarming signs. "Stertorous breathing, attended with a rattling in the upper part of the chest, is highly dangerous. Short and very accelerated breathing, always a bad sign; hiccough, in the advanced stages of fevers, indicates great danger." Constant wakefulness, or great degree of somnolency, is quite unfavorable; great pain in the head, with a puffed, red countenance, is indicative of much danger. "Unequal distribution of temperature—a sensation of cold externally, and of heat internally, are bad signs,—still more unfavorable when a sense of burning heat on the surface is attended by a feeling of cold internally.

The Hand.—In this portion of the system, many symptoms appear that are positive signs for good or bad; it shows the first fall of the temperature of the body; the cold clammy perspiration is soon discovered here, difficulty of breathing produces a purple hue of the nails, and, in fact, its heat, its firmness or softness, are all significant.

The Excretions.—They consist of blood, bile, secretions from the alimentary canal, of urine, of perspiration, of saliva and of semen; and with respect to them, the sight and smell gives us most information. The urine is fre-

quently examined by taste, to ascertain whether it contains acid, or is neutral, or alkaline; you can detect by weight whether it contains any saccharine matter, and this is of great importance, especially in diabetes, which is to pass large quantities of urine daily. Dr. Prout reports some cases where he found the urine perfectly black; this, of course, is highly dangerous. Suppression of urine, in protracted and violent cases of fever, highly dangerous.

Alvine Evacuations.—They are various in their characters; we sometimes find them black or a little red, and sometimes bloody; this latter, when not accompanied with inflammation, is easily arrested by small portions of the oil of turpentine, or sulphuric acid and tinct. opii, or by the white of an egg and opium. A liquid, frothy, green discharge, resembling the washings of flesh, with swelling of the abdomen, highly dangerous. The expulsion of urine a good sign. (Rush.) Bloody stools, in the latter stages of bilious or malignant fever, highly unfavorable; less dangerous in strictly inflammatory fevers. Involuntary discharges always indicate great danger.

Perspiration.—Copious perspiration about the face, especially if cold and clammy, indicate great prostration; partial sweating a bad sign; profuse clammy perspiration, attended with a small and frequent pulse, is sure to be fatal. There is an offensive perspiration which exudes from the feet highly unpleasant, and for which I know no remedy; a pedeluvium strongly impregnated with salt, and an astringent applied, after wiping dry, might be of benefit.

Vomiting.—It is common for the mouth to become filled with a fluid; this fluid generally contains a large

quantity of muriatic acid. We also find persons vomiting up their food, and it is exceedingly sour and acid; these are the results of indigestion. Black discharges from the stomach, especially in yellow fever, highly dangerous; a rumbling noise in the stomach when fluids are swallowed is a bad sign; very frequent vomiting, with tenderness over the region of the stomach, in fevers, quite unfavorable.

Fetid Breath.—There is frequently bad breath; it is sometimes sour, and at times as fœcal matter. The most disagreeable breath arises from depraved secretions of the tonsils; this latter is particularly offensive. With foul breath generally, we have eructations; these may be simple or fetid; those which are inodorous are experienced when the stomach is empty. The fetid eructations arise when the stomach is full and the contents undergoing a certain degree of fermentation. Persons who are subject to being costive have fetid eructations, which are removed when the bowels are kept in a soluble condition.

The Tongue.—No inflammation can exist in the system without the tongue becoming white. In delirium tremens it is always covered with a white mucus; when covered with brown or black crust with cracks in it, dangerous; black and dry, with sordes adhering to the teeth, highly dangerous. A dark brown, hard and shrivelled tongue, almost certainly fatal; secretion of saliva a good sign. Keeping the tongue between the teeth without retracting it is a bad sign. A red, smooth and shining tongue, dry around the edges, indicates considerable danger, it is a sign of gastric inflammation. Total absence of thirst, with a dry and rough tongue, is a bad symptom. There is a variety of other appear-

ances that would demand attention in forming an opinion as to the probable event of diseases.

Critical days.—The ancients imagined that a crisis occurred particularly on certain days at which prominent changes are wont to occur. We have yet some modern authors who contend for the same. It is a vulgar notion that prevailed amongst ancient physicians, and they have come down to us and still "linger among the vulgar." Some persons say they observe these things; but I cannot say that I have ever noticed the disease to terminate on one day in preference to another. The reason we do not observe what the ancients did, is said to be, that we are more active in practice than they were. We do not let nature take her course, but endeavor to knock a morbid process on the head; and we save five patients where they saved one. We allow diseases to run on a much shorter period than they were accustomed to do; and some ascribe the want of critical days to our active practice. To show the inefficacy of the practice of the ancients, *Broussais* asserts, that an account of thirty cases of acute diseases is mentioned, in which eighteen patients died, and the other twelve suffered much afterwards. It must have been bad practice to lose eighteen acute cases out of thirty. Sir Gilbert Blane says, out of forty-two cases of acute diseases, thirty-seven of which were continued fever without local affection, and five with local affection, of these twenty-five died, twenty-one of the thirty-seven, and four out of the five. If nature had an inclination to perform her cures on certain days, she had there a fine opportunity; but at the present day we so interrupt her course that I have never observed critical days.

Critical Hæmorrhages.—This is always the result of

increased arterial action, and generally beneficial, partly from the loss of blood, and again by the new arterial excitement by which they are attended; these crisises are generally confined to inflammatory fevers, they occur sometimes in typhus; epistaxis (or hæmorrhage from the nose) is the most common, always preceded by one or more of the following symptoms—flushed face, red and suffused eyes, sneezing and ringing in the ears.

Critical Sweat.—This is an important crisis, and when favorable, it is general, over the whole body, attended with a warm skin; it is indicated by a soft full pulse, an extraordinary degree of stinging or itching (most commonly the latter) sensation on the surface, the cuticle turns red, and the patient soon gets restless.

Excess of Urine.—There is frequently an excess in various diseases. In asthma there is frequently a large quantity of pale urine made; in hysterical and dyspeptic persons, this is frequently the case; fright also produces it. But as a critical discharge it must be copious, and some contend the morning urine is best for inspection; it will exhibit at first a cloud, floating in the upper part of the vessel, and finally a sediment; it will be attended with a soft, moist skin, and a frequent inclination to urinate.

Critical Alvine Discharges.—Very frequently take place in bilious fevers; they are generally copious, and indicated by a peculiar trembling of the under lip, a full active pulse, pain in the bowels, discharge of wind, moist tongue, and scarcity of urine.

Auscultation and Percussion.—We have concluded to bring this subject under this head, and to give our testimony to the truth of Lænnec's discoveries. We know by the large mass of physicians who have passed the

age of forty, that it is generally viewed as chimerical, and there seems to be an innateness in the human mind to reject the lights of science in regard to new discoveries. After this period they seem to rest satisfied with imperfect information, when application would give us more; to admire ignorance, when knowledge is within our reach, they examine discoveries with the hope of finding it deceptious; they are unwilling to learn because they are no longer *in statu pupillari*, (in the rank of pupils.) So high in their own estimation as to feel it a disgrace to be taught by others, they are so unphilosophical as to have an hostile opinion upon matters, which observation must decide; and guilty of lamenting the inconsistency of our art, while they are too indolent to investigate a method which professes to remove much of its uncertainty. These facts were well demonstrated when the immortal Harvey discovered the circulation of the blood, and it is asserted upon the best authority, that not a single physician could be found over the age of forty in England, that would give in to the discovery, nor did they until the latest hour of their death. Nor would the aged physicians of Montpelier acknowledge the lacteal vessels, so wedded were they to ancient opinions; this too frequently is the case, but it is for the young physician to investigate, and he will have a store of knowledge of great importance, which the mass of aged physicians reject. The language of a distinguished author is here appropriate:— "Far be it from the defenders of auscultation and percussion to assert, that the diagnosis of thoracic diseases can never be doubtful. Skill in auscultation requires application; and, even with the greatest, doubt will frequently exist. The stethescope does not render the

parietes of the chest transparent. Percussion and auscultation merely open a new set of symptoms to our notice; and, as diagnosis is certain in proportion to the number and nature of the facts on which it is founded, and the percussor and auscultator, with all the same means of judging as his opponents, possesses others in addition, he is better qualified to form an opinion; and though he may sometimes still regret his want of certainty, he knows that by shutting his ears, by levelling himself with his opponents, he augments his uncertainty a hundred fold."

The alleged errors of those who practise auscultation are no arguments against it. Many tales of this description, like those of the errors of *Phrenologists*, have, when traced to their origin, proved inaccurate, or even altogether destitute of truth; and eagerly catching at them would betray a mind hoping that no fresh knowledge is to be attained. Persons who have no skill will pretend to it, and the skillful will sometimes give a hasty judgment, but as in Phrenology, nature is open to all. Let every one examine for himself—examine carefully and patiently—not anxious to find it a deception, but hoping to find the promise of new information fulfilled.

THE PULSE.

In giving the number of pulsations, and the mode and manner of examining the pulse, we have been quite particular in consulting authorities, viewing a proper knowledge of this symptom as the most essential to the

scientific man. After patient research of *Heberden, Falconer, Robinson, Celsus, Rush, Tweedie, Bell, Stewartson and Eberle*, it requires some education of the finger to appreciate with exactness the several varieties of pulse, *even those which are practically important;* there are many varieties mentioned which are useless and unnecessary. The pulse varies with the age of individuals; at birth it beats from 130 to 140 in a minute; mean rate for the first month is 120; limits during the first year are 106 to 120; for the second year from 90 to 100; for the third year from 80 to 90; nearly the same for the fourth, fifth, and sixth years; in the seventh year pulse about 78 to 80; from the twelfth year it differs but little from that of adult age, which is estimated at from 60 to 80, according to individual constitutions, &c. The common standard of frequency may be placed at from 70 to 75 beats in a minute. From the 45th to the 60th year, the pulse gradually becomes slower; *after this period it again rises in frequency.* Generally more frequent in women than in men. *Climate* influences pulse; more frequent in hot than in cold countries.

The Time of Day.—Slower in the morning than at other times; most frequent soon after dinner; slower during sleep than in the waking state. Bodily exercise accelerates the pulse; varies according to the position of the body; slowest while lying down; slower when sitting than standing. Mental excitement influences the pulse; joy and anger render it fuller and more frequent; grief, sorrow and fear depress it.

Mode of Examining the Pulse.—Not to be examined immediately on entering the patient's room; the examination to be repeated at short intervals; should be felt on both wrists, the arm having its muscles relaxed by

proper positions; two or three fingers to be applied to the artery; thirty or forty pulsations are to be felt at each examination; examined in different positions of the body; *talking*, whilst examining the pulse, should be forbidden.

Pathological Condition of the Pulse.—Considered in relation,

1. To the force of the pulsations.
2. To the rythm or mode of the pulsations.

The most prominent and useful pathological states of the pulse, consist in frequency, quickness, strength, fulness, hardness, and irregularity.

A frequent Pulse is one in which the pulsations succeed each other with preternatural rapidity; a pulse beating more than 160 in a minute is scarcely to be counted; great frequency of pulse always connected with great prostration of the vital energies; frequency, with fullness and strength of pulse, more dangerous than the same degree of frequency, with softness and moderate fullness. When it rises above 120 in inflammatory fevers, much danger is to be apprehended.

Slow Pulse.—Occurs from cerebral compression, internal venous congestions, and impairment of the vital energies, as in apoplexy, *congestive fevers*, and malignant fevers.

Quickness of Pulse.—Often confounded, improperly, with frequency. Quickness refers to the suddenness with which each individual pulsation is made; frequency has reference to the number of pulsations in a given time. Quickness, however, is generally attended by frequency.

Strong Pulse is one which gives the sensation of preternatural resistance to the finger during the diastole;

(the contraction of the heart,) not to be confounded with a hard pulse. It is hard when the artery is felt firm under the finger like a tense cord, both in its systole and diastole—sometimes called corded. Strength and great frequency are never united, a strong pulse seldom exceeding 115 beats in a minute. A strong pulse indicates energy of the vital powers, and is therefore favorable.

A feeble Pulse, the reverse of a strong pulse. It is feeble when the artery produces a weak impulse against the finger during its diastole. Feebleness and softness of pulse not synonymous; the artery may resist pressure and yet pulsate very feebly. The pulse is soft when the artery appears to be filled, and yet offers no resistance, vanishing by slight pressure.

A very soft Pulse, seldom attended with great frequency, or with irregularity; occurring in the advanced stages of fevers, favorable; when joined with great difficulty of respiration and suffused countenance, in pneumonic inflammation, indicative of much danger.

Full Pulse, never very frequent; sometimes much slower than natural.

Small Pulse, the diameter of the artery is smaller than natural; in inflammation seated above the diaphragm the pulse is generally full; when seated below it, it is small.

Depressed Pulse small and apparently feeble, and occasionally quick; does not depend on actual debility or exhaustion, but on internal *venous congestion*. Cold bath will raise this pulse; distinguished from a small and weak pulse, by attending to the prevailing diathesis, by using the cold bath and watching its effects, and by observing the period of the disease in which it occurs; if it is small and obscure in the beginning of acute diseases, we may presume it is depressed.

Intermittent Pulse, when not attended by other alarming symptoms, not in general a dangerous sign; pulse sometimes habitually intermits; it is said to be of dyspeptic origin. Occurs frequently in old age, and then probably depends commonly on some affection of the heart. Occurs also in affections of the brain; a very unfavorable sign in the advanced stage of fevers, with great prostration; is said frequently to precede a critical diarrhœa.

Unequal Pulse, synonymous with irregular pulse; characterized by a constant variation of the pulsations in frequency, quickness, size, hardness, &c.; more dangerous than intermittent pulse. *Dicrotus pulse*, twice beating.

Undulating Pulse; a wave-like rising and falling of the pulse; generally large, soft and feeble; when very small it is termed creeping; highly dangerous.

A morbidly natural Pulse occurs in malignant fevers; exceedingly unfavorable; can only be distinguished from a healthy pulse by the concomitant symptoms.

Shattered Pulse feels like a shattered quill under the finger. Occurs in opium eaters.

Obstructed Pulse; artery remains equally full during its diastole and systole.

Compound Pulses; the principle are the *synocha, synochus, synochula, typhoid and typhus.*

1. *Synocha*, hard, full, frequent and strong; indicates high inflammatory excitement.

2. *Synochus*, full, round, active, but not hard; occurs in the hot stage of intermittents, in remittents.

3. *Synochula*, quick, tense, small, hard, vibrating; occurs in sub-acute rheumatism, inflammation of the intestines, peritoneum, &c. It is the hectic pulse.

4. *Typhoid*, quick, small, slightly tense, not hard, and somewhat frequent; in the advanced stages of bilious fevers—the result of irritation in an exhausted state of the system.

5. *Typhus*, small, very frequent, somewhat quick; occurs in the advanced stages of jail, hospital, and other varieties of typhoid fevers.

OF FEVERS IN GENERAL.

Idiopathic.—We mean by this term a disease which does not depend on any other, and in which respect it is opposed to a systematic disease which is dependant on another.

Symptomatic.—Dependant on; local irritation, partial or general; inflammation, "which we generally find seated in the mucous tissues, frequently in the serous."

Proximate cause.—Some contend that the cause is located in "the capillary system of blood vessels, and that the morbid actions of the heart and arteries are mere sympathetic phenomena, dependant on a primary local irritation of a part or the whole of the sanguiferous capillary system;" and this is from no mean authority. Respecting the proximate cause, I might say, and with truth, there have been an hundred hypothesis. Some contend, and assert it as a fact, that the disease is all in the solids; others assume as a fact, that the disease is confined exclusively to the fluids. Now, we contend, that all changes which take place in the fluids are most probably owing to the solids in the first instance. A morbid cause makes an unnatural impression upon the

general system as a living body; it impresses the solids, and by the action of the solids the fluids are secreted in a vicious manner and of an unwholesome quality. There are various other reasonings that we could cite, but as our object is to give a brief outline of fevers, their causes, &c. in general, we refer readers to works that have entered largely upon this portion of our subject, and I can only assure you, in your perusals you will find many assumptions. "Anything may be said in physic, but anything may not be right."

Remote causes of Fever,—Are divided into predisposing and exciting. There exists no essential difference between the predisposing and exciting cause. Every predisposing cause may become an exciting cause by continued or intense action. So says Bell, Eberle, Stewartson and Cook. We believe that most of the remote causes of fever do not produce epidemic disease; the predisposing causes are: an anxiety of the mind, grief, an over-exertion of the mental faculties, extraordinary muscular exertion, excess of venery, and all circumstances of a debilitating character. Predisposing causes soon become an exciting cause, when pushed too far; such as an excess in venery, &c. One cause, most certainly, of continued fever, is an exposure to cold, more especially when the body is over-heated. Cold again, will sometimes, it is said, produce epidemic diseases, but rarely, except in conjunction with the cause of autumnal fever. However, it is but too true, that from Sept. '46 to April of '47, cold was the cause of an epidemic in the county of Grimes and adjacent country. I style it an epidemic because it was almost universal, pneumonia, (vulgarly termed winter fever.) Famine is capable of producing epidemic disease, and epidemics

are annual in many parts of the world. It is in the summer or hot months, almost universally, that epidemic diseases prevail.

Predisposition.—General debility but seldom, most commonly confining itself to some local organ. In drawing our deductions from our past reading, to arrive at conclusions for the predisposing causes of ague, the first that presents itself for consideration is bad health. A distinguished author says, "if a person be out of health in any respect, he is more likely to be the cause of ague." Our own impression is, whether in health or out of health, that in this climate the general system, from the effects of heat, is so much relaxed, that the least change of weather predisposes us to ague. And it is under this head that, with feelings of some reluctance, I feel it to be an imperative duty to state, that in this climate our systems require a stimulant; I am well aware of the general hypothesis, and concede that associations for temperance are well calculated to do good, but nevertheless, to carry it to the extent of confining entirely to cold water, I am well convinced would, in many instances produce disease. I am well aware in assuming this position that there are persons belonging to Temperance Societies, whose anathemas I will receive, but an author should have but one guide, to write conscientiously his views, and to state them boldly; and arriving at my conclusions from some of the most distinguished authors of the present day, and accompanied with my own experience, *I assert, that in this climate to keep up the general vigor of the body, it is necessary to drink in moderation small portions of wine.* I think good claret the most preferable. In support of this position I refer you to Gregory's "*Conspectus Medi-*

cinae Theoreticae," wherein he asserts when a student at Leyden there were twenty-four students, who always dined together, and were very much in each others society; twenty-three of them conceived it to be necessary to avoid the ague to keep up a slight excitement; there was one whose opinions were the reverse, and confined himself to cold water; the twenty-three escaped, but the water drinker caught an intense ague. This certainly exemplifies the necessity of keeping up the vigor of the body, and strength of mind to resist disease. The French authors assure us, (and for their authority the world can produce no better,) that it is indispensable in the marshy parts of France, to drink wine in moderation to resist the ague. Dr. Elliotson asserts that Sir John Pringle mentions that wine in moderation, and a full diet, are the best safeguards against it. In Gregory's Study of Medicine you find the same opinion. Dr. Stewartson asserts that the Dutch are in the habit of exciting themselves by taking spirits before they go out in the morning, and their physicians contend that it is highly necessary, exposed as they are to the exhalations of an impure atmosphere. I am aware that these opinions are counter to those entertained by many, and more especially to some benevolent societies, instituted for the suppression of drinking intoxicating liquors; but the major part, or at least the intelligent of those societies, will discover that my opinions approach near to theirs, and if used in the manner proposed, that no harm would result therefrom.

The origin of all possible cause of Fever, says *Chisholm* and *Eberle,* is quadruple. 1st. "Retained recrementitious materials, in consequence of the accidental torpor of one or more of the emunctories.

2d. Substances generated in the system, independent of organic actions, worms, &c.

3d. Materials generated out of the body—miasmata, heat, cold, &c.

4th. Substances generated by diseased organic actions—contagious."

To the most of these propositions we cordially agree; but with due deference to the authority from whence they spring, we beg leave not to attach so much importance to miasmata, as is generally conceded by the author and the most of Southern physicians. We will notice our objections under the head of the cause of fever.

The causes of Fever are divided into three classes:

1. The atmosphere, its sensible properties—heat, cold, moisture, electricity.

2. Contagious—the result of organic action.

3. Miasmata—the result of physical changes.

Heat.—Specific temperature of the human body, 98°. Heat alone, however, in its usual degree in the warmest climates, is not sufficient, most certainly, to produce epidemics; in temperate climates the hot months are the time of sickness; moisture is also necessary. It has been contended that moisture is not essential for miasmata; but in my humble opinion it cannot be sustained. The hot climates within the tropics, which are almost universally healthy during the warm and dry season, soon become sickly after the rain commences, and continues so throughout the whole season. Drs. Cook and Ferguson assert the rainy and sickly season are synonymous terms. Heat, no doubt, increases the secretion of bile.

Cold causes a contraction or shrinking of the body, produces irresistible disposition to sleep, and when ap-

plied suddenly excites the nervous system; its alternations with heat is a fertile source of disease, generally resulting in affections of the chest, pneumonia, colds, or rheumatism. "Cold water externally applied, or taken into the stomach when the body is heated, and in a free state of perspiration, often proves suddenly fatal."

Miasmata are seldom generated at a temperature below 80°; their precise nature unknown; there is reason to believe that they consist of particles of putrid vegetables and animal matter, dissolved in aqueous vapor. Periodical fevers are met with in mountainous districts in the interior of some of the islands, at an elevation of six hundred feet, and amongst a series of mountainous ridges not exposed to currents of exhalations from swampy and low grounds. We therefore conclude that heat and moisture are not sufficient to produce epidemic disease. Something more is necessary, and may be discovered by attention to the situation and circumstances of the places most liable to these diseases.

Contagion.—By "contagion is generally meant, I believe, either a peculiar matter generated in, or a depraved secretion of a living system under disease; capable of producing the same disease in others, when there is no indisposition to it; and more especially if there be a predisposition." The diseases produced by this class of causes preserve a determined or specific character; you may divide into chronic and acute; the latter seldom affect more than once, the former may affect repeatedly. "Typhus fever, under certain circumstances, contagious; appears to be propagated by effluvia only." Contagion is rendered more or less harmless by free ventilation; it will attach itself to various substances; those most apt to receive it and retain

it are wool, cotton, chairs stuffed with hair, cotton cloths, &c. The best disinfecting means are cleanliness, free ventilation, muriatic vapors, lime, fumes of sulphur, and heat.

PARTICULAR FEVERS.

INTERMITTENT FEVER.

At the present time, especially in this country, it would be superfluous to enter, at any considerable length, into the details of the treatment appropriate to the simple intermittent form of periodical fever. The management of this character of fever has, to a great extent, been taken out of the hands of the profession by the patients themselves, or their friends; but more frequently by an over-weening confidence in some patent nostrum for their cure. I have in this climate seen sad results in mal-practice for this form of fever, and it has been a matter too much overlooked by the profession; the public generally resort to these patent nostrums, all of which contain an anti-periodic property—either quinia or arsenic—and the result generally is, that the system not being prepared for their action, harm generally is the result; a train of diseases follow—dropsy, &c.

Pyrexia.—By this we mean the absence of fever during the first and second reaction. In inflammation there are only two stages well developed, which are cold and heat; but in fever, especially intermittent, we have three, a cold, a hot, and a sweating stage; these

are always well developed; the first symptom which presents itself in this disease is the cold stage.

Cold Stage.—The patient has indescribable sensations of feeling, a great desire to yawn and stretch, and a chilly sensation along his spine; he soon begins to tremble slightly, and in a few minutes complains of being very cold, and in many instances his jaws chatter, the skin becomes very rough, and the urine which he makes at the time is very pale, and in small quantities; the pulse is weak, and generally very slow; sometimes nausea and vomiting; finger nails become blue. The relation between the violence and duration of the stage is direct; the former being violent and short, the reaction will be apt to be vigorous; weak and lengthy chills usually followed by feeble reaction. A chill occurring in the advanced period of a remittent, indicates that it is about altering its type or form.

Hot Stage.—In the cold stage the blood recedes from the surface, and accumulates in the large vessels; it here regains its warmth, and the pulse soon becomes very full and rapid, and creates such an excitement as to produce pain and throbbing in the head, the eyes become prominent, a dry skin, urine small, and high colored.

Sweating Stage.—After the hot stage the skin becomes soft, perspiration is profuse and general, urine copious, and a cessation of pains in the head, loins, &c.

Incidental Symptoms.—We have, occasionally, these symptoms, such as fainting, delirium, and at times, the appearance of *petecchiæ* on the surface; by this term we mean red or purple spots. Pringle mentions, as the character of an epidemic which he saw prevail, violent delirium with a clinching of the hands, &c.

Periodical Recurrence.—These stages frequently all take place in twenty-four hours, but they are various in regard to duration; beyond two days the intermission is rarely regular in this climate, If the attack returns every day the fever is called "quotidian." If there be an intermission of a whole day, in medicine we mean twenty-four hours, it is called "tertian." If the intermission extend two days, it is then called "quartan;" this will bring the attack every third day. We seldom have intermission in this country longer, but cases are reported where the paroxysm has been known to return every sixth or seventh day.

The body sometimes only partially affected.—Cases are reported where the paroxysm only affected one half of the body. Abercrombie cites a case of a friend, who only perspired in violent exercise in a vertical half of the body. I have a friend of this description, Mr. Harper, who was clerk of the Probate Court of Grimes County. I never considered him a healthy man.

It affects any period of life.—Ague affects all ages, from childhood to old age. I have had under my care seven German patients over the age of forty-five, and in every instance, upon the cessation of the paroxysms, anasarcæ made its appearance; by this term we mean one of the stages of dropsy, which, however, was easily removed. Quinine was administered without any preparatory treatment.

It is liable to return.—When it has once occurred, the person is ever afterwards liable to its return; cold, wet, and the east wind have a particular tendency to bring it back. I do not think it will recur spontaneously, but I am satisfied that cold, wet and an east wind will frequently bring it back.

Complications of Ague.—It is frequently complicated

with rheumatism. It will sometimes alternate with rheumatism, sometimes one will have precedence, then the other.

Local Inflammation.—Ague is frequently attended by inflammation, frequently inflammatory affections of the chest, but in this climate it is confined in a large majority of cases to the *abdominal viscera.*

Congestion and Effusion.—A very distinguished author, who has made frequent autopsical examinations, says, after death, during intermittent fever, we often find congestion and effusion in the head, chest or abdomen. The mucous surface of the alimentary canal is likewise in a state of great congestion, and the liver contains a large quantity of bile. When this disease proves fatal, it frequently does so by great internal congestion; whence there is fullness of all the blood vessels of the head, chest, stomach and intestines, and a large quantity of bile on the liver. When the disease has continued for a considerable time we have various organic affections, such as dropsy and other diseases which I shall mention hereafter. ' But when a patient dies in a paroxysm, or dies after the disease has existed only for a short time, we find decided marks of internal congestion.

Enlargement of the Spleen.—"The chronic form of the disease is very frequently attended by other affections, and frequently after ague has ceased other diseases make their appearance. It is very common, for example, when ague has continued any time, for the spleen to become enlarged. So common is this in some places, that the tumor is called by persons "ague-cake." The tumor thus formed by the spleen, occupies the left hypochondrium, or, frequently, I may say, the whole left half of the abdomen. Spleens are reported whose weight exceeded twelve pounds. Enlargements of the spleen

and liver is common, but particularly of the former. In the case of spleen the patient is for the most part pale; while in the case of the liver he becomes more or less jaundiced."

Diagnosis and Prognosis have been given briefly in the fore part of the work, and we view it as superfluous to recapitulate.

TREATMENT.—The means which we adopt to eradicate this fever we divide into two—remedies for the intermission, and those during the paroxysm of the disease; with regard to the latter they are numerous, and prescribed to alleviate rather than to the cure.

Cold Stage.—Little is ever attempted to be done at this time. Plenty of cover, with the aid of warm drinks, should be resorted to, but by no means should they be of a stimulating character. I have frequently prescribed opium in this stage; where there was no evidence of congestion upon the brain, it will most certainly shorten it, and in many instances alleviate it.

Bleeding in the Cold Stage.—This has been proposed, and in favor of which there is strong testimony. We certainly have more powerful congestion in this climate than they have in a more northern latitude, and it is quite common to have congestion to such an extent as to prove fatal, if it were not speedily relieved. Dr. Mackintosh and others recommend this practice very highly; it seems rather to alleviate than to cure. I never have resorted to bleeding in the cold stage of intermittent, from never having had a case that I thought required it. Dr. Mackintosh says it is always safe, often shortens and sometimes cures. Dr. Lind says, he and two other friends had three patients each, each bled their patients and they all lost one. I have no doubt it

is a remedy that might be resorted to, where we found extraordinary symptoms of congestion. Dr. Drake says, if there is a determination to the brain, you should use the lancet, or where you have a muscular agitation, bleeding will soon re-establish re-action. With due deference to this high authority, we must dissent from the indiscriminate use of the lancet, and in doing so, we will state briefly our reasons:

1st. We have been successful in curing intermittent without resorting to the lancet.

2d. In this climate our systems are very much relaxed, and re-action is generally very slow in its character, and the type of disease is very easily changed, consequently, we contend, to bleed in the cold stage of intermittent fever would be running considerable risk, and in case *re-action* did not take place, it would be the means of changing a common intermittent into that of congestive fever. We would not be understood to say that we would never use the lancet, but we are of opinion we would not unless our patient was robust and plethoric. As a general rule it is inadmissible, and therefore requires a sound judgment when you resort to the lancet. I have no prejudice against the lancet, but would be understood to say that I have never seen a case of fever wherein I deemed it necessary. Use it seldom, if ever.

Hot Stage.—When this stage comes on we frequently give small portions of cream of tartar, but a treatment that I adopt in a very large majority of cases is, to give about ten grains of Dover's powders, to be followed with warm sage tea, or an infusion of wild horehound, to bring on the sweating stage as soon as possible; if this does not produce the desired effect I repeat the dose every

half hour until there is a free determination to the surface. I have used opium in both stages to advantage.

Sweating Stage.—When this period arrives the paroxysm is nearly at an end. We now continue slightly warm diluents; we do not suffer the cold air to blow on him. If the patient be very weak we can give him weak stimulants, at the same time taking care to observe that no local congestion or inflammation be present.

During the Intermission.—All the principal remedies should be employed during the intermission. The two chief remedies in the cure of this disease is quinine and arsenica; quinine is best given in a fluid state, and there should be a slight addition of sulphuric acid, by means of which a super-sulphate is made. No general rule can be laid down respecting the quantity required, but our usual mode, when given to arrest the paroxysm, is to give five grains quinine and one grain piperine every four hours. We give our general treatment in the report of two cases, also our recipe for making Massie's Tonic Pill, which in our hands seldom fail in producing a speedy return to health.

Mr. B. had quotidian fever four weeks; he was constipated, with dull percussion over the liver. Five grains of blue mass was ordered; in a few hours afterwards

Nitrate of potash - -	10 grs.
Quinine - - -	5 "

were ordered every three hours during the intermission. He had a second paroxysm, and I ordered bark in substance, to produce a healthy tone,

Barks	ʒss.	which is 30 grs.
Cream tartar	ʒss.	" "

every four hours. Patient recovered without any further assistance.

Mr. G., 24 years of age, quotidian fever five weeks, with quite an enlarged spleen; he was cupped over the spleen, and the following prescription ordered:

℞.	Quinine,	3 grs.
	Podophylline, (mandrake,)	1 gr.
	Ipecacuanha,	1 gr.

This was given every four hours during the intermission; he had a second and third paroxysm, and became constipated; senna tea was administered to keep open his bowels, and the following prescription was ordered every four hours, which arrested the paroxysms:

Quinine,	6 grs.
Camphor,	3 grs.
Piperine,	1 gr.

Arsenic, as I before observed, is valuable in this fever; it is best adapted to cases attended with rather a full and robust habit; a moderately full, but soft and regular pulse, and unaccompanied by local congestions. In debilitated or scorbutic habits, (by this term we mean, in the abstract, the scurvy,) often injurious; improper also in persons who have any affections of the breast. Should be given in as large doses as the stomach will bear; apt to produce dropsical swellings. From ten to fifteen drops of Fowler's solution, with the same amount of laudanum, every four hours.

Sulphate of Zinc is a good article in the treatment of this disease; in combination with capsicum, (cayenne pepper,) I have found it quite as efficient as quinine. I give it according to the following recipe:

℞. Sulph. Zinc, x grs.

Pulv. Capsicum, ℈ii. (40 grs. cayenne pepper.)

Syrup of ginger sufficient to make it into pills, which I divide into thirty pills, and give one every two hours.

Massie's Tonic Pill.

℞.	Quinine,	ʒi.	60 grs.
	Piperine,	ʒss.	30 "
	Podophylline (mandrake),	x grs.	
	Rhubarb,	℈ii.	40 "
	Capsicum,	℈i.	20 "
	Oil of black pepper	40 gtts.	40 drops.
	Oil of anise,	8 "	8 "

Pulverize this well, and divide into 5 gr. pills. My usual mode of administering is to commence about six hours before the paroxysm begins, and give one every hour.

I have frequently used the following compound, and with the happiest results; whether it has ever before been introduced to the profession I know not, but from my own experience I can recommend it as a valuable remedy. Its action upon the spleen is equally efficacious as quinine, and without doubt the most valuable succedaneum to quinine which has yet been discovered. The article is *gentianine*, given from 15 to 30 grain doses twice a day.

In regard to quinine, frequent objections are raised on account of its extreme bitter taste. We have tried Bouchardot's method, and think well of it; he substitutes tartaric acid in lieu of sulphuric acid; it hastens the solution. M. Casorati has found that one grain of the tartaric acid is sufficient to saturate three of disulphate of quinine, and it is not at all unpleasant to the taste.

Prevention of Ague, says Dr. Elliotson, is to prevent all accumulation of dead vegetable substance, in order to prevent as much as possible exhalations from putrified vegetable matter. When land cannot be drained,

occasional inundations may be necessary, in order to throw more water on it than is compatible with vegetable decomposition. With regard to individuals who must be exposed to ague, the best mode of preventing it is to live as well as possible, to have good food, a certain portion of *wine* or *beer*, and never to expose themselves to malaria with empty stomachs. Smoking is an excellent preventive in damp places.

You will frequently find persons who have had chills and fever for a great while; these cases are almost universally attended with what is termed "ague cake," an enlargement, and sometimes an indurated spleen, to remove which I cup freely over it, scarifying every portion of the surface over the enlargement, and then rub over the scarified surface the following ointment. I prefer, however, warming the ointment, spreading it on leather or cloth, and keeping it constantly applied.

The ointment consists of the following:

℞. Hydriod. potassa, ʒiii.
Simple unguent, ℥i.

Mix intimately, warm and spread as directed.

At the same time either of the following remedies should be taken.

℞. Hydriod. potassa, ʒii.
Iodine, ʒi.
Aqua distill. (distilled water), ℥i.

Mix intimately, and give 20 drops three times a day; you can increase the dose one drop a day in chronic cases.

Twining's Recipe, I sometimes use in lieu of this; it is the following:

℞. Pulv. Jalap.
—— Rhubarb.
—— Columbæ.
—— Zinziberis—Ginger.
—— Potassa supertartratis aa ʒi—Cream of tartar.
Ferri sulphatis ϑss.—Green vitriol.
Tinct. sennæ, ʒiv.
Aquæ menthæ sativæ, ʒx.—Misce.

The dose is an ounce and a half for an adult at 6 A. M., and repeated at 11 A. M., daily.

For children the dose should be so regulated as to produce two or three stools daily, not more. Its action is that of purgative, tonic, and diuretic. Where your patient is very costive, I have frequently added pulv. scammony comp. ϑii to the mixture; and on the other hand, where they are easily purged, we substitute compound tincture of cardamon for the tincture of senna; and if there be any disposition to paroxsyms of intermittent fever, I add to the mixture from a scruple to a drachm of quinine. I continue this for ten days, then alternate with small doses of podophyllin, and tinct. ferri. muriat, (which is muriatic tinct. iron,) 20 drops in a wine glass full of water, with ʒi of tinct. of gentian comp. at 7, and repeated at 11 A. M. These should be used for about five days, when you should return to the spleen mixture if the case is not relieved.

The following remedy has some celebrity in affections of the spleen.

℞. Pulv. Cinchona, ʒi—Peruvian bark.
Cream tartar, ʒi.
Nit. potash, ʒii.—Nitre.

Mix and triturate intimately together, and then take a tea-spoonful before each meal.

You will frequently find in this climate cases where different treatment will have to be observed, both in enlarged spleen and intermittent fever; they are, however, rare occurrences. In the latter we have used the following recipes with success.

℞. Sulphatis Quiniæ, gr. xx.
Acidi Sulphurici, gtts. iii, (drops.)
Syrup ginger or lemon, ʒii.

Mix well, and give large tea-spoonful every hour. We sometimes substitute for the ginger or lemon, loaf sugar ʒi, and cinnamon water ʒiiss, and use it in same doses.

You sometimes find cases in which quinine seems to exert no influence; in such cases try the gentianine, as has been before suggested. We have frequently used the following in such cases with the happiest results:

℞. Ferrocyanitis Quiniæ gr. viii.
Alcohol, ʒi.
Solve and add,
Aqua Camphoræ, ʒvi.

Mix, and give from a half to a tea-spoonful every hour. The arsenical preparation used by Graves, and which was suggested by my friend Dr. L. A. Byan, of Brownsville to me, he assured me he has used it in these particular character of cases with marked success; he is a gentleman in whom I have every confidence, and my own experience so far confirms his statement fully. The preparation, as used by him, is as follows:

℞. Liquorice arsenicalis, viii. gtts. (drops.)
Water, ʒi.
Tinct. Opii, xv gtts. (drops.)
Spirits Lavend. comp. ʒss.

To be taken at a dose. It does not irritate the stomach like the simple arsenic solution.

The following remedies, although one of which is extremely simple, you will find valuable under many circumstances; the first is a good remedy when there is a disposition to vomiting.

℞. Tartratis Antimonii et Potassæ iii. gr.—Tar. emetic.
Sul. Quinine, xii. grs.

Mix and divide into four parts. A powder to be given every two hours during the apyrexy, (intermission of fever,) it prevents the paroxysm by emesis and alvine evacuations.

M. Piorry, M. Sculla Montdezert, and M. Parant have been advocating the use of common salt in ague; they give one ounce of the chlorine of sodium in six ounces of water, in three doses, two hours before the fit. I have tried it in a few cases only, and in a majority of which it succeeded beyond my expectations.

M. Condret affirms that he cures intermittent fever effectually by dry cupping. He applies eight or ten middle sized cupping glasses on each side of the spinal column, from the neck downwards, and allows them to remain on about half an hour; he applies them during the cold stage, and says two or three applications are sufficient.

We are extremely sorry that we did not possess Drs. King and Newton's invaluable work until most of our manuscript was written; I have, however, where I could before going to press, availed myself of many valuable suggestions from their work. They say that a pint of cotton seed placed in a quart of water, and boiled down to one pint, and one gill of the warm tea given an hour or two before the expected chill, will cure intermittent

fever with the first dose. It is so simple a remedy it is within the power of all to try. If it should prove successful the South will be under many obligations to those gentlemen; they will be viewed in the light of benefactors.

The Gelseminum Sempervirens, (yellow jessamine—wild jessamine,) woodbine, is probably engaging at the present time the widest reputation for the cure of intermittent.

"The plant was brought into notice, as far as we can learn, in the following manner: A planter, whose name we have forgotten, having been laboring under a severe attack of bilious fever, which seemed to resist all remedial influences, requested one of his servants to collect a common root growing in his garden, and prepare an infusion of it for him to drink. The servant, by mistake, collected another root, and gave a tea of it to his master, who, shortly after swallowing some of it, was seized with a complete loss and prostration of muscular power, unable to move a limb, or even raise his eyelids, although he could hear, and was cognizant of circumstances transpiring around him. His friends collected, expecting every minute to see him breathe his last. After some hours, he gradually recovered himself, and was astonished to find that his fever had left him. Ascertaining from his servant what plant it was which acted in this manner, he collected some of it, and employed it successfully on his own plantation, as well as among his neighbors. The success of this article finally reached the ears of some physician, who prepared from it a nostrum called "Electrical Febrifuge," which was disguised with the essence of wintergreen. The plant was the yellow jessamine.

"*Properties and Uses.*—Narcotic and antispasmodic, exerting a gradual influence over the system. The resin of the root is a dangerous poison, and care should always be had, in preparing the tincture, that the alcohol be considerably diluted. Those who have used the 'Electrical Febrifuge,' among whom are several physicians, speak well of it in all species of fevers, nervous and bilious headache, colds, pneumonia, hemorrhages, leucorrhea, chorea, ague-cake, and several other diseases, though it is in fevers especially in which its efficacy has been mostly observed. It is said by some to be the only agent ever yet discovered capable of subduing, in from two to twenty hours, and without the least possible injury to the patient, the most formidable and most complicated, as well as the most simple fevers incident to our country and climate, quieting all nervous irritability and excitement, equalizing the circulation, promoting perspiration, and rectifying the various secretions, without causing nausea, vomiting or purging, and is also adapted to any stage of the disease. It may follow any preceding treatment with safety. Its effects are clouded vision, double sightedness, or even complete prostration, and inability to open the eyes, and which gradually pass off in a few hours, leaving the patient refreshed, and completely restored. And as soon as the heaviness or partial closing of the eyes is induced, no more of the remedy will be necessary, although these effects should even follow the first dose.

"The tincture is the preparation more generally employed. It is made by bruising the green roots, after having cleansed them, and then filling a glass jar, keg or barrel with them; then fill the vessel containing them with three parts of whiskey, and one part of water.

After standing ten or twelve days, filter and bottle for use. The dose is from ten to fifty drops, in a wine glass half full of water, to be repeated every two hours; the second dose, in the majority of cases, usually effecting the cure. From two to ten grains of quinine, according to the severity and character of the disease, should accompany each dose, or it is said the system will relapse again into the febrile state, in a few hours, for want of tonicity following the relaxation produced by the remedy. The original discoverers of the use of the article say, however, that the quinine is not actually necessary, but that its addition renders the cure more prompt, and, by this combination, its usual unpleasant effects, as determination to the head, &c., are completely obviated. When the fever does not yield in six hours, a mild purgative may be administered, or podophyllin in small doses, may be added to the medicine; if diarrhœa be present, add an opiate to it. If one-half of the virtues reported to exist in this plant are true, it is certainly deserving the close investigation of all classes of physicians."

A very favorite recipe, and one which I have used with considerable success was,

℞. Quinine, ʒss.
Cream of tartar, ʒi.
Cloves in powder, ʒi.
Whiskey, (good) 1 pint.
Macerate for 24 hours, and filter.

Dose, for an adult half a fluid oz. every hour during the intermission, until two or three hours previous to the time for the return of the chill, when it should be given every half hour. The dose for children is from one to two fluid drachms.

REMITTENT FEVER.

Character.—This fever in its symptoms suffers regular exacerbations and remissions, but no perfect intermission. In its nature it partakes both of intermittent and continued fever; I might assert that it is essentially the same as intermittent fever. We have only remissions, not intermissions; the disease is certainly continued although remitting. It is particularly confined to warm climates.

Symptoms.—In its forming stage it is very analogous to those of intermittents. There is generally continual fever, *every day*, throughout the twenty-four hours; in the course of the same a remission of these symptoms generally takes place, but after a short remission the febrile symptoms appear again, and after a certain period again suffer more or less remission. This description answers generally to the mild form of the disease. Sometimes, in addition to the continual fever, there is a regular paroxysm of ague. I have seen patients, and especially in this climate, complain of being extraordinarily warm day and night, except, perhaps, every other day, when they would have, probably, a chilly sensation, after which the heat becomes more violent, and a slight sweating stage comes on soon after, but when this ceases their seems to be no intermission, for the patient soon becomes hot again. When the disease is fully developed there are pains in the head, back and lower extremities, a yellow tinge of the eyes, considerable nausea, sometimes bilious vomiting, fullness and tension in the region of the heart, pulse full, frequent and inclining to be soft, tongue coated, generally at first white, afterwards brown, with a very bitter taste in the mouth. The mind is

seldom affected; there is at times wandering during the exacerbations, and occasionally we meet active delirium. We sometimes have stupor, but it is generally not of long duration, and like delirium does not exist as a prevailing feature. "In those cases which have been styled hepatic remittent there is an absence of bile in the matters evacuated, whether by vomiting or stool, until towards the close of the attack, when there are large evacuations of dark, pitch-like matter, which have been regarded as critical." For myself, I can only assert, that I view such discharges as the most favorable omen, and during the course of my practice I do not recollect one solitary case that did not recover when such evacuations were established. It is true they have a very depressing influence at the time, and the patient has every appearance of sinking, but in a short time his system reacts, and he is more vigorous than he was before the discharges commenced. As I before said, I do not recollect one solitary exception to this rule.

Remote Cause.—This form of fever is produced by certain irritating and depressing causes. Miasma generally has the greatest tendency to produce remittent fever. My own impression is, that it acts upon the solids, it is soon transferred into the blood vessels, and its peculiar influence is conveyed through the nervous system, which generally produces muscular debility, and when we find the heart's action rapid it is almost invariably the result of depression of the nervous system. The excretions and secretions are all perverted in quality. We have a feeble appetite, the surface is generally hot, the blood is acted upon from the foreign poison which emanated from the solids; the depression is after a time followed by reaction, which is the first of the hot stage.

The blood having receded from the surface and congested itself in the internal organs, when re-action does take place it is a powerful assistant to aggravate the fever, and the blood being in a morbid condition, it adds its influence in irritation to the heart. In the cold stage, as I before observed, the blood is all accumulated in the internal organs, which of course have all been in a state of congestion, and when reaction does take place, *inflammation* is already exhibited from the turgescence in which the blood vessels have been in. In eruptive diseases the blood generally becomes secreted in the capillary vessels, when *inflammation* is soon produced from the congestion. Inflammation is, therefore, the great cause of death in idiopathic fevers. We sometimes have inflammation surviving the cure, as, for instance, the spleen in autumnal fever. In the secreting or decline of the hot stage, which is the stage of returning health, the vital powers are recovering, and you will have secretions from the different parts, and our patient will be much better if they are abundant; we must assist them when the excitement of the system is allayed, and not *before*, if you do you will increase the irritation and do no good. It is an established principle that, if the regular secretions are disturbed the individual will soon be unwell; this will bring on fever, and it may be the cause of producing inflammation in some part of the system.

Etiology.—We extract from the prize essay of *Professor L. P. Yandell* his views in regard to the cause of this fever. We do this from the satisfaction of knowing personally the high character and elevated position that that gentleman occupies in the medical world. His opinions have great weight, and are entitled to the

greatest confidence. "Nothing in regard to bilious fever is better settled than, that the poison which generates it is developed by the drying up of ponds and water courses, in a fertile region of country, under an ardent summer and autumnal sun. Wherever moisture is present to co-operate with organic matter in warm weather, there is decomposition going on and there is found bilious disorder, especially by the bottoms of streams or ponds recently exposed to the air and the sun, does the poison of fevers seem to be eliminated. The draining of a mill pond, if done late in the summer or in the fall, hardly ever fails to spread miasmatic diseases far and wide among the inhabitants of the neighborhood. The following is an instance in point, which has never been published: The proprietor of a mill on a small stream in Ohio, was in the habit every year in early summer, when the waters became low, of draining the pond by raising the flood-gate. No injury to the health of his neighbors resulted so long as the draining process was confined to early summer. The inhabitants of a village bordering upon the stream were not particularly subject to fevers, but during a wet summer in 1839, as the stream continued full, he was induced to postpone draining the pond until late in August; the consequence was that a most formidable fever broke out in the village, and prevailed to an extent before unknown in it. The owner of the mill was compelled to draw off the water next spring, the pond having been condemned as a public nuisance, and the summer which followed was one of health in all of the surrounding neighborhood."

As regards the duration of bilious remittent fever, it varies in accordance with the intensity of the attack in the simple uncomplicated character. In this climate, with

proper treatment, it generally terminates in a few days, and our most violent cases seldom exceed nine days. There are some cases which from their violence have a malignant tendency, and such cases are generally very tedious. Dr. Dickson, of South Carolina, says, "it is not uncommon, especially among the most perfectly acclimated adult natives resident in malarious localities, and strangers long familiarized to them, to find bilious remittent fever of very protracted duration," "and terminating generally after the twelfth day in a low form or typhoid stage of bilious fever. In this climate such cases are very rare. My friend, Dr. Rogers of Chappell Hill, and some other medical gentleman of the Brazos Valley, have assured me, however, that in their districts this form was quite common."

Hepatic Modification.—The most severe and dangerous form of this disease is soon known by the great febrile heat during the exacerbations, fullness, tension and pulsation in the right side, delirium, tongue foul, and great irritability of the stomach accompanied by severe vomiting. The discharges from the bowels are of various colors and consistence, sometimes obstinately constipated to a great degree, at other times the discharges are green or black.

General Indications of Cure in Fever.—Some are self-limited, and consequently it is very difficult to shorten them, but the reverse can be effected. In small-pox you cannot prevent the fever, but you may keep it from disorganizing the system and save your patient's life. There are a great many practitioners who never attempt to relieve the paroxysm until the system is prepared for the specific or *tonics*. The first indications are to moderate the action of the heart and arteries; to remove the

irritating contents of the bowels, and moderate intestinal irritation; to restore the healthy functions of the liver. To answer all of these indications we employ the tinct. aconite to relieve the arterial excitement. *Bleeding* is but seldom necessary in the milder cases of remittents, it is a favorite with some; it might become necessary when the pulse is full, vigorous and hard, the skin very hot and dry, and the headache intense and acute; but even under these circumstances the lancet should always be employed by a sound judgment and with great caution. The first indication would be to moderate the heart's action and reduce the vascular system. Every case of fever will present morbid action in the heart and blood vessels, but does not present power in every instance. In typhoid and autumnal fevers the powers are generally in excess. We will introduce the means to reduce the action. You must withdraw every stimulant from him; he must have a cool and fresh air; you must abstract the caloric from his body; you must look to what acts upon the organ of sense; you must diminish light and noise, and, in fact, every stimulant must be withheld; you must look well to his alimentary canal, (the bowels,) and see if there is any feculent matter, from the peristaltic motion not being in health, you must, consequently, if there is any obstruction or irritating matter, it must be removed by cathartics; the mental influences must be attended to; he must not engage in any thing that will excite the brain, &c. If there is vascular action it must be moderated. You will carry off the contents of the stomach and alimentary canal, but you must not endeavor to increase the secretions immediately. If the pulse is full, tense and bounding you will find the aconite will lessen its volume, and

therefore lessen the chances to inflammation from congestion. There is another means which will deplete, which must not be neglected, by exciting the secretions which lessen the vascular action, hence you produce nausea; it is valuable and must not be neglected. If you should resort to the lancet it should always precede purging; you will deplete from the kidneys; you will give nitrate of potash, cream of tartar, &c. You likewise deplete from the skin by giving minute doses of tartarized antimony, but a more favorite remedy with me is Beach's sudorific tinct.; these are medicines which cool the system. The vegetable acids are celebrated for their uses in fever; they do not stimulate the heart, but reduce the energy of the calorific functions. Tartarized antimony stands very high in a direct effect in decreasing arterial action, but should be used with great caution, when you give cathartics. With antimonials you will relieve the action of the heart and deplete more successfully in inflammatory fevers than any other.

The next thing is to consider the morbid action, and to alter its mode. The acetous emetic, which we will lay down, fulfils several indications to change morbid action. Podophylline is another remedy, and is beneficial in *inflammatory* fevers if preceded by the remedies above alluded to; another is the sulphate of quinine; it will produce a constitutional effect, and acts as a *sedative* in proper doses.

The next consideration is the depuration of the blood; it undergoes changes in disease, and we must purify that fluid; a copious perspiration, if it can be kept up, is always likely to be beneficial, and if copious, fever will abandon the system. Such medicines that will produce great secretions of the liver, generally are of great consi-

deration in producing a copious termination to the surface. In all the diseases of the South there is generally great biliary derangement; therefore, it is that Podophylline and some medicines act so beneficially in producing healthy action of the blood, by relieving biliary engorgement of the liver. I would here remark that, whilst you are giving cathartics, to deplete the alimentary canal, it is difficult to produce perspiration at the same time, consequently the latter should be attempted after purging. I frequently resort to it, however, before. I generally use spiritus mindererus, or Dover's Powders, on the sudorific tincture. If the patient's stomach be very irritable, you will be better able to remove foreign substances by giving a light emetic; if you resort to this, use the emetic powder. I should, however, be very careful not to administer an emetic if the pulse was full, which would indicate a slight inflammation; if you found any soreness upon the epigastric region from pressure, you should not administer an emetic, or at least be careful in it. If you find soreness upon percussion, you would not attempt to administer it. Ipecac. I always add to the emetic powder; it is my favorite in this fever. I would here caution you against pushing cathartics too far; you can produce such an irritation in the alimentary canal as will terminate in inflammation, and I have frequently seen instances where purging was the cause alone of changing the color of the tongue to a very bad appearance.

Antimonial preparations sometimes change the diathesis in this disease; mercury will sometimes change its type, but we must confess that we are a poor advocate for its use; we think, in a large majority of cases, that Podophylline fulfils all its indications. Quinine is

a very valuable remedy, but if administered in small doses, when the patients pulse is excited, it increases the arterial excitement; but if administered in ten grain doses, it will certainly act as a *sedative.*

The indication to be filled in Remittent is to bring it in the same state that we have in intermittent, and this is to be done by the general treatment already pointed out. We cannot administer safely the quinine when there is inflammation of the alimentary canal, or great irritability of the stomach, but when this is not the case, we may begin its use at a very early period with benefit. Cases are reported where quinine alone has been the remedy, and the patient cured in a short time. If such be the fact, why subject a patient to a course of debilitating remedies; this would be a very hazardous practice. My own general treatment, however, is, after having cleansed the alimentary canal, and produced a copious perspiration, I make a compound which I give every six hours during the remission, which is as follows:

℞.	Podophylline,	1 grs.
	Aloes,	2 "
	Quinine,	10 "
	Piperine,	1 "
	Opium,	1 "

I frequently divide this, and administer it every three hours. Some of the following remedies I frequently use, and can safely say, they will seldom disappoint your expectations.

The following with us are popular:

℞.	Pulv. aloes,	℥ii.
	Ex. eupatorium perfoliatum,	℥i—Boneset.
	Castile soap,	¾℥.

Ex. podophylline,	ʒss.—May apple.
Lobelia seeds pulv.	ʒii.
Ex. gentian,	ʒss.
Pulv. capsicum,	ʒii.—Cayenne.
Oil cloves,	ʒi.

Warm the extracts, and then add the other articles; mix intimately, and divide into five gr. pills.

As an aperient, from one to three is sufficient; as an *active cathartic* four to six, I have frequently known, an active dose of them, to relieve a severe case of bilious fever.

I frequently use the following:

℞.	Massae ex. hydrg.	ϑi.—Blue mass.
	Pulv. Rhei.	x grs.—Rhubarb.
	Sul. quinine,	ʒss.

Mix intimately, and divide into twelve pills; give one every hour, or two every two hours.

The following is well calculated to prepare the alimentary canal for other remedies:

℞.	Pulv. Rhei.	—Rhubarb.
	Saponis albi,	aa. ʒss.—Castile soap.
	Podophyllin,	v grs.—Resenous principle of Mandrake.
	Simple syrup,	q. s.—Sufficient quantity.

Mix and divide into fifteen pills; give one every two hours.

In the high, or malignant grades of this disease, from the engorgement and inactive state of the hepatic system, emetics, emeto-cathartics, and strong purgatives, useful in the commencement of the milder forms of the disease, are altogether inadmissible. The first object is to allay gastric irritability, which is generally very great. For this purpose, when there is congestion or

engorgement, the local abstraction of blood by cupping is the most important measure; sinapism to the stomach, and warm bath after cupping.

We proceed to give from our memorandum book two cases in detail, so that our treatment in general cannot be misapplied.

Case 1st. I was called on the night of the 12th August, 1851, to Mrs. H. She had been taken a day or two before with headache and dull chill; the headache continued, with a general feeling of prostration, and towards evening became more severe, accompanied by great heat and thirst, with pain in the back and bones.

13th. Pain in the head severe, face flushed, tongue yellow, pain in the back very acute, skin hot and dry; pulse ninety-eight, full and strong. We gave a few drops of tinct. aconite, repeated at short intervals, until the arterial action was subdued, when two pills of the following prescription were ordered every two hours until they operated well.

℞. Pulv. jalap.
——— rhubarb.
Saponis albi, (soap,) aa. ℈i.
Podophylline, v grs.
Pulv. ipecac, v "

To be made into sixteen or twenty pills.

14th. The aconite relieved the headache yesterday, but to-day the cephalalgia is about the same as yesterday, flushed face, tongue as before described; considerable tenderness over the region of the stomach, skin hot and dry, no perspiration up to this time, pulse ninety-two, full, yet more compressible than yesterday; four cups were placed over the stomach, considerable constipation; pills continued, and one drachm of spirits min-

dererus (solution of acetate of ammonia) every hour and a half until perspiration was produced.

15th. Eyes heavy and injected; considerable prostration; perspired after the administration of the mindererus freely, tongue still very yellow; the cups relieved the pain in the stomach; pulse ninety-eight, and soft; urine very high colored, and depositing a sediment. Blue pill three grs., quinine six grs., were ordered every five hours.

16th. Has taken three doses of blue pill and quinine; three or four bilious stools; pulse eighty-five, soft and full; perspiration night and day.

17th. At twelve o'clock in the day, yesterday, recurrence of the fever, skin hot and dry; the quinine was discontinued on the appearance of the fever, as well as beef tea which she had been taking. The fever continued during the afternoon, pulse ninety, skin hot and dry; it gradually went off, and the quinine was resumed with three pills composed of equal parts of aloes, rhubarb and quinine.

On the following morning the pulse and skin had become natural, the bowels had been freely opened; quinine and tea were continued, and in a few days the patient was convalescent.

Case 2d.—I was called on the 3d September, 1851, to visit Master G. His intelligence was dull, tongue furred, prostration great, profuse cold perspiration, bowels very costive. An active cathartic, composed of scammony and podophylline was ordered, and repeated three times without producing any stool.

4th. Could scarcely be aroused, headache severe, tongue covered with a thick yellow fur. I ordered the same cathartic, increased in combination with castor oil;

I was soon requested to return, as he was having fits rapidly; I found him with a fit on; the temporal artery was opened, and considerable quantity of blood taken. I had ordered injections, they did nothing; medicine had not as yet operated; the bleeding had allayed spasmodic action. A large dose of scammony, gamboge, and calomel was now ordered; waited eight hours and no operation. I then ordered one drop of Croton oil, and one gr. tartarized antimony; in a few hours he had three copious stools.

5th. Prostration very great, the arms were allowed to fall like a dead weight, his skin hot, stupor profound. I gave spirits mindererus, and we soon had a profuse perspiration over the whole body, pulse soft and weak; four grains of quinine every hour, and a blister to the nape of the neck.

6th. His lethargy was aroused in a few hours after the blister was applied; pulse eighty-eight, soft and compressible; continued quinine treatment. At three o'clock cold perspiration, cold extremities, and deep somnolency; heat was applied (warm ashes) to the extremities; quinine was given in combination with brandy, and blistered extensively.

7th. Very much prostrated; quinine and camphor in four grain doses every two hours; a pill of the mass every four hours, with small portions of ipecac. From this time he rapidly improved, and was soon convalescent.

We have only spoken of blisters to the back of the neck; their application to many other parts, in irritation and oppression, are of great practical utility; in inflammatory cases they may prove more annoying than use-

ful; the local abstraction of blood is generally more preferable, and at least should precede.

We have given two cases only from their peculiarity. We have tried to make our general treatment explicit, and will proceed to lay down the remedies which we have alluded to under this head, and which remedies possess our confidence; and we would especially refer you to the recipe of an anti-bilious pill laid down under the head of intermittent fever.

A favorite cathartic with me is the following:

℞. Podophylline, ii grs.—Mandrake.
Cream of tartar, ʒiii.

To make it stimulating add half a scruple of capsicum (cayenne pepper); mix all the ingredients intimately, and divide into eight doses; give one every two hours.

The acetous mixture, which has been alluded to, consists of:

Sanguinaria—Blood root.
Lobelia seeds.
Ictodes foetida, (skunks cabbage root,) aa. ʒiss, pulv.
Good cider vinegar one quart.

Mix and let it digest in a warm place for a week; strain and press the dregs.

Dose, one drachm every ten or fifteen minutes, increasing it up to four or five, until the desired effect is produced; to be given in sage tea.

Beach's *sudorific* tincture is a valuable remedy; the recipe is as follows:

Ipecac.
Gum camphor.
Serpt. virg.—Virginia snakeroot.
Opium, aa. ʒii.
Proof spirit, (he uses gin,) 3 qts.

Mix and digest for two or three weeks. Dose, ½ to ʒi, to be given in some warm infusion. We have some objection to this recipe on account of the opium, and we frequently substitute for it cypripedium pubescens ʒvi, (yellow lady's slipper,) and flatter ourselves that it is a good substitute, answering all the purposes, without the stupefying effects which follow the opium.

Anodynes, when the patient is extremely restless and wakeful, may be given with benefit, and you will generally find "Dover's powders" beneficial. I cannot close this subject without referring to the practice of applying blisters, as well as mustard plasters, in almost every variety of fever; as a general rule they should be dispensed with, yet in some severe cases I have frequently given relief by applying a large one over the region of the liver; the benefit depends upon the stimulus it imparts to this organ. Some of my medical friends inform me they have applied them below the shoulder with similar success, and my friend Dr. W. S. Rogers assures me he has frequently done much good by mustard applications at this point.

As soon as a state of convalescence manifests itself, the patient should use great precaution and care to prevent a relapse; his diet should be vegetable, and spare.

We append at the close of this subject some remedies which we have employed in practice, and which have generally met our expectations.

℞. Nitrate of potassa, ʒiss.
Mucilage of gum acaciae, f. ʒii.
Antimonial wine, gtts. xl.—(Drops).
Syrup orange peel, ʒss.
Water, ʒiv.

Mix; give one oz. three times a day in remittent fever with a hot skin.

As a cooling drink in fevers, we frequently recommend either of the following recipes.

℞.	Vinegar,	ʒiii.
	Honey,	ʒii.
	Water,	3 pints.

Mix; drink ad libitum, as much as they want, or,

℞.	Vinegar,	ʒi.
	Acetic ether,	ʒi.
	Syrup raspberries,	ʒiii.
	Water,	1 quart.

Mix; use as above.

It is frequently essential in this fever to produce diaphoresis, without disturbing the patient. It may be effected as follows:—Take a piece of lime about the size of a lemon, wrap around it a wet rag, but not too wet; around this wrap several thicknesses of dry muslin or cloth; place one thus prepared on each side of the patient, and by both thighs; it will soon induce copious perspiration.

Dr. Jones, of Cincinnati, has used with immense success the ferrocyanuret of ferri, (prussiate of iron); he does not regard febrile or inflammatory symptoms in its administration, provided the disease be in the least degree periodical; he gives it in doses of three or four grains every three or four hours, in combination with quinine. It is a remedy we have long used, and one that I have great faith in.

Our last remedy for intermittent fever is highly prized by some physicians in remittent fever, and others extol the jessamine equally as much.

CONTINUED FEVER.

Definition.—The same variety of symptoms which occur in intense local inflammation are those, most generally, which will be observed in this fever. In this climate we frequently have the same symptoms which present in intermittent fever. This, however, is in direct opposition to Professor Andral, who says, "chilliness rarely occurs." I have been peculiarly attentive to this circumstance, and have noticed their analogy to intermittent fever. This class of symptoms, it is true, are of short duration; they soon yield to those of excitement, and these, in a very large majority of cases, continue throughout the disease, and are frequently accompanied with great debility.

Symptoms.—The symptoms vary considerably in their general character. There is quickness of pulse, increased heat, and diminution of the secretions usually; we have these symptoms in combination with thirst, great dryness of skin, scanty and high colored urine, with considerable costiveness. At first, or beginning of the attack, we have chilliness amounting almost to rigors, with paleness and smallness of pulse, but these generally last only for a short time. It is attended with affection of the head, at first more or less confusion, at times great giddiness; there is always a perfect loss of appetite and a general sense of debility, whiteness and dryness of the tongue, great uneasiness of the limbs, occasioning frequent change of posture; extreme irritadility of the sense of sight and hearing, especially in persons of irritable constitutions; any noise is almost insupportable. The fever is generally formed in the course of the first evening, and the hot stage frequently is de-

veloped in an hour or less. Vomiting is seldom present, at least till the third day; frequently no sickness at the stomach, unless the lancet has been resorted to, after which it is quite severe. I have seen, after two or three days, a tendency to delirium, and sometimes I have seen it developed; it occurs most frequently before the hot stage. "The terminations of this form of fever are essentially three in number: abrupt departure in connexion with some critical discharge, gradual mitigation and disappearance without particular increase of any of the excretions or any adventitious evacuation, and gradual transition from the purely inflammatory character into the typhoid type."

The Pulse.—Their is no certain diagnosis to be derived from the examination of the pulse. We frequently find it assuming every grade; it may be full or hard, soft, small or weak; it is sometimes so feeble as to be called fluttering. The safest mode is to examine the circulation at the heart. The usual range of the pulse is from ninety to one hundred and sixty.

State of the Tongue.—The tongue is unusually dry in this fever. We generally find it yellow and loaded, but it may be found absolutely black; it assumes, however, a great many varieties.

The Stomach.—We find as much uncertainty in regard to this organ as we find in the pulse; for the most part the appetite is lost, but yet we see cases where it is the reverse, accompanied by an extraordinary desire for food.

This fever generally terminates in some manifest critical discharge, such as hæmorrhage from the nose and copious perspiration, the most common. It is most apt to occur in persons of a robust constitution.

Cause.—"The most common causes are: atmospheric vicissitudes, violent passions, wounds and other injuries, a peculiar atmospheric constitution. Sudden suppression of perspiration by cold is, however, the most common sporadic cause. Hence, inflammatory fevers are most prevalent in cold and variable climates, or during the spring of temperate latitudes; more prevalent also in elevated, dry, and sandy situations, than in localities of an opposite character."

Prognosis.—The simple inflammatory fever is the least dangerous variety of this fever; when it is attended with abdominal inflammation it is highly dangerous. When the fever is greatly protracted it is very apt to assume a typhoid character. A very sudden and copious discharge of urine, or thin watery discharges are very unfavorable. We frequently find in cases, that have a tendency to terminate favorable, a slight bleeding from the nose, a moist and soft skin. Pale urine a bad sign. Delirium not to be considered dangerous.

Treatment.—The first duty of the physician is to see that the room of the patient is well ventilated, and he should be particular in having his patient washed all over with soap and water. After this, during fever, you can sponge the body with warm water, which is not only useful but very grateful to your patient. If the temperature of your patient be above ninty-eight I would not hesitate to give him the cold dash.

Emetics,—Are seldom proper in inflammatory fevers. If, on making pressure, we find tenderness over any portion of the abdomen, it would not do to have recourse to an emetic. If there should be a determination of blood to the head it would be extremely wrong to have recourse to an emetic. In the beginning of the fever,

and in the absence of the above symptoms, a grain of tartar-emetic with a scruple of ipecacuanha is sometimes beneficial; if the pulse, however, would justify the use of the lancet, I should always premise bleeding before giving it. It is in this fever the lancet, if ever used, will be found beneficial.

Cathartics.—The bowels should be kept in a mild and soluble condition, and there should be at least one evacuation every day. That which is most proper to remove the constipation without debilitating the patient is to be considered. *Dr. Eberle* maintains that the *saline* cathartics are the best. I would not question this in a cold climate, where there is no relaxation of the general tissues, but in the South, where such medicines have almost a universal tendency to produce violent hypercatharsis, which would be very injurious in this disease, I would think such treatment would be very questionable. My own impression is, that in this disease above all others, calomel in combination or podophylline as an alterative is the most proper. It should be administered according to the amount of constipation; my own practice is to give from five to thirty grains, waiting some six or eight hours for its operation, and then assisting its action every two hours by a table-spoonful of castor oil. Sometimes it requires the assistance of an injection; this, however, is not to be done if the bowels be sufficiently open of themselves. You will sometimes find an opposite state of the bowels, *too open*, then, of course, the purgative plan will be highly injurious.

Blood-letting.—If there is a great excitement in any one organ, or general excitement of the whole system, the lancet can be safely used; but there is no question but the instrument is too frequently *abused*, by intro-

ducing it as an auxiliary in cases where it is absolutely not required. If there be congestion or great arterial action, one decisive bleeding will do more good than double the same quantity of blood drawn at one or two bleedings in the beginning. The pulse must be the principal guide as to the repetition of bleeding, and in all cases it should be resorted to with great *caution.*

Blisters, are frequently applied with great advantage to the nape of the neck, or behind the ears; mustard applications are frequently very useful applied over the region of the stomach to arrest vomiting, and they are employed frequently to the feet, with the view of exciting irritation.

Mercury.—In many fevers calomel has been considered of the greatest use, especially if there be a high degree of inflammation, with great foulness of the tongue; and it is nevertheless true, that there are many cases of fever that can be treated successfully without the aid of mercury; in the mass of cases, probably, where mercury is given, its success is greater than when it is omitted; but I am satisfied from experience, that in a majority of cases *calomel* is frequently too active for the intestines. I substitute generally the blue pill, in connection with hydrargyrum cum creta, (calomel and chalk,) which answers in many cases decidedly better. Mercury, we are aware, if pushed too far in this fever produces great mischief; and we have been frequently compelled to exhibit with our remedies, to subdue the irritation in the alimentary canal, the chalk mixture, with the infusion of catechu or kino.

Local Complications.—It is necessary in every case to be on your guard, and to watch minutely for local inflammation. If you find local complications, they must

be subdued by the use of cups, blisters, &c.; as regards drinks in this fever, I am in favor of cold water, and as much as the patient desires, and I regard it as one of the best things that can be given.

Whilst upon this subject of continued fever we, in common with most writers, include the description of what are by a very respectable number of American physicians, considered as two distinct affections, and frequently designated at the present time under the names of Typhoid and Typhus fevers.

The former, Typhoid fever, the descriptions of which by the French and English physicians generally, accord with the peculiar phenomena attending continued fever in this country. Some contend that the difference here alluded too are of a secondary importance, whilst others maintain that they are to be accounted for only by admitting the existence of two radically distinct fevers, as above mentioned. It is true that the symptoms we have described in continued fever are almost precisely those we find in typhoid fever, many contend for two distinct diseases; and in Bartlett's Treatise the subject is handled with great care, and in that masterly manner in which that distinguished author alone seems to possess the faculty.

Before closing my article on this subject, I cannot refrain from noticing an article from the pen of Dr. Fenner, of New Orleans, in reply to an article of Dr. Boling in the New Orleans Medical Journal, November ber number, 1852. Dr. Fenner there takes high ground, in what he terms the *abortive* treatment in continued fever. So far as our experience goes, we are inclined to the opinion of Dr. Boling. We have in a few cases only, administered quinine in five grain doses, and the result in

our cases were decidedly injurious; but while we make this assertion, we should also state, in justice to Dr. Fenner, in whose professional judgment we have great confidence, that we have never, in any case, pressed the quinine treatment to the extent suggested by that gentleman. I have no hesitation in giving credit to large doses of quinine in intermittent and remittent fever, and my own impression is, when given in ten grain doses, they exert a sedative influence. We would not be understood as condemning the suggestions of Dr. Fenner, as I am a strong advocate of quinine; but in the mode in which I have administered it, in this form of fever, it did not fulfil my expectations. A very distinguished physician in Kentucky condemns the use of quinine in strong terms in this form of fever; in fact he administers nothing but barley water and beef tea, keeps the bowels in a soluble condition by enemas, (injections,) and at intervals to produce a determination to the surface, (produce sweating) gives spiritus mindererus (solution of the acetate of ammonia); and I confess this mode of treatment I have adopted in a few cases with success. In contradistinction to this mode of treatment, and in sustaining the views as set forth by Dr. Fenner, Dr. R. Dundas, in an article in the Medical Times, (October 4, 1851,) considers the remittent and intermittent fevers of the tropics to be identical with the typhus of this country, and with this conviction has been induced to treat the latter by large doses of quinine, which he says he has found so efficacious in the former. (See "Abstract," vol. v., p. 163.) The doses he gives are ten or twelve grains, repeated at intervals not exceeding two hours. Three or four of these doses will, he says, in general be sufficient to exert the specific influence of the medicine,

which is displayed by dizziness of the head and tinnitus aurium, (ringing in the ears,) or in the rapid subsidence of all the urgent symptoms. In the latter event, he observes, three grains of quinine, or some vegetable bitter infusion, should be administered three times a day, and the patient supported with beef tea, or other light nutriment, and wine if necessary. Should the urgent symptoms return, the large and repeated doses of quinine must be again resorted to.

We cannot refrain here from introducing the experience of Dr. Douglass, who has had forty years experience in the treatment of this fever. He says his own plan of treatment is expectant. "In the first place, I never have recourse to quinine. I have had recourse to every plan I could devise, for the purpose of "breaking up" the disease before it should be fully developed, but invariably with disappointment to myself, and, I believe, with increased suffering to the patient. In my practice, *quinine*, given in doses large or small, and in every form, in no single instance arrested the disease, but often increased the irritability of the stomach, the pain in the head, and every symptom connected with the fever. I have long since abandoned it as absolutely pernicious." He is opposed to purgatives and bloodletting, and concludes by saying, "to conduct a patient safely through an attack, the physician should economise the recuperative energies and strength of the sufferer from the beginning. I would infinitely prefer giving cold water and thin gruel, and applying blisters over the parts affected, and doing nothing else, than to resort to the vigorous, heroic attempts to arrest this disease, as we would intermittent or bilious fever."

We would here refer the reader to our article on the

virtues of the jessamine in this disease, which will be found under the head of congestive fever.

In regard to the alleged difference which exists, and from the great variety of names that are applied to this form of fever, it is really calculated to embarrass the mind in making the distinctions. We find in many authors the terms typhus fever, common continued fever, slow nervous fever; even hospital fever, jail fever, camp fever, malignant fever, putrid fever, contagious typhus, and petechial fever. If they are really unlike each other, and if the diagnosis between them can be distinctly established, how important it must be to draw the line of distinction, if any thing like success is to be expected in its treatment. I need not point out how necessary it is to sound science, that we should understand the difference in arriving at a proper diagnosis.

In Dr. Armstrong's "Practical Illustrations," and in Dr. Southmond's "Treatise on Fever," they are both complex and gratuitous in their generalization, and their diagnosis extremely loose; but the inference is to be drawn from both of their articles that there exists distinctly two forms of fever. Dr. Bartlett, in his very able treatise on this subject, (and which work I take great pleasure in recommending to the profession,) says: "The *common continued fever* of Dr. Armstrong is, I think, the typhoid fever of Paris, and of New England." Some of the leading and prominent distinctions between the two diseases we have collated from the chief medical works which have been written on these two diseases, by those who were satisfied as to their distinctness.

1. In the age of the patient they affect. Typhus

affects all ages, young and old; typhoid, chiefly persons under forty.

2. In their modes of attack, typhus being sudden, typhoid insiduous, as a general rule.

3. In their duration. Typhus fever is of much shorter duration than typhoid.

4. Character of eruption. Nothing can be more distinct than the repeated scanty crops of rose-spots in typhoid fever, with their bright color, their disappearance under pressure, and their duration of three or four days, compared with the permanent, dark red, or mulberry colored, ineffaceable rash of typhus.

5. In the color of the skin, the expression of face, and in manner. Typhus patients often present, in the highest degree, those characters which the old writers often termed "oppression" and "prostration." The face is dark and generally flushed, the complexion muddy, the manner stupid and confused, and the eyes unintelligent. On the contrary, in typhoid fever the complexion does not get muddy, consequently, the flush of the cheeks, when present, is bright and pinkish.

6. The severity and peculiar characteristic symptoms of the head. In typhus, headache usually ceases on the tenth day, and *always* before the fourteenth; in typhoid fever about four or six days later. Delirium commences earlier in typhus than typhoid by several days. Somnolence, although frequently absent in both, is more common and earlier in typhus than in typhoid.

7. In the degree of loss of muscular power. Typhus patients almost always take earlier to their beds, and are more completely prostrated at an earlier date than typhoid cases.

8. Frequency of the epistaxis, (bleeding from the

nose.) Rare in typhus, rather common in typhoid.

9. In the condition of eyes. In typhus the conjunctivæ are generally injected and the pupils contracted; in typhoid fever the conjunctivæ are pale and the pupils dilated.

10. The condition of the tongue; which is drier, browner and larger in typhus, is more frequently small, fissured, red, or partially covered with a pale brown fur in typhoid.

11. Symptoms of the chest. Sonorous bronchi, or *rale sonore*, (a sound resembling the snoring of a person, at others the sound of a bass string of an instrument; it seems to be caused by a contraction of the bronchial tubes, and is characteristic of chronic catarrh.) This symptom is very frequent in typhoid, comparatively rare in typhus. Pulmonary congestion common in typhus, rare in typhoid.

12. The pulse; it varies more in typhoid than in typhus.

13. The abdominal symptoms. The abdomen is painful on pressure in about three-fourths of typhoid patients; is almost always quite painless in typhus. The abdomen is distended and resonant more or less in all cases of typhoid; it is, with scarcely an exception, natural in shape or even a little concave in typhus. Diarrhœa exists, as a rule, in typhoid, as an exception in typhus. Intestinal discharges are different in the two diseases. In typhoid they are loose, light in color, and alkaline; in typhus they appear but little, if at all altered from health.

14. In the occurrence of *epiphænomena*, (which is an adventitious symptom that sometimes occurs, but which is not connected with the disease.) Sloughing from

pressure is equally common in both diseases, but erysipelas, phlibitis and local inflammations and ulcerations are much more common in typhoid fever.

15. In the continuance of the eruption after death. The spots of typhus last uneffaceably after death; the rose spots of typhoid fever cannot be found.

In addition to our suggestions on continued or typhus fever, we append some recipes that have received the sanction, generally, of the profession:

℞. Carbonate of ammonia.
Powdered white sugar.
——— gum arabic *aa*, ʒiss.
Compound spirits of lavender, ʒii.
Mint water, ℥iv.

Mix. A table-spoonful every two or three hours. A good addition sometimes by adding laudanum ʒi.

This is a good prescription when the system is in a low state. As a stimulant in the sinking stages of this fever the following prescription will answer well:

℞. Brandy.
Cinnamon water *aa*, ℥iv.
Yolk of two eggs.
Sugar, ʒss.
Oil cinnamon, gtts. ii. (drops.)

Mix. Give it in small portions as circumstances dictate. In petechial typhus take

Comp. infus. of Virginia snake root, ℥xii.
Tincture allspice, ℥iv.
Vinegar, ʒii.

Mix. Give three or four tea-spoonfuls every four or six hours.

When your patient requires a stimulant, and the

brandy preparation does not meet your expectation, you can substitute the following:

℞. Virginia snake root, ʒvi.
Proof spirit, ʒv.
Water sufficient to obtain six fluid ounces of strained fluid; after one hour of infusion, add
Camphor, ʒss.
Balsam Peru, ʒi.
Gum arabic, ʒii.
Make an emulsion, and add
Acetic ether, ʒi.

Give a spoonful every hour in cases requiring stimulation, as we have suggested.

As a stimulating injection we can advise the following:

℞. Common clyster, ii. pints.
Camphor, ʒii.
Yolk of egg, i.

Mix. Use one-fourth at a time, and as occasion requires. The *babtisia tinctoria* (or wild indigo) has been highly extolled, but having had no experience, we cannot speak of its claims.

Dr. Willbur, in the Southern Medical Journal, recommends in strong terms the veratrum viride in this form of fever. We have never tried it, consequently cannot speak of its merits. It is very highly extolled.

The *arnica montana*, or leopard's bane, is highly esteemed in Germany as a stimulant in typhoid fever; they generally give it in an infusion, by taking a half ounce of the flowers to a pint of water, and given in doses from a half ounce to an ounce every three or four hours.

Dr. King highly extols the *wild* indigo, he says:—"I make much use of the dried alcoholic extract of the

root-bark in the low stage of typhoid, and typhoid conditions generally in conjunction with leptandrin; and have used it extensively for the last ten years, and with very excellent effect in all cases of a tuberculous character. I take pleasure in introducing to the profession, the active principle of this plant, *Baptisin*, prepared similarly to Aletrin, or it may be precipitated by acetate of lead from the saturated tincture; I have found it to exert a powerful influence on the glandular system in doses of from one-fourth to one-half a grain; if given in large doses it produces a very disagreeable prostration of the whole system. I am at present investigating this article with a view to obtaining its neutral or alkaloid principle, and which will undoubtedly prove a valuable addition to our Materia Medica."

Dose of the decoction, made by boiling one ounce of the powdered bark in two pints of water, down to one pint, one table spoonful every one, two, or four hours, as required; if it purge, produce nausea, or a disagreeable relaxation of the nervous system, lessen the dose, or omit its use for a time.

I have used in this form of fever *yeast* beneficially, by mouth and injection.

In low typhoid fever xanthoxylin (prickly ash) will be found a valuable and stimulating tonic, and may, when necessary, be added to laxatives in that disease, to prevent too much prostration; it must, however, be employed only during the stage of prostration. Dose, from one to three grains three or four times a day.

(See yellow fever, the two last paragraphs.)

CONGESTIVE FEVER.

The great frequency of this fever, and the unusual fatality attending it in the South, renders it very important, and worthy of the most serious consideration from the profession; and we do assert that every practitioner who has enjoyed any opportunities for observation should freely give the most ample results of his experience. Having had many opportunities when a student of viewing this disease in Mississippi, and having witnessed it in a professional capacity in this portion of the state of Texas, in some few cases in its most malignant form, we have concluded to give an article upon its symptoms and treatment, and in doing so, we will make considerable extracts from Eberle, and a paper on congestive fever by Dr. Barbour, of Tennessee. We have concluded also to report a few cases.

Etiology.—In regard to the causes of this form of fever, certainly but very little is known. Its almost universal occurrence in localities which are favorable to the production of malaria; its co-existence with all the common varieties of miasmatic fevers, and all its distinguishing phenomena, clearly demonstrate the identity of cause, and that that cause must be some powerful and concentrated poison, generated by the decomposition of organic matter.

It requires but a superficial observation of the phenomena of this disease, to be convinced that this cause, whatever it may be, makes its primary impression upon the nervous system; and that all of its characteristic symptoms are the immediate sequences of diminished nervous sensibility. The suddenness of the attack, the numerous indications of nervous derangement, and the

rapidly fatal tendency of the disease, conclusively show that the brain, and the whole nervous system, are almost overwhelmed with the first paroxysm.

The impression made upon the nervous system is proportionate to the intensity of the malaria; and the effects upon the constitution are various, according to the relative force of vital resistance; hence, whenever it prevails, there is every gradation of the disease from slight manifestations of congestion, to the most malignant cases, in which the vital forces seem to be completely overpowered. This leads me to the consideration of the general pathology of this fever.

The whole nervous system seems to be oppressed by a powerful morbific poison; and the phenomena dependent upon internal engorgement are various, according to the seat and extent of the congestion. When the brain is the chief seat of congestion, the countenance appears contracted; there is pain or giddiness, or a sense of heaviness in the head; and there is a strong tendency to coma and insensibility. When the lungs and heart are principally congested, there is great praecordial oppression; the respiration is short, hurried, and oppressed, and there is generally a peculiar livid appearance in the face; the pulse is irregular and oppressed, and there is general coldness of the surface. When the abdominal viscera are the chief seats of congestion, there is a sense of great heat and oppression in the region of the stomach, attended with great thirst, and a constant disposition to retching and vomiting; there is also great restlessness; sometimes the bowels are torpid, but most generally they are very loose, thin serous discharges passing off in enormous quantities, which contribute rapidly to prostration and death. It is said that

autopsic examination usually reveals the true source of all the foregoing symptoms. The various organs are found more or less gorged with blood, which was the cause of their oppression and embarrassment during life.

Symptoms.—The premonitory symptoms, which are generally of short duration, are those which commonly precede other forms of fever, such as languor and lassitude, a sense of weariness and general uneasiness, loss of appetite, and disturbance of the stomach and bowels. Next to these succeed chilly sensations, alternated by flashes of heat, soon after which the patient has a regular paroxysm, characterized by a protracted cold stage; the system, most generally, being unable to recover its natural temperature before the occurrence of the second paroxysm. Dr. Eberle says, congestive intermittents occur seldom. This to a great extent is true, but we frequently in this climate see such cases. He says they are marked by a very protracted cold stage, deep-seated pain in the head, vertigo, fainting, a sense of weight or oppression in the breast, coma, a small and weak pulse; the hot stage coming on very slowly, and developing itself very imperfectly, so that instead of hot skin, flushed countenance, and a full and vigorous pulse, the system continues to be oppressed, the skin scarcely warm, the countenance pale and contracted, the breathing confined and anxious, and the pulse frequent, small, and tense, with an internal sensation of heat.

The type of this fever generally corresponds with the double tertian of old authors, being subject to quotidian paroxysms, but on each alternate day to an increased aggravation of the symptoms. Thus on the third and the fifth days, the paroxysms are usually very severe,

and followed by a protracted cold stage, from which the system reacts very feebly. The anxiously looked for hot stage is rarely or never fully developed, even in what might be called mild cases. But instead of it, the temperature of the whole surface is greatly diminished and irregular—the extremities being much colder than the trunk. The pulse becomes exceedingly weak and quick, the respiration is short, hurried, and difficult with generally a confirmed hippocratic countenance; the patient complains of a painful sense of heat, and weight in the epigastrium, (region of the stomach) accompanied with insatiable thirst; there is uncontrollable restlessness; the patient tosses himself from side to side, and often rises up as if to relieve the oppression of the lungs; there is either pain, or giddiness, or sense of weight in the head; and the countenance looks contracted, pale, and anxious, and often livid; the tongue is generally moist, and the bowels in a large majority of cases are loose, and the dejections serous. These are the general symptoms at an early period of the disease; they are subject, however, to considerable modification according as the brain and spinal marrow, the lungs, or the abdominal viscera are the chief seats of the congestion; the most prominent symptoms in all cases being particularly referable to the chiefly engorged organs.

If the condition above detailed is not soon removed by the recuperative efforts which nature makes to throw off the oppressive load under which she is laboring, aided by proper remedial agents, there is a rapid tendency to *total collapse*. This usually occurs either on the third or the fifth day, when, as has been remarked, the paroxysms are unusually severe. This condition is marked by all the symptoms which indicate profound

congestion. The extremities and, indeed, the whole surface become as cold as ice; the whole body is bathed with cold, clammy sweat; the skin loses its elasticity, resuming very slowly its natural situation when pinched up; the pulse is very quick, and scarcely perceptible; the thirst is great; incontrollable and extreme restlessness; the respiration becomes shorter, more hurried and oppressed, and there are strong marks of diminished sensibility, as a disposition to lethargy and even to coma, with great muscular prostration. If unchecked, these symptoms increase with a rapid pace and soon terminate in death.

But congestive fever does not always follow the regular course above described. Sometimes, instead of suffocated excitement, after the first or second regular paroxysms there is full and violent reaction, and the stage of excitement continues twenty-four, thirty-six or forty-eight hours with little or no remission, when the system, seeming to be exhausted by the violence of the excitement, rapidly sinks into collapse.

This modification generally occurs when there are internal inflammations, as indicated by pressure over the epigastrium, (the region over the stomach) the right hypochondriac region, (over the liver) or over some portion of the bowels.

In other instances, the first regular paroxysm is succeeded by the strongest mark of deep congestion and complete collapse of the powers of nature. So far as my observations have extended, this last modification almost universally occurs, either in aged persons of feeble or broken down constitutions, or in those who have debilitated themselves by the use of harsh purgatives or by the use of a too common remedy among Southern planters,

the emeto-cathartic, *salts and tartar*, and it is frequently produced by the use of *patent purgative pills*, which in almost every case contain some powerful drastic principle which generally causes great irritation of the stomach and intestinal irritation, which induces a rapid fluxionary movement in the circulating fluid towards the chylopoietic viscera, (any thing connected with the formation of chyle,) which causes inequality of the circulation, and rapidly prostrates, by the copious serous discharges which ensue.

"*Treatment.*—This is certainly the most important part of the subject—in ascertaining the treatment necessary for the different modifications of Congestive fever. The leading indications in the treatment of this disease are: 1st, to restore tbe lost balance of the circulation; 2d, to relieve the engorged organs; and 3d, to restore the suspended secretions.

The great discrepancy of opinions which have been entertained, and the great diversity of agents which have been applied to fulfil the plain indications of treatment, clearly show that, however well the pathology may have been understood, great uncertainty has existed in regard to the treatment. Under circumstances very *favorable* to its adoption, general and topical blood-letting might be resorted to. We most generally find our patient with a feeble, quick pulse, cold skin, and other marks of great prostration; and in such a case we should probably resort to the *lancet*, but in doing so would have great doubt; this would be correct, as we should always be very prudent in the abstraction of blood, especially in this climate. Nevertheless, in the commencement of the disease we are very certain, from our knowledge of its pathology, that these symptoms do not arise from

actual debility, but only from engorgements of the internal organs, which, most generally, are not at first structurally diseased, but only oppressed by the undue quantity of blood forced into them. Our practice under such circumstances is cautiously to abstract blood, and in almost every instance it has had a tendency to promote reaction by diminishing the load under which the heart and other vital organs are laboring. Do not understand us to recommend general blood-letting as admissible at all times, for there are many conditions and many circumstances where it is entirely inadmissible; for example, it would be highly detrimental in aged persons of feeble or broken down constitutions; in persons of very intemperate habits; *also in the advanced period of any case*, because, in all of these, the powers of life are generally at a low ebb, and most probably the loss of blood by venesection would preclude the possibility of reaction.

Having strictly followed the practice of Dr. Barbour in some three or four instances, I can do no better than strictly to give his language in the few following pages. I would, however, remark, that I have succeeded with the calomel treatment in large doses, and podophyllin, as well as the stimulant treatment, some few cases of which I shall report.

"Blood-letting is particularly indicated in those cases where high excitement continues for two or three days after the paroxysm with little or no abatement. Under such circumstances it is certainly one of the best means we possess to lower excitement." In high arterial excitement the tinct. aconite will generally reduce the pulse and cause a perfect remission, during which we can make use of such remedies as are calculated to prevent

the recurrence of a severe paroxysm, which would, most probably, be followed by collapse.

"When general blood-letting is considered inadvisable, free cupping should be substituted. Cups should be applied along the whole course of the spine, over the chest, over the epigastrium, (the stomach,) over the right hypochondriac region, (over the liver,) or over the bowels, according as the indications of internal congestion predominate in one or other of those situations. The revulsive influence exerted by this operation often acts very beneficially. Having bled or cupped as circumstances indicated, it is important to attend to the condition of the alimentary canal. The stomach is generally very irritable, and the patient complains of great thirst and heat in the epigastrium, to relieve which a large sinapism (mustard plaster) should be applied over the stomach, and small portions of cold water or iced lemonade or small quantities of ice should be given. These are exceedingly grateful; they lessen the burning heat and thirst, and often compose the stomach. If they fail cups should be applied over the epigastrium, and if necessary, a large blister should follow them. These combined means rarely fail to tranquillize the stomach.

The bowels are sometimes torpid when the evacuations are either clay colored or of a muddy or tarry color,—conditions which indicate either a suspended or a greatly vitiated secretion. Most frequently, however, the bowels are very loose and the discharges serous, with a great quantity of small black particles in the bottom of the vessel containing them, resembling coffee grounds." This appearance is attributed by most Southern practitioners to the oxydisement of the mercury, which is so plentifully administered in the form of calomel.

My *own impression is that it is the result of morbid secretion* from the *liver and bowels.* If the bowels are torpid and the dejections are unnatural, the best combination I know of is,

Podophyllin,	ii. grs. or Calomel v grs.
Rhubarb,	v. "
Ipecacuanha,	i. "

made into two or three pills, and given every four or six hours, so as gently to evacuate the intestines once or twice in the course of the day; some combine aloes, but I look upon it as too harsh, having a tendency to produce great irritation in the alimentary canal, and it excites an undue irritation in the mucous coat of the bowels. Some Southern practitioners recommend large doses of calomel, from one hundred to three hundred grains, and repeat them often, and make positive assurance, when thus administered, that they have done more good than with all the other remedies besides. I, myself, resorted to this treatment in the case of a distinguished citizen of Grimes county, (my experience was limited, and, thank God, my patient recovered; but we would not now be guilty of such folly, especially when we have remedies like podophyllin,) which case, for its novelty and the extraordinary doses administered, I shall report on another page.

If the discharges are very thin, it is important to suppress them as soon as possible. For this purpose I generally use the following combination:

Podophylline 1 gr., or Calomel,	v grs.
Camphor,	v "
Opium,	1 "

and give every four or six hours, according to the copiousness, and frequency of the discharges. The above

means, thus combined, are admirably calculated to restrain the bowels, to unlock the liver, and at the same time to determine to the surface. Having attended to the alimentary canal, the most important indication which demands our attention is to restore the lost balance of the circulation, by the adoption of every revulsive means in our power.

In the most cases the pulse is as small as a thread, sometimes imperceptible; and the whole surface is as cold as ice, attributable to a complete recession of the vital fluid from the extreme vessels, and to the engorgement and consequent oppression of nature's calorificator, the lungs; and unless these conditions can be soon overcome by means calculated to equalize the circulation, nothing can effect any good.

There is such a variety of opinions as to the best means of accomplishing this object, that we shall not attempt even a synopsis, but content ourselves with giving our views, and at the same time remark, we have unlimited confidence in them, but that they do not in general harmonize with the opinions of many others.

In all the worst cases of this disease which have come under my notice, the hot bath and most diffusible stimulants have done injury rather than good, the patients appearing generally more relaxed and oppressed after they had been used. The remedy which I estimate above all others in the treatment of congestive fever is the effusion of COLD WATER. My own comparatively limited experience, and the ample experience of many intelligent practitioners in this country, for instance, Drs. Dickson, Rogers, Minnock, &c., sustain me in the declaration that the effusion of cold water upon the naked body, is capable of producing the most beneficial effects;

and in a large majority of even the most malignant cases, of inducing complete and permanent reaction. So well am I assured of its invaluable efficacy as a powerful excitant to the nervous system, that I now feel no more hesitation in its adoption than I do in the use of aconite or the lancet, if necessary, in inflammatory affections, for the principle upon which it operates is just as obvious to my mind.

Who would hesitate to dash cold water on a patient who was overwhelmed by the effects of opium? Surely no practical medical man would if he knew its efficacy. Why? Because it is known to be capable of arousing and sustaining the oppressed nervous system by the stimulant impression which it makes upon it. Why then should there be a doubt about its applicability to a disease which we believe to be dependent upon a poison which oppresses and paralyses the whole nervous system? The analogy as regards the condition in the two cases is perfectly just, and the principle upon which the remedy acts is identical. That this is the fact, its almost universal effects abundantly testify.

The modes of application which I have adopted are the following:—Have a broad plank placed upon two chairs, at a convenient distance apart, and place two vessels of hot water on each side, corresponding with the feet and hands; then strip the patient and lay him on his back on the plank, with his extremities in the hot water, and having at hand twenty or thirty gallons of cold water, or what would be better, water made colder by ice or salt, pour the water from a pitcher, in a full and rapid stream over the chest and abdomen. The advantage of this mode is, that the cold is directly applied over the most common seat of congestion, whilst

the circulation is invited to the extremities by the hot water.

The second mode which I adopt, particularly in cases where the brain and spinal marrow are the chief seats of congestion, is to place the patient upon a blanket on the floor, and cause him to turn upon his side, and dash cold water as forcibly as possible over the head and down the spinal column. This method is often the most effectual, because its influence is more immediately felt by the great nervous centres. Having applied the water, the patient should be quickly dressed and placed in bed, and be covered with two or three blankets. I have sometimes had the patient surrounded with hot stones, or bottles filled with hot water, after being placed in bed; *but I am now satisfied that it is improper to do so*, on account of the relaxing influence of the heat, and the debilitating effects of the copious perspiration induced by it. Instead of heating the patient, I cause him, as soon as he has received the *cold dash*, and is placed in bed, to be extensively and forcibly rubbed, either with dry mustard or salt, or with spirits of turpentine.

Under the combined influence of these agencies, reaction, if at all possible, soon ensues; the surface rapidly recovers its natural temperature; the pulse, from being quick and thready, becomes fuller, softer, and more regular; the respiration becomes easy; the countenance becomes fuller and more animated; and from insatiable thirst, and uncontrollable restlessness, the patient often experiences so much relief that it is not uncommon for him to fall into a quiet and refreshing sleep, from which he awakes greatly improved.

The effects of the cold dash are frequently perma-

nent, and complete reaction takes place, followed by rapid convalescence. In many instances, however, the effects of the first infusion subside, and the patient relapses into his former condition of coldness, restlessness, and insensibility. In such cases it is proper to repeat the effusion, until complete and permanent reaction takes place, which may be confidently anticipated in a large majority of even the worst cases, provided it is applied sufficiently early.

Unfortunately for the reputation of this invaluable remedy, it is deferred too long, and most generally resorted to as a dernier resort; in consequence of which the system looses all susceptibility of its impression; or some vital organ, or organs, become irreparably injured, and hence its use proves abortive.

There is no just reason why its adoption should be delayed. If it is capable of producing such salutary effects in the latter periods of the disease, when the vital principle is almost extinguished, how much more triumphant would be the success attending the use at an earlier period, when the vital organs, most generally, are not seriously injured, but only burdened with an undue quantity of blood, and when the susceptibility of impression is but little impaired.

As auxiliaries to the cold effusion I generally apply cups along the course of the spine, over the epigastrium, over the right hypochondriac region, or over the bowels, according to the indications, and at the same time have warm mustard plasters applied to the extremities, and over the different seats of congestion; or have the whole surface well rubbed with strong mustard flour. I have sometimes derived considerable benefit from the applica-

tion of a narrow mustard plaster along the whole course of the spine.

When, however, there are strong marks of cerebral congestion, a blister to the back of the head and over the cervical portion of the spine is decidedly preferable. Diffusible stimulants seem to be indicated, and I usually indulge the patient with occasional portions of any of them which appear to agree best with the stomach. Brandy, and in fact all spirituous liquors, in most instances which have come under my observation, appear to increase the oppression and sickness of the stomach. Good *porter* is far preferable to all other stimulants of this class, and patients are generally very fond of it.

If we succeed by the above means in producing complete reaction, what course of treatment should be afterwards pursued? If the reaction is moderate, which is most usually the case, all that will be necessary will be to administer mild aperient and alterant medicines in combination, in order to regulate the bowels and restore the biliary and other secretions to a healthy condition, and at the same time remedies calculated to sustain the weakened powers of nature, and to prevent the recurrence of the paroxysm, to which there is always a great liability. The combination I use, with the view to the fulfilment of the first indication, is from three to five grains of blue mass,

Rhubarb,	v. gr.
Opium,	i. gr.

every six or eight hours, until the secretions become of natural color and consistence. To fulfil the second indication, I give from ten to twenty grains, and even as much as forty grains of quinine, and five to ten grains of Dover's powders every three or four hours. I gene-

rally confine the use of this combination to the forenoon, beginning with it at about four o'clock in the morning and repeat it at eight and twelve; after which I substitute infusion of serpentaria, (Virginia snake root,) because there is commonly some tendency to excitement in the afternoon. For the same reason, if it is deemed necessary to administer aperient medicines, they should be given in the evening, as there is then much less liability to a depression of the system from depletion in any form.

Sometimes, however, the reaction is violent, and unless it is moderated, the organs which have just been gorged with blood, and consequently weakened and irritated, will rapidly become the seats of violent inflammation, which will be difficult of removal on account of the inability of the system to bear depletion to any great extent. In such cases, it is necessary to apply cups over the various seats of congestion, administer calomel, and after it infusion of senna with ginger, and repeatedly use either the cold or the tepid effusion. If these means fail it may be proper to draw blood from the arm; *but this should be done with the greatest caution*, as the power of resistance in these cases is generally so low that not unfrequently high excitement is suddenly followed by symptoms of prostration. In cases where blood-letting seems to be demanded the pulse should be very carefully watched, and upon the slightest manifestation of failure the orifice should be closed, and, if necessary, a little wine, brandy or porter should be given.

The above means are usually sufficient to reduce the excitement to a proper standard, when the alterant and aperient combination, together with *quinine*, can be administered as above directed.

Suppose, however, that notwithstanding the diligent

use of all the means which have been recommended for the purpose of arousing a patient from the collapse of congestive fever, he still continues without any reaction, what should be done? I seriously apprehend that nothing can be effectual, as in such cases, generally, the injury done to the vital organs is irreparable. *Still, as we should never abandon a patient until he is completely gone, as sometimes patients recover contrary to all reasonable expectations of physicians and friends, it is our duty to continue unremittingly to apply every means which can possibly in our opinion do good.* Under such circumstances, I would chiefly rely upon the occasional use of the cold bath, large and numerous sinapisms, blisters, hot spirits of turpentine, calomel often repeated in small doses, large doses of quinine, and the free use of brandy or porter.

"In conclusion, I will briefly notice the most appropriate regimen during the continuance of the disease and in convalescence. It will be remembered, that in congestive fever the stomach and bowels are in an engorged and oppressed condition, and that in consequence their important functions, digestive and chylification, are greatly impaired; hence, it is very necessary to adapt the aliment to the weakened digestive organs, otherwise it is sure to become a source of increased irritation. Rice water, barley water, arrow root tea, well made gruel or beef tea are the best articles of diet during the course of the disease, and also for several days after convalescence commences. After the strength of the digestive organs has somewhat improved, chicken broth, boiled milk, or milk and mush would be appropriate. For drink good porter is best, or a good article of wine."

Case 1.—Judge S., *aetat* forty-two. I was called to this gentleman in the spring of '44; he had had an attack of remitting fever, and from neglect upon his part, the disease changed its type into that of congestive; he had been visited by an able physician and pronounced hopeless. When I was called in I found him in a comatose condition; he apparently was insensible to surrounding objects; he had not spoken for fifty or sixty hours, his pulse was small as a thread, sometimes imperceptible; the whole surface was as cold as ice, and particularly the extremities, with an extraordinary degree of constipation of the bowels; it required no prophetic spirit to tell that he would die if not relieved. His lady, a female of fine sense, had informed me that she had given various purgatives and injections, without producing any action. I was therefore satisfied it would be folly, as there was no time to delay, to persist in remedies which had already failed. I conceived him in the last stage, and had no hope of even the cold dash; was requested by his friends to let him alone, as they were satisfied nothing could be done. I determined, from the authority of Dr. Cook, where the secretions were so completely locked up, to risk every thing on calomel; I immediately gave him 200 grains of calomel, which not having operated in six hours, was repeated with the addition of an hundred grains; this dose was repeated afterwards, and during the time I literally covered him with sinapisms, and had him constantly rubbed with hot brandy and pepper; his lady being a strong believer in stimulating injections I did not forbid them, but withal we had as yet produced no action on the bowels. I suggested an injection of *cold water*, which was immediately followed by a very copious and

bilious evacuation of a very thick consistence, after this evacuation there was a slight reaction, and I immediately gave him

Quinine,	20 grs.
Camphor,	10 "

every two hours, until he had taken ten doses; the system reacted kindly under the influence of this last prescription; the remedies administered produced copious bilious evacuations—the quinine was continued for some days, my patient soon became convalescent, and, strange to say, the salivation produced from the calomel was very slight—since this attack he has enjoyed uninterrupted health. It cannot be questioned that the only fear from this practice, is the fear of the injurious effects on the mouth. But we would not be understood to say that we even approve of the practice, only to be justified under similar circumstances. But is the bare apprehension of the most dreadful salivation more terrible than certain death? Surely not. The risk of salivation in these extreme cases, is less than is supposed. I have never known a patient that absolutely required some energetic mode of procedure, to be badly salivated after taking the largest dose. When ptyalism (salivation) is produced, I have had but little difficulty in arresting it, with Tinct. Iodine, and a weak solution of the sulphate of copper in water. This is the case we have alluded to before—we would really hesitate now in trying it again.

Case 2.—Mrs. T., *aetat* thirty-four. I was called to this lady in the spring of '46; she had been attacked with a severe intermittent fever, and whilst in the cold stage of this fever she was bled by her husband; the consequence was, that it prostrated her, and her system

did not react, and the chill, from a simple intermittent, was changed to a congestive chill. I found her covered with a cold clammy perspiration, pulse very feeble, respiration hurried; great uneasiness, and a general prostration of the whole system. I immediately corded the left extremities, I gave the cold dash in the face, had the body rubbed dry, and immediately commenced the quinine, having ascertained that the biliary secretions were in a good condition, (I view the administration of quinine as useless almost, unless the biliary secretions are aroused) with the following prescription,

Podophyllin,	ss. grs.
Quinine,	10 "
Camphor,	10 "
Opium,	1 "

I never combine the opium where there is any thing like congestion upon the brain. This prescription was given every two hours,—reaction was established after the third dose, when quinine was given in combination with piperine, ten grains of the former and one of the latter, every four hours; my patient had a return of the chill, but the same treatment was pursued, and she was soon convalescent.

Case 3.—Mrs. M., *aetat* fifty. This lady's attack was of a congestive character; I saw her about the third day, and her situation was extremely critical. She was in a cold clammy perspiration, no pulse had been perceived at the wrist for twelve hours; very restless, with very cold extremities. I immediately had the body brushed hard with a flesh brush, rubbed the spine with warm mustard, and blistered the extremities largely; she was sinking very fast, ammonia was administered. On examining the blisters, four hours after they had

been put on, I discovered the cuticle was not the least irritated; under these circumstances, I resolved on a desperate course, I immediately applied the actual *cautery* to the extremities, continuing all the time rubbing the body; after cauterizing, I dressed the wounds with a sinapism, and in less than an hour I had the satisfaction of feeling the pulse at the wrist. I continued the ammonia, and gave three grains of quinine every fifteen minutes, until ninety grains had been taken; this produced complete re-action, after which five grains of blue mass was ordered; in the course of the day it operated well. Quinine and camphor was continued in five grain doses every two hours, my patient had no return of chill, and in a few days she became convalescent.

Case 4.—Mr. K., *aetat* sixty. I was called to this worthy old gentleman in the month of August, '47; I found him in a most deplorable condition, his situation was that of collapse; after examining the patient thoroughly, I was satisfied he could not recover, and so informed his friends; he had extensive gastritis, and in fact there was inflammation of the whole alimentary canal. I report this case, with the hope that it may do good in deterring others from pursuing a course which is becoming too common in the South—as I am satisfied this old man lost his life from a too free use of a patent medicine. Upon inquiry, I was informed that he had had the fever for some two or three days, and that he had been taking a quantity of *Spenser's pills*—these pills were old, and not operating according to directions, he repeated and repeated again, the result was, that when the fever left him, it left him prostrated; about this time the medicine commenced operating, and producing

the most extensive serous discharges. I was called whilst he was purging, but the work was done, he was icy cold; I arrested the discharges as soon as possible, but it was too late,—all patent pills generally have combined a drastic cathartic; they are almost certain to produce serous discharges, and when taken in an over quantity, are as certain to produce inflammation. This was the result here, and it was the second case I had been an eye witness to, of the fatal effects of these nostrums; they are the cause of many deaths, and we frequently see them heralded forth with the signatures of individuals, as testimonials, which we view as very wrong,—and we have seen an article so completely covering the case, that we have determined to insert it.

"We can scarcely open a newspaper, without meeting with the advertisement of one or more quack medicines, recommended and avouched by *clergymen*. Now, such is the confidence of the mass of the people in their spiritual pastors, that these certificates have in them a power even greater than the forged testimonials of eminent deceased physicians, so often seen appended to the same advertisements. Such being the case, we would respectfully ask our clerical friends, to whom we attribute no bad motive in this matter, whether they have ever reflected on the mischief they do to the community by these recommendations? Do they not know, that if a nostrum be *inert*, a reliance upon it may destroy life; if *active*, that while it may relieve or even cure a few, it will kill many more? We would charitably believe that most of these certificates are given without due reflection. The majority of them are for fevers, cough mixtures, balsams, boluses or lozenges, which are pre-

sented as infallible remedies, without reference to the nature of the disease in the *lungs*, by which the cough is produced. But the diseases of the lungs are of various kinds—requiring different modes of treatment—and what may cure one patient will destroy another. If a clergyman, then, has seen a quack medicine relieve one individual, he *certainly* is not justified in generalizing and commending it to all who may, from the coincidence of a single symptom, fancy themselves in the same condition.

Medicine is an inductive science, the basis of which is a knowledge of the structure and functions of the human body. How many of our clergymen understand anatomy and physiology, beyond Dr. Paley's Natural Theology? We suspect very few. We would ask these respected brethren what they mean by orthodoxy? Is it not a full acquaintance with the letter and spirit of the Bible, and a faithful adherence to both? Now medicine, if I may make a comparison, has its orthodoxy, which consists in a profound knowledge of the principles of the science, and a reliance on them to guide us in practice, as the divine relies on the doctrines of the Bible to guide and govern him in preaching. If some ignorant layman, but superficially acquainted with that divine revelation, and unimbued with its spirit, were to advertise a new exposition of its doctrines—a sort of *patent mode* of securing Heaven—what would our clerical friends say, if physicians, who had never made the Bible a study, were to certify to the truth and efficacy of such a pretended discovery? They would undoubtedly warn the people to beware. It would be a dereliction of duty for them to remain silent; and we, on the other hand, feel, that duty in reference to the

health and temporal welfare of the community, commands us to speak out in words of warning to the people, and to rebuke such of their spiritual leaders as travel out of the way of their profession, to enlist under the banner of quackery in another."

I have been led to the statement of these extraordinary cases, by a sense of duty. It has been said—"thousands die of medicable wounds:" thousands, I am fully persuaded, die of fevers that might be cured. I would that the reader should particularly understand that it is not intended to recommend large doses of *calomel*, no indeed, or any other medicine in common cases. On the contrary, I have always endeavored to accomplish the object with as small a quantity as possible.

Considerable attention has of late been turned to the yellow jessamine, which is cultivated in all portions, I believe, of the Southern States; its peculiar action on the system was discovered accidentally, and we have used it in some few cases with benefit, and already some QUACK doctor has prepared a patent medicine from it, styling it the "*Electrical Febrifuge*;" it is disguised in this preparation by the oil of winter-green. From the great influence it possesses over most of the fevers indigenous to this climate, we are inclined to give a full description of the plant, with its specific characters, which description we take partly from the Eclectic Journal of Cincinnati, Dec. No., 1852.

The Gelseminum belongs to the natural order Apocyneæ, so remarkable for the great activity of many of its genera, and the name of the genus, given by Jussieu, is one of the ancient names of the jessamine, and that of the species arises from its evergreen foliage.

Gelseminum belongs to the Pentandria Pigymia of Linnæus, and to the natural order Apocyneæ of Jussieu.

Generic Characters.—Regular, calyx fire parted, (the sepals of this species being furnished with bract-like appendages,) corolla funnel-form, border spreading, fire-lobed, nearly equal, capsule compressed, flat, two partible, two-celled, seeds flat and attached to the margins of the valves.

Specific Characters.—The Gelseminum Sempervirens, is known in the South under the names yellow jasmine, wild jasmine, and woodbine. In Florida I learn it flowers in March, in Mississippi in June, and we have seen it here in April and May flower sooner. Its stem is twining, smooth and glabrous; its leaves are opposite, perennial, lanceolate, entire, dark green above, paler beneath, with short petioles. The flowers, which are esteemed poisonous, are yellow, about an inch long and half an inch wide at the top, of a fine yellow color, and have an agreeable odor, which perfumes the air where they bloom. It grows luxuriantly, climbing from tree to tree. According to Eaton, from whose botany we have gleaned the above botanical notice, there is a variety called inodorus, which has scentless flowers.

It is indigenous to this state, as well as most of the Southern States.

Medical Properties.—The root is the part used, and the tincture is the preparation most usually employed, and, as made, must be a saturated tincture. The roots, in a green state, well bruised, are introduced into a suitable vessel, and covered with whiskey or diluted alcohol. After standing two weeks, the tincture is

separated by expression and filtered. The dose is from ten to forty drops.

The Gelseminum is stimulant, tonic, and anti-spasmodic. By its relaxing effect, it produces gentle diaphoresis, and is said by Dr. Rogers and others to be narcotic. I have used it in but few cases, but am inclined to the opinion that it possesses narcotic properties. Its effects in large doses, or when too frequently repeated, is extreme relaxation, and general prostration of the whole muscular and nervous system. It will suspend and hold in check muscular irritability and nervous excitement, with more force and power than any known remedy." Our experience accords with this statement. It is of a bitter taste, and exerts its influence in all febrile diseases, which is remarkable, without producing nausea, vomiting or purging. When enough has been given to produce its specific effect, the eye becomes dimmed, the vision clouded and doubled, the head light and dizzy. When these effects follow the administration of the remedy, no more should be given until the patient has entirely recovered from its influence. It may be used in all species of fevers, nervous and bilious headache, colds, pneumonia, hæmorrhage, leucorrhœa, chorea, enlargements of the spleen, and I am confident it will prove a valuable remedy in that troublesome disease, asthma, and many other diseases,—its great efficacy is in almost all forms of fever. It should be used with great care and caution. The root is said to possess a resinous principle, which, when extracted by pure alcohol, will, in very small doses, produce death. But no such effect need be apprehended from the proper dose of the common tincture. There is danger of carrying it to such an extent as to suspend

involuntary muscular action, and when this is the case, death must ensue. It is incompatible with no known substance, and may follow any preceding treatment with perfect safety. The dose is forty drops for an adult, and children in proportion to age and *temperament.* It is given either with or without quinine. It has been used for chronic rheumatism, in doses of forty drops, three times a-day, with marked effects. Three or four doses, with a mild cathartic, will remove the redness and swelling attending inflamed sore eyes. *Special attention should be directed to the general health and constitution of the patient, before giving this remedy.* If the bowels be constipated, they should be moved by a gentle aperient, and kept in a soluble condition. It requires double the quantity to produce the effect on some that it does on others, and should you unfortunately produce too great a degree of relaxation, you should lose no time in stimulating and toning up your patient.

We have used it, according to the mode prescribed by Dr. Hickman, which gentleman has used it for about a year in an hundred cases of fever, without, as he says, one solitary failure. His mode of preparing the tincture, is to take the green roots, wash, and bruise them, then place them in a clean glass vessel, and pour good whiskey upon them until they are covered, when they are suffered to stand and macerate for ten days, after which they are ready to be strained. About thirty drops of this tincture are given to an adult every three hours until three doses are taken. In all cases of fever he gives from three to six grains of quinine along with this tincture of jasmine. It is advantageous to use it along with quinine, as it prevents the rush of blood to the

head, and is anti-spasmodic. It will relax the nervous system of itself for a short time, but the fever will return again, hence I would advise that it should always be given with quinine. This course of treatment will break up an attack of remittent fever in from twelve to twenty hours, frequently sooner, by first giving some mild cathartic, either blue pill or podophyllin. In bad cases of congestive fever, or typhoid, it is necessary to give a cathartic first, which will secrete the bile, and then give the jasmine and quinine—if given as directed no deleterious effects follow; it should be given in all cases until the patient becomes drowsy.

The effects of this plant on the human system, taken in connection with its medico-botanical relations, its general application to febrile diseases, mark it out as being probably one of the most valuable of our indigenous remedial agents, and renders it well worthy the investigation by the profession—it is a remedy that will meet your expectations, when properly administered.

YELLOW FEVER.

Having some time since written an article upon this subject, at the request of some medical friends, I think I can do no better than to insert it in these pages, as my opinions have only been strengthened since its publication in the New Orleans Medical Journal.

Epidemic diseases generally, are chiefly of the acute or febrile class; they are apt to prevail in the Spring, but frequently in the Summer and Autumn; happily for us, and mankind in general, that our ignorance of the causes of many epidemic diseases does not destroy our interests in the study of their pathology. If medical gentlemen would be contented to look calmly into

the many series of events belonging to epidemics, and set aside their hypothesis and conjectures, we would not be so much at a loss to account for the causes as at the present day. The records of pestilential epidemics present us with various opinions and statements, and frequently as much at variance as it is possible for any two different theories to be; *truth*, however, is sacred, and error cannot be disseminated without producing harm; how important, then, is the duty of medical observers to investigate fairly and impartially, and to report with truth and fidelity.

We have examined this subject to some extent, (as to the causes producing it in this city,) and we will content ourselves by alluding to the most prominent facts. As far, therefore, as we are enabled to form any general conclusions in regard to the circumstances which conspire, in many cases, to produce a pestilence, the following are substantially our deductions:—

First.—Intemperature of the air, or peculiarly irregular weather.

Second.—Local impurities, the result of putrifying substances, more especially of animal matter, if located in marshy situations, produce miasma, which aggravates the preceding causes by polluting the atmosphere.

Third.—(And I think very important,) human secretions and excretions; the latter become virulent by accumulation, and almost poisonous during a fever, "which always," says a distinguished author, "is the cause of the fever acquiring a degree of malignity which is proportioned to the congregated mass."

We do not wish a latitudinous construction of this sentence, so as to infer that we are willing to concede to authorities of considerable respectability, that the solu-

tion of the question is to be found in all cases, in the filth of the town or the state of the sewers; though we are free to admit they are great auxiliaries.

Exposure—Fatigue—Excesses.—There can be no doubt that yellow fever is frequently the immediate result of the operation of the ordinary occasional or exciting causes of disease; and that persons exposed to the essential poison of the disease, might escape, were it not for the co-operation of the latter influences. Dr. Rush states that he did not see a single case in which the disease came on without an exciting cause; such as light clothing and bed clothes, sitting at doors after night, a long walk, gunning, and violent and unusual exercises of any kind. Dr. Hillary, one of the most careful observers, says: "The disease most readily seizes those who use vinous or spirituous liquors too freely; and still more readily those who labor hard or use too violent exercise, and are, at the same time, exposed to the influence of the scorching rays of the sun in the day time, and soon after expose themselves too suddenly to cool dews and damp air of the night, and especially if they drink liquor too freely. Dr. Dereze says, that it has always been remarked, that during the prevalence of yellow fever, persons newly married are constantly its victims. "Of all the exciting causes of yellow fever," says Dr. Balby, "the act of coition is the most powerful. How many have we seen, seized by a chill on leaving the arms of pleasure, terminate in a few days their career? How many, even, have we seen, the victims of a simple nocturnal pollution?

We find that a great many authors lay great stress on the signs which are the antecedent indications of an epidemic, "such as intemperate seasons, and unusual

weather, (which I think quite likely) great mortality among any species of the lower animals, and great scarcity amongst binds," the singular changes which have been observed to occur in the common varying disease of the place before, during and after an epidemic, the facts connected with epidemic pestilence; and on the other hand, the exemption of those places where due attention has been given to cleanliness and a rational system of health police. Mortality among animals very frequently follows intemperature of the seasons. In the pestilence that raged at New Orleans in 1819, "we are told that cattle died, horses, oxen and cows, with rotten tongues; sheep and hogs with their hoofs dropping off, and calves with rotten ears."

To found, however, any truth in science, we must have strict recourse to our general and impartial observations; a solitary isolated fact is only valuable so far as it may tend to establish general laws. There is no question in regard to one fact, that at the commencement of an epidemic the proportional mortality is always greatest. We have another remarkable fact: in all the cities and towns in Spain which suffered with yellow fever, they were, with the exception of Cadiz, extremely filthy, even disgustingly so; and a fact worthy of notice, that Cadiz escaped very lightly, in consequence of *a rigid system of police which had been adopted*, and the result was, as history testifies, that they seldom have suffered since. *And I would most respectfully suggest, that if a prudent and systematic adoption of police should prove of benefit at the very time of an epidemic, to lessen the mortality and to mitigate the disease, as it has often been found to do, how much more should such measures*

prove beneficial if practically adopted in any city, as the constant and most efficient means of preservation.

Contagion.—In regard to contagion I hold it is not a necessary incident to any disease of this class. Medical men themselves, as well as the public, are worn out with statements from different authors, and "indeed they may well wonder at the imperfect state of science which has not settled points of so much importance."

During the last fifty years, medicine has assumed more of the character of an exact science than it held before; and of the history of contagion little is known for the space of a century after its origin. In 1545, we are informed by ancient authorities, that Pope Paul III. convoked reluctantly the Council of Trent; and being anxious to remove the Council to Bologna, he was not slow in contriving means for the accomplishment of his purpose. An epidemic was prevailing in Trent at the time of the assembling of the Council, and availing himself of this circumstance, the Pope caused it to be proclaimed that the disease was contagious, and therefore dangerous to the health and lives of the fathers. In this proclamation he found no difficulty in inducing physicians and others to concur. A committee of inquiry, composed of prelates, was formed by Cardinal *Morito*, (I quote from memory,) who was an artful man, and easily controlled by his Holiness; and before this venerable body, *Frucastorious*, and many other physicians, (who, from bribery, says history,) being solemnly examined, testified to the Pope's opinion. "The consequence of this manœuvre was threefold; the Council was removed, his Holiness gained his end, and the belief in contagion established by authority of the church."

And it is but too true, from facts, that that scheme of protection has descended, with but slight modifications, to the present time. It has been sustained by authority of the Romish Church; and in modern days it has been sustained principally from this precedent; for we are bold to say, that nine-tenths of the physicians of the present day will accord with us in saying, that truth and science, from investigation, have afforded it no support. To exhibit some of the many ridiculous causes assigned, and the testimony submitted on the part of those who were anxious to establish the principle of contagion, it may not be amiss to recite a few of the facts from the most enlightened witnesses. They were as follows:—"A fur or leather cap, worn thirty-five years previously, by a person with pestilence, communicated the disease to twenty-five Germans in Verona, and destroyed them all."

"A feather bed, in which a pestilential subject had lain, on being shaken up some years afterwards, in Waterslau, produced a fever, of which 9,500 persons died."

"A rug, which had been infected fourteen years before, on being thrown out of a window, sent its plague poison abroad, and produced frightful mortality."

On the authority of these absurd tales, says a distinguished author, and many others which I could recite, equally as incredulous,—(as, for instance, this: in modern days quarantines are established for forty days. Why forty days? Is it from the fact that it is the usual time allotted to *dog days?* I presume it is from the fact that it corresponds with the forty days *lent.*) Upon all this has a judgment been passed, and a code of laws been established, which the accumulated experience and

wisdom of centuries have not yet set aside. It seems to us, in the nineteenth century, that it is time for science to obliterate, even from the pages of the past, a demon that has even shackled commerce. And yet there are not wanting individuals of distinction, who still endeavor to maintain their truth and perpetuate their influence. And I will here remark, so far as my knowledge extends, that every candid and well conducted enquiry into the hypothesis of contagion has resulted unfavorably to it. Dr. Rush was candid and honest enough to recede from his first position; and it is admitted by high medical authorities, that among the former advocates of contagion in the West Indies, scarcely one can be found in the present day.

Dr. Bono, who resided in the West Indies for a number of years, and whose opinions on yellow fever are entitled to great confidence, says: "I have proved in the Naval Hospital that the yellow fever cannot, by any possibility, be communicated from one person to another."

"We do not allow the fever commonly called yellow fever to be infectious." This opinion is supported by many American authors; yet I am not prepared to say, if a great number of persons laboring under yellow fever in its violent form, and crowded into an ill ventilated apartment, as on board ship, might not create a morbid atmosphere, and if conveyed to a place extremely filthy, the probability is that it might find an affinity in the atmosphere of that locality, and might act as a spark to ignite the whole material; but we should most rigidly observe, generally, that the great error is in attributing to contagion, that which should honestly be attributed

to accumulated causes of filth, and decomposition of vegetable and animal matter.

Treatment.—As regards the treatment of yellow fever, I would simply remark, that with the mass of practitioners, it is as much at variance as the cause. The rationale of Mr. Wilson I deem worthy of attention. He admits, as I presume all will, "that in many cases the resources of our art have little influence in its worst forms." He even goes so far as to say that this fever is utterly beyond control; and, indeed, it is not permitted us to be too sanguine as to the efficacy of any remedy in even a seemingly mild case of the disease."

It has always been a matter of astonishment to me, in epidemics, that no treatment, during their prevalence, ever commanded the general assent. Some place their reliance on active and vigorous depletion, others extol calomel to ptyalism (salivation.) The latter, in the United States and England, has more advocates, probably, than any other. "Although M. Louis and other distinguished gentlemen contend that the liver is the only organ constantly, and more or less uniformly altered." The same opinion is entertained by a very distinguished and truly scientific gentleman of Galveston, Dr. A. Smith, (if my memory serves me right,) yet the former contends, that "experience has sufficiently proved that no dependence is to be placed on mercurial preparations of any sort."

The treatment of depletion, venesection, &c., we hold is of extreme doubtful utility; and as a means of reducing the active excitement of the first stage, and as a substitute, in some degree, for blood letting, I make use of the cold affusion. Dr. Dickson, formerly of South Carolina, praises it very highly. "Relief from the pun-

gent heat of the skin," he says, "the tormenting thirst, the distressing headache, the pain and irritability of stomach, you will never fail to procure. This relief, it is true, will be partial and transient; but the remedy may be repeated as often as seems requisite, without danger or injury. The termination of the chill, if there be one, when the face becomes flushed, and the surface dry and hot, a condition almost characteristic in the degree attending this form of fever, is the moment for affusion. Seat your patient in a convenient vessel, and pour rapidly from a slight elevation, upon his head and shoulders and over his naked body, a full large stream of cold water, continuing it until his face becomes pale, or his pulse sinks. I have never yet seen any unpleasant consequences from it. The surface should be rubbed dry, and the patient, on lying down, covered so as to be comfortably warm." Upon the first symptoms of the disease, I recommend a warm mustard pedeluvium (foot bath) to the extremities, sinipisms to be applied immediately after, a large one between the shoulders, to assist in arresting the hot stage, and to produce a free determination to the surface. At the same time we administer small portions of the pure tincture of Aconite, ten drops to two or three ounces of water, and give a teaspoonful every ten or fifteen minutes until perspiration is produced, or the desired object of reducing the circulation is effected. After which, four ounces of rochelle salts, with or without one gr. of tart. ant. (tartar emetic) given in small doses during the twenty-four hours. But if there is an obstruction in the gall ducts, as manifest from the absence of the biliary secretions, I do not then hesitate to combine a few grains of sub. hydrag. (calomel), or podophylline

with a grain of opium, and continue until biliary secretions reappear. Enemata we generally have recourse to as useful auxiliaries. Frequently we have seen the disease localize itself upon the bowels, and commence a termination by active hypercatharsis (purging); in this stage you will have to resort to astringent injections. Quinine we commence with at the outset, with 10 gr. doses, (we view this dose as a sedative,) with a small portion of sulphuric acid, as the circumstances of the case dictate. Frequently, however, any treatment has to be varied, from the fact, in the majority of cases, great irritability of the stomach is always present; and if cupping, epispastics or sinapisms fail to allay irritability, we have frequently seen the following prescription do so:

℞. Lemon juice, ʒi.
Sub. carb. ammonia, ϑii. M.

when the effervescence has ceased, add common syrup, two ounces, camp. mixture, one ounce, and give from one to two table-spoonfuls every three or four hours; frequently a drop or two of kreosote will allay the irritability, if given in milk; and as a dernier resort, and I have seldom seen it fail, a blister along the spine is a valuable auxiliary.

We would remark, that we have modified our treatment in some cases, substituting oil for mercury or podophylline; and we think that it has been attended, probably, with better success.

There is, as I before observed, quite a variety of opinion in regard to the treatment of yellow fever; in the epidemic of 1848, in Houston, which was generally mild in its character, my friend Dr. McCraven assures

me that he treated two hundred cases, and administered castor oil to remove the secretions from the bowels, and only lost with this treatment three cases. This certainly speaks well for the practice—but in opposition to this, my friend, Dr. Ewing, who is good authority, treated a large number of cases on the mercurial plan, with eminent success, and assures me that in the epidemic of '39, which was very malignant in its character, he tried both plans of treatment effectually, and accords his opinion in favor of mercury.

Some French physicians are extolling ice in these two forms of fever, (continued fever and yellow fever,) they apply it in bladders to the head, in typhoid, and upon the abdomen to lessen the irritation, and to obviate ulceration in the small intestines, applied in small pieces with ground flaxseed to the abdomen, they recommend continuing them for eight or ten days, if the pain exists.

In yellow fever, if applied on the stomach in the febrile stage, it will reduce the heat and thirst, and prevent that fluxionary movement towards the stomach, that we find in this fever.

I find in an European Medical Journal, a new remedy for the yellow fever. The discovery seems to have been made at Angostura, in Venezuela. The remedy is the plant *vervain* or *verbena*, which grows abundantly in that region. The expressed juice of the leaves, given in small doses three times a-day, with an injection of the same every two hours, is stated to be a perfect cure of the yellow fever and black vomit, even in their most threatening stages. All the physicians of Angostura have adopted this treatment of the disease, and they

state that hardly any deaths occur under its influence. This statement is attested by the British Vice-Consul, at the above place.

The varieties of the *verbena* growing in the warm and temperate regions of the western world are numerous. The particular species referred to above, is that known to botanists by the name of *Verbena Jamaicensis*. It is a native of the West India Islands, as well as of the continent. There are two kinds of it, the male and the female; the latter is the one used as above. It has long been known to the creole population of Spanish America, for its medical virtues. They have used it as a febrifuge and an unfailing specific, in cases of dysentery. It is generally given to children as a tea, mixed with sugar and milk, and is by no means a disagreeable beverage. The expressed juice of the plant forms a cooling purge for children, in fevers. The *vervain* is likewise a remedy of particular note in sundry maladies that defy ordinary medicines. Sloane says, that a decoction of it cures dropsies; Hughes, that it is a powerful deobstruent; according to Barham, it is likewise an excellent vermifuge. And, having now been discovered as a cure for *yellow fever*, this shrub must in future rank as a still more valuable addition to the pharmacopiæ.

ERUPTIVE FEVERS.

SMALL POX.

So called in English, but in medical Latin, "variola." This is an eruptive fever, desseminated from contagion,

seldom affecting persons more than once during life—there are two distinct varieties, generally divided as the distinct and confluent, the different stages of which are the febrile, eruptive, maturative and declensive.

Premonitory Symptoms.—Before the eruption appears, the symptoms approximate very closely to those that present themselves in any other fever—for instance we have languor, vomiting, severe pain in the head and loins, accompanied with drowsiness, the symptoms are much the same as those you find in continued fever—there is also universal feverishness, tenderness of the epigastrium, (region of the stomach) pain in the loins, (and these two symptoms are generally very intense,) quickness of pulse. After these symptoms have prevailed for about two days, small red spots make their appearance, first in the face, and then generally over the body—these spots rise into pimples, and on the fifth day, counting from the first fever, you have pustules, the contents of which look opaque and white, and seven out of ten, if they are large, are *depressed* in the *centre.* On the eighth day maturation commences, counting as before from the first fever; if the eruption be extensive, the face becomes swollen, the eyes are apt to close, with considerable inflammation of the fauces. On the eleventh day the pustules are at their acme; inflammation of the fauces generally at this period subsides, and the extremities commence swelling, first the hands: and at this time the pustules are completely ripe, (if I may use the expression) and maturated. When the pustules become perfect we then have a fresh attack of fever, this is called the 'secondary fever,' to distinguish it from that which ushers in the disease, and is styled the 'primary fever.'

Variola Confluens.—The other form of the affection, the pustules are very numerous, run into each other. The fever is decidedly more violent, and the symptoms more of a typhoid character; the pulse is more feeble, patient more prostrated, and generally accompanied with delirium and violent pain in the head.

Attendant Symptoms.—The feverishness, in this form of the disease, is very little lessened in the appearance of the pocks; and at the end of the eruption it is aggravated very much. Secondary fever, of a very violent character, comes on. The symptoms occurring in other parts are also very severe. There is an excessive secretion of saliva in both forms of the disease, but chiefly in the *confluent;* inflammation of the fauces decidedly more aggravated than in the distinct variety. We have sometimes diarrhœa as an attendant, dark colored spots between the pustules, bloody urine, and sometimes bloody evacuations, frequently an exudation, from the body, of a very offensive smell. The consequences frequently of this form are terrible, such as phthisis, (consumption) blindness, and ulceration of the intestines.

Treatment.—In the first form of the disease, that of distinct small pox, there is nothing peculiar in the treatment; the regimen should be light, ventilation free, a mild aperient once or twice a week; if pain in the head, cup the temples, if pain in the chest or abdomen, cup over those regions; his room should be kept dark, and he should lie on a mattrass. There is no harm in cold or tepid ablution, provided the body is hot—the utmost cleanliness should be observed—if the fever is great it would be well to wash the patient with a solution of the chlorides, and use them freely around the bed.

In the confluent variety, where the symptoms assume the typhoid form, the treatment consists in the selection of those remedies and in the use of that diet which are best calculated to sooth and allay the disturbances, based in debility, which are met with in this form. To effect this you will resort principally to mild nourishing food, to the administration of stimulants, as the sesqui-carbonate of ammonia, ether, &c., and occasionally to the use of tonics, especially quinine and ferruginous preparations. The points, however, on which to place great reliance, are the local application of powdered camphor to all the parts where the irritation is very great, especially around the throat when swollen, and the free use of some absorbing powder to all the surfaces of the body covered with the eruption, the powder used generally consisting of calamine.

Prevent Pitting.—My experience has been too limited to state the most effectual mode. Some recommend Kentish ointment, others puncturing the pustules and touching with nitrate silver solution, washing with milk and water. The chloride of soda as a wash is also highly extolled. Some use sulphur ointment; the collodion or gun cotton is highly recommended, but we think the mercurial plaster has advantages over either of the other remedies, not that it prevents pitting, but that it lessens the liability to it. Independently, however, of its influence in this respect, the application of the mercurial plaster to the face is valuable in some cases with a view of moderating inflammation. Some use the strong mercurial ointment, whilst others rub it down with an equal portion of lard. To use either, spread it upon a piece of thick muslin shaped like a mask, and then carefully apply it to the forehead and

face; apply it, if possible, before the fourth day of the eruption.

A very distinguished author speaks in warm terms of macrotin as a valuable remedy in this disease, says it should be given during the whole course of the disease. It seems to divest it of its malignant character; he asserts he never lost a case of small pox where this medicine was used thoroughly from the beginning; and during the winter of 1849 and 1850, he treated from fifty to one hundred cases, some of which were of the most severe confluent kind. The dose is from one-fourth to one grain, to be given once in three or four hours, until the proper symptoms of the medicine appear.

We have extracted from a late number of the London Lancet, a new discovery for the treatment of small pox, scarlatina and measles, the article was written by a "member of the Royal College of Surgeons, who vouches for it as a 'medicine that will effect a revolution in the healing art, as regards the prevention and cure not only of small pox, but also of measles and scarlatina, however malignant the type, in a manner more efficient and extraordinary than could ever have been hitherto anticipated even by the most ardent philanthropist.'

"On the first appearance of fever or irritation ushering in attacks, whether occurring in families or large communities, the subjoined mode of treatment should at once be entered on: take one grain of powdered foxglove or digitalis, (valuable in the ratio of its greenness—the dark should be rejected,) and one of sulphate of zinc, (this article is commonly known as white vitriol). These should be rubbed thoroughly in a mortar or other convenient vessel, with four or five

drops of water; this done, a noggin (or about four ounces) more of water, with some syrup of sugar, should be added. Of this mixture, a table-spoonful should be given an adult, and two tea-spoonfuls to a child, every second hour, until symptoms of disease vanish.

"Thus conducted, convalescence, as if by magic, will result. The rapidity of an event so auspicious, will equally delight and astonish. It may, however, be necessary further to note, that should the bowels become obstructed in progress of the disease, an evil by no means common, then a drachm of the compound powder of jalap (formed of two parts cream of tartar with one of jalap,) and one grain of the herb, treated as above, formed into a pastil with syrup or sugar, should be given to an adult, and half the quantity to a child. This simple medicine shuts out every other form or article whatever, as totally unnecessary, if not pernicious.

"The *methodus medendi* of these medicines, capable of effecting results so gigantic, remain now only to be given, and appears to be as follows: The herb, by its anti-febrile properties, lays hold at once of the fever, the prolific source of wo, which it immediately strangles, while the zinc acts the part of a tonic, instantly restoring the equilibrium."

VARICELLA.

In common language called the chicken pock or swine pock, in general, it requires no treatment. Some contend, however, that varicella is nothing more than a modified form of small pox, and various reasons are assigned for this opinion. There are two varieties of varicella; in the chicken pock, the vesicles are small, elevated, and contain a colorless fluid. In the other

form or swine pock, the vesicles are large, soft, and broader at the base, the fluid they contain is limpid at first, but soon assumes a milky appearance. Sometimes the symptoms indicate treatment, in which event the course advised for variola is equally applicable here.

RUBEOLA.

Was formerly applied to scarlet fever and measles in common, but it is now restricted to MEASLES.

Contagion and Infection.—In our humble opinion, this is both a contagious and infectious disease, affecting in this climate, children and adults with almost the same severity; the disease is inflammatory, affecting at once the skin and gastro-pulmonary mucous membrane; in which, after catarrhal fever has continued about three days, a rash appears on the skin, at first in small stigmatized dots, not unlike flea bites; which presently coalescing, form patches of a crescentic or semi-lunar form; first on the face, and thence spreading gradually downwards over the whole of the body and limbs, at the end of four days disappear by desquamation of the cuticle. In short, the symptoms which usher in an attack of measles, are the symptoms of coryza and catarrh; we have another variety in this climate, which is accompanied with severe diarrhœa, indicating a simultaneous affection of the mucous membrane of the intestines; which form is very malignant in its character—the symptoms of the two varieties are so well characterized, having very peculiar symptoms, which I think no one can mistake.

Sequelae.—When the measles are over, they frequently give rise to a variety of pulmonary diseases, even phthisis (consumption,) and I have seen cases that I thought

gave rise to tubercles—but an important sequela after measles, in this climate, is a chronic diarrhœa, frequently of an inflammatory character; and we have seen diseased mesenteric glands as the result. And these sequelae are frequently followed by a chronic cutaneous affection, such as boils, porrigo, etc.; there is really no calculating the ills that measles sometimes leave behind.

There are three varieties spoken of by authors,—

1st. Rubeola Sine Catarrh.

2d. Rubeola Nigra.

3d. Rubeola Patrida, (this latter form we have never witnessed.) You will find in the first form of this fever, that frequently eruption appears upon the mouth and throat, and in negroes it is the spot in which we are able to detect the eruption.

This disease resembles very much scarlet fever, and those who are not familiar with both, may find some difficulty in making a diagnosis, but if due attention be paid, the distinct difference is very clear. You can distinguish this from the latter affection, by the time intervening between the primary fever and the rash, by the character of the rash, and also by the sequelae—the eruption of measles shows itself on the fourth day of the fevers, whereas in scarlet fever on the second day. A marked difference is observed in the peculiar character of the rash, in measles it is crescent shaped, while that of scarlet fever is diffused and irregular; the rash of measles has a raspberry color, that of scarlet fever a deeper red.

Prognosis.—In regard to this, a great many circumstances present themselves, such as the character of the epidemic, the type of fever prevailing at the time, a wet

or dry season, (dry being decidedly the most favorable,) and whether the disease follows other infantile disorders.

The most prominent circumstances denoting danger, are unusual violence of the eruption, spasmodic twitchings or convulsions, the backward appearance of the eruption, especially if it be of a dark livid color; or, if the thoracic or abdominal organs be implicated—severe headache, petechiae, &c.

Treatment.—In regard to the treatment of this disease, great discrepancy of opinion exists; I am thoroughly persuaded, both from my own experience and my observation of the practice of others, is too uniformly active when the eruptive fever is developed. An active antiphlogistic treatment, when there is no complications of internal local inflammations, is uncalled for, and in my opinion decidely injurious, even though great febrile excitement should present itself in the eruptive fever.

When the fever is regular, without any great degree of violence, and uncomplicated with inflammation or congestion, we should only employ a gentle remediate treatment—keep the bowels in a soluble condition by laxatives, drinking freely of diluent drinks, and if necessary, using some mild ptisans—such as sage, eupatorium, camomile, balm, &c. If a high grade of fever presents, ipecac. and nitre should be given in small quantities. In such cases we frequently prescribe the following:

℞ Spirit mindereri, ʒi.—(Solution acetate of amm.)
—— Nitre dulc, ʒii.—(Spirits nitre.)
Vini ipecac, ʒiss.
Syrup. lemonis, ʒiss.

Mix and give a tea-spoonful every hour or two. Some use instead of the syrup lemonis, the camphor julep, which, however, I do not think is any way superior to my original prescription.

In case the measles should suddenly disappear, (or in common parlance 'go in,') it will be necessary to apply mustard plasters to the legs and arms, rub the body with flannels saturated with warm brandy, and apply warm poultices and bottles filled with hot water to the feet and hands. If inflammation of the chest should supervene, you will find a warm bath strongly impregnated with salt, a most valuable remedy. If the case should prove obstinate, then in addition to the above means, we should give gently stimulating drinks, and the following remedy will prove useful in cases of this character.

℞.	Carbonatis ammonia,	ʒi.
	Pulv. gum arabic,	ʒiss.
	Sach. albi (loaf sugar,)	ʒi.
	Tinct opii,	♏ii.
	Water,	ʒiv.

Give a tea-spoonful or two, every hour or two.

If the symptoms manifest a tendency to a malignant form, then opiates are sometimes necessary, and should be continued, with a saline diaphoretic at bedtime, but should not be given unless the patient is very restless. If diarrhœa or cough become troublesome, the syrup of poppies will generally meet your wants; a teaspoonful or two given occasionally, according to the violence of the symptoms, and the patient's age.

During the course of the disease, keep the bowels in a soluble condition, obviate costiveness by gentle purga-

tives, and for this purpose I am in the habit of administering the syrup of rhubarb. If there should be difficulty of breathing, a mustard or blister plaster applied over the chest, or between the shoulders, has often proved a valuable remedy.

Patients recovering from measles should not be permitted for some time to expose themselves to the cold air, as asthma and consumption are frequently the consequences of such imprudence. We append two favorite recipes; the safflower mixture will be found serviceable in assisting in bringing out the measles when they have subsided too soon, or gone in.

℞. Safflower, ʒii, (Bastard Saffron,)
Boiling water, one pint.

Infuse and strain. A domestic remedy to bring out the eruption.

The spermaceti mixture is a valuable remedy when the cough is troublesome:—

℞.	Spermaceti,	ʒii.
	Sugar,	ʒiii.
	Paregoric elixir,	fl ʒss.
	Water,	fl ʒviii.

Rub the spermaceti and sugar together with the yolk of an egg; add the water and paregoric gradually. A table spoonful several times a day.

See smallpox, last paragraphs.

SCARLATINA.

This is the next disease which claims our most profound consideration, and in plain English called scarlet fever.

This disease the young practitioner will sometimes confound with measles; and, as I have pointed out the distinction under the head of measles, I deem it superfluous to repeat it here. Not until as late as 1793 was scarlet fever separated from measles; Dr. Nithering published an article about this time, and was the first to make a correct division of these diseases.

Symptoms.—This disease is marked by a scarlet-colored efflorescence of the skin; and some authors divide it into four varieties, which we deem too complex for general practice. In the mild form of the disease we have coldness and shivering, to which succeed heat, thirst, and an accelerated pulse; the mouth and fauces have not the same appearance as the skin. These symptoms last for about two days; and on the second day, generally, the eruption appears in some parts; but occasionally you will find a case where the eruption will not take place till the third, fourth, fifth or sixth day; and when it makes its appearance it continues for about five days.

It is asserted that the interval between exposure and the appearance of the affection is greater in adults than in children.

In the most simple form of the disease the fever is very moderate. In about twelve hours after the first fever, a quantity of red spots appear on the neck and face, and in twenty-four hours will spread over the whole body. On the second, or at furthest on the third, the efflorescence has covered the whole body, and more particularly the fingers. The eruption, as we have before said, appears on the second; on the third it has extended itself over the whole body, and on the fourth the redness is at its height. On the fifth day it

commences declining; on the sixth day it is indistinct, and on the seventh generally no sign of it.

Tongue.—The papillæ of the tongue become enlarged, and they are easily to be seen through the dry mucus with which it is loaded; it looks as if a pungent substance, such as cayenne, had been sprinkled upon it.

There is at times considerable redness of the eyes, but no intolerance of light, and no secretion of tears.

If the disease be at all severe, we have discharge from the ears, and frequently glandular enlargements. After mild scarlet fever general dropsy very frequently follows, but the discharge from the ears and suppuration of the glands occur after the severe form of the disease.

Another variety, called scarlatina anginosa, is marked by the efflorescence extending itself to the mouth and fauces. It is accompanied with headache; sometimes delirium and great restlessness. The throat feels sore, the patient hoarse, great difficulty in swallowing; in this variety the tongue is very red, especially at the sides and the extremity; the papillæ are greatly increased in length. In the more severe form of this variety, the eruption frequently does not appear until the third day, but increases to a great degree of intensity. About the fifth or sixth day, the redness recedes from the surface gradually, the skin becomes rough and pale, and a brown color succeeds, and the patient gradually becomes convalescent. It sometimes happens, however, that after a few days amendment, unaccountable languor and debility are felt, followed by stiffness in the limbs, disturbed sleep, disrelish for food, accelerated pulse, scarcity of urine, and dropsical swellings. In cases of a very malignant type, in addition to the common symptoms, there are great heat, nausea, and

vomiting, with a small, quick pulse, and frequent and laborious breathing. Ulcerations appear on the tonsils and adjoining parts, covered with dark sloughs, and surrounded by a livid base. Delirium arises, a debilitating diarrhœa comes on, and not unfrequently hæmorrhage from the nose, mouth, and bowels occur. It resembles very closely what is termed the malignant or ulcerous sore throat.

We recapitulate and condense the four varieties:—

1st. Scarlatina Simplex.—In the most simple form of scarlet fever, the fever, is seldom of an active kind. The cutaneous efflorescence appears in the usual manner; but there is no inflammation of the mucous membrane of the throat.

2d. Scarlatina Anginosa.—In this variety there is greater febrile excitement; and the general symptoms are farther complicated by inflammation of the fauces.

3d. Scarlatina Maligna.—The symptoms are more aggravated in their character. The fever, which is of a typhoid type, with great depression of the vital powers, is generally accompanied with considerable inflammation of the throat, which sometimes becomes gangrenous, accompanied with tumefaction of the parotid and cervical glands, and acrimonious discharge from the nostrils and ears.

4th. Scarlitina Faucium.—In this variety the efflorescence does not appear upon the skin; but is confined to the mucous membrane of the mouth and throat.

Causes.—Scarlet fever is evidently contagious, and it can be communicated by being near a person laboring under it; and it is therefore infectious.

Prognosis.—In scarlatina simplex, the great danger to be apprehended is internal local inflammation, or the

supervention of anasarca, when the desquamation of the cuticle (skin) is completed. You must recollect that when it prevails as an epidemic, the mildest cases some times assume the most malignant form.

In scarlatina anginosa, the danger to be judged of is in the extent and severity of the local inflammation; in this variety there is a general tendency to terminate in resolution. If the air-tubes are involved, and the mucous membrane of the fauces presents a dark livid aspect, the case will be apt to terminate fatally. Early delirium a very unfavorable sign.

Treatment.—Every scientific physician will admit that this is a very dangerous disease; and yet while we assert in its mild form no particular danger may be apprehended, yet you should commence with energetic and prompt remedies, and pursue them assiduously until convalescence is perfect. My usual mode of treating scarlet fever has been very simple. I commence by dissolving two tablespoonfuls of table salt in about four ounces of milk warm vinegar, of this I give one-fourth every ten minutes, until it acts as an emetic or cathartic. This I generally repeat for about two days, at the same time I use a strong *cold* salt bath, and if the skin is dry and hot, I repeat it every hour. When the temperature of the skin becomes natural, a warm salt bath should be substituted for the cold. The heat of the body is generally so great that no danger need be apprehended from cold effusion. The disease has certainly been cut short by taking a patient out of bed and pouring cold water upon him. It should be done oftener than it is; but from its appearing a violent measure, few have the firmness to test its efficacy. If this is not

done, the body should be thoroughly and frequently sponged with cold water and salt.

Cleanliness and fresh air should be particularly attended to—as little covering as possible—his drink should be water, and no food beyond milk and water, and the bowels should be kept in a soluble condition. Dr. Waller, in an able article, recommends the cold water to be alternated with *lard*, this latter to be applied to the whole body frequently.

Throat and Head.—These are the chief parts that suffer in this disease. The application of leeches (if they can be procured,) around the throat or about the head, is generally of great service.

In the second and third varieties we frequently have very considerable sloughs. These are always best treated by gargles of the chloride of soda or lime. The more intense the gangrenous tendency, the stronger must be the gargle. In ordinary cases a gargle composed of two ounces of the common solution, to a half pint of water, is found strong enough; in violent cases it may be applied much stronger than this; if there is any difficulty in the application of the gargle, you can use a syringe and inject into the throat. If any should be swallowed it will do no harm. We have used, in the first stage, a solution of caustic to the throat, once a day, and we have found, in the suppurative stage, that administering creosote internally, say three drops in the twenty-four hours, is very beneficial. I have also used a gargle of creosote, six drops to the ounce of water, three or four times a day, and think highly of it. We see the *diluted pyroligneous acid* highly recommended as a gargle in this disease; and my friend, Dr. Hopkins, of

Leon, speaks highly of it. You put a teaspoonful of the acid obtained from the shops into a wine glass of water, and gargle frequently with it. I am inclined to think very favorably of this remedy.

As a local application to the throat in the angenose form, you will find cod liver oil applied three times a day, a valuable assistant.

Hoarseness and dry state of the larynx, before or during convalescence, give from five to ten drops of balsam copaibæ on a little sugar, three times a day. After the patient gets up, great care is necessary to prevent taking cold. The pulv. jalap compound, will generally keep down or remove dropsical effusion or anasarca, if that state supervene.

Stimuli.—"If the disease show a very considerable gangrenous tendency in the throat, and the pulse be very soft and feeble, we have only to treat it, generally, as we would treat any case of typhus fever. Sesquicarbonate of ammonia, is a good remedy in this stage, barks and sulphuric acid and wine, are all beneficial.

Prophylactics.—A German physician, Dr. Hahneman, of Leipsic, recommends *belladonna* for the purpose of preventing the disease, he says, "if we take two grains of the extract of belladonna, and dissolve them in one ounce of cinnamon water or pure water, and give two minims of this solution to a child a year old, or another minim or two, according to the age of the child, we may prevent the disease." I have investigated the theories of Dr. Hahneman, "Homæopathy," with great care, and while I have considerable regard for some of the remedies, I must confess that this article, as a prophylactic, has never met my expectations, and I am inclined to regard it like many other of his *specifics*, as extremely fanciful.

We append some recipes that we have used in some forms of scarlatina, with advantage:

℞. Ipecacuanha, ʒss.
Boiling water, sufficient
to obtain six ounces of infusion, strain and add
Hyponitrous ether, ʒi.
Extract of juniper berries, ʒi.

Mix. Dose.—A spoonful every two hours, in the dropsical swellings consecutive to scarlatina.

Another:—

℞. Tartrate of potassa, ʒi.
Nitrate of potassa, ʒss.
Manna, ʒi.
Decoction of dandelion, ʒvi.

Mix. Two tea-spoonfuls every two hours, in dropsy consecutive to scarlet fever.

In ulcerations in the anginose variety, the following gargle is highly recommended by good authority:

℞. Solution of acetate of Ammonia,
Honey of roses, aa. ʒi.
Elder water, ʒviii.

Use a small portion as a gargle, frequently.

We have used the preparations of *belladonna* with advantage.

A preparation recommended by *Radius*, and which my friends Drs. Bryan and Rogers speak of in the highest terms, as follows:

℞. Chlorine water, ʒii.
Strawberry water, ʒiss.
Quince mucilage,
Syrup of mallows, aa. ʒvi.

Mix. A tea-spoonful to children, every 2 hours.

Of late the *baptisia tinctoria*, (wild indigo,) has been used in the form of decoction or syrup, in this disease, with much advantage, and it may be used in all cases where there is a tendency to putrescency. "It acts powerfully on the glandular and nervous systems, increasing the glandular secretions, and arousing the liver especially, to a normal action; and is very efficient in the atonic varieties of acute rheumatism and pneumonia."

I was assured by my friend Dr. R. Baldwin, of Winchester, Va., a practitioner of thirty years standing, and who has encountered scarlet fever in every form and variety, that his sole reliance of late, was Watson's Chlorine Mixture,—give table-spoonful every few hours.

Where you have a dropsical affection, especially ascites (dropsy of the abdomen), and dropsy supervening upon scarlet fever or other exanthematous diseases, I would advise you to try the "Hydragogue tincture."

℞. Take elder bark, bruized, 1lb.
Sherry wine, 1 gallon. Macerate for fourteen days, express and filter through paper.

Dose.—Two ounces three or four times a day.

This preparation can be made for use immediately, by digesting the articles with heat for an hour.

Scarlet fever has baffled most medical men in its treatment, and any remedy that would have a tendency in controlling it, ought to be viewed as a great benefit to the public. *Cod liver oil* possesses this in a great degree, use it as an external application three or four times a day, to the throat and chest.

DENGUE.

This is a very singular affection, and one that seems to be peculiar to our climate; fortunately, however, its history, unlike many other epidemics, has been distinguished, less by its fatality than mere suffering.

"In the annals of medicine, there is not, perhaps, recorded a disease so severe in its accession and duration, and so seldom leading to a fatal issue."

Symptoms.—We are presented in the onset with those peculiar symptoms that usher in bilious fever, with this difference, that the febrile symptoms are of a more inflammatory character, accompanied with great pain in the limbs and muscles. These symptoms continue for two or three days, when the symptoms of aggravation begin to subside, and with them the excruciating pain. From the second to the third day it is accompanied with nausea, and generally great irritability of the stomach. We have seen a rash or eruption accompanying it, which, in my opinion, is only an incidental symptom; but my friend, Dr. McCraven, for whose professional opinion I have a high regard, is of the opinion that this rash or eruption is one of the symptoms that most generally presents itself.

The eruption, when it does appear, is generally from the fourth to sixth day, it resembles scarlatina more than measles, it consists of florid red papulæ, very minute, slightly elevated, and not so confluent as in measles or scarlatina.

It has been classed amongst the exanthemata, but in my opinion it certainly partakes more of the nature of both eruptive and arthritic fevers, than of the former. Dr. Waring, of Savannah, considers it to have been closely analogous to the "break-bone" fever, and in our

humble opinion it is one and the same thing under a different name only, and the analogy is so closely identified that it would indeed be difficult for me to draw the distinction between the two, if any peculiarity really exists.

A distinguished author says, and says truly, that it is for the most part a difficult task to point out the precise origin of any form of disease, and with respect to what are called vaguely, general epidemics, the attempt has been notoriously futile. Local epidemics, however, among which dengue must of course be ranked, if its contagious nature be denied, are always, as pneumonia typhoides, for example, limited to particular season and temperature; or, as in the case of bilious remittent, dysentery, and yellow fever, to certain localities and circumstances of soil and surface, conjointly with season and temperature. But dengue has, in its brief career and well known history, shown no correspondence with any of these, being neither limited by season, local position, nor atmospheric change. Its gradual progression from one place to another, allowing abundant room for the anticipation of its arrival, and the fact that "it followed," from the time when it first appeared upon the American coast, "the great routes of commercial intercourse," are strong evidences in favor of its contagiousness. But there are positive and marked facts which seem to us leave no room for reasonable doubt on the subject.

Dr. Stedman traces the communication of dengue clearly from St. Thomas to St. Croix. Christianstœdt, which is the seat of government of the latter, and on this account, and from its proximity to the former island, enjoys a freer intercourse with it, was invaded a week

or two before the town in which he resided, Frederickstœdt. The first patient whom he saw had arrived three days before from St. Thomas, and the disease appeared first in the family with whom this patient had come to reside; among them, indeed, it raged exclusively for some time, with the exception of a family residing opposite, the head of which had frequent mercantile business with Christianstœdt. From there it extended through the town. "The disease," he says, explicitly, "spread from family to family, and from estate to estate exactly in proportion to their contiguity, or to the intercourse that might happen to exist;" and gives an instance of the latter kind, when, from the communication between two estates belonging to the same master, the one near town and the other four or five miles distant, the negroes on the latter estate "got the disease at a time when it had not spread to any other in that neighborhood."

In the City of Charleston, the earliest cases happened in persons connected with vessels that had arrived from the Island of Cuba, where dengue then prevailed. This fact is clearly made out upon the authority of two physicians of the highest respectability. Professor T. Prioleau attended the first patient, a negro, who was put on board the brig Emmeline, just in port, whose captain had been ill with dengue a few days before he left Havana. The next persons attacked were the ship-carpenter and his family, who went on board to effect some repairs in the same vessel. From these the disease spread as from a centre. A short time after these events occurred, Dr. P. G. Prioleau was called to attend the family of the captain of another vessel who had arrived here about the same period, laboring under the disease.

The dates in these instances are worth recording. Captain W. arrived in Charleston on the 31st of May, ill of dengue: on the 20th of June, his wife was seized; on the 1st of July, two of his daughters; on the 2d, his son; "it soon extended to the rest of the family." Prof. Prioleau's first case, the negro above mentioned, was taken ill on the 10th of June; his second case on the 23d. Here we have two central spots whence the dengue rapidly diffused itself throughout the city. These early patients were far from being in the same neighborhood. The brig Emmeline lay at Knox and Pritchard's wharf, in the upper part of the town. Captain W. resided in Tradd street, nearly or quite a mile distant.

Farther circumstances of a similar nature deserve notice, as tending to throw some light on the nature and history of this strange affection. It made its appearance at two points in the vicinity of the city, the qualities of the soil and atmosphere of which were as strongly contrasted as possible. One of them, Haddrill's point, is an elevated sandy bluff, about four miles from Charleston, across the bay, noted for the salubrity of its air, and the health of its inhabitants. It has never been invaded by the yellow fever, even in the most pestilential seasons of its epidemic prevalence. Yet some cases of dengue occurred there, introduced, as he himself had stated, by a clergyman whose family resided at Haddrill's, while he attended to his official duties in the city, and by "a neighbor similarly situated." The second instance was that of a plantation lying about four miles from Charleston, in the opposite direction, in a low malaria country, the residents upon which were annually subject to ordinary remittent fevers. The head of the family and

a negro, having visited the city, were both taken ill in about a week afterwards; the wife of the former was next seized, and the disease afterwards extended among both the whites and the negroes in that place.

Prognosis.—The prognosis in this singular affection was remarkably favorable. Perhaps no form of disease is known in which the proportion of deaths is so small, compared with the numbers attacked. Influenza alone spreads with a universality of invasion at all resembling it, and even influenza is inferior in the infrequency of exceptions to its attack. "In a population of about 12,000 souls who occupy the town of St. Thomas," says Stedman, "scarcely a single individual escaped." In all its seats few died; whether managed by the best professional skill or mere domestic attention, or totally neglected. Yet there was a vast difference in the degrees of the suffering undergone by different patients, and not a little in the duration of the suffering and in the rapidity and perfectness of their convalescence. The aged were most severely handled, remaining frequently infirm and debilitated, with languor and emaciation. Corpulent persons usually suffered much, and recovered very slowly. The intemperate paid in this, as in every other form of disease, a heavy tax for their degrading indulgences. In many it served to usher in formidable paroxysms of delirium tremens. Dengue, indeed, can hardly be said to have ever proved fatal of itself. The rare instances in which patients died, while laboring under it, presented some complication under whose incidental symptoms the patient sank; or some extreme feebleness of constitution in which the remedies employed were productive of fatal effects. More than one example of this nature is placed on record."

Treatment.—The lancet is highly recommended by Southern authors. For myself, I confess I have never seen, in my opinion, any necessity for its use; and I am satisfied we have it, with as high inflammatory fever, and with as much virulence, as it is found at any other point. My friends, M'Craven, Ewing and Parker, I am sure, like myself, deprecate the use of the lancet.

My treatment is very simple, but such as I am sure will relieve the patient as readily as any other mode. I use local applications of warm water to the head and chest, give large doses of Dover's powders every half hour, in combination with sage or horsemint tea, until free perspiration is produced. After which, I generally administer the following :—

℞. Podophyllin, grs. ii.
Sul. Quinine, ℈i.

Divide into 8 powders, give one every two hours, in a half tea-spoonful of castor oil, until free hypercatharsis (purging) is produced. If there is nausea, apply a mustard plaster, over the epigastric region, (stomach,) or administer a drop of kreosote in milk. After the free operations of the medicine, give Dover's powders and quinine in combination, and you will soon have the pleasure of seeing your patient convalescent.

Many Southern physicians of high repute, speak of opium as the Sampson in this disease, and I confess I have used it with more success in allaying the excruciating pain of which patients complain, than with any other remedy. Doctors Rush and Dickson highly commend it to the profession, the former says "its salutary effects in procuring sweat and a remission of the fever, led me to prescribe it in almost every case, and

always with the happiest effects." In a more extended experience, Dr. Dickson says "that this benevolent man would have been delighted to find that it was entirely unnecessary, at least in a large majority of the cases, to wait for what he styles the "proper evacuation," but that this relief, or diminution of pain and anguish, might safely be accorded to the patient at the very commencement of the attack." I cannot refrain from quoting the paragraph from him in regard to this article, he says "the profession has much to learn upon the subject of the admissibility of opium in the treatment of fevers generally, and declaring, as I do, with entire sincerity, that the most agreeable and satisfactory of all my experience in the healing art, has consisted in the employment of this divine remedy in states of the system, and under circumstances which dogmatists of all sects have taught to offer positive contra-indications to its exhibition."

ARTHRITIC FEVERS.

RHEUMATISM.

This disease has frequently a resemblance to gout, and approximates so nearly, that it is with difficulty that it is distinguished. It makes its attacks in all seasons of the year, when the atmosphere is moist and variable, but is more frequently met with in autumn and spring. It is sometimes accompanied with fever, and when it is, it is styled acute rheumatism; if no fever, it is styled chronic rheumatism.

Symptoms.—They are so well known, it would be folly to enter into a minute detail of them. The *acute*

form commonly begins with weariness, shivering or quick pulse, restlessness, thirst, and other symptoms of fever.

The *chronic* form is seldom attended with any considerable degree of fever, and most generally confined to some particular part of the body, generally the shoulder, back or loins. There is seldom any inflammation or swelling in this variety.

Treatment.—Mild purges, large doses of nitre, and the cold dash, I have used with the happiest effects. I have seen some few cases, that required the lancet, but I have substituted in its stead the alcoholic bath, which I have tested in the severest cases of inflammatory rheumatism, in almost every stage, and it has always met my most sanguine expectations. The patient will get relief in a short period, and it should be repeated twice a-day, for three or four days. If this remedy is resorted to, it should be followed by Dover's powders, which is a valuable remedy at almost any stage of the disease; it should be persevered in until perspiration is induced, and its effects should be kept up, by drinking freely of an infusion of catnip. If the pain prevents sleep, the following recipe we have used both as an anodyne and diaphoretic.

℞. Powdered aconite leaves.
Precip. sulph. of antimon., each one grain.
Carbonate of magnesia, ʒi.

Mix and give.

Where there is swelling and violent pains of the joints, a poultice of "bran and vinegar can be simmered to the proper consistence," and applied. I have frequently used beneficially, hops steeped in warm vine-

gar, though a far better article, and one of greater efficacy, will be found in a combination of lobelia and eupatorium, (thoroughwort, boneset,) as a fomentation.

We have tried, in the inflammatory stage, Townsend's Sarsaparilla,—to a quart bottle we have added two scruples of the hydrate of potash, and give a tablespoonful three or four times a-day with decided benefit.

Dr. Aldis, of London, is a strong advocate of the lancet, and a favorite prescription with him, which he gives after venesection, is

℞.	Colchicum wine,	gtts. xii.
	Sulphate magnesia,	ʒi.
	Camphor mixture,	flʒ1.

every six hours.

Also,

Opium,	grs. ss.
Chloride of mercury,	grs. ii.

This pill is repeated every night for two or three nights, as well as the former recipe, which is taken through the day. In regard to this practice, we will let the Doctor speak for himself:—"I learnt this mode of treating rheumatism at St. George's Hospital, under Dr. Chambers, whose practice it was to bleed, purge, and administer calomel and opium; and I have employed it during twenty-four years, in a large dispensary practice, with the most signal advantage."

He says he has found a modification of the above treatment, viz: calomel and opium, and colchicum, with saline aperients—most serviceable in the treatment of *gout.*

Arnica.—The extract taken internally, and a fomentation applied externally, is recommended very highly; I have never tried it.

Ipecacuanha, given in grain doses every hour, (if the stomach will bear it,) will prove serviceable as a purgative in this disease.

The diet should be light, and in small quantity, such as roasted apples and gruel.

Chronic Rheumatism.—Treatment.—You must try and ascertain the remote cause, as it may have been so slight as to have been entirely overlooked. You are to distinguish clearly between local and general rheumatism, from the fact that local affections, such as white swelling, are frequently confounded with chronic rheumatism, especially when the knee is the part affected. The treatment for this form of the disease, must be both local and constitutional.

Bandaging the effected limb somewhat tightly with flannel rollers, continuing it above the affected joint, will prove serviceable. Some of the eastern physicians speak in high terms of the sabin, (juniperus sabina,) and contend that it is entitled to be placed at the head of remedies, for this truly distressing disease; Dr. Chapman gives from twelve to fifteen grains of the powdered leaves three times a day, gradually increasing the dose; it should be persevered in, the want of perseverance generally, is one of the main causes why chronic diseases are so seldom relieved.

In this form, I have used evacuants, an emetic followed by a cathartic, at least once a week, the bowels should be kept freely open in the meantime, by aperients, for this purpose I use the following:

℞. Podophylline, (Mandrake.)
Sanguinaria, (Blood-root.)
Iris, (Germanica.)
Hydrastis, (Tumeric root.)
Apocynun, (eq'l. parts,) (Dogs-bane, (Indian hemp.)

Dose, as an alterative, about ten grains at night. Continue with this an equal amount of *alkaline or compound powder of rhubarb*, which is as follows :—

Rhubarb.
Saleratus.
Spearmint leaves, equal parts.

This in combination, can be given in 15 grain doses, twice a day, or just enough to move the bowels two or three times.

Before each meal, the patient should take in cold water, from one to two drachms of the following recipe :

℞. Pulv. gum guiacum, ℥iv.
Allspice, ℥iv.
Saleratus, ℥vi.
Alcohol, 2 quarts.

Digest and filter.

Add tinctures of macrotys, black snake root, and Xanthoxylum, equal parts.

Dose.—Table-spoonful three times a day.

In the chronic form, I have great confidence in the alcoholic vapor bath, use it twice a week, just before retiring to rest, in connection with this. As a local application to the affected joints, I use a rheumatic liniment composed of the oils of cedar, cloves and sassafras, and very frequently, a liniment called in the apothecary

shops here, "Massie's liniment," which I have found beneficial, and safely assert that you will find it superior to the world-renowned Mustang, wherever that is necessary to be used, the recipe will be given in the volume.

A thorough examination should be made of the spine, and upon pressure you will be apt to find tenderness, whenever such is found apply the following plaster, which can be used also when the pain is confined to large joints:

℞.	Sang. Can.,	(Blood root.)
	Pod. Pel.	(Mandrake.)
	Arum Triphyllum,	(Indian Turnip.)
	Phytollacca decandria,	(Poke root.)
	of each, pulverized	ʒii ℈.
	Tar,	1 quart.
	Rosin,	4 oz.

Boil the tar until its water is evaporated, add the rosin, and let it melt; and add the powders while it is hot, stir briskly until it becomes stiff. As a slow counter-irritation and revulsion, it has no equal.

This preparation should be spread quite thin at first, and on soft leather; it should be removed daily, and spread more plaster on the same leather.

The *phytollacca decandria*, or pokeroot, one of the preparations of the plaster, as an indigenous remedy, enjoys considerable reputation. You take the expressed juice, and mix with a small portion of brandy, to keep it from fermenting, and of this a small wine-glassful can be taken two or three times a day.

I have considerable confidence in the sarsaparilla and hydriodate of potash, the same as recommended in the acute form.

Fowler's solution of arsenic possesses strong anti-rheumatic qualities. From six to ten drops may be taken three or four times a day. The administration of balsam copaibae is entitled to consideration in this form of the disease.

Cold bathing, especially in salt water, has often cured chronic rheumatism. I have used a domestic remedy of garlic, put into good Holland gin, with decided advantage.

Such as are subject to frequent attacks of the rheumatism ought to make choice of a dry, warm situation, to avoid the night air, wet clothes and wet feet as much as possible. Their clothing should be warm, and they should wear flannel next their skin, and make frequent use of the flesh brush.

We append some remedies, not specified in our treatment, that we have used with advantage in the chronic form of this formidable disease.

℞.	Powdered resin of guaiacum,	ʒii.
	" gum arabic,	ʒiii.
	Extract bitter sweet,	ʒiii,
	Syrup of Mallows,	fl ʒi.
	Distilled water,	fl ʒvii.

Mix. A table-spoonful every three or four hours.

The oil of Guaiacum wood is a good external application.

℞. Rasped guaiacum wood, two drachms; water sufficient to obtain one pint of strained decoction. After an hour's boiling, add, wine of colchicum seed, ʒii.

Dose. A wine-glassful every two hours.

℞. Powdered resin of guaiacum.
Golden sulphuret of antimony, aa. ʒss.
Calomel, x. grs.
Ex. Dandelion, q. s.
M. ft. Divide into 3 gr. pills.
Dose. Three, three times a day.

In sciatica, and other chronic forms, I have frequently used, with great advantage,—

Hydriodate potash, grs. xxiv.
Hop tea, 1 pint.

Make a solution, and give one-third morning, noon and night.

The following ointment is a valuable application:

℞. Veratrin, ʒss.
Powdered opium, ʒi.
Lard, ʒiss.
Mix. Rub it on well.

We have spoken of the alcoholic sweat, and to show the efficacy of this little appreciated measure, (the alcoholic sweat,) I will state, that in the severest cases of inflammatory rheumatism, in the early as well as the later stages, I have never known it fail to relieve.

An application termed firing, has obtained much celebrity, and we have extracted, from Drs. King and Newton's late work, the mode of its precise application. "Obtain a thick iron wire shank, about two inches long, and inserted into a small wooden handle; on its extremity, which must be slightly curved, have a disc or button of iron, exactly one-quarter of an inch thick, and half an inch in diameter. The whole instrument

to be only six inches in length. The face of the disc for application must be flat.

Mode of Application.—Light a small spirit lamp, and hold the button over the flame, keeping the forefinger of the hand holding the instrument, at the distance of about half an inch from the button. As soon as the finger feels uncomfortably hot, the instrument is ready for use, and the time required for heating it to this degree, will be about half a minute. It is to be applied as quickly as possible to the parts, the skin being tipped successively, at intervals of half an inch over the affected part, as lightly and as rapidly as possible, always taking care to bring the flat surface of the disc fairly in contact with the skin. In this way the process of firing a whole limb, or the loins, making about one hundred applications, does not occupy a minute, and the one heating by the lamp suffices. To ascertain whether the heat be sufficient, look sidewise at the spots as you touch them, and each spot will be observed to become of a glistening white, much whiter than the surrounding skin. In from five to thirty minutes the skin becomes bright red, and a glow of heat is felt over the part. The iron must never be made red hot—it is very little hotter than boiling water—should never make an eschar, and rarely raise a blister. On the next day after its application, a number of circular red marks will be seen on the skin, the cuticle not even being raised, and the surface ready, if necessary, for a fresh application. There is no discharge whatever, and in most cases the patient is unconscious of what has been done. It is vastly superior to a blister in many cases; even the most delicate female will not object to its frequent repetition when required.

Properties and Uses. — A powerful counter-irritant. Recommended by Dr. Corrigan in paralysis, local muscular rheumatism, sciatic, lumbago, neuralgic pains, &c., and wherever a counter-irritant is required. Also applied each side of the spinal column, in intermittents, epilepsy, mania and other diseases."

The Macrotys Racemosa (Black Cohosh,) is an article of great value in this disease, and should be investigated by all. The saturated tincture of this article is the form in which I like it best; it should be given in doses of ten drops every two hours, gradually increasing to sixty drops; its action must be kept up for several days.

We annex a very valuable rheumatic tincture, and one that will be found exceedingly efficacious as an external application, in almost every painful affection.

℞. Camphor, one pound.
Oil of Origanum.
" Hemlock, aa. half pound.
" Sassafras.
" Cajeput, aa. ℥ii.
" Turpentine, ℥ii.
Capsicum, ℥iv.
Alcohol, 1 gallon.

Macerate for fourteen days and filter. In ordinary cases, apply two to four tea-spoonfuls to the affected part, and rub it well by the fire, and afterwards moisten flannel with it and apply to the diseased part.

Lemon juice is now much used in rheumatism, the practice is to use it freely.

The following recipe for rheumatic inflammation has been lately presented to the French Academy of Sci-

ences, by a retired army surgeon of Paris, as possessing extraordinary curative properties in the above painful affection.

Dr. Poggioli, the discoverer, states that in seventeen cases of rheumatism, the complaint yielded immediately on the application of this new remedy.

Recipe.—A salt of morphia (hydrachloratis,) distilled water, extract of belladonna (atzopine,) ointment, made of the buds of the poplar tree, leaves of black poppy, belladonna, hen-bane and nightshade; animal fat, macerated in datura leaves, q. s. The composition to be scented with essence of lemon or cherry laurel water. In many instances mentioned by the discoverer, one rubbing was sufficient, with the application of linseed poultices afterwards, to effect a perfect cure; it may, however, be sometimes expedient to apply it for a week at the utmost. The proportional quantities of prescription must be regulated according to the constitution of the patient, as well as the nature and extent of the malady. The inventor, in his account to the academy, states it to be the result of several years labor and experience.

GOUT.

Gout is a disease resembling, in many particulars, rheumatism; and there is no disease which shows the imperfection of medicine more, and yet none that teaches the advantages of temperance and exercise in a greater light, than the gout.

Indolence and intemperance, in a large number of cases, are evidently the principal causes of this disease; yet there are other things which greatly contribute, in many instances, to induce a paroxysm; for instance,

intense study, excess of venery, too free use of acidulated liquors, night watching, grief and uneasiness of mind, an obstruction or defect of any of the customary discharges.

Symptoms.—This most excruciating painful disease is generally preceded by eructations, sickness and headache; the patient complains of weariness and dejection of spirits, the appetite generally keen a day or two before the attack, a slight pain in passing urine, (and there is one remarkable feature in gout, you will in almost all cases find it accompanied with stone of the bladder.)

It is almost certain to make its attack in the night, and in a majority of cases the great toe is the member seized. I have seen the parts attacked become so exquisitely sensitive that the patient could not bear to have it touched; the least jar in the room would affect them materially. It seems to confine itself mostly to the male sex. I have never seen a female patient.

Causes.—This is one of the great hereditary affections. It most frequently attacks in January or February, but there is no universal rule.

Where it is not hereditary, the exciting cause without doubt consists in too free an indulgence in nutritious foods, too great an excess in wine, with insufficient exercise.

It generally occurs in stout, robust and short persons, and those of a sanguineous temperament; but I have seen it in persons extremely spare.

It never has been known in eunichs; at least, so it is said. If such be the case, gouty old gentlemen have an easy remedy.

Treatment.—We open our treatment with a paragraph from Dr. Watson, which is to the point and true.

"In the interval between attacks of gout, whether regular or irregular, it must be chiefly regimenal. The instances are not few of men of good sense, and masters of themselves, who, being warned by one visitation of the gout, have thenceforth resolutely abstained from rich living, and from wine and strong drinks of all kinds, and who have been rewarded for their prudence and self-denial by complete immunity from any return of the disease; or upon whom, at any rate, its future assaults have been few and feeble."

Cold water applications have been recommended; but I view it as an extremely dangerous remedy in this disease. It has a tendency to produce metastasis, (a sudden change from one place to another); apoplexy has been induced by it; serious affections of the heart, and sudden death, have resulted from it. We dwell on this application from the fact that patients are generally inclined to use it, and it is due from their medical advisers to guard them against it.

The chief indications to be fulfilled in this painful disease, is to regulate the diet, let that be of a mild farinaceous character, perfect quiet, gentle purges, and in my opinion, you will find and experience as much benefit from large doses of opium and colchicum, as any other remedy, although the tincture of iodine is held in high repute by many.

Wine-whey is a good article of drink in this disease, as it promotes perspiration without producing arterial excitement, I generally combine a tea-spoonful of spiritus mindererus, (acetate of ammonia,) say two or three times a day. Any local application upon the

afflicted part that will produce insensible perspiration, will have a tendency to afford great relief, and for this purpose, I know of nothing equal to fur or wool. The limb should be completely folded, (if I may use the term,) in it.

The course to pursue to prevent attacks of the gout, is to observe temperance, and to take that sort of exercise that will produce free perspiration. Let milk be the main reliance for diet; avoid all liquors, especially sour wines and champagne. Sour punch should be especially avoided.

I am inclined to the opinion that the irritating plaster, as recommended in rheumatism, would be of great service as a local application. I have never tried the local application of chloroform, but think it would afford relief.

We are frank in acknowledging that the profession has not discovered as yet any remedy that will afford complete relief for a regular paroxysm of the gout. The great danger is in metastasis, (a change of the disease from one organ to another;) then it is that the proper applications are absolutely necessary.

If it affects the head, it will be accompanied with severe head ache, drowsiness, giddiness, convulsions and delirium; if the lungs, great oppression, with difficulty of breathing; if the stomach, extreme sickness, accompanied with violent pain, and generally a total loss of strength.

If it attacks the head or lungs, every effort must be resorted to to invite it to its original place. Bathe the feet in warm water, apply cataplasms to the soles, the irritating or blistering plaster to the extremities, and give the aromatic preparation of rhubarb.

If the head, opiates and stimulants are inadmissible. Your reliance will be upon the lancet, active cathartics, with cold applications to the head, with the same applications as recommended for the lungs to the extremities.

If it attack the stomach, ether will be found an efficacious remedy, or strong wine boiled with cinnamon and drank freely.

The prescription of aconite, as recommended for rheumatism, is a valuable remedy in this disease; and where the stomach is involved the following recipe will be found valuable.

℞.	Powdered ginger,	grs. xv.
	Carbonate of amonia,	grs. vi.
	Spirit of cinnamon,	ʒiss.
	Water,	fl.ʒi.

Mix and give.

INFLAMMATION.

ERYSIPELAS

Is an acute febrile disease, and very intense in its character; it is always attended with heat, swelling, pain, redness of the skin in patches, and often united with vesication. The parts are much swollen, the inflammation very intense, the pain and heat very great, and the constitution frequently much disturbed. Generally the redness disappears on pressure, and instantly returns when the pressure is removed, as in erythema and roseola.

Symptoms.—It is ushered in with a shivering sensation, pain in the head and back, heat, thirst, and great restlessness, and a rapid pulse, sometimes vomiting and delirium. On the second, third, and sometimes on the fourth day, the parts become red, and swell, small pustules appear, at which time the fever generally subsides.

Sometimes this disease is primary, and at others only a symptom of some other malady. There is no portion of the body but what is liable to erysipelas, but it most frequently attacks the face and legs. In some instances it confines itself to a particular locality, and in others it spreads quickly over large portions of the surface; and, in certain comparatively rare cases, does not cease to make progress until it has invaded successively every part of the skin.

The face is very liable to this inflammation, and is often so much swollen that every feature is almost hidden. The eyes are closed, the lips, nose, cheeks and ears greatly enlarged, the nostrils so much obstructed that the patient cannot breathe through them, the mouth so stiff that he speaks with difficulty, and the external meatus (opening of the ear) so much narrowed as to interfere with hearing. The disease sometimes involves the whole head, and extends over the scalp; when such is the case it is much swollen and pulpy, and the whole head becomes enormously enlarged. In this situation the parts become so tender that pressure produces much uneasiness.

If the breast is the seat of the affection it becomes much swollen, and very hard, producing great pain; in this situation, unless active remedies are resorted to, it is apt to suppurate. In this locality it is always accompanied with pain under the armpit of the affected side.

When the erysipelas is large, deep, and affects a very sensitive part of the body, the danger is great. If the red color changes into a livid or black, it will end in a mortification. Sometimes the inflammation cannot be discussed, but comes to suppuration; in which case gangrene or mortification often ensues.

When the inflammation and fever are high, they are always attended with great difficulty in breathing.

Treatment.—The treatment varies according to the causes, symptoms and complications of the disease. The mode of treatment will be different in phlegmonous or acute erysipelas from what it would be in the other varieties, which must be apparent to any one who makes the least pretensions to knowledge of diseases in general.

The common acute form of this disease generally yields to purgatives and diaphoretics, enjoining a light vegetable diet.

"After the inflammatory symptoms are in a measure subdued" ipecac. will exercise a powerful influence over the disease.

If the fever be high, the pulse hard and strong, and the patient vigorous, it will be proper to use the lancet, or give aconite in drop doses, to control the arterial action. In our opinion it is not so necessary to bleed in this disease as is so frequently done. If the patient has been in the habit of using ardent spirits to excess, and the disease has attacked his head, then and in that case, the lancet will be absolutely necessary.

In cases where the lancet is requisite, it is necessary by all means to keep the bowels in a free soluble condition, and this must be effected by those remedies which will have a tendency to lessen excitement. I generally administer for this purpose rhubarb, in com-

bination with nitre. If the mild purgatives I have here suggested, fail to open the bowels well, stronger (or drastic) ones must be resorted to.

If the disease attacks the head, you must apply blisters to the neck, behind the ears, and cataplasms to the extremities.

Fine wool or fur are good applications, they exclude the atmospherical air and promote perspiration, which has a tendency to relieve the vessels of their engorgement.

When the inflammation cannot be discussed, and the part has a tendency to ulcerate, it will then be proper to promote suppuration, which may be done by the application of ripening poultices, with saffron, flaxseed, slippery elm, warm fomentations, &c.

When the skin is dry, hot, and accompanied with severe inflammation, the most soothing application is milk-warm water, but neither cold or warm water ought to be used, unless the parts are in the precise condition as stated here.

A large number of the English, and some of our most enlightened American physicians, recommend free incisions through the inflamed surface, and across its whole extent. I have tried this method with considerable success.

In some cases I have resorted to the caustic potash, giving a slight touch to each vesicle, which readily produces disorganization of the morbid structure, and if followed with an emolient poultice, the destroyed parts readily slough off,—this application is alone proper in cases where mortification is threatened.

In erysipelas of any form, I am a great advocate of

quinine, unless there should be vomiting; and even then, where the vomiting was not inflammatory, I have given it, and it has arrested the vomiting. Though this disease in general should be treated by active antiphlogistic measures, yet it permits the exhibition of wine, quinine and porter; and though we adopt an antiphlogistic course, yet it does not bear those vacuations which other inflammatory diseases do. It sooner requires supporting measures, and a larger number of cases require support, than perhaps in any other inflammation.

In a word, to sum up a general treatment, if rhubarb or castor oil does not exert a decided influence, you must resort to mercurials and nauseants. Ipecac. is my favorite, followed freely by the sulphate of quinine, which article I cannot recommend too highly. Opium is frequently serviceable, and cupping to the neighboring sound parts, with me, is much preferable to bleeding; caustic potash, and the sesqui-carbonate of potash are valuable auxiliaries; blisters, cold or tepid applications, as well as depletion, should be used with extreme caution. Mercurial ointment, acetate of lead and sulphate of zinc, (sugar lead and white vitriol,) tincture of iodine, and nitrate of silver, are good applications locally, and in the phlegmonous form, as we have before described, free incisions should be resorted to, to prevent the pus from burrowing in the cellular tissue.

In respect to local applications, in addition to those already recommended, the following are highly extolled, especially if there be vesication, it is a good treatment to sprinkle a little calmine powder or starch, over the inflamed surface; others contend that the oxide of zinc

is a valuable application, and a distinguished author says,—he experienced great relief from the application of blotting paper, which absorbed the fluid.

Mr. Velpeau has employed the sulphate of iron with advantage, as an application to the inflamed part. He uses it both in solution and ointment; the following are his recipes:

℞. Ferri sulphat, ʒi.	℞. Ferri sulphat, ʒi.
Aquae, Oj.—M.	Adipis, ʒi.—M.

he asserts that these applications exert a great control over the inflammation, generally subduing it in two days.

Dr. Dunglison recommends methodical compression, says it is quite efficacious.

Tonic remedies are more essentially necessary, where the inflamed parts exhibit a tendency to gangrene.

The following topical remedy is used by Dr. Ewing, in gangrene, and it is a valuable application,—charcoal, slippery elm, and barks, made into a poultice. The solution of the chlorides of lime and soda, are valuable applications in this stage.

I have used with great success the tincture of the chloride of iron, in doses from ten to twenty drops in water, repeated every two hours, it is a valuable agent in the treatment of erysipelas, and is apt to effect a cure from three to seven days.

Infants.—I am of the opinion that infantile erysipelas does not differ in any essential point from the erysipelas of adults. It occurs under all the modifications, as to its phenomena and progress, that it is known to assume at a more advanced age.

Treatment.—With children it rarely admits of active antiphlogistic measures. 'An obvious tendency to prostration, in a large majority of cases,' occurs almost as soon as the inflammation makes its appearance; the fever in general assumes a typhoid type from the onset of the malady. The treatment, separate and apart from the antiphlogistic course, does not differ from that recommended for adults.

Where there is an evident tendency to prostration, I have used the carbonate of ammonia in conjunction with quinine, with signal advantage. In a conversation with Doctors Bryan, Minnock and Irion, they assured me that they used spirits of turpentine internally, with benefit to children; they give from two to three drops every four hours, to an infant six weeks old.

If the parts assume a gangrenous character, a local application of charcoal, a decoction of oak bark, with a small portion of yeast, is a most excellent poultice.

PHRENITIS.

(INFLAMMATION OF THE BRAIN AND ITS MEMBRANES.)

Phrenitis.—This is one of the most important subjects for medical investigation. In order to understand any disease, and more especially this, in my opinion, it is absolutely necessary to have seen it, to have carefully watched it, and traced it through its different stages during life, and to note the vestiges which it may have left behind after death. Good descriptions of disease

never can be substituted for the actual observation of disease at the bedside; and here you will find how necessary it is to have been thoroughly instructed in diagnosis, one of the most important qualifications of a physician, whilst, at the same time, the principal branch of pathology, and without doubt the most difficult. But it is the only basis on which we can found a just prognosis and rational treatment. I shall cite an example, merely to show my young professional brethren, that an accomplished diagnosticator has but little difficulty in ascertaining the seat and nature of a disease, even in cases wherein serious obstacles may present themselves. Let us suppose an example.

A patient is presented in a state of complete loss of consciousness. It is impossible to obtain from him any information with respect to his present feelings or condition, or any clue to the previous history of his case. We are informed by those present, that, up to the period of his illness, he was in the enjoyment of perfect health, and that the present attack was sudden. Having no other sources of information as to the nature of the case, we call in our senses and reason to our aid in forming a diagnosis. The former tells us that he is advanced in years, of a robust frame, the several cavities large, his limbs well developed, his face flushed, eyes prominent, the temporal and carotid arteries beating with violence, frothing at the mouth, his extremities cold, that one side of the body is deprived of motion, that the pulse is strong and hard, that he has vomiting, and that he has passed his fæces involuntarily, that the breathing is stertorous. Now what is to be done in this case? Do you not see in a moment what the disease is, its nature, seat, extent, and the indications of treatment? We will

now reason on the case. *There is complete loss of consciousness.* What are the *diseases* which give rise to this symptom? They are diseases of the heart, of the lungs, and of the brain. Is the heart the seat of the disease at present? No, for the patient was very well before the attack, and the *circulation* was not disturbed. Is it syncope (fainting or swooning)? No, for the face is flushed, and the pulse is strong and full. Is it asphyxia (suffocation)? No, for the respiration and circulation still exists, and there was no asphyxiating cause. The *brain* therefore must be the organ involved. We have now placed the disease in the *brain*, but the diseases of this organ are numerous. The disease is evidently not chronic, for the patient was very well a little before the attack. Thus, then, by this single trait, we have got rid of one-half of the cerebral affections. We now have left for consideration arachnitis, (inflammation of the arachnoid membrane,) cerebral congestion, softening, hæmorrhage; it cannot be congestion, for congestion is a general disease, and here there are local phenomena; nor can it be arachnitis, for the same reason. It must, therefore, be either softening or effusion; but the progress of softening, which also produces hemiplegia, (paralysis of one side of the body,) is slow and gradual, and here the disease came on suddenly. The case, therefore, must be one of a cerebral hæmorrhage, or apoplexy. Thus, then, have we come, by the mere application of the senses and by reasoning, to ascertain the nature, seat, and extent of the disease, which we have before our eyes, and that with almost mathematical certainty.

Acute inflammation appears to attack at times the whole of the contents of the skull. "As the contents

of the cranium are called collectively the encephalon," some call this disorder encephalitis, but I adopt Cullen, and term it phrenitis.

"*Phrenitis*, or acute and general inflammation of the brain and its membranes, as it occurs in adults, presents two periods, which are marked by different symptoms, and in most instances are very distinctly observable," they are sometimes mixed and confounded together. But the distinction is real, and the physician should give it close observation.

The symptoms that characterise the period of excitement are pain of the head, often intense and deeply seated or extending over a large part of it; a feeling of constriction across the forehead, throbbing of the temporal arteries, flushing of the face, injection of the eyes, which generally have a wild and brilliant look, contraction of the pupils, preternatural sensibility to external impressions, amounting frequently to impatience of light and sound; a disposition to get out of bed, violent delirium, want of sleep, frequent paroxysms of general convulsion, a parched and dry skin, a frequent and hard pulse, a white tongue, thirst, nausea and vomiting, with generally great constipation of the bowels.

The attacks come on in various ways, and you are not to look for all the symptoms here laid down in every case, from the fact that it is frequently ushered in with a sudden alteration of manner, frequently with nausea and vomiting; but the symptoms are generally so prominent in regard to the head, that it will fix your attention there. Another important fact is the frequency with which inflammation of the dura mater supervenes upon otitis, (*inflammation of the internal ear,*)

and this should be *kept constantly in mind;* for it is only by a prompt action and judicious treatment whilst the disease is confined to the internal ear *that we can have any hopes of saving the patient.* (Dr. McCraven and myself attended a case in this city where the attending physician treated the *otitis* as the result of cold, with simple remedies, when, at the time, it needed the most active remedies.) When the inflammation has extended to the dura mater, the termination is almost generally fatal.

"Again, some cases of acute inflammation of the brain set in neither with sudden and great disturbance of the intellectual functions, nor with sickness and vomiting, but with a paroxysm of general convulsion, such as often ushers in an attack of meningitis." (Inflammation of the membranes of the brain or spinal cord.) This symptom, M. Andral affirms, is a more certain sign of cerebral inflammation than the occurrence of delirium. From the variety, you see the importance of your remembering that inflammation of the brain commences in three different ways. And there is even another; M. Andral states that he has seen a few instances of inflammation of the brain, of which the first sign was a sudden loss of the power of speech.

I venture the opinion that phrenitis, in many instances, has produced such morbid vascular action as frequently to terminate in such a complete alteration in the structure of the brain as to end in incurable mania, without fever.

After the symptoms related continue for twelve hours or more, they are generally followed by twitchings of his muscles, and startings of their tendons come on, sometimes his limbs are agitated, cold sweats break out,

the sphincters relax, he falls into a profound sleep, and life is gone; these symptoms I regard as more certain indications of inflammation than the symptoms which present in respect to the intellect.

Causes.—This disease is more frequently the accompaniment of fever than of any other disease. It is frequently the result of colds, especially when overheated. It will occur also from heat alone, especially if exposed to the direct rays of the sun. Mental irritation, want of sleep, or long continued watchings will sometimes produce it.

It is asserted that a cessation of the itch has been followed by phrenitis. Dr. Elliotson attaches much importance to inflammations of the eye, or the ear, or the nose, or the frontal sinuses, will sometimes spread to the brain. I have myself seen two or three such cases. Phrenitis has frequently carried off patients who have had nothing more, at first, than inflammation of the parts I have just enumerated. Of course inflammation will spread in the head just as in other parts of the body. When the nose and sinuses have been inflamed, the bones in many cases have been carious.

Dr. Elliotson again says, "I have several times seen phrenitis arise from disease of the ear, and once saw gangrene of the dura mater, from a case of this description." (I have also seen it: I have alluded before to a similar case.) He says, "When a person has a discharge from the ear, or ear ache, we ought to be on our guard to notice the first symptoms he may mention of pain in the head, or the first anxious look that is displayed. *The very slightest symptoms of cerebral affection, when there is a cessation of discharge from the ear, ought to put us on our guard.*" He says he has seen a number

of cases of this description, where persons have had phrenitis after pain of the ear, or a *discharge* from that organ.

Phrenitis, it is said, has been the result of a cessation of the mumps, and it has been known to occur on the cessation of inflammation of the testicle, and we know that it certainly does occur in the way of metastasis, when Rheumatism ceases in the joints, or gout ceases in some situations. Exciting causes, such as blows, &c., will produce it.

Prognosis.—Inflammation of the brain may, indeed, be regarded as a dangerous and very alarming disease; it often proves fatal in a very short period, but more frequently between the third and seventh day; if protracted beyond this, it is apt to terminate in mania; and in children it is followed by dropsy of the brain.

Treatment.—Energetic measures are of the utmost importance to begin the treatment with, and that early. Although I am but a poor advocate for the lancet, especially in this climate, yet to meet the urgency that is required to combat successfully this disease, I know of nothing as yet equal to the lancet; and the great object must be, when you use it, not to bleed for quantity, but bleed for effect; and to do this correctly, you will continue the bleeding until the pulse begins perceptibly to flag, except only in the case of hypertrophy (enlargement) of the left ventricle of the heart. If the pulse remains tense, and the active cerebral symptoms are unabated, in which case the bleeding can be resorted to again, I prefer bleeding in the temporal artery. Cups should be applied to the temples and behind the ears, and frequently will relieve if applied to the stomach and abdomen. Leeches do better when they can be had.

A vast deal depends, as to the result, on the abstraction of blood, both general and local. To assist in reducing the arterial action, I have frequently administered aconite, a few drops put into an ounce or two of water, and give teaspoonful every 15 or 20 minutes.

Active hypercatharsis (purging) should be produced as speedily as possible, as there is always severe constipation. Some advocate calomel. I have never seen any necessity, or more properly, I have never witnessed, in this disease, any benefit resulting from it. For the purpose of producing free evacuations, I generally prescribe the following:

℞. Podophyllin, gr. ss.
Ex. Jalap, grs. iv.
Comp. ex. colocynth, grs. v.

Mix and give, and repeat in three hours, if necessary. Its operation should be promoted by the subsequent administration of the infusion of senna with epsom salts, or combination of a similar character.

A combination of 12 grs. of the nitrate of potash, and a half grain of digitalis, is highly recommended in this disease. The dose may be repeated every two hours. I could not be induced, with my knowledge at the present time, to give digitalis in this disease.

If the stomach is not irritable, ipecac. may be given in small doses every hour or two, as the nausea produced from it has a tendency to lessen the force of the cerebral congestion; vomiting is not desirable, and you should not press the ipecac. to that extent.

Local applications are highly recommended, and there is none so effectual as cold water; ice is preferable, put into a bladder, but to be of service, it must be constantly

and steadily applied, intermitting sufficient so as not to destroy the skin, but not so long as to let secondary re-action ensue, for in that event it would produce more harm, than its sedative influence would do good.

Most medical writers recommend shaving the head, and applying blisters to the scalp; I must confess I have no confidence whatever in this mode of treatment, I believe the cold applications can be applied with the hair on as well as if shaved, and as regards the blisters to the scalp, if they were placed on the extremities, I think they would be much more serviceable.

During the application of cold water to the head, the extremities should be immersed in tepid water, and mustard plasters to the feet.

I am of the opinion that a large blister to the nape of the neck, will sometimes be of benefit.

Opiates and anodyne narcotics, though entirely forbidden in the early stage, may sometimes be safely and usefully employed to control the restlessness remaining after the inflammation has gone.

Attention should be directed to the bladder; the head should be elevated, the feet kept warm; he should observe total abstinence, free from noise and perfectly quiet.

We may have a state in the after treatment of this disease, in which nourishment and even opium will be necessary,—at the close of phrenitis, if there has been too much purging, delirium will still remain; in this case you resort to the remedies above. When on the subject of delirium tremens, we will allude to this state again.

I have already assured you of the value of podophyllin in this disease, and you will find no remedy

manifesting a higher degree of value, in controlling inflammation of the brain, or relieving congestion of blood to that organ.

I have alluded to *hæmospasis* (dry cupping,) under the head of congestive fever,—I believe this principle was first suggested in this country by the able and scientific Dr. Buchanan, of Cincinnati, and as he places a great estimate upon it in this disease and many others, I cannot do better than to report it in full.

"Any thing capable of drawing blood to a part may be said to act hæmospastically. It is a powerful revulsive treatment. Dry cupping does so; it not only draws the blood from internal parts to the surface, but likewise attracts morbid action, and thus affords relief. Common half-pint tumblers will answer for adults very well, in place of ordinary cupping glasses. A piece of paper or cotton, rolled up, and fired, and dropped into the tumbler, and allowed to burn a minute or two, fits the tumbler for application to the spot. One, two, or more may be applied, and repeated as often as may be desirable: they should remain until ready to fall off. Intermittent fever has been invariably cured by M. Condret, by applying eight or ten middle sized cupping glasses, on each side of the spinal column, from the neck downwards, and allowing them to remain for about thirty or forty minutes. To be applied at the commencement of the cold stage. One to four applications effect the cure. Also useful in cases of difficult respiration from congestion of the lungs or mucous membrane of the bronchii, etc.

"*Hæmastasis*, a term applied to the retention of venous blood in the extremities by ligature. Tie a handkerchief, or any suitable cord around the upper

part of the arms, and the thighs, and then, by means of a piece of wood, twist or turn the cord sufficiently tight to check the circulation of the venous blood, but not the arterial, which may be known by the action of the pulse. In a short time the arms and legs will be much distended, and an amount of blood removed from the trunk and retained in the limbs, which the most heroic practitioner dare not remove by the lancet. If the subject faint, promptly loosen or remove the ligatures; if he be plethoric, and of firm, vigorous constitution, he must be reduced by cathartics, diuretics, sudorifics, and be under the influence of gentle nauseants, at the time of the operation. This is found very useful in uterine hæmorrhage, hemoptysis, and other hæmorrhages, inflammations of the brain, lungs, bowels, etc., congestions, puerperal convulsions, and wherever it is deemed advisable to lessen the amount of blood in the head and trunk, without injuring the system."

The following cataplasm is a good revulsive, when applied to the feet in this disease:

℞.	Bruised horseradish,	ʒvi.
	Mustard seed, Pulv.,	ʒi.
	Flaxseed meal,	ʒiiss.
	Vinegar,	q. s.

Mix and make cataplasm.

DISEASES OF THE EYE.

OPHTHALMIA.

The eye is the agent that controls most of our other senses. Its structure is, without doubt, the most deli-

cate and diversified of any other organ in the animal economy; and, from its constant use, it is liable to a number of accidents and diseases.

Ophthalmia is the genuine term for inflammatory diseases of the eye. The *simple conjunctivitis*, or inflammation of the mucous membrane covering the front of the eyeball and lining the eyelids, is the most frequent form, and it is attended with pain, redness, intolerance of light, and frequently a sensation as if sand was in the eyes. The causes that produce this form of ophthalmia are various, such as external injuries, exposing the eye to a strong wind, also to intense light, heat, or to dust. Inflammatory tumours, called styes, often produce it. There are several varieties of conjunctivitis of sufficient importance to require distinction.

Before we enter into a description of the several varieties, I wish to impress upon the general practitioner of medicine, that he ought to be competent not only to treat all acute diseases of this important organ, together with its simpler and more common forms of chronic derangement, but to distinguish these, with readiness and accuracy, from the rarer and more complex malformations or disorganizations, which may justify him in referring the case to professed eye doctors. Although you may not propose to become professional occulists or exclusively "operative" surgeons, you are still bound to study and discriminate many of the diseases fully treated of only in works devoted to this one organ.

Simple conjunctivitis is sometimes symptomatic of other diseases, such as measles, small pox, scrofula, and syphilis.

Treatment.—There is very little treatment required

in the early stage of the disease, if proper remedial measures are adopted. Cold water through the day, with an application of slippery elm, will be all sufficient, generally. A very soothing application is to take the green leaves of scrofularia marylandica, (some call it water betony,) this, in combination with appropriate regimen, will very soon relieve every trace of inflammation; the pith of sassafras is also a good local application.

It is said in obstinate cases, that an infusion of hydrastus canadensis, (yellow root or tumeric root,) with the addition of borax, (ʒii to the pint,) may be used with good effect. In such cases I resort to cupping, and I apply a seton behind each ear, if the case is one of great obstinacy. This should be preceded by an emetic, either lobelia or ipecac., given at such time and in such quantities as to produce vomiting two or three times in the course of the day. After this, you should administer a cathartic of senna and epsom salts, or cream of tartar and jalap, and if the biliary secretions are in the least suspended, you should add to the foregoing a half grain or grain of podophyllin.

If this treatment should not lessen the inflammatory symptoms, the alcoholic sweat must be resorted to, (page 39,) with a continuation of the emetic and cathartic remedies. This will generally remove all the acute symptoms, but it is sometimes followed by a chronic form.

The following remedies are valuable applications in this stage. Take alum and the white of an egg, agitate until a coagulum be formed, put it in a linen rag and apply to the eyes.

℞. Ex. Opii Mollis gr. x.
Camphor gr. vi.
Hot water or orange water ʒ xii.

Rub the two first ingredients well together and add the water—strain before using.

Also,

℞. Poppies, ʒ iv.
Aquæ rosarum (rose water.)
Misturæ Camphoræ, aa, ʒ ii.

Misce.—Either of these can be successfully applied to the eye by introducing a small syringe into the outer angle and injecting them.

℞. Liquoris ammoniæ acetatis, ʒ ii.
Aquæ ferventis, ʒ vi. (hot water.)
Ex. Opii, grs. x.

Dissolve the opii in the water, strain, and add the ammoniæ. This is a valuable remedy in this form of the disease, when there is considerable pain.

In acute ophthalmia, when there is great sensibility, the following anodyne collyrium will be found to answer well.

℞. Colchici autumnalis, ʒ i. (meadow saffron.)
Aquæ Lini bullientis, ʒ iii. (hot flaxseed water.)
Tincture opii, ʒ i. Mix, and apply.

In acute ophthalmia, when you wish to promote absorption, the following is valuable:

℞. Nitratis Argenti, gr. i to ii. (Lunar caustic.)
Distilled water, ʒ ii. Mix in solution and apply.

When the inflammation becomes sub-acute, or the active stage has passed, it is then that the preparations

of lead, vitriol, and the chloride of mercury or lime will prove beneficial, and in such circumstances you can use the following:

℞. White vitriol, grs. x.
Sugar of lead, grs. x.
Tinct. Opii, ʒ iss.
Aqua puræ, ʒ viii.

This should be applied with a linen rag five or six times a day, use without shaking.

It will very seldom happen that the change from the acute to the chronic forms takes place, if the remedies here suggested have been properly applied, but it may do so, especially if you have a scrofulous patient. In the chronic form you must abandon your active depletive measures, and your local applications must be of a more stimulating character. If your patient should have a scrofulous diathesis, you should put him on an alterative course, and you will find the following recipe will fulfil your expectations.

℞. Sarsaparilla, ½ lb.
Liquorice root, 1 lb.
Burdock, 1 lb.
Sassafras, ¾ lb.
Guaiac, 1 lb.
Elecampane, ʒ vi.
Rose leaves, ʒ vi.

Make a gallon and a half of syrup. Dose, two to three tea-spoonfuls four times a day, before each meal, and at bed-time.

You will find a good local application in the tincture

of capsicum, diluted with twice the amount of water, after a few days you can use it pure.

In the chronic form of the disease you will frequently have it to prove very obstinate; under such circumstances you can apply a blister to the nape of the neck and behind the ears; after it has drawn, it would be well to keep the surface irritated, so as to produce a constant drain from it.

In this particular form, the eye assumes a peculiar weakness, and it is here that your stimulating collysia must be applied. Some speak in high terms of cinchona, canis florida, (dog-wood) and the pyroligneous acid.

In the chronic form of this disease, you will derive much benefit from any of the following:

℞. Sulphate of cadmium, grs. iss.—(Cobalt.)
Laudanum, gtts. xx.
Rose water, f. ʒiv.
Mix and use as a wash.

Hydrastis, (yellow root) if made into decoction, is a good wash in the chronic form.

℞. Pulv. alum, grs. xii. to xx.
Rose water, f. ʒiv.
Make a solution and apply to the eye.

The following will be found a good astringent and stimulating remedy:

℞. Liquoris ammoniæ acetatis, ʒii.
Mixture camphor, ʒvi.
Mix, and apply to the eyes.

We have cured the most obstinate cases of opthalmia, with the following decoction, as a collyrium, viz:

℞. Witch hazel bark.
Golden seal.
Lobelia leaves, equal parts.

The first two made into a strong decoction, after which add the lobelia to the hot liquid—cover, when cold, strain.

Dose of decoction, two to four ounces, three or four times a-day.

The compound collyrium of golden seal, is a most excellent local application in chronic ophthalmic diseases, it is prepared as follows:

To a strong decoction of green tea, and golden seal, of each one pint, add sulphate of zinc, gunpowder and dried sulphate of iron, of each two drachms. Let them dissolve, and after decomposition has ceased, and the precipitate has subsided, pour off the supernatal liquid. Apply it three or four times a-day.

Black cohosh, in doses of one drachm of the tincture every hour, is a valuable remedy for simple sore eyes, without the aid of any local application.

Catarrhal and Purulent Ophthalmia, often arise from exposure of the eyes to dust, and hairs of the eyelids frequently produce it. It is said to be communicable from one to another; my experience does not justify me in giving an opinion. Children are very subject to it, soon after birth. The secretion of tears is always much increased, and the purulent discharge is very considerable.

Treatment.—The chronic form in this variety, is very quickly assumed—your local applications should be of a stimulating character; the general treatment is much

the same as in the chronic form of ophthalmia. To arrest the inflammation, I generally use cooling and astringent washes, applied by means of wet pledgets; a most excellent application is three or four grains of nitrate of silver, (lunar caustic) to an ounce of water; this can be used as directed. An ointment of the red oxide of mercury will allay irritation. Some extol alum curd and the spirits of turpentine; but you will find in this peculiar variety of ophthalmia, no remedy equal to the pyroligneous acid.

Some authors speak in high terms of the tincture of myrrh in purulent opthalmia, they use the saturated tincture of myrrh. Saturate a linen cloth and apply over the eyes. The following formula is most excellent in the purulent form:

℞. Sulphatis cupri, grs. v.—(Sulphate of copper.)
Camphor, ʒi.
Hot water, ʒviii.

Rub the camphor with the water, then strain, and add the copper. A good application to infants.

Scrofulous Inflammation of the eyes, is generally met with in those persons who have a scrofulous diathesis, and occasionally it presents (almost similar,) as the result of venereal disease, it is generally very obstinate; in this variety of the disease, special attention is of course required to the state of the constitution. The most peculiar symptoms are irritability and intolerance of light, with little or no pain; occasionally there are pustules or ulcerated spots upon it. I am satisfied in this variety, that quinine and the scrofulous recipe, on page 228, in addition with iodine or hydriodate of potash, will be found of greater service than almost any other remedies.

Scrofulous Ophthalmia.—I advise the use of the scrofulous syrup, especially in this form of the disease, and alternate it with iodine, ten drops three times a day, or two or three grains of the hydryodate potash given as often.

Local applications, and strong ones, are often necessary. If the disease has advanced to ulceration or pustulation, the dissolved caustic will be found a valuable application.

I have used the following in scrofulous ophthalmia and ulcerations of the cornea and conjunctiva with benefit, viz.:

R. Rose water, ʒvi.
Ioduretti Potassii, gr. xxiv.
Iodini, gr. i.

Mix, and apply three or four times a day.

The annexed ointment will be found highly efficacious, if applied to the edges of the eye-lids in this variety of the disease.

Red oxide of mercury, 1 part.
Sulphate of zinc, 2 parts.
Lard, 96 parts.

Rub well together.

When you have scrofulous ophthalmia in connexion with a rheumatic affection, which is frequently assumed in inflammation of the eyes, you will find the following a most excellent application.

℞. Ferrocyanide of zinc, grs. x.
Pulv. gum arabic, ʒiss.
Cherry water, ʒiiss.
Wine of opium, fl.ʒi.
Cherry laurel water, fl.ʒss.

Mix and apply.

I have used the tincture of capsicum with marked success in this form of ophthalmia.

Gonorrheal Ophthalmia.—With this unfortunate disease I have had no experience; but an author of some celebrity recommends, without hesitation, the same general remedies and regimen as for the original clap. I am impressed forcibly with the idea, that if the original disease could be reproduced, that probably in cases where there was great danger of losing the eye, it would be well; as some of the English surgeons even go so far as to recommend their patients "to go and get a fresh clap."

AMAUROSIS.

GUTTA SERENA.—DIMNESS OF SIGHT.

This disease affects the optic nerve, and is termed amaurosis, and I think might be defined more properly as paralysis of the optic nerve. There is dimness and loss of sight, without any perceptible fault in the humours of the eye. The eye is generally lighter colored than it should be; it acts sluggish, and the pupil is generally dilated; it is sometimes, however, contracted; when it is, it is the result of irritation of the third pair of nerves.

Causes.—The most obvious is any excessive application of sight, producing an expansion of the optic nerve, or probably in the course of the nerve itself. Sometimes it arises from softness of the nerve, and again from induration of the nerve, and sometimes from tumors pressing upon it.

In this disease there is very frequently headache, vertigo, and evident signs of cerebral congestion.

Syphilis and mercurialism may be also distinguished among remote causes. You can set down congenital amaurosis as incurable.

"Dr. Condie says, that amaurosis is frequently dependent upon irritations seated within the stomach and bowels, and upon derangements of the digestive organs generally, there can be little doubt; he says he has met with many cases of this kind, and they are repeatedly referred to, more especially by the German writers on the disease. Complete blindness we have known suddenly to occur in consequence of the presence of indigestible food in the stomach, and to be as quickly removed upon its expulsion."

Treatment.—The large mass of medical men sum up their success, as is done by a distinguished author in this sentence. "I have done all this, and with a certain degree of success; but, (as I just now said,) I hardly recollect a case, which, after continuing some time, was perfectly cured."

This is not in accordance with my experience; I have treated a few cases, some of them of long standing, with perfect success.

The first thing is to prohibit any exercise of the eye, give your patient occasionally an active cathartic; I am in the habit of giving an emetic once a week, followed by podophyllin in combination with jalap or juglans; the bowels in the mean time should be kept in a soluble condition by means of gentle aperients. "The patient should be regularly bathed once a day in weak ley, applying brisk friction after drying; the feet should be bathed in hot water every night for a considerable time, apply the irritating plaster to the whole cervical vertebræ, let it remain as long as he can endure it, create

two issues behind the ears, and keep them open." Dr. Buchanan recommends pouring a stream of water from a considerable height to a point behind and above the external canthus of the eye; this can be done by holding a funnel over this part; electricity exerts a very good influence at times. After following strictly these directions you will seldom fail in restoring sight, if you will use the prussic acid vapor as recommended by Dr. Trumbull; I have used it with complete success.

As regards local applications to the eye, I confess, in opposition generally to my medical brethren, I have considerable confidence in them, and when your patient can bear the tincture of capsicum directly applied to the eye it will not disappoint your expectations. Commence its use by diluting it, increasing its strength until you can use it pure. I have experienced in some cases considerable benefit from the following:

℞. Pure strychnine, grs. ii. to iv.
Dilute acetic acid.
Distilled water, aa. ʒ i.

Make solution, a drop or two applied to the eye several times a day.

I have used a small blister over the eye-brow, when drawn remove the cuticle, and sprinkle on the sixth of a grain of pulverized strychnine.

DISEASES OF THE LIVER.

INFLAMMATION OF THE LIVER.

We will now proceed to consider the diseases of an organ, which, unfortunately, is too frequently, both by Southern men and Southern practitioners, pronounced diseased, and remedies directed thereto, when, in fact, it is performing its functions in health—I mean the *liver*. It is, however, very subject to acute and chronic inflammation.

Symptoms of Acute Hepatitis.—The premonitory symptoms of this affection are similar to those of fever, especially if the liver is laboring under acute inflammation to any amount, when you will have some local signs, which will soon indicate the character of the affection, such as pyrexia (fever) and almost constant pain, chiefly confined to the right side. The character of the fever generally is inflammatory, and may become typhoid; the skin is hot and dry; the tongue covered with a yellow fur; pulse full and hard, with great thirst, and an acrid bitter taste in the mouth; frequently nausea and vomiting; *urine scanty* and very *high colored*, depositing a lateritious sediment (a brick-like sediment); bowels generally constipated. The local symptoms in connection with those already specified are numerous. There is a sense of tension or weight. It is said, and by high authority too, that if the surface of the liver suffer, there is mere tension; whereas, if the substance be affected, then a weight is experienced; or if it be the peritoneal coat which is inflamed, then we have a greater degree of pain on pressure, and a pain of a

sharp character. These are all nice distinctions. However, there is no doubt that the pain in the region of the liver and epigastrium is increased by pressure, or by inspiration and cough; and there is no doubt the pain is still greater, when the peritoneal coat or the parenchyma (the texture of the liver) nearest to the surface is affected. The pain frequently extends to the scapula (shoulder blade), goes through to the back, and not unfrequently to the right shoulder. Some contend that the pain is more acute when the patient lies upon his right side. We think otherwise, because if he lie on the left, the whole mass of the liver, situated as it is, will of necessity pull to the left, and all the parts are put upon the stretch. Our experience teaches us that they lie best upon the right side. We frequently have in connection, some difficulty in the respiration; other portions of the body sympathise; we have a dry cough, with tumefaction detected by percussion; we frequently have jaundice, sometimes complete to its full extent.

"A deep inspiration increases the pain by the descent of the diaphragm on the liver; and, when the convex surface is acutely inflamed, the patient often suffers from the same cause, even in ordinary respiration."

Terminations.—This acute inflammation frequently terminates in resolution, and sometimes in suppuration. The latter circumstance is very common in this country, however rare it may be in colder latitudes; there is sometimes an effusion of serum in the substance of the liver; formation of pus, and consequently of abscesses, and sometimes both circumstances occur. Large quantities of matter are sometimes collected in this way. Nature frequently assumes various ways to get rid of this pus. "Occasionally an adhesion forms between

the two parts of the peritoneum, the loose and the visceral; and the matter points externally. Sometimes an adhesion takes place to the stomach; sometimes to the intestines; and, I think, the matter more frequently finds an outlet in that way than in any other. Sometimes nature does not succeed in forming adhesions, and then the matter is poured into the peritoneum. Now and then an occurrence takes place less favorable than the discharge of pus into the stomach and intestines;—adhesions take place to the diaphragm, and the matter is discharged through the air passages. We have cases on record in which the pus has discharged itself; not at the front, or at the side, but at the back. Cases of this description have been mistaken for lumbar abscess. Occasionally the matter has been discharged with the urine; and there is a case upon record, in which an abscess emptied itself into the "vena cava," and death was the consequence. Sometimes the abscess does not discharge itself at all, but there it remains; and patients have died with a large abscess in the liver, the existence of which was not known before. If the matter be disposed to discharge itself externally, it is evident enough; if it discharge itself into the stomach, we have vomiting of matter; if into the intestines, we have a quantity of matter in the stools; and if it discharges itself by the air passages, you have cough, and many of the other signs of phthisis." Hepatitis in its acute form is very common in most all of the fevers of this climate, and it is frequently united with other inflammations of the abdomen.

Chronic Hepatitis.—The symptoms of chronic hepatitis are not very well marked. We frequently have all the signs of dyspepsia; and with the exception of pain

on pressure, find the liver apparently almost healthy. We frequently have, connected with the chronic form, dysentery; and it is not unfrequently the case, that you find chronic dysentery and chronic hepatitis at the same time. This is common in this climate.

Treatment.—It is that plain and simple treatment for inflammation, commencing with aconite to lesson arterial action, regulated in quantity by circumstances, followed by local depletion, especially with the cups, (some prefer leeches,) warm poultices to the part, and purgatives. We find mentioned in works published twenty or thirty years ago, and in many works at the present day, that mercury ought not to be given in acute inflammation of the liver. Such fallacies have passed away, and such notions are only retained by the ignorant, who will admit of no discoveries in the science of medicine. Our own opinion is, that both forms require nearly the same treatment, for whatever is good in the one we have tested was beneficial in the other to a more or less degree. Do not understand us as being the advocate of mercury, although at the same time, we are not so much prejudiced in favor of any other treatment, from our experience, as to justify us in saying that mercury, under many circumstances, is not a valuable remedy. Because an article has been badly abused, and frequent injurious results have followed its use in the hands of empirics, it is no reason that it should not be used. I confess that I think the podophyllin a good substitute, in general; but I have found, in many instances, great relief from the proper administration of mercury.

We view purgatives as particularly useful in inflammation of the liver, because they act as a local means in preventing blood, to a great extent, from going into the

vena portea, and therefore less gets into the liver. Those purgatives most in favor with us, are the podophyllin and mercurials, and the cholagogues, (medicines that are reputed to produce a flow of bile.) Our own course has been to give podophyllin or our bilious pill, (see ℞.) in small portions, frequently repeated, and continue them until bilious evacuations are produced; if these fail we have generally selected calomel for this purpose; and when bilious secretions are fairly established, we commence the use of podophyllin, or blue mass and Taraxicum in combination, and continue according to circumstances. We have frequently derived decided advantage from the use of the nitro-muriatic acid, used both internally and externally. We have, in the advanced stages of the acute variety, as also in the chronic, resorted to counter-irritants and blisters with benefit. There are cases in which setons and issues would be of service. In the chronic variety the irritating plaster is a valuable remedy.

Frequently the physician is apt to lose sight of the disease, if there is a temporary improvement in the general symptoms; such is very wrong, as the disease is frequently deep seated, and abscesses may form. The greatest care is requisite upon the part of the physician to attend to the diet of the patient; much depends upon the patient observing strictly the injunctions of his attendant, for unless he do so, the best and most salutary treatment will fail to give relief.

We have frequently in our practice prescribed the following prescriptions, and we can speak well for them:

℞. Ex. Colocynth Comp. ℈i.
" Scammoni, ℈i.

	Pulv. aloes.	℈i.
	Scil marit.—(Squills.)	℈i.
Podophyllin, vi. grs., or	Blue mass,	℈i.
	Taraxicum,	℈ii.

Mix and make into thirty pills; take two every night, or

℞.	Gamboge.	ʒss.
	Ex. Eupatorium perfoliatum,	ʒss.
	Aloes,	ʒi.
	Castile soap,	ʒss.
	Ex. Podophyllum,	
	Ex. Gentian.	
	Lobelia seeds, pulv.	aa. ʒss.
	Capsicum,	ʒii.
	Oil cloves,	ʒi.

Warm the extracts until they are quite soft, and then add the powders. Mix thoroughly and add the oil; make into five grain pills.

Give one night and morning, as an alterative; they are valuable pills in bilious fever, in doses from four to six.

Treatment of the Suppurative Stage.—"As to the suppuration which sometimes occurs, that requires to be treated on common principles. If the abscess point to the skin, of course a knife may be applied, and the matter let out—just as in any other abscess, only that it might be dangerous to let out a great quantity at once. It should be done gradually, in order that the part may slowly contract. If the discharge takes place inwardly, through the lungs or the intestines, we have only to lessen the irritation by narcotics, as in other cases; and this will also be required on opening the abscess."

There are a great variety of structural diseases of the liver, such as serous cysts, hydatids, adipose matter, tubercles, malignant tumours and formations—all of which are interesting, but it would take great length to do the subjects justice.

Nitric acid alternated with taraxicum, is a favorite remedy in chronic hepatitis, and deservingly so.

Leptandrin. — The resinous principle of leptandra virginica, is a valuable agent in diseases of the liver, it is one of the most efficacious and important agents among those peculiar to eclectic practice, being the only known medicine that efficiently stimulates and corrects the hepatic secretions and functional derangements of the liver, without debilitating the system by copious alvine evacuations. Its effects on the liver are peculiar. It at the same time seems to act as a tonic, restoring the tone of the stomach and increasing the strength and activity of digestion.

The dose is from one-half of a grain to five or six, every three or four hours, according to the action or effect desired.

A combination which is valuable in affections of the liver, is one part of podophyllin and ten parts leptandrin, triturated with ten parts of sugar.

Dr. Newton recommends the *sanguinarin*, the resinoid principle of bloodroot, and says in doses from one-sixteenth of a grain to one grain. In combination with leptandrin and podophyllin, it forms a medicine which, for safety and efficacy in the treatment of hepatic diseases, is superior to any other remedies yet known in medicine.

JAUNDICE.

Jaundice is an occasional symptom both of acute and chronic inflammation of the liver. In general it constitutes of itself a distinct form of disease. We frequently find that the coloring matter of the bile has been absorbed, and passed into the circulation, which accounts for the yellow tinge the skin, eyes, and urine present. One of the most peculiar symptoms of the disease is the yellow color we find in the conjunctiva, the general complaint of languor and drowsiness, and a disposition to scratch the surface; these are the unmistakeable prominent symptoms of jaundice. In general it is a very slight disease, arising from slight causes, and may be cured by very simple remedies. In that peculiar form of "jaundice in which the yellow verges to green," and which is sometimes called green jaundice, recovery is very rare.

Treatment.—Before deciding what plan of treatment may be proper in any case of jaundice, you should most carefully inquire into his or her general health, and the nature and duration of the disease from which the patient has recently suffered; and particular attention should be paid to the state of the abdominal viscera; this examination will indicate the remedies which will be the most proper to use, at the same time you must look well to the condition of the constitution. There are certainly more domestic remedies for the cure of jaundice than for almost any other named disease; almost every article in the materia medica, and that which is *not* in it has been recommended for this disease, even as low as goose excrement, so says Dr. Wood. The cure of jaundice must be attempted by first restoring the interrupted passage of the bile through the duct,

secondly by passing it off, and thirdly to combat general symptoms. Some extol emetics very highly, we question the propriety of giving them. I have had more success with jaundice with the following simple recipe than I have had from any other remedy.

℞. Powdered Rhei, ℈ i.
Castile soap, ʒ ss.
Pulv. aloes, grs. xv.

Divide into twenty pills. Give three or four every night. I have used the puccoon or blood root successfully in this disease, giving from forty to fifty drops three times a day.

Hemlock, in combination with cinchonæ and podophyllin, I have no doubt will prove efficacious if used according to the following:

℞. Ex. of hemlock, ʒ ss.
Ex. of bark, ʒ ii.
Podophylline, grs. vi.

Divide into four pills, and give two to four daily.

A strong infusion of the bark of wild cherry in cold water is a valuable remedy, it should be taken in wine-glassful doses every three or four hours through the day.

Hempseed, boiled in milk, is highly extolled, may be taken in any quantity.

When you have reason to suspect the presence of calculi, obstructing the bile ducts, the nitro-muriatic acids will be found of great service, given in doses of five drops three times a day, increasing it daily until two scruples can be taken.

In those attacks of jaundice accompanied with pain and vomiting, opium should be used to allay the irri-

tability, in connection with the warm bath and emollient application to the stomach.

The irritating plaster should be applied over the liver.

A recipe of great reputation in this disease is the following, and I can safely recommend it, viz:

℞. Ext. dandelion,
Mandrake and bloodroot in powder.

Of each equal parts. Mix together, add a few drops of the oil of spearmint, and divide into four grain pills. Dose, two or three pills twice a day.

SPLENITIS.

DISEASES OF THE SPLEEN.

In this climate I know of no diseases more common, or none that are more neglected than diseases of the spleen. Very little is known relative to the functional diseases of the spleen; we direct our attention entirely to organic affections, such as inflammation, congestion, hypertrophy, enlargement and softening, induration, &c. there are various prominent signs of diseases of this organ, such as an enlargement, which is generally called "ague cake," but which is technically *hypertrophy* (or enlargement) of the spleen. We have various other symptoms of splenic disease, such as pain, oppressed respiration, bending of the body to the affected side, inability to lie on the right side, tendency to dropsy and dysentery, &c. We frequently find an enlargement of the spleen as the result of intermittent fever, we also

have hypertrophy as the result of deranged menstrual functions. And we find this disease more frequently in damp and marshy situations than elsewhere.

"Most patients with an enlargement of the spleen are affected with a short and imperfect respiration; the general appearance of the patient evincing that decarbonization, (the transformation of venous blood and chyle into arterial blood by respiration) if the blood is not sufficiently decarbonized, any attempt to take active exercise excites panting and distress at the chest. Among the usual attendants on vascular enlargement of the spleen we may observe impaired appetite, difficult digestion, and imperfect assimilation of food. In the latter stages of the disease oedemea (swelling) of the feet is present, and sometimes the face and eyelids are swollen. The majority of protracted cases that terminate fatally suffer from dysentery, or dropsy of the belly; and when the abdomen is much distended from this latter cause, the superficial veins in the side of the chest and belly appear large and numerous, showing the extent and degree to which the circulation in the internal organs becomes ultimately obstructed."

Diseases of the spleen often occur in conjunction with intermittent and remittent fevers, dysentery, and sometimes diseases of the liver; the tumefaction of the spleen frequently comes on very suddenly, almost without any premonitory symptoms, in the course of these fevers, and in a little time the enlargement is considerable; it varies considerably, but it is nothing unusual in this climate, to see the spleen extending downwards, even with the umbilicus, and laterally, as far as half way between the cartilages of the ribs and the navel. I have

frequently seen cases filling up the larger portion of the abdomen, even to the iliac region.

Enlargement of the spleen sometimes appears as an idiopathic disease in children, and in persons of delicate and feeble constitutions; and is produced by the combined influence of a damp climate, variable temperature, such as we have in Texas, want of exercise, unsuitable clothing, and insufficient nourishment. The major part of the cases of vascular engorgement of the spleen in Texas, follow intermittent and remittent fevers; it is also the result of other debilitating diseases, but more especially after protracted remittent and intermittents, which we find here occasionally at all seasons.

Induration and Softening of the Spleen.—Sometimes, without any enlargement, we find the spleen exceedingly hard—cutting exactly like liver; and sometimes, on the other hand, it will become exceedingly soft. Very often where, during life, we could discover no particular ailment referable to the abdomen, the spleen is soft. If it be not preternaturally hardened, we may, by working it up in our hand, bring it to the consistence of currant jam; but in various diseases we find that the spleen, on being cut, is soft.

Congestion of the Spleen.—The spleen suffers a great accumulation of blood, when there is any obstruction in the organs of respiration. It is supposed by some, that the size of the spleen may depend very much upon the mode in which patients die. If they die after long continued dyspnoea, (difficulty of breathing,) we may find the spleen large, although during life it was not so enlarged, or at least it had not the appearance.

Treatment.—The treatment in the acute form, is similar to that of other inflammatory affections. We have

a high regard for purging, while there are many others that disapprove of it. Some hold *mercury* in high esteem in diseases of this character, whilst we unhesitatingly condemn it as pernicious. A variety of remedies have been highly extolled, such as cinchona and iodine. I have great faith in nitrate of potash. Compression and hygienic means are certainly of great service in splenic affections.

Our treatment in the early stage of enlargement of the spleen, must depend considerably on the amount of fever present. We would also be guided by the degree of hyperemia (congestion,) and the general condition of the patient. "But mercury," says the celebrated Twining, "must never be used, with a view to cure the disease of the spleen." We generally, when we find vascular engorgement of the organ, commence a course of purgative medicine, combined with some preparation of iron; we cup the spleen actively for two or three days, and then generally apply a sinapism; the formula for the purgative which we generally use, is Twining's Spleen Mixture, which is:

℞. Pulv. Jalap,
" Rhei,
" Calumbæ,
" Zinziberis,
Potassæ Supertartratis, aa. ʒi. (Cream of Tartar.)
Ferri Sulphatis, ℈ss. (Sulph. Iron.)
Tinct. Sennæ, ʒiv.
Mint Water, ʒx. Mix.

The dose is one ounce and a half for an adult, at 6, A. M., and repeated at 11, A. M., daily.

For children, the doses are regulated so as to produce

not less than three, and not more than four stools daily. This medicine acts as a purgative tonic and diuretic. The purgative properties of the two first articles in this prescription, will be assisted by the cream of tartar, while that medicine with the jalap, generally acts on the kidneys; the principal effects of the other ingredients may be referred to their tonic and astringent properties. The cure of the enlarged spleen may probably be in some measure owing to the effects produced on the circulation in that organ, by the frequent application of a powerful astringent to its immediate vicinity. I of late use a smaller quantity of sulph. ferri in ordinary cases, and sometimes add ʒi. of pulv. scammon. comp. to the above mixture, for patients who are very costive, and require stronger purgatives. On the other hand, in very delicate and emaciated subjects, who are easily purged, it is requisite to substitute compound tincture of cardamons for the tincture of senna; and if there be any disposition to paroxysms of intermittent fever, I add to the mixture the same quantity of quinine as it contains of sulphate of iron.

When the disease is obstinate, there is an advantage in changing the prescription occasionally; and after the above has been used for ten days, the patient, if an adult, is directed to take eight grains of compound extract of colocynth, with two grains of gamboge, in pills, at bed-time, and twenty drops of tinct. ferri muriat. in a wine-glass of water, with ʒi. of tinct. gentian comp. at 7, and repeated at 11, A. M. These medicines are to be continued for five days, and then, after taking the spleen mixture for ten days more, the patient is ordered to take ʒss. of the powder of black myrobalan, with ℈ss. black salt every morning; and eight

grains of compound extract of colocynth, with two grains of sulphate of iron, and ten grs. of aloes, in pills, at bed-time. Thus, for two-thirds of the time the patient is taking the spleen mixture, with the occasional change to another medicine for a short interval, whereby the efficacy of the principal remedy is not weakened by its habitual use. It cannot be of importance to adhere invariably to a precise number of days in using each prescription, but an occasional change is requisite; and, at any time during the treatment, if the patient becomes feverish, the above medicines are omitted, a dose or two of jalap is given, and leeches or venesection employed.

In the treatment of a diseased patient for spleen, careful attention must be paid to his diet; in chronic cases we must have patience, and it is not required to give the spleen mixture so often.

"Water which has been used for cooling heated iron at a blacksmith's forge, has been recommended as an auxiliary to other remedies employed in the cure of enlarged spleen."

We have determined, as this is a disease of so common an occurrence, to give from our practice a few cases, to illustrate upon general principles, the treatment of this disease. Mr. G., aged thirty, a farmer, had quotidian fever of four weeks standing, with quite an enlarged spleen. Massie's tonic pill was ordered in the first place, to eradicate the chill, which it did successfully. I then directed my remedies to the spleen. We ordered six cups to be applied, and prescribed—

Nitrate potash,	grs. 10
Sulph. quinine,	" 2½

to be given every three hours.

Ordered two cups; the former prescription had been beneficial, but for the purpose of producing a healthy tone, we ordered peruvian bark, ʒss.; cream of tartar, same amount, every four hours. Another cupping was ordered, and in a few days, during which time he took the spleen mixture, he was completely relieved.

Second Case.—Mrs. J. consulted me on the 4th Sept., 1845; she was very pale, and considerably emaciated; her feet were slightly oedematous, tongue white; pulse 91 and weak. The spleen was very much enlarged, and very painful on pressure. She was quite costive, complained of headache, had little or no appetite, was becoming progressively weaker daily. We ordered four cups, and the following prescription:

℞.	Pulv. cinchonæ,	ʒi.
	Cream Tartar,	ʒi.
	Nitrate Potash,	ʒii.

This was mixed intimately together, and a tea-spoonful given before each meal, for four days.

Sept. 9th.—Feels much better, but very weak; spleen not decreased; two cups were ordered and the spleen mixture, with the addition of a scruple of quinine.

Sept. 10th.—Has had chilly sensations, the mixture produced two stools; took another dose this morning, discharges watery.

Sept. 11th.—No sensations of chill to-day, and she thinks herself better; the morbid sensibility of the spleen is much reduced, and the tumefaction is smaller; ordered the cups and same mixture, so as to produce about two actions daily.

Sept. 17th.—The above mixture was continued from

day to day, with decided benefit. The tumefaction of the spleen has entirely subsided, and her health very much improved. Ordered

℞. Pil. Rhei. comp.
Ex. comp. colocynth, aa. ʒss.
Olei mentha, drops v.

Make into ten pills, two to be taken at bed time.

Also,

℞. Sulph. quinine, ʒss.
Aquæ mentha, ℥x.
Sulph. acid, ʒss.

Mix, and give two table-spoonfuls at ten o'clock, forenoon, every day.

Sept. 21*st.*—No complaint, except debility; bowels rather too free. This patient took regularly the spleen mixture, and recovered entirely. We generally, in chronic cases, pursue the same course, with the addition that we make a plaster, which we enjoin to be worn constantly, from the following ingredients, viz:

Take of Sang. can.—(Bloodroot).
Podophyllum.—(Mandrake).
Arum triphyllum.—(Indian turnip).
Phytollaccæ decandriae.—(Pokeroot,) aa. ʒ2¼.
Tar, 1 quart.
Rosin, ℥iv.

Boil the tar until its water is evaporated; add the rosin, and let it melt; cool it a little, and add the powders while it is nearly boiling hot, and stir briskly until it becomes stiff. It is to be spread on thin, soft

leather, and applied fresh every day, until it produces considerable irritation. A favorite prescription of Prof. Drake, was to take

Peruvian bark,	℥i.
Cream of tartar,	℥i.
Nit. potash, (nitre),	ʒii.

Mix and triturate intimately together, and then take a tea-spoonful before each meal.

In some cases, I have given the following recipe with decided advantage, in connection with Miller's ointment. I give

Hydriod potassæ,	℈ii.
Iodine,	℈i.
Distilled water,	℥i.

Mix intimately, and give twenty drops three times a-day. You can increase the dose one drop at a time, and continue it in chronic cases. Miller's plaster is

Hydriod potassæ,	℥i.
Suet,	℥i.

Mix, warm and spread it, and apply on the spleen.

A prescription which I have never used, but which my friends, Doctors Rogers and Irion, (and, I am informed, it is quite a favourite with Dr. Arnold of Montgomery, a gentleman of distinction in his profession,) highly extol in this disease, is the following:

Iodide of potassium,	grs. 3.
Red iodide of mercury,	grs. 4½.
Distilled water,	fl℥i.

Dissolve first the iodide of potassium, and then the mercurial salt in the water. The dose is from three to five drops, three times a-day, much diluted.

A highly popular mode of treating diseases of the spleen, especially when they are hypertrophied, is by iodine and digitalis. I have tried it in some few cases, and am satisfied it is a valuable auxiliary in the treatment of this disease.

Dr. Ruchenmuster states, that impure and non-crystalized gentianine, may be used instead of sulphate of quinine. He contends,—1st. That gentianine acts as efficaciously on the spleen as quinine. 2d. That fifteen or thirty grains, twice a-day, are sufficient. 3d. That gentianine is certainly the most valuable succedaneum to quinine, which has ever been used.

The *silphium perfoliatum* or ragged cup, is one of the best eclectic remedies for the removal of ague cake or enlarged spleen, it is both tonic, diaphoretic and alterative. A strong infusion of the root, made by long steeping, or an extract, is said to be best for use.

DISEASES OF THE PULMONARY TISSUE AND PLEURA.

WINTER EPIDEMICS.

In the former pages we have endeavored to point out the cause of autumnal fevers, their effects on the general system, and the best mode of obviating them. We propose to investigate the winter epidemics, and to make a few general observations on the treatment, and especially upon the epidemic that raged through every section of the country in the latter part of '46 and beginning of the year '47, termed winter fever, but confirmed pneumonia.

In any section of country in which miasma is found, the population, to a very great extent, is exposed more or less to its influence, and it is obvious the effects appear under various stages. It is a question with me, if any escape without a considerable change in the blood; it generally becomes darker; some lose their appetite entire, others have an abhorrence for food, and others again have a very irritable stomach; many persons have foul tongues—some actually have chilly sensations, and experience considerable pain in various parts of the body. And all these symptoms will be found in individuals who feel indisposed, but are yet nevertheless capable of attending to their usual avocations.

These general, but morbid symptoms in various degrees, continue most generally to affect the settlers throughout the whole season. Frequently numbers become diseased, and at the approach of cold weather, many are still lingering on the verge of an attack. It is a self-evident proposition, that when winter appears, miasmata ceases, that is, its production, and the extraordinary violent and sudden winds that we experience in this climate, have a great tendency to disperse all that remain even in low marshy places. Therefore, the cause ceasing to operate, the effects gradually subside, though not immediately; "for we meet, in every period of cold weather, with cases in which green or black discharges from the stomach and bowels, and other effects of *miasmata* appear." We are satisfied there are gentlemen of fine attainments in their profession, who find within themselves a very great difficulty in fully admitting the dependence of those diseases on miasmata. Their doubts arise, and with some degree of plausibility,

too, from the fact, that cases of autumnal fever appear at a considerable distance from sources of miasmata. "We conceive at least one point on this subject as settled, that every man's experience has brought him to the conclusion, that autumnal fever is certain to prevail in the heat of summer along the borders of marshy grounds, not covered with water so as to prevent the full action of the sun. Wherever such a spot is formed by the regulation of streets in a town, by the building of a mill-dam, or in any other way, provided the water does not cover the surface from the full action of the sun, there, in hot weather, autumnal fever prevails. Whenever this marshy state is done away by draining, by filling with earth, by covering with water, or by excessive drought in the heat of summer, the fever ceases. The presence of both heat and moisture is shown to be necessary by the failure of the fever to appear in cool countries until hot weather, and by its disappearance as soon as the country becomes dry after the rains or inundations cease.

"It cannot be admitted as an objection to this known truth, that cases of fever occur at a distance from marshes, or the borders of streams. Whatever these may be attributed to, it remains absolutely certain that, wherever heat and moisture co-operate on vegetable matter, there fevers arise." Here is a position that we hold as certain:—the occurrence of cases of fevers in such situations, that it is asserted this cause cannot be *present*, is no proof that the latter does not produce those cases which occur where it is present. When, therefore, winter sets in, we have another, although a remote cause of fever in progress, and in districts in which miasmata abound, the settler is, at the same

time, under the influence of both of these causes. During the autumnal season, fever is frequently induced in subjects under the influence of miasmata, by an undue exposure to the rigors of the season; sometimes from want of care during sleep in cold nights, and very frequently, at this season of the year, in neglecting to change wet clothes. It is, therefore, quite evident, that when a community is under the peculiar influence of miasmata, the co-operation of cold will most certainly produce a continuance of the *epidemic* through the winter months.

Cold, therefore, in addition to its influence on the general system, whereby it assists in producing fever, has a local operation upon the part to which it is immediately applied. It is not only known, but observed as a common fact, that whenever cold is applied to any external part of the body, it produces considerable redness and swelling, which frequently terminates in severe inflammation.

"In the like manner, when applied to the *fauces* and to the *lungs*, it often produces inflammation in those parts. Fevers, accompanied by these local affections, are distinguished by appropriate names. Unfortunately amongst the citizens they view it all alike, and frequently, by tampering, hazard the lives of individuals by simple remedies, when there are but few exceptions that do not require the most active course. Fever, with such local affection of the lungs or pleura, (the membrane covering the lungs,) is called *pneumonia*, or *pleurisy*. When cold produces the fever, with such local affections or pleurises, in persons who are under the influence of miasmata, bilious symptoms are the effects of miasmata, and the disease is called bilious

pleurisy. Bilious pleurisy, which occurs in winter, is therefore the effect of the combined influences of miasmata and cold."

These winter fevers have become very prevalent during the fall and winter months in our climate, and unfortunately, so far have been very fatal. I am of opinion that the fatality has been *caused*, from the insidious manner of these attacks, by inducing persons to delay in sending for medical aid. They have prevailed, heretofore, on the Brazos and Navasoto to a great extent. They are commonly attended by symptoms of a partial inflammation, whence they are denominated pleurisies of the *eye*, or of the *head;* but most frequently they affect the side. In those several forms they are equally dangerous.

We shall now proceed to consider these diseases; and, in the first place, we will attempt to elucidate that which is most common, *acute pleuritis.*

ACUTE PLEURITIS.

General Symptoms. — The pleura, (the membrane covering the lungs,) is a serous membrane, and therefore in most cases, at the onset, we have a firm hard pulse—not invariably, but generally. Then as to the local symptoms, they begin commonly like an ague fit, with shivering and shaking, flying pains all over the body, sometimes bilious vomitings and purgings; most patients are seized with stitches in their sides, striking upwards to the clavicle and shoulder blade; in addition to these, some have severe pain through the thorax, (chest,) difficulty of breathing sometimes extreme, and cough attended by expectoration, and sometimes not; when there is no pain in any part of the thorax, but a

severe one in the head, it is then frequently termed pleurisy of the head—the respiration is very hurried, because the patient is unable to make a deep inspiration, and to make up for this, he breathes more quickly. The pain is greatly increased by coughing, and sometimes by speaking. In general, there is no difficulty in making out the nature of the disease sufficiently without resorting to percussion or auscultation. This affection is very plainly marked—more so than any one of which I am acquainted; we sometimes have an enlargement of the affected side, from an effused fluid, we then have a severe pain in the region of the nipple; it is generally acute and lancimating, and is greater as the effusion is more extensive; in the milder attacks, the cough is generally insignificant; the patient usually rests upon the healthy side. In this disease we have many symptoms that are common with other inflammations of the serous tissues. The character of the fever, after the first day, is generally persistent, with a quick, tense and small pulse. The seat of the pain will sometimes vary in the course of the disease. It has been known to cease in one side, and be felt by the patient in the other; and it is said, that now and then, the pain is not felt in the part which is found inflamed after death. It is said that sometimes no pain has been felt at all, and the physician has been surprised to find, on examining after death, violent marks of inflammation. As we remarked, the patient generally lies on the opposite side, but sometimes he can lie only on the affected side. We have thought it was not necessary for us to give the auscultatory signs—as our book is intended for all classes, there are able works written especially upon this branch of the science, which medical men would

refer to—and to give the sounds for the mass of general readers, we deem it useless, as they could neither understand them, nor infer our meaning, from the fact that but few know any thing of the anatomy of the parts.

Treatment.—Upon the treatment, it seems to me it will be useless to dwell, as it requires, for the most part, an antiphlogistic course. It is treated as you would treat any common inflammation—aconite to reduce the arterial action; if it fails, you may have to resort to the lancet. Podophyllin and low diet will, in almost all instances, arrest it.

With regard to those cases in which there are catarrhal or pneumonic symptoms, it is necessary, in addition to the treatment called for by the bilious symptoms, to make use of remedies suited to remove the inflammation of the lungs. These are chiefly cupping and blistering. The acute pain in the side or breast, which most frequently occurs, together with the cough and the great difficulty of breathing, seem to call for cupping freely, and the great object of the physician should be to arrest and destroy, if possible, the inflammation at its onset. The most successful mode to do this, in severe cases, is to resort to the aconite and cups freely, pushing them to the extent of removing all pain upon a full inspiration, or at least until all hardness of the pulse ceases. This should generally be followed, if pain is complained of, by a large warm poultice, made from *hops*, or the inner bark of the red oak, and covered with flannel, or an application of warm dry napkins should be applied. Unfortunately for the patient, blisters are too apt to be applied, whilst the inflammation is at its highest, evidently doing considerable harm; they are serviceable, if applied after the active inflammatory symptoms have

been checked—they then promote absorption, and are beneficial in the advanced stages.

These desultory remedies should be repeated, if, within a few hours, the pain returns or the pulse resume its former hardness. Local depletents should be used, and should be administered when the pain is most acute. My own practice is to give a strong infusion of pleurisy root, half ounce to the pint of boiling water; in a tumbler full of this you may give twenty drops of digitalis or two grains of ipecac. every three or four hours, to produce diaphoresis in the commencement. I then give podophyllin or calomel in combination with Dover's powders or ipecaci., and it is sometimes necessary to give nitre, digitalis, squills and colchicum. However, generally podophyllin in ss. gr. doses, or calomel in five grain doses, with the same amount of Dover's powders every three or four hours will give relief. If they should not operate and arouse the secretions fully, I then give an active draught of salts and senna, afterwards, if much arterial excitement, I resort to the squills and digitalis, or you can add digitalis or colchicum in a saline mixture with an excess of alkali, to determine to the kidneys and skin, and to lower the inflammatory condition of the blood.

"After the decline of fever, should effusion remain, attempts may be made to promote the absorption of the liquid by squills in connection with calomel." This may be a valuable combination under the peculiar circumstances that sometimes exist, but in this stage generally you will find the following recipe of decided advantage: ℞. Lobelia seeds,
Ictodes, (skunk cabbage,)
Sang, asclepias, (blood root, pleurisy root,) aa. ʒ i.

Assarum can. ʒ i, (wild ginger,)
Water and alcohol, aa. 1 qt.

Make a tincture, and mix with half the quantity of simple syrup; this may be given in tea-spoonful doses every two or three hours.

A favorite prescription, I think of Dr. Buchanan or Beach, may be alternated with the above, it is as follows, take

℞. Elecampane,
Asclepias aa. 1 lb. (pleurisy root,)
Macrotys, (black cohosh,)
Comfrey,
Eupatorium perfol, (thoroughwort or boneset,)
Hoarhound,
Sycamore bark,
Iceland moss, aa. ½ lb.
(Blood root,) Sanguinaria ¼ lb.

Make three and a half gallons of syrup, without spirits, and add the saturated tincture of ictodes foet., (skunk cabbage root,) assarum cand, aa. 1 pint, (colt's-foot,) and the tinctures of lobelia and cypriped. pubesc. aa. one-half pint, (lady slipper.) Dose, one to two table-spoonfuls every two or three hours.

In conclusion, I beg leave to recommend quinine in this affection, and those who will have the boldness to test it will not be disappointed if they will administer it for its sedative influence; I have given it time and again, in combination with ipecac. when the skin was hot and dry, pulse full and tense, tongue parched. And whilst writing this article I have administered it in five grain doses with the ipecac. to a patient presenting these symptoms, with the addition of hurried respiration,

every three or four hours, with the happiest effects. This remedy has been much overlooked in winter epidemics.

If the pain in the side should be very acute you should give a pediluvium (foot bath) either with mustard or ley, "and in conjunction with these means it will be necessary to apply the following fomentation to the side:" take a couple of red pepper pods put into a pint of good brandy, simmer them together for a few minutes, then dip flannels in the same and apply, as long as you are applying do not suffer them to get cool. "Should this fail to relieve, apply the following fomentation: tanzy, worm-wood, hoarhound, catnip, boil all down together in a suitable quantity of water, enclose the same in flannel and apply to the side."

The following recipe I have used as a good expectorant:

℞. Foxglove leaves, grs. xxx,
Boiling water q. s. (sufficient quantity) to obtain four ounces of strained infusion. Add,
Syrup of gum arabic, ʒ iii,
Kermes mineral, grs. vi, (sul. of antimony and crys'd carb. soda,
Syrup of mallows, ʒ i.

Mix. To be given in tea-spoonful doses.

The following cataplasm is a good rubefacient application in pleurisy:

℞. Powdered long pepper,
——— ginger, aa. ʒ ss.

White of egg, sufficent to mix well into a paste.

Chronic Form.—The treatment in the chronic form depends upon the condition and idiosyncracy of the patient, but does not differ materially from that already stated.

The pleurisy root infusion, half ounce to the pint of boiling water, may be drank freely in both varieties. It is a good expectorant and diaphoretic.

It is frequently necessary to administer a powerful sudorific to produce a determination to the surface, inducing perspiration, and the comp. tinct. of Virginia snake root will answer this purpose most admirably; it will, at the same time, lessen pain, allay nervous excitability, and procure sleep. The following is a recipe to prepare the tincture viz.:

℞. Pulv. Virginia snake root,
" Ipecacuanha,
" Saffron,
" Camphor,
" Opium, aa. ʒii.
Good gin, six pints.

Macerate for two weeks, express, and filter through paper.

Dose.—One tea-spoonful in some warm herb tea, repeated every hour, aided by warm infusions and bathing the feet, will soon produce copious diaphoresis. In this disease, however, you may with safety give a much larger dose.

The drinks should be mucilaginous.

Regimen.—The diet should be very light, avoiding all stimulating or heating substances.

ACUTE BRONCHITIS.

This disease is one of the respiratory organs, and when inflammation attacks the air passages and affects them severely, it is then termed bronchitis, or inflammation of the bronchia.

General Symptoms.—The breathing is quick and shallow, and to make up for the latter the patient breathes quickly; there is frequently severe constriction of the chest, and soreness along the course of the bronchia. In a great majority of cases there is considerable cough, and the least action so effects the bronchial membrane as to produce it.

Expectoration.—At first there is nothing very peculiar or marked in this respect, but as the disease advances to resolution, or is passing on to the chronic form, we have it then almost transparent, or thick opaque, and of a whitish color; and I have seen it appear very black, this was, however, only when the disease was very intense.

The Pulse.—The pulse is from 80 to 90 in a minute, with thirst, anorexia and headache; there is a great variety, however, in the pulse, but for the most part it is full and rather soft.

State of the General Surface.—The skin is most frequently dry, the tongue likewise, covered with a dirty white, but frequently considerable mucus. The face is frequently congested. There is, in many cases, drowsiness and headache; and I have frequently seen, at the moment of coughing, the veins of the neck greatly distended, and the whole face become turgid.

Progress of the Disease.—"If the disease go from bad

to worse, the patient cannot lie down at all. His face becomes livid from the congestion. The lips become purple, and I have seen the face become really black—of such a hue that I could not have believed it had been the result of bronchitis if I had had it represented to me. It was as dark as when a patient has taken nitrate of silver to a great amount, or where there has been a communication between the two ventricles of the heart. The pulse, at last becomes weaker and softer, and at the very last, vermicular, (a crawling sensation, as that of a worm.) The surface becomes blue, and both the forehead and chin are bedewed with a cold, clammy perspiration. In this state of things the expectoration becomes very scanty, or ceases altogether; not because it is not secreted, but because the patient is too weak to expectorate it; so that he may almost be said to be drowned inwardly with mucus. In cases which are left to themselves, or badly treated, it is said that dyspnœa, (shortness of breathing,) comes on about the fifth or sixth day, and is followed by death."

If, on the other hand, improvement takes place, the constriction is removed. The cough is not much diminished, but it does not hurt the patient as it did. There is copious expectoration. The pulse becomes slower and softer, without, however, becoming so soft as in health. The surface perspires, and the tongue becomes moist. Still if the case be severe, there is a discharge which appears to be puriform. In other cases, the patient neither gets well nor dies suddenly, and there is considerable expectoration. Still the pulse is kept up, and still it is hard. In consequence of the cough, he does not gain strength, but perhaps becomes more and

more emaciated. He has night-sweats, and at the end of many months he may die, or get nearly well; and then when he is exposed to a common cold, he may have difficulty of breathing, and more or less bronchitis; so that some persons who have been ill, will never be able to get through a winter without an attack of asthma—that is, shortness and great difficulty of breathing. There are a great variety of symptoms afforded by auscultation as well as by percussion, but as we have before remarked, these subjects have been investigated so minutely by other writers, that I refer the medical reader to them, and for the mass of readers, it is a branch, which, without study, would afford no interest or instruction.

Treatment.—The treatment of this disease is perfectly easy. When the patient is of full habit, and much fever, we resort to the aconite; if it should fail, then the lancet is decidedly indicated, and antiphlogistics generally and counter-irritants; but in mild cases, we resort to nauseating and stimulant diaphoretics and expectorants. The vegetable diaphoretics are in considerable repute, but we prefer the combination of tartarized antimony (we think it answers well in this disease) and ipecac. We sometimes prescribe a cough mixture, composed of a narcotic, a nauseating ingredient, and some mucilaginous matter. Should your patient be robust, and you are called early, you must resort immediately to the remedies we have suggested. If, however, the secretion has taken place, and the patient is reduced, then there is some considerable danger in the lancet, as it prevents the expectoration, and causes greater dyspnœa, (difficult breathing;) in this state of the case, we

must resort to vegetable emetics—serpentaria (snake root) or carbonate of ammonia; when the secretion is lymph-like, we must resort to an alterative course—the emetic and expectorant treatment. But to recapitulate, we have only to use the aconite or bleed the patient well, and to follow it up by local bleeding. I generally cup over the root of the lungs, and behind on each side of the spine. I am quite sure that mercury is of great use in this disease; if you do not, however, wish to resort to mercury, you can exhibit tartar emetic in large doses, so as to keep the patient nauseated. In many inflammations it would be dangerous to practice vomiting; but in bronchitis, many trust, next to bleeding, to the exhibition of full doses of tartar emetic—a grain or more every two hours. I need not recommend blisters, low diet and moderate purging, as their application is so common, all know them to be serviceable. The treatment is that of common inflammation, and if it be well practised in time, and if the patient be not the subject of chronic bronchitis, the treatment is easy enough. If the patient have acute supervening on chronic disease, our chance is slight, but even then the case must be treated on the same principles.

Some rely entirely on lobelia and the tincture of blood-root, in equal parts. Dose, a table-spoonful, children in proportion, to be repeated as often as there is much accumulation of mucous.

The feet should be frequently bathed, and counter irritation to the extremities.

In the chronic form, the treatment is much the same, two tea-spoonfuls of the syrup of white poppy may be given to allay irritation, when the cough is

troublesome; this is recommended also in the acute form. In the chronic form, the

Anisated ammoniated alcohol,	ʒi.
Syrup of mallows,	ʒi.
Ext. of henbane,	ϑi.

Mix, and given in desert-spoonful three times a-day, has some celebrity.

You will find the dried root powdered, of Indian turnip, in ten grain doses, given in an emulsion of gum arabic several times a-day, a very valuable remedy in chronic catarrh, chronic bronchitis, and rheumatism. My friend, Dr. Rogers of Chappel hill, says that the iodide of calcium, ten grains, in combination with the extract aconite, six grains, made into six pills, and give one every four hours, will be found valuable in the chronic form.

The following prescription we have used in bronchitis, especially when the cough was bad:

℞.	Ext. Opium,	grs. i.
	" peruvian bark,	grs. iv.
	Camphor,	grs. vi.
	Sugar,	ʒi.
	White linctus,	ʒiv.

Mix. It can be given with success when the cough is troublesome.

Kreosote and monesia, are both extolled in either form of bronchitis. I cannot speak of their action, I have never used either in this disease.

In the chronic mucous and muco-purulent bronchitis, there is no remedy, I fully believe, (and I have certainly tested a great many,) that possesses anything

like the controlling power over the super-abundant quantity of secretion, as is done by the acetate of lead. I give it in doses of one or two grains, with the extract hyosciamus, and a grain of squills three or four times a-day.

The following is a recipe of much value, in this disease:

℞.	Pulv. gum ammoniacum,	grs. v.
	Sal. cupri, (copperas,)	gr. ½.

every three hours in this disease.

PNEUMONIA.

Pneumonia.—We commence with this disease, with a degree of anxiety, that is easily accounted for. We have seen many consigned to the silent tomb, from its ravages, and we only hope, and hope is the staff of all mankind, that our efforts to make this disease perfectly understood, may be successful. And we are satisfied that if strict care be observed in carrying out our directions, that the fatality of this disease will be lessened, while its subjects will be no less few.

Pneumonia is inflammation of the parenchyma (which is composed of agglomerated globules, united by areolar tissue, and tearing with more or less facility,) of the lungs; it commences either as bronchitis, or it may arise in the substance of the lung; the common, ordinary, and well known symptoms of this disease, are very much like those of bronchitis—there is great rapidity of respiration, with shallowness of the same; general feverishness, with cough and expectoration. In bronchitis there is great constriction in the chest, with soreness upon coughing; in pneumonia, if there

be any pain, it is generally a deep seated dull pain, frequently diffused, and so mild in its character, that it is somewhat difficult to arrive at a correct diagnosis from it.

Character of the Sputa.—According to Laennec, a decided difference with regard to expectoration exists. My observation as to the character of the fluid, confirms me in the opinion, that it is most generally a bloody serum. I have seen cases where it was marked by viscidity and transparency; and it generally passes through the stages of lymph and pus. I have seen it of great tenacity, almost the consistence of jelly; so much so, that it would partially hang from the vessel's mouth, whilst the great bulk would remain adhered to the bottom. My opinion is, that little confidence can be depended on the sputa as a means of diagnosis. Pneumonia has generally been divided into four stages; by some authors into three. We say there is 1st, engorgement; 2d, hepatization, or solidification; 3d, yellow induration, and 4th, softening and removal by expectoration. We have also the functional signs, which are general, local, and secondary; we have, in the majority of cases, a bronchitic cough at first; it soon becomes suppressed or pneumonic in its character, and, in a great variety of cases, the cough is absent, the frequency of the respiration is greatly increased, and if only one lobe is affected, we have from forty to fifty respirations in a minute; but if both, we have from fifty to sixty, and so in proportion to the extent of the mischief. The pain, as we before observed, was very variable, depending entirely upon the amount of inflammation of the pleura. When it is deep seated, the pain is slight, and in the old and infirm the pain is scarcely felt. If an abscess should

form, there is generally a large quantity of purulent matter, sometimes suddenly discharged.

This disease generally affects secondarily almost all the important organs. We have, as the result or combination attendant upon it, *pleurisy*. The heart is sometimes affected, the brain also, and if the cerebral symptoms are severe, for the time being, it will mask the affection of the lung, the stomach, bowels, pharynx, and kidneys, but most frequently the liver, and when this is the case, to any great extent, the disease is then styled bilious pneumonia. We have general symptoms, such as an effusion of one or both cheeks, and the whole countenance modified by the dyspnœa (difficulty of breathing). There is considerable excitement in the general circulation; after a slight chill, fever sets in, increasing with the close of the day, and the pulse is full and hard at the commencement of the disease, and in the latter stages it is often frequently from 100 to 120 in a minute. The excessive pain in the side or breast, sometimes occurring in this disease, together with the cough and difficulty of breathing, seem to call for active and speedy remedies. The pulse is sometimes so contracted, and absolutely in many cases so low, it would seem to forbid the loss of blood, but we have seen it in such cases often rise, upon the use of the cups freely applied. Physicians, in such cases, resorting to this remedy, are frequently reprobated by many people. The propriety of bleeding, which I view in a large majority of cases as of doubtful utility, is of course to be determined by the pulse; and there are cases in which bleeding is justifiable; all other remedies will fail to save the life of the patient probably without this, but these cases seldom present themselves.

First Stage.—In the first stage of inflammation of the air-cells, the lung merely suffers an accumulation of blood, so that it becomes more solid and heavier than usual.

Second Stage.—When the inflammation has become more intense, so as to constitute the second stage, the lungs are heavy, and they become so firm as to resemble liver; and on this account the term *hepatization*, or *solidification*, has been applied.

Third Stage.—Before death, however, a still further change will take place. After the second stage, when the third begins, the lungs are as hard as before; but they become yellowish, or of a straw color.

Fourth Stage.—We have cavernous respiration with gurgling, and percussion flat.

Its Progress.—This disease is frequently fatal, when its extent is not very great, and when even it has not passed the first of these stages; all three of the stages have been discovered in the same lung.

Usual Seat of the Disease.—It is very remarkable that, in the greater number of instances, the inflammation commences at the lowest part of the organ, and it may not extend higher. The right lung is more frequently affected than the left.

Prognosis is variable, if complicated with the heart, brain or liver, it is very unfavorable; its duration in mild cases, is from ten to twenty days.

'The varieties of pneumonia are very great. Thus, while at one time it is marked by the most highly inflammatory symptoms, at others it is characterized by typhoid phenomena, or by the presence of bilious symptoms, such as yellowness of the skin, of the sputa and other excretions. The extent of the disease, whether

occupying one or both lungs; its form, whether lobar or lobular; the age of the patient, and other circumstances, give rise to important modifications. It has been already observed, that lobular pneumonia is especially met with in children. Indeed, this is the form usually met with in those who are not over six years of age. The same obscurity often attends the inflammation of the lung, which comes on in the course of other diseases. When supervening in the course of severe acute febrile diseases, especially of a low grade, the access of pneumonia may be marked merely by a sudden increase of fever and prostration, and its symptoms are often masked by those of the principal affection. By the careful employment, however, of auscultation and percussion, we may generally succeed in arriving at a satisfactory conclusion, where an aggravation of the symptoms has already led us to suspect that some fresh disorder has supervened upon the previous affection.'

Causes.—We have already remarked, that pneumonia is frequently the result of a secondary affection, and there are a variety of different circumstances that may combine in producing it; the principal cause, however, of producing idiopathic pneumonia, (primary affections,) is certainly *cold;* and although it may be met with in every variety of climate, yet it is more prevalent in cold regions,—it is evident between the tropics it is less prevalent, and the simple cause why it has been so frequent and so fatal in Texas, is, that we are subject to such frequent and brisk variations in our temperature,—it is most frequent during winter and spring, and diminishes rapidly as summer advances. The individuals most likely to be attacked, are those

most exposed to atmospheric vicissitudes, as well as to those circumstances calculated to favor their influence, such as fatigue and privations. The greater prevalence of the disease amongst men which has been proverbial in this country, is in our opinion owing to the circumstance, that they are much more exposed to these causes than females. It is almost certain, when a patient can trace his attack to any particular circumstance, that it is found in a great majority of cases to be *cold*, such as exposure to a draft of air, a check of perspiration, or something of this character. Cold and heat applied, in the way which I mentioned in the foregoing part of this work, is frequently the cause of this disease, as well as of inflammatory diseases in general.

Treatment.—The treatment of this disease is that of any inflammation; but I would here suggest, as the basis, that aconite and the cups, freely applied, is the sheet anchor of our hope in a large number of cases; consequently the first indication is to push aconite and cup freely, especially in persons of robust constitutions; and if the attack is highly inflammatory, this may be repeated according to circumstances, and whenever the pulse justifies it we should not shrink from the responsibility. There are cases where we would use the lancet, and in such cases there is one great consideration to keep before you, that is, *bleed for effect, not for quantity.* When you are called late in the disorder, of course you will have to modify your treatment; but even then you should try the effects of local depletion. In the acute stages, the cupping and aconite will be of much more benefit than general depletion; but nevertheless it is contended by many, that the latter exerts the best influ-

ence in the advanced stages of the disorder. In this I differ from the mass of authority.

There is a great error in practice, and to the mortification of the intelligent portion of the profession, it is too frequently indulged in, that is, blistering in the acute stage of the disorder. Such practice is detrimental to the patient, and calculated to do great harm; but by applying them in the third stage great benefit may be expected from them, as they will then check the inflammation and prevent collapse; they should be applied under the arms, and between the shoulder blades (scapula) and spine. Rubefacients, should, in this stage, also be used, as they act as stimulants, and give, in many cases, great relief in the dyspnoea, (difficulty of breathing.)

Ipecacuanha.—This is a great auxiliary in the treatment of this disease, and in fact I place great reliance upon it in my own practice. I have had the satisfaction of seeing this remedy relieve many cases. It can be administered either as a diaphoretic, expectorant or sedative; I think it exerts these influences superior to tartar emetic, the action varying according to the quantity given—the administration for its best effects depends, of course, on the judgment of the attendant. It is frequently highly necessary to attempt the contra-stimulant plan; this is effected by giving ipecac. and quinine in large doses, continuing it for twenty-four hours, and then diminishing the dose till the third day; frequently active emesis and catharsis are produced from this plan of treatment; and to obviate and arrest the emesis and catharsis, you should combine opium with the ipecac. and quinine. You should not neglect here that remedy which exerts great action over the

general system, I allude to podophyllin and mercury. Either acts as an anti-phlogistic, (opposed to inflammation,) in this disorder. It should be administered so as to produce a general and active impression upon the general system, in doses of either from a quarter to half a grain, in combination with two or three grains of ipecac. every hour. If your patient commences sinking rapidly, you should administer stimulants and give expectorants, such as eupatorium, (bone set,) serpentaria, (Virginia snake root.) [See pleuritis for this remedy.] These general principles of treatment, if observed, will have a great tendency to moderate the worst of cases, and relieve many. As this a disease of so much importance, we will attach a synopsis of the treatment of some distinguished practitioners, and afterwards recapitulate our own. Dr. Elliottson affirms that patients have borne the loss of blood to an immense quantity: perhaps more in this disease than in most others. It is in this affection that those enormous bleedings which I mentioned, but of which I have little experience, are reported to have taken place—several gallons in the course of a few days. Mercury is of the same use in this affection as in bronchitis, and in bronchitis as in other inflammatory diseases. The same gentleman, with Dr. Stewardson, says, "The loss of blood has always been the great resource in the treatment of this disease. Not only does it lesson the inflammatory action, but it diminishes the amount of labor which the lung, already less able to perform its duty, owing to an engorgement of a part of its structure, is called upon to perform. By lessening the quantity of blood which passes through the organ, we lessen its activity. These circumstances, as well as the import-

ance of the organ to life, render free venesection, whenever the general system will admit of its employment, especially important and useful, and often absolutely imperative. It is scarcely necessary to remark, that topical depletion by cups or leeches may be resorted to after general depletion is no longer advisable, and is sometimes particularly useful in relieving the local pain and uneasiness.

Next to bleeding, one of the most powerful agents in controlling inflammation of the lungs, is tartar emetic in large doses; physicians in the United States generally give from two to six grains in the twenty-four hours, but most of them place their chief reliance on calomel. This remedy, alone or combined with opium, is, perhaps, one of the most efficacious to which we can resort. This is the treatment of eminent gentlemen, and by following this treatment I have myself lost many patients.

It is unnecessary to allude to all the usual adjuvants of an antiphlogistic course in reference to diet and regimen. The patient should be kept perfectly quiet, his shoulders moderately elevated, and the most perfect repose enjoined, at the same time that the position should be occasionally changed in order to prevent the congestion of blood in the depending portions of the lungs; the most rigorous diet should be enjoined, and mucilages, with narcotics resorted to, to allay the cough and pain and procure comfortable rest. The efficacy of blisters is doubted by some practitioners, and applied at too early a period, before the excitement is sufficiently reduced, they may, as is well known, aggravate the disease. It is scarcely necessary to observe, that in a disease which presents itself under such a variety of forms, corresponding modifications of treatment are demanded.

It is now an established fact, that in pneumonia there is a total absence of the chloride of sodium from the urine, at or about the period of hepatization.

The history of the past teaches us that neither excessive bleeding nor the expectant plan of treatment have met with such marked success as to bring about the exclusive adoption of either the one or the other. And it would seem that a knowledge of this should preserve humanity from any new experiments; but the human mind in general seldom profits from the experience of the past; but the science of medicine being one of a progressive character, we think we have the undoubted right to advance our ideas and mode of treatment, however wide it may differ from high authority, as I am satisfied from practical experience of its decided superiority in this truly alarming disease. I am aware that such a variety of opposite opinions upon the treatment of a disease so well understood as pneumonia, are powerful arguments employed by those who are unwilling to concede that the science of medicine is possessed of any degree of certainty; but let every one cease to reproach medicine with errors which are exclusively chargeable, in my opinion, upon those who are controlled by hypothesis.

I shall contribute my experience and mite with the hope that it will preserve our successors from such periodical anarchy; and I hope my suggestions may have an impartial investigation. "But," as a distinguished author says, "so long as the human mind remains the same, so long as there exists ardent enthusiasts to be thrown into ecstacies by plausible dogmas, or the stupidly incredulous who are ready to doubt the most ordinary truths, it is to be feared that we shall still

witness the same extremes of folly, not merely in reference to pneumonia," but of many other diseases of which we shall attempt to treat. I set forth my opinions upon this subject with extreme diffidence, I have not grown grey in the practice of my profession, but I can claim an indefatigible diligence and observation for many years, if this is sufficient to entitle it to any consideration.

To recapitulate the plan of treatment I have adopted for some years in acute pneumonia, is as follows: I generally commence with the Homœopathic preparation of aconite, (and it is but just to say, I adopted this at the suggestion of my townsman Dr. Parker,) say twelve drops to two ounces of water, and give a tea-spoonful every ten or fifteen minutes, until it produces a decided action over the circulation and a free determination to the surface; if there is the slightest tendency to pain on a full inspiration I cup freely over the affected organ, I pursue the remedy and cups until the pulse is reduced in frequency and volume, I then give podophyllin or mercury as suggested in a desert-spoonful of castor oil every two or three hours, until free evacuations are produced. If reaction takes place, I again resort to aconite and the cups, if, however, it controls the circulation, I immediately commence giving quinine in combination with ipecac. and antimony, in the following proportions: quinine five grains, ipecac. two grains, antimony one-sixth of a grain, every two and a half hours.

In connection, we generally let the patient use freely of the following sudorific infusion. Take:

Catnip,
Asclepias, aa. ʒi. (Pleurisy root.)

Xanthox berries, (Prickly ash.)
Menthæ viridis, aa. ʒss. (Spearmint.)

Make a strong infusion and drink freely.

We have the feet bathed in warm ley water every day for twenty minutes or more, and apply sinipisms to the legs at night. We frequently use the fox glove preparation as recommended in pleurisy; also, the expectorant recipe, which will be found under the same head. In following this course, in connection with our general instructions, you are almost sure to give relief; and while most authors advise the lancet as the sheet-anchor in this disease, I with the same confidence advise *quinine.*

In connection, we frequently use the white liniment. Take the yolk of an egg, slowly add rose water, two ounces and a half, and rub together in a mortar; then add oil of turpentine, three ounces; oil of lemon, half fluid drachm. Pour into a pint bottle and agitate, to mix thoroughly; then add pyroligneous acid one ounce; shake quickly and briskly. Keep it well corked; apply it to the chest as a counter irritant rubbing it in with a sponge, after which apply a cataplasm of pearl flowered life-everlasting, which in many instances proves more effectual than hops.

Already, some have condemned the quinine treatment without a trial; there are many things we know to be facts, that do not accord with our reasoning, and although we may not be able to explain satisfactorily why quinine acts beneficially in this disease, yet, nevertheless, I am satisfied it does so. Give it a fair trial.

Typhoid Pneumonia.—Here you will be extremely cautious in the administration of quinine. You must use counter irritation early; emollient anodyne enema

may be prescribed; great caution should be used in the employment of a cathartic remedy. In the debility, you will give wine whey, and the cold infusion of bark, with acids in small doses, or almost any of the vegetable tonics may be administered.

A decoction of senega and carbonate of ammonia will be found useful.

When there is muttering delirium, I have administered musk, in 3 gr. doses, every three hours, with great success.

The wild indigo is a valuable remedy in the low stages of typhoid pneumonia. Make a decoction, by boiling one ounce of the powdered bark in 2½ pints of water down to 1½. Give a table spoonful every three hours.

ASTHMA.

Asthma seems to be a disease more immediately alarming in appearance, than dangerous in reality.

Symptoms.—There is a violent sense of constriction of the chest, generally accompanied with wheezing respiration; it seems rather to be a spasmodic affection of the organs of respiration. The peculiar respiration can be heard without putting your ear to the chest, or employing a stethoscope. It is accompanied by a hacking cough, followed by some expectoration. The symptoms are so well known, that we need not here particularly relate them, as almost every practitioner has witnessed an attack of asthma.

Spasmodic asthma, I have no doubt, is complicated with organic alterations within the chest, (thorax,) such as emphyema (a collection of blood or pus in some cavity of the body, particularly that of the pleura) of

the lungs, structural changes in the heart and great blood vessels; and it is probable that the production of the spasm consists in some altered condition of the circulation through the lungs.

Treatment.—During the fit, we generally apply flannel cloths wrung out of hot water, and never suffer them to become even cold. We immediately give morphine, in combination with ether, and generally add ammonia, assafœtida and musk; if there are any complications of bronchitis, you must be cautious in the administration of these remedies. Dry cupping frequently gives some patients instant relief. Dr. G. Rolison has suggested a very simple and ingenious method of dilating the chest, in this and other spasmodic affections. He recommends, that at the end of every inspiration, or during the expiration, the nostrils and mouth be kept forcibly closed, so as to prevent the act of expiration; the patient will thus be compelled to inspire for several times without expiring, and the consequence would be a forcible expansion of the thorax. We cannot speak from our experience of the efficacy of this treatment.

The dyspnœa, or difficulty of breathing, may be moderated or assuaged by a variety of narcotics. We generally, as we have before stated, employed morphia for the mitigation of spasm in paroxysms of asthma, but the article in which we have the highest confidence, is stramonium (Jamestown weed.) Take the leaves and stalks, cut them up and put into a pipe, and smoke like tobacco. The smoke descends, of course, into the lungs, and when the saliva is swallowed, the remedy is introduced into the system in that way also. I now simply suggest, in combination with this smoking remedy, to combine with it a small portion of opium. We have

never known this suggested, but from my experience you will find it a valuable acquisition to assist in relaxing the spasm.

Lobelia has been much lauded for its beneficial operation upon asthma. To make the recipe which is recommended, you take 3 oz. of lobelia inflata, and macerate it for fourteen days in 3 pints of proof spirits. Give from fifteen drops to half a drachm every two or three hours. (It is said that in the latter stages of bronchitis, in combination with a few grains of carbonate of ammonia, that it is a valuable remedy.) Some contend that they have derived great benefit from immersing porous paper in a solution of saltpetre, and drying it; let the patient inhale the vapour, by burning it in the room, or smoking it in a pipe.

We have derived much benefit in this disease, from a domestic remedy—simply goose grease, strongly impregnated with garlic; tea spoonful three or four times a day. Doctor Fenner has tried nitric acid with very satisfactory results, given in solution as strong as lemon juice, (ad libitum.) I have not tried this remedy, but am inclined to think well of it.

A valuable contrivance to moisten the air in the bedroom of a person afflicted with asthma, we take from the London Lancet. It consists of a common six-quart saucepan, with a tube soldered in of sufficient length to reach above the mantle, (an inch and a-half in diameter). Four quarts of water will evaporate in about five hours. A few drops of ether poured in at the top of the tube, will be useful and refreshing. There are many asthmatic cases, that may derive great benefit from this invention.

M. Ducros asserts, in the *Gaz. Med. de Paris*, that

experience has shown that the application of ammonia at 25° over that part of the cervical vertebræ, which corresponds to the pharyngeal plexus, has the power of almost instantly arresting most attacks of asthma.

Asthma, like all other nervous diseases, is subject to the most unaccountable variation, and is most uncertain as to the effects which our remedies or the influence of physical agencies produce. We have derived as much advantage from small, but frequently repeated doses of the wine of ipecac., with an equal portion of the tincture of castor, as from any other remedy.

The use of strong coffee, without milk or sugar, is highly spoken of.

Some of the following recipes we have used, with decided advantage in spasmodic and humoral asthma.

Take Catalpa pods, ʒss., water sufficient to obtain 8 ounces of decoction. Add,

Seneka, ʒii.

Oxymel. squills, ʒi.—Give in tea-spoonful doses.

A prescription we have used with some degree of success, is

Skunk cabbage root,	ʒi.
Boiling water,	pint, 1.

Infuse in a covered vessel for an hour; give an ounce or two at a dose.

In humid asthma, the following recipe is equal, if not superior to any remedy that we know of:

Galbanum,	ʒii.
Vinegar of squills.	
Fennel water,	aa. ʒiiss.

Spirit of mindereris, (acetate of ammonia,)	fl℥ii.
Nitric ether,	℥i.
Syrup of mallows,	℥ss.

Mix. Three or four tea-spoonfuls a-day.

In spasmodic asthma, we have used the tincture of squills, ten drops; nitric acid, five gtts.; extract henbane, three grains; water, one fl. ounce and a-half.

Mix, and repeat every three or four hours.

In chronic catarrh and humid asthma, the following has a decidedly good reputation:

℞.	Elecampane root,	℥i.
	Orris root,	℥ss.
	Water,	℥ivss.

Boil down to two-thirds, and strain, and add

Honey,	℥ii.
Gum ammoniac,	℥i.
Vinegar,	℥viii.

Evaporate to the consistence of honey, and give a spoonful occasionally.

A recipe that Dr. Thompson recommends very highly, is,

Powdered ipecac.,		grs. vi.
"	Nitrate of potassæ,	ʒiss.
"	Myrrh,	grs. xii.

Mix. Divide into four powders; give one every three hours.

Lobelia has of late been highly extolled. Although a valuable remedy, we confess that, in this disease, it has not fulfilled our expectations. Our mode of admi-

nistering it, has been to give it in powder in small doses, or the tincture.

You will find, in many cases, the following valuable,

℞. Cyanuret of potassium, grs. iv.
Distilled water, ʒii.
Syrup of sugar, ʒiii.
Mix. A tea-spoonful every two or three hours.

A preparation of Dr. Helford's, which we have never used, but I am satisfied it will prove quite an acquisition in the treatment of this disease.

℞. Ext. stramonium, ʒss, (Jamestown weed.)
Soap, ʒi.
Pulv. gum arabic, ℈i.
Mucilage of tragacanth, sufficient to make mass.
Divide into thirty pills.
Give one three times a day.

A tincture of swamp dog wood is reported to have cured asthma; it is made with good whiskey.

The compound tincture of cramp bark is highly spoken of by eclectics. It is a powerful antispasmodic; useful in all nervous and spasmodic diseases, and particularly valuable in asthma. The following is the recipe:—

℞. Pulv. cramp bark, ʒii.
Lobelia seed, in powder.
Skunk cabbage seed, bruised, aa ʒi.
Stramonium (Jamestown weed) seed, bruised.
Capsicum.
Bloodroot, in powder, aa ʒss.
Alcohol, four pints.

Macerate for two weeks, express and filter through paper.

Dose twenty to sixty drops, three times a day; or, during a paroxysm, as often as required.

The white liniment is also valuable in this disease. See *pneumonia*.

CONSUMPTION.

This is a disease seldom originating in this climate, but from the fact that our State has got to be an asylum for patients of this character, we have concluded to point out with great brevity the prominent and reliable symptoms, with a condensed mode of treatment.

Symptoms. Cough.—This is one of the first symptoms noticed, it is a short tickling cough, sometimes hacking, accompanied with a little expectoration of mucus, with pain in the chest.

Stitch in the side.—This is generally complained of low down, you would be inclined to place it in the abdominal muscles. Cough is always worse at night.

State of the surface. The skin and flesh becomes very soft and flabby. About this time a little fever presents itself, especially after exercise, on falling asleep the patient is almost sure to perspire in some part of the body.

The progress of all the symptoms of consumption varies exceedingly. Frequently a very short time, and in other cases many years elapse before the patient sinks under the affection.

Treatment.—We will not pretend to lay down any precise rules for the treatment of consumption, but will direct your attention to general conclusions, founded on a review of its pathology.

We will endeavor to enumerate some of the curative indications, and to give a brief outline of the principal remedies which have been successively proposed, and those recipes which have the greatest amount of authority for their use.

"We have the unvarying testimony of authors in favor of a milk and a vegetable diet," if the cow's milk disagrees it should be boiled, it can be taken with bread in moderate quantities frequently. You can use soda water and flour to the boiled milk. Should it disagree, light broths, animal jellies, gellatinous food, with the various preparations of rice, flour, eggs, buttermilk and oysters, have been highly recommended in varying the diet.

The clothing should be warm, in proportion to the debility of the patient. Too much must be equally avoided, particularly if there is much tendency to perspiration.

Exercise in the open air is regarded as one of the most essential curative measures.

Sea voyages are universally recommended, and travelling to select climate, can only be of benefit in the early stages of the disease.

Emetics, or remedies given to nauseate, are particularly recommended. Their administration requires discrimination, and they should only be persisted in when their effects are evidently favorable.

The vapor or sulphur bath is highly extolled.

Counter irritation has the testimony of almost every ancient and modern author in its favor.

Taraxicum, (dandelion,) digitalis, (fox-glove,) prussic acid, sulphur and bark, are all highly extolled—sulphur in particular.

Iodine is certainly a very valuable remedy, and has not received the attention it deserves as a remedy in consumption.

A variety of other remedies, such as myrrh, iron and lead, have been favorably mentioned in connexion with consumption.

Cod liver oil and gentian are highly extolled by the English physicians, and, I think, deservedly.

There are many other remedies suggested, which we have purposely omitted.

We will detail some of the recipes that have the confidence of the profession, and such as we have tested, we will allude to.

Morton's remedy, I used in a case in this city, in connexion with my friends either Dr. McCraven or Dr. Holland, and with decided benefit; it is—

℞.	Hydrocyanic acid,	gtts. xii.
	Syrup of Tolu,	fl. ʒss.
Then take,	Powdered gum Arabic,	ʒss.
	Water,	fl. ʒvii.ss.

Dissolve the two last and add the former. Mix. A table-spoonful every three hours.

A favorite prescription of *Brera*, is—

℞.	Chloride of barium,	grs. iv.
	Distilled water,	fl. ʒii.
	Ext. hemlock,	grs. iv.
	Common emulsion,	lb. i.
	Syrup,	ʒi.

Mix. To be taken during the day, in scroflula and phthisis.

Another of Brera's is—

℞.	Iceland moss,	ʒii.
	Hartshorn shavings,	ʒi.
	Water,	1 qt.

Boil down to a pint and strain; add, wine of opium xv. gtts. To be taken during the day.

Another of Brera's is—

℞.	Iodide of calcium,	grs. x.
	Ext. aconite,	grs. vi.

Mix. Divide into six pills. One every four hours.

There is such a multiplicity, that I shall simply allude to those articles, singly or in combination, which are entitled to any consideration.—An electuary of Peruvian bark and sulphur; pills of kreosote; sulphate of copper; vinegar foxglove; ipecac. and nitrate of potass; artificial goat milk, which is the following:—Fresh suet 1 oz., put into a muslin bag, and boil in two pints of milk, sugar candy two drachms, and used ad libitum. Myrrh and Canada balsam; compound extract of myrrh; Griffith's myrrh mixture, which is—

Myrrh,	ʒi.
Sulphate of iron,	ϑi.
Carbonate of potassæ,	ʒi.
Sugar,	ʒii.
Water,	fl ʒvi.

Make mixture. Table-spoonful doses as a tonic in consumption, according to circumstances.

Acetate of lead, iodide potass, sulphuret potass, and charcoal; chlorate potass, have all considerable reputation in consumption.

The two following recipes will be found very valuable

in pulmonary complaints. I have used them with advantage:

℞. Elecampane.
Asclepias, aa. 1 lb.—(Pleurisy root.)
Macrotrys.—(Black cohosh.)
Comfrey.
Eupatorium perfol.—(Boneset.)
Hoarhound.
Sycamore bark.
Iceland moss, aa. ½ lb.
Sanguinaria, ¼ lb.—(Blood root.)

Make three and a-half gallons of syrup, without spirits; add the saturated tinctures of ictodes foet. (skunk cabbage,) and asarum canad., (wild ginger,) of each one pint; and the tinctures of lobelia and cypriped. pubesc., (lady slipper,) half pint each.—Dose, one or two table-spoonfuls every three or four hours. Or

℞. Spikenard.
Hoarhound.
Elecampane.
Comfrey, aa. ℥iss.
Caulophyllum.—(Blue berry.)
Macrotrys.—(Black Cohosh.)
Ictodes, aa. ℥i.—(Skunk cabbage.)
Eupatorium perfol.—(Boneset.)
Lycopus.—(L. virginius.)
Ampelopsis, aa. ℥ii.—(Bryonia.)

Make two gallons of syrup. Dose, from a-half to one table-spoonful, every three or four hours.

We would suggest, that Dr. King's cough mixture, in

the incipient stages of consumption, will prove valuable. This is his formula; take

Lobelia seeds.
Ictodes.—(Skunk cabbage.)
Sang.—(Blood root.)
Asclepias.—(Pleurisy root.)
Assarum can.—(Wild ginger,) aa. ʒi.
Water and alcohol, each, 1 quart.

Make a tincture, and mix with half the quantity of simple syrup. A tea-spoonful every two hours, and can be alternated with the two former recipes.

Various preparations are highly recommended to inhale, such as belladonna; we have tried this means, and with us it has been attended with no advantage.

The white agaric or spunk, is good in checking the night sweats in consumption, in doses from four to six grains.

A good counter-irritant in pulmonary affections, is the following:—Take pulverized ipecac., ʒii; olive oil, ʒii; lard, ʒss.; rub on the skin for a few minutes, once or twice a-day. If it is desired to make it more active, add croton oil, one drachm and a-half.

We have more confidence in the inhalation of medicated vapors, than any other course of treatment.

DISEASES OF THE STOMACH.

ACUTE GASTRITIS.

Gastritis.—This term denotes an inflammation of the mucous membrane of the stomach, and is characterised by an almost constant and acute pain at the pit of the

stomach, (the pain is increased by pressure on the stomach, by inspiration, swallowing any dry substance, particularly if it be hot, or vomiting;) accompanied by considerable fever, with nausea, sometimes vomiting and great thirst. If the disease is violent, we generally find the patient complaining of a great sense of tightness across these parts. And there is generally an increase of heat felt in the part, especially if the hands are suffered to remain on the stomach a few minutes. It is not uncommon to find a great tendency to hiccup; and not unfrequently the patient complains of great debility.

I am of the opinion that we have more or less gastritis in connection with our fevers; and I am satisfied from observation, that in a large majority of cases, we have it combined with most of our inflammatory diseases.

Pulse,—We will sometimes find it frequent and small, soon becoming weak and thready, sometimes full and hard; but there is a great variety in this respect, as much if not more than in inflammations of other parts.

The bowels are generally constipated, the urine very scanty and high colored; the tongue has a peculiar appearance, being particularly red or scarlet along the edges, and not unfrequently at the top, and in the middle we generally find it covered with a peculiar flaky fur.

This disease may terminate in a few hours, or it may last some days, and frequently degenerates into the chronic form, when we have many of the symptoms of the acute in combination with many more, for instance, the tongue, which in the acute is red or scarlet along the edges, with a flaky fur in the middle, in the chronic is particularly red at the top and margin, and the whole tongue is covered with elevations something of the char-

acter of papillae; and in this variety the bowels are very torpid, the urine scanty and high colored, with a very dry skin. We have fever, sometimes cough, and frequently great complaint is made of excruciating pains in the limbs. In farther connection with the chronic symptoms, we have frequent vomiting of a glairy fluid, acidity and flatulence. The nervous system sometimes participates to a considerable extent, so much so as to be of itself the cause of many diseases.

Causes.—They are more prolific in this than perhaps most any other disease. There are a great variety of causes, and it would be almost impossible to enumerate the various causes that will produce gastritis; suffice for it that gastritis is produced by the common causes of all inflammations; cold draughts of water taken when the body is over-heated; it is frequently produced by the sudden cessation of gout; it will sometimes arise from sympathy with a diseased womb; it is also liable to be produced from the same cause with the kidneys.

Regimen.—All heating and irritating food or drink must be carefully avoided; wines, spirits, or cordials, under no circumstances, should be admitted, as they will never fail to increase the disease, and when administered frequently, produce sudden death. There is generally great irritability of the stomach, and many, from this fact, are disposed to give an emetic; which, if done, death is almost sure to follow, unless the disease is produced from taking some acrid poison, in which case, a gentle emetic of ipecac., accompanied with free dilution, would be proper.

Treatment.—The lancet is highly recommended. I have never resorted to it; but I treat it as I do other

inflammatory diseases. I commence by giving aconite; and I regard no one remedy in the acute gastritis of more importance than freely cupping the region of the epigastrium (stomach).

Constipation is almost a uniform attendant upon gastritis; but medicine, of almost any character, if given by the mouth, is either sure to aggravate the inflammation, or be rejected; and, consequently, I seldom advise any medicine to be given. What I use I do endermically, by applying a blister the size of a dollar, and sprinkle upon the denuded surface fifteen or twenty grains of calomel. The bowels should be kept in a soluble condition by the free use of enemata (injections).

If the stomach will tolerate medicine at all, I frequently use sweet oil, given in doses sufficiently large to produce purgation, and it should be repeated every two hours; but, if found to disturb the stomach, it should not be persevered in.

I use flannel cloths dipped in warm water, or the decoction, as recommended in pleurisy; these to be applied to the region of the stomach, and never suffered to grow cool.

When the pain is very great, accompanied with an inclination to vomit, by removing a portion of the cuticle from the blister, and sprinkling on a grain of morphine, it will frequently allay the iritability, and procure rest. When the vomiting, however, is obstinate and easily excited, advantage will frequently accrue from enemata (injections) of laudanum, with a solution of starch or flaxseed tea.

The feet and legs ought to be bathed in stimulating

pedeluvia (bath); and, for the purpose of exciting action in the lower extremities, warm bricks or poultices should be applied to the soles of the feet.

"In the last and most prostrate stage, when all the symptoms indicate threatened or existing gangrene, the most efficient remedy is the oil of turpentine, combined with laudanum or a salt of morphia, and given frequently in small doses."

In the early stages of the disease, I allow nothing to be given, unless it is a little cold water, or iced lemonade; in the more advanced stage, a little nutriment in the shape of a solution of gum arabic, or some other mucilaginous or farinaceous drink; but, where the debility is great, I have suffered the patient to use fresh milk, with a little lime water, in very small quantities, every hour or two.

Every care must be taken during convalescence, for the least imprudence in eating would, without doubt, occasion a relapse, which would almost be certain to prove fatal.

CHRONIC GASTRITIS.

Is so closely allied to that of dyspepsia, that most authors make no distinction. It is a frequent attendant upon phthisis. We view the two diseases as identical, and I will, therefore, give my views and treatment under the head of dyspepsia.

It is reputed that peach leaves exert a decidedly beneficial influence in all inflammations of the stomach. They should be used in cold infusion, a table-spoonful every hour or two.

The datura stramonium, or Jamestown weed, is

highly extolled in gastritis. The extract should be used, commencing with an eighth of a grain.

DYSPEPSIA.

Symptoms.—Irregularity of the appetite, occasional nausea, heartburn, and frequently pain in the stomach; flatulency of the stomach and bowels; the food becomes sour, with unpleasant eructations; heaviness or oppression at the stomach after eating; the food is frequently ejected by mouthfuls, in a half-digested state; occasionally colic pains, and general languor and debility. The discharges are generally of an *ash* color. After the disease has lasted some time, the pulse becomes tense and quick, the upper part of the abdomen tender to the touch; the patient becomes irritable and frequently desponding.

Causes.—All stimulating substances, such as alcoholic drinks, food highly seasoned, or that which is of difficult digestion, irritants, medicines, poisons, hunger, thirst, sudden changes of temperature, external irritation repeated by sympathy in the mucous membrane of the stomach; a slow irritation, which has existed for some time, and perhaps unsuspected by the patient; moral affections of a violent character, such as anger, excess of joy or grief. All these causes act with an energy, modified by the temperament, the predisposition, and the degree of sensibility of the individual.

That the mucous membrane of the stomach is the most frequent seat of irritation, is an incontestible fact, which may be readily accounted for, from the numerous causes which act upon this membrane. A distinguished physician has classified the exciting causes as follows:

First.—By hunger and thirst.

Second.—By ingesta of every kind.

Third.—By mechanical agents, blows, contusions, &c.

Fourth.—By emanations transmitted by the air.

Fifth.—By the circumfusa, (every thing that acts on man,) cold, heat, humidity, light, electricity.

Sixth.—By the moral affections.

'The great number of cases unrelieved, has served to cast unmerited opprobrium on the science of medicine, and is, indirectly, a most fertile cause of the growth and spread of empiricism. The weight of this opprobrium should fall (and it would be justly, too,) on the patients themselves; for it is perfectly useless to attempt to cure this disease, unless the invalid is thoroughly convinced of the necessity of changing his customary habits, and adopting a new rule of conduct, and determined to persevere in it to the end.'

We shall allude to one other cause, which our experience teaches us is of the most fruitful origin, in producing dyspepsia, which is the use of *tobacco*. 'Every medical man knows that the saliva, which is so copiously drained off by the pipe or cigar, is the first and greatest agent which nature employs in digesting food. Chewing equally drains off this liquid, so necessary to digestion.' Darwin, in his Zoonomia, says:—"The unwise custom of chewing and smoking tobacco, for many hours in the day, not only injures the salivary glands, producing dryness in the mouth when this drug is not used;" but I suspect its constant use in many persons will produce scirrhus of the liver and pancreas. 'It injures the power of digestion, by occasioning the patient to spit out that saliva which he ought to swallow, and hence produce flatulency. It makes the patient very nervous,

he has disturbed sleep; he is irascible, and it even produces mental depression. Dr. Brown says:—'That it acts directly upon the nervous system, enfeebling, exhausting, or destroying the powers of life.'

Treatment.—You must seek to ascertain the causes in each particular case, which has given rise to the disease, and when it can be traced to any cause, either eating indigestible food, using ardent spirits, or want of exercise, *ever after they should be carefully avoided.*

I have had considerable success in the cure of this disease, I restrict my patients to a regular diet, and generally use one article of food at a time, as the stomach is more capable of managing a simple than a compound diet; use as little drink when eating as possible; avoid taking exercise immediately after eating, but in an hour or two afterwards, exercise freely. The diet which I esteem most highly in this disease, is corn meal, baked in the ashes; this can be alternated with fresh lean beef cut thin, one pound put it into a jar, add a little salt, and place the jar in a kettle of boiling water, let it remain for an hour, and strain through a woolen cloth. You can give a tea-spoonful of this, and increase the quantity as the stomach will bear it. Occasionally a piece of stale wheat bread, with a little loaf sugar, covered with boiling water, and then covered with a plate; you can add a small quantity of milk, this is apt to agree with the stomach.

The medicinal treatment of this disease is not so simple or plain as many authors conceive it to be; it is true that the stomach should not be made a perfect laboratory, but a regular and constant use of medicine is indispensable; it must be persevered in, and unless it is, no good will be attained. I have treated some five or

six cases successfully in this city, I used strychnine in every instance with success, and however desperate the case may be, I would advise giving it a trial. I gave it to Rev. M. Cameron and Mrs. John Brown, (cases of long standing,) who persevered in the remedy until they were perfectly restored. In connection with this I generally used equal parts of rhubarb, aloes and copperas made into pills, and give sufficient at bed time to keep the bowels in a soluble condition. My general formula for administering the strychnine is as follows:

℞. Alcohol, ʒ iiss.
Strychnine, grs. iii.

Fiat tinctura.—To be given in ten drop doses before each meal, increasing a drop daily until the patient gets to twenty, at which point he will stop increasing and continue to take that amount. It should be borne in mind that the activity of this substance is increased by all acid drinks.

Dr. J. Spurgin, an English physician of celebrity, recommends in the strongest manner possible, what he terms the "liquid condiment" for the cure of dyspepsia, which is as follows: Liquor potassæ, chloride of sodium, (common salt) aa. ʒ i, phosphate of sodæ, (it is sometimes called tasteless purging salts, and not unfrequently neutral phosphate of sodæ) ʒ iss, water ʒ iii. As much of this solution may be taken at a time as will not affect the taste of the beverage disagreeably. He says, in a great number of instances this article has proved most useful. Many families have it on their tables for daily consumption, and even make their tea by first putting two or three spoonsful into the tea-pot with the tea. It is not intended to be resorted to as an occasional remedy

for various forms of indigestion, but as a constant practice, in like manner as with common salt.

He says, he "could write a treatise to record the successful results of its employment, but its utility needs no corroboration." I leave it to its own merits.

There is a variety of remedies laid down for the cure of this disease, none of which, in our humble opinion, are reliable; those that are entitled to the most consideration I append to this article, but would, in a very large majority of cases, advise you to follow my treatment to the letter.

The following recipe is frequently recommended, viz:

Bruised gentian, ʒ i, bruised rhubarb, ʒ ii, boiling water, twelve fl. ounces. Macerate for an hour, strain, and add carbonate of ammonia, (hartshorn) ϑ ii. Dose, one to two fl. ounces.

I have more confidence in the gentian and sulphuric acid mixture than any of the compounds that are recommended, which is,

Compound infusion of gentian, fl. oz. v.
——— tincture of gentian, ʒ i.
Diluted sulphuric acid, fl., ʒ i.

Mix. A table-spoonful three times a day, in dyspepsia.

There are many formulas highly extolled by different authors that I do not think, from my experience with them, are worthy the attention of the profession.

A preparation I use, and which will be found useful, is the following:

Sulphate ferri, ʒ i.
Ext. gentian, q. s.

Divide into thirty pills, one to be taken morning, noon and night.

The preparation of podophyllin and leptandrin, that we have had occasion already to recommend in hepatitis, will be found an excellent alterative in dyspepsia.

VOMITING.

Vomiting proceeds from various causes; excesses in eating or drinking. It is frequently the result of metastasis, (a translation of the disease from some other part;) it may likewise proceed from the suppression of any of the customary discharges, for instance the piles, menses, &c. There are a great variety of causes that will produce vomiting, and there can be no question that at times it is purely of nervous origin.

If it proceeds from a foul stomach or indigestion, it will generally relieve itself, but may be promoted by ipecac. and chamomile tea.

If from retrocession of the gout, every means must be used to invite it back to its first locality.

If from weakness of the stomach, Peruvian bark, sulphuric acid or brandy will be found beneficial.

If from acidities in the stomach, your remedies will be the alkalies, to neutralize the acid.

If from spasmodic affections of the stomach, the aromatics, such as cinnamon and spices boiled in wine.

I have used kreosote in drop doses, given in a little milk, with great success, in violent vomiting. Any of the following recipes will be found valuable, under many circumstances. I have frequently relieved violent vomiting, by free cupping over the region of the stomach, following the cupping by rubbing on ether. Mustard plasters over the region of the stomach, frequently allay irritability of that organ.

I have used catechu in the recipe following, very successfully.

℞.		
	Catechu,	ʒi.
	Columbo,	ʒss.
	Winter bark,	℈i.
	Boiling water,	ʒiv.

Mix, and digest for eight hours; strain, and add syrup of red roses, ʒi. Give in spoonful doses.

In spasmodic vomiting, the annexed recipe will afford relief.

℞.		
	Powdered columbo,	℈iv.
	Opium,	grs. iv.
	Oil of peppermint,	gtts. x.
	Syrup of pinks,	q. s.

Mix, and make thirty pills. Take 2, three times a day. If the patient prefers the fluid form, give the following:—Columbo, ʒss. Boil in water, 3 to 5 fl. oz., strain and add,

Carbonate of potassa,	grs. x.
Lemon juice,	fl. ʒiii.
Tinct. opii.	gtts. xii.

Mix. Give from a tea to a table-spoonful every hour.

I prefer giving the kreosote in milk, but my friend Dr. Hopkins assures me he has used the following with the happiest results.

℞.		
	Kreosote,	1 drop.
	Camphor water,	
	Compound infusion of gentian, aa.	fl. ʒvi.

Mix, and give half of this mixture.

A clyster of laudanum, will frequently allay irritability. I generally use tincture opii. ℈ii; infusion of flax-seed, two to four ounces, and inject.

The following aromatic plaster, will generally allay nausea, and relieve gastric uneasiness; and it is also a good local stimulant, when applied to the region of the stomach.

℞.	Burgundy pitch,	ʒiii.
	Yellow wax,	ʒss.
	Powdered cinnamon,	ʒvi.
	Oil of pimento, (black pepper,)	
	" lemons,	aa. ʒii.

Melt the rosin and wax together, and strain; when they begin to thicken, on cooling, mix in the cinnamon, previously rubbed with the oils, and make a plaster.

I have relieved many cases, by the administration of ipecac. in quarter to half gr. doses. Soda powders, sulphuric ether and strychnine; also, stimulating clysters of common salts, or salts with the addition of the oil of turpentine, will often afford relief. Counter irritants, such as stimulating liniments and blisters, we have suggested.

Vomiting, the result of pregnancy, will be frequently relieved by either of the following, the latter of which is well adapted to children:

℞.	Magnesia ustae,	ʒi.
	Aqua ammonia,	ʒi.
	Spiritus cinnamomi,	ʒiii.
	Distilled water,	ʒvss.

Mix. A table-spoonful four or five times a day.

℞. Aquæ calcis, (lime water,)
Lactis recentis, (milk,) aa. ℥iii.

For an adult, two table-spoonsful.

The two last remedies are well adapted to the cure of what is commonly called the *heart-burn*, and when this complaint is very troublesome, it can be relieved immediately, by taking fifteen or twenty drops of the purified soap lees, in a cup of linseed tea or milk.

A very efficient, yet a very simple remedy, will frequently allay vomiting, when all other means have failed. I allude to the leaves of the raspberry, in decoction with cream; it will speedily allay nausea, if taken in doses from one to four ounces.

DISEASES OF THE INTESTINES.

ENTERITIS.

It frequently occurs that the irritation, after having existed for some days in the superior portion of the intestinal canal, invades the inferior and lower portion. We have acute deep seated pain, and this may occur in many parts of the intestinal region; the pain is more aggravated at this time than at others, and increased very much if pressure or percussion is applied to the abdomen. The pains are constant and violent; there is no cessation, such as you see in severe attacks of the "*gripes*." The heat is intense, the thirst unquenchable, and the pulse is exceedingly quick. It is generally accompanied with violent headache, and the patient, in the latter stages, becomes delirious, and trys to get out of bed, though generally he will lay very quiet.

The tongue, in the first instance, grows white, and the breathing is very much accelerated. Nausea and vomiting soon occur. There is obstinate costiveness, and the urine is very high colored.

If the alimentary canal be stimulated to action, the tongue soon becomes brown and dry.

Diagnosis.—Enteritis is distinguished from peritonitis by the obstruction that is produced, the constipation, and the consequent effects of it—nausea and vomiting; and also by the circumstances of the pain, it being more fixed about the region of the umbilicus, (navel,) whereas in peritonitis it is generally much more diffused.

Treatment.—I have seen, in this disease, violence of symptoms that would indicate, even in this climate, the use of the lancet; but if employed it should be exercised with great caution, and in delicate constitutions it should not be used.

To remove the constipation, and to arouse the liver to active secretion, we give either podophyllin or calomel in combination with castor oil, half grain of the former or five grains of the latter, in a tea-spoonful of oleum ricini, (castor oil.) If the disease should be accompanied with diarrhœa, I use the same remedy, only a small portion of the calomel.

If there is acid in the bowels, which is easily ascertained from the odor and color of the stools, preparations of magnesia, or either of the following recipes can be given. Take

℞. Rhubarb,
Saleratus,
Peppermint or spearmint leaves, equal parts.

Dose. In powders, from ½ to 1ʒ. It can be used by infusion, by taking ʒi. of the mixture to 1 pint of boil-

ing water. Steep, strain and sweeten. Dose.—One table-spoonful every half hour. Or take

℞. Podophyllin, x. grs., and one drachm of the rhubarb and saleratus mixture. Mix, and give two or three grains every two hours until the desired effect is produced.

Throughout the whole course of the disease, the bowels should be kept in a soluble condition by the administration of the above remedies, or by neutral salts or magnesia and manna. If, however, the cathartics are found to irritate the alimentary canal, you can substitute emolient enemata, (injections.)

You should endeavor to produce a determination to the surface, by inducing free perspiration; to do which you can give Dover's powders, aqua ammoniae, or the following sudorific infusion. Take

℞. Catnip,
Asclepias, (pleurisy root,) aa. ʒi.
Xanthox. berries, (prickly ash,)
Menthæ viridis, (spearmint,) aa. ʒss.

Make a strong infusion, and drink freely as warm as possible; or Beach's Sudorific Tincture is a valuable remedy.

The warm bath is a valuable adjuvant. In the advanced stages, if there should be diarrhœa, I would advise the hydrg. cum. cretæ. (mercury and chalk,) in combination with opium, in small but repeated doses, or a mixture of nitro-muriatic acid and laudanum.

The most efficient measure is your active local treatment; ascertain the seat of tenderness and cup it thoroughly and effectually. Warm fomentations are often

of great efficacy, such for example as hops, though a better can be found in a combination of lobelia and eupatorium; it should be applied for days. The arnica, a favorite amongst our homœopathic friends, is a good application, three parts water to one of arnica, and apply over the abdomen. Frequently you will derive advantage from combining garlic in mustard with your cataplasms.

If the disease should prove very obstinate after effectual cupping, you can apply a large blister over the abdomen.

If the liver, brain or stomach should become involved, you will have to adapt your treatment to the affected organ, generally an antiphlogistic course will be demanded.

We have already called attention to the benefit to be derived in inflammations, from the use of a cold infusion of peach leaves, it is highly serviceable in this affection. [See Gastritis.]

'Great care is requisite in relation to the diet. In severe cases accompanied with fever, slippery elm or a solution of gum arabic is all that should be allowed; if a more nutritious diet is necessary, it may consist in farinaceous drinks, such as rice, barley, or bread water, sago and tapioca may be given.

In the declining stages, mutton broth and oysters may be allowed. In convalescence, it is equally as important to regulate the diet to avoid relapse, the lightest and most digestible articles of food should be employed.

CONSTIPATION.

Constipation.—Obstruction or costiveness, without any fault in the bowels, or any accidental obstruction whatever, frequently arise from persons neglecting to endeavor to relieve their bowels; it frequently occurs as a symptom of enteritis, and it is also accompanied with lesions of the spinal marrow and colic. We frequently have irritation of the mucous coat of the intestines, and constipation is most frequently to be attributed to the secretions not being formed in sufficient quantity, which is essentially necessary for the healthy action of the intestines; the consequence is, the fæces are retained longer than is customary with the individual. I know persons who seem to be in the exercise of their functions, and comparatively in good health, who do not have an evacuation over once a-week, and I know of some others who go from nine to thirteen days. Now this is certain in the end to give rise to gastric and intestinal disorder. They will sometimes, (the fæces,) collect in such quantity as to create a mechanical obstruction. One of the principal causes in my opinion, is that the biliary secretions are suspended, and from the want of the secretion of bile, torpor of the bowels is the consequence. In this opinion, however, I am not sustained by the weight of medical authority.

Treatment.—When called to a case of this character, you will generally find it obstructed, and your great effort will be to produce free evacuation as soon as possible, and for this object I will recommend various remedies that I have used with success. If, after you have tried castor oil, infusion of senna and salts or pills of aloes and colocynth with no advantage, you will have

to try podophyllin, croton oil, elaterium, &c., with the addition of turpentine enema and cold water.

I generally use the castor oil as follows: take castor oil 1 pint, oils of wintergreen and origanum aa. ʒ ss. Shake well, and give two table-spoonsful every two hours. Beach's composition powder of senna is a valuable hydragogue cathartic, it is, senna 1 lb., jalap ½ lb., cloves, ginger or spearmint, 2 ounces, finely pulverized together; I generally add five grains of cayenne pepper to each dose; it is given in doses of from one to two drachms, sweetened in water. The following cathartic I have used with decided effect in severe cases. Take

℞. Podophyllin, grs. x. (mandrake.)
Leptandrine, ℈ii. (black root.)
White sugar, ʒiss.

Mix intimately, give from five to ten grains every two hours, until free catharsis is produced.

Aloes, rhubarb and soap, is a favorite remedy with many, but I prefer, the following:

℞. Pulv. Aloes.
Assafœtidæ.
Soap, aa. ʒi.

Beat with water to form a mass, divide into forty pills, give from three to five.

When the constipation is very obstinate, either of the following recipes can be relied on:

℞. Elaterium, grs. vi.
Ext. of gentian.
Soap, aa. grs. ix.

Mix. Divide into twelve pills. Give from one to four.

℞. Tartarized sodæ, ʒi.
Ext. henbane, grs. vi.
Syrup of chamomile, fl. ʒi.
Water, ʒvi.

Mix. A spoonful every hour.

When there is a tendency to habitual costiveness I generally prescribe the annexed mixture:

℞. Sulphate of soda, ʒxiv.
Acetate of potassa, grs. xxv.
Nitre, ℈i.
Tartar emetic, gr. ss.
Water, pints, 2½.

Dissolve, and filter. Give wine-glassful.

The following has considerable reputation as a laxative in constipation:

℞. Flower of sulphur, ʒii.
Cream tartar, ʒvi.
Powdered fennel seed, ʒi.
Sugar, ℥ss.

Mix. A tea-spoonful two or three times a day.

In very severe and obstinate cases I generally resort to

℞. Croton oil, gtts. ii.
Mucilage gum arabic.
Distilled water, aa. ʒi.

Mix, and give a tea-spoonful every two hours until it operates. We assist in relieving the bowels by either of the following enemas:

Acetic acid, from one to three oz.
Barley water, ʒvi, or
Venice turpentine, ʒss.

Yolk of one egg.
Infusion of flaxseed, ʒx.
Linseed oil, ʒi.

Mix, and inject.

We have frequently relieved the patient by simple cold water injections. The extract of butternut, buck-bean, and ox gall are valuable remedies, the latter I think particularly so.

After you have succeed in removing the fæces, you must not continue your active cathartics, for the system soon becomes habituated to their use, they must be dispensed with if possible. When the individual is disposed to constipation and torpor of the intestines, a daily aloetic pill, with cold water enema at night, which should be retained, will generally afford relief, if accompanied with appropriate regimen.

Recently the "ox gall has been strongly advised as a direct solvent to accumulated hardened fæces, the consequence of deficiency of quality or quantity of bile in the alimentary canal." The following is the mode in which to administer it. Take

Inspissated ox gall, ʒii
Oil carui, (caraway) gtts. x.
Carb. magnesia, q. s.

Divide into thirty-six pills, give two, three or four times a-day

"A most important assistance to the remedy as above mentioned is the proper adaptation of diet and exercise. By simply eating bran bread, or bread made of unbolted flour, or corn bread, ripe fruit, or preserves, figs, stewed prunes, or a free use of molasses;" by these means the

bowels may sometimes be kept entirely soluble in constipated habits, without the use of any cathartic. Regular exercise on foot is the most preferable.

DYSENTERY.

This is an acute inflammation of the mucous membrane of (either the whole or a portion) of the alimentary canal; and a disease that is becoming quite prevalent in this climate.

When the inflammation is seated on the upper bowels, your patient will complain of a bitter taste, the appetite weak, and the tongue covered with a whitish fur; urine high colored.

If the small intestines should be involved in the inflammation, the tongue will present a brown fur, and the edges very red; the stools only mucous; some irritability of the stomach, and pain under pressure.

If the inflammation is chiefly confined to the lower bowels, you will have it accompanied with great pain, frequent desire to go to stool, with mucous and bloody discharges, terminating in what is frequently called bloody flux.

Symptoms.—There is almost a constant desire to go to stool, accompanied with the most excruciating pains, especially in the colon and rectum. Sometimes it makes its appearance suddenly, with griping mucous and bloody stools, without the least premonitory symptom. In general, the fever is developed before these symptoms present. There is little or no fæces discharged during the disease, and the violence of the pain affords a good diagnosis as to the degree and danger to be apprehended.

In protracted and violent cases, great prostration en-

sues, and frequently preceded by a colliquative perspiration, which is indicative of great danger.

The urine is always scanty and high colored, and the functions of the skin and liver are invariably disordered, in regard to perspiration and biliary secretion.

Causes.—Among the sporadic causes of dysentery, may be mentioned the immoderate use of green fruit, indigestible, unwholesome and irritating food of all kinds; drastic cathartics, vicissitudes of temperature and obstructed perspiration, and ill ventilated apartments.

I am under the impression that cold, or sudden variations of atmospheric temperature and humidity, must operate in conjunction with other general causes of an occult character, before the disease can become extensively prevalent.

Treatment.—In the treatment of this disease, I differ widely from most of my medical brethren, but I can assure you, if my treatment is followed, you will save, when the opposite treatment might prove the reverse. I generally commence the treatment, and at almost any stage, by opening the bowels with the following:—

℞.	Podophyllin,	grs. iv.	(Mandrake)
	Leptandrin,	grs. iii.	(Black Root.)
	Dover's powders,	grs. x.	

Mix, and divide into four powders. Give one every three hours, until the bowels are freely moved; if this should not act promptly, I substitute for the Dover's powders, cream tartar ʒii., and give as before directed, alternating with the following:—

℞.	Rhubarb,	
	Bicarbonate potassa,	aa. ʒi.
	Pulv. Ipecac.,	grs. xii.

Mix. Take a tea-spoonful of this mixture, add half pint of boiling water, sweeten, and give table-spoonful every hour or two. It is only necessary to administer these until free catharsis is produced; so soon as that is established, commence giving:

℞.	Sul. Quinine,	grs. xxiv.
	Pulv. Opii,	grs. ii.
	" Ipecac.,	grs. iv.

Mix, and divide into eight powders; give one every three hours.

If there is great debility, you can add capsicum to the above.

We generally give the following, during the whole course of the disease:

℞.	Tinct. kino,	ʒss.
	Tinct. catechu,	ʒi.
	Comp. tinct. opii,	ʒss.
	Tannin,	grs. v.
	Vini ipecac.,	ʒiiss.
	Mucilage gum arabic,	ʒiss.

Mix. Give a tea-spoonful every two or three hours.

I assist the action of the medicine in relieving the disease, by giving the following injection immediately after each action from the bowels:

℞.	Infus. hydrastis can., (golden seal,)	ʒi.
	Tinct. opii,	ʒss.—Inject.

If this treatment should fail to relieve the tenesmus and bloody discharges, as a dernier resort, I have given, and with good success, the following:

℞.	Corrosive sublimate,	grs. ii.
	Pulv. ipecac.,	grs. xii.
	" opii,	grs. iss.

Divide into eight powders; give one every three hours.

Where there is great irritability of the stomach, to relieve which I apply poultices of wheat bran and mustard, stewed in hot vinegar, to be changed when cool, sometimes substitute cloths wrung out of hot brandy, alternated with sinapisms.

We frequently use the common injection of Dr. Beach, and in violent cases have used the following with advantage:

℞.	Lunar caustic,	grs. ii.
	Tinct. opii,	ʒss.
	Water,	ʒvi.

Inject one-fourth every hour.

You will frequently find cases that the quinine will aggravate instead of benefiting the disease, in such cases you can administer opium in very large doses, with the happiest and best effects; and I have frequently combined with this mode of treatment the saline cathartics, with decided advantage. In connection with this, I generally, if I adopt this mode, give iodine injections, say,

Iodine,	grs. v.
Tinct. opii,	gtts. xx.
Water,	ʒii.

Inject two or three times a-day.

The following is a valuable recipe, for children laboring under this disease:

℞. Pulv. Leptandrin, (black root.)
" zingiber, (ginger,) aa. grs. vi.
" podophyllin, (mandrake,) grs. iss.
" cretæ preparat. (prep'd chalk,) grs. xii.
Loaf sugar, ʒi℔.

Mix intimately, and divide into ten powders. Give one every three hours, to a child from one to four years old.

The chalk mixture, with the addition of tinct. kino, ʒ., in tea-spoonful doses, is a good remedy for children. Hope's mixture has also considerable reputation, for this disease in children, it is as follows:

℞. Aquæ Camphoræ, ʒiv.
Acidi nitrici, gtts. v.
Tinct. opii, ʒi.

Mix. I give this in tea-spoonful doses every hour.

I append a variety of prescriptions, which I have used in this disease, with considerable benefit:

℞. Nitric Acid, ♏ii.
Opium, grs. iii.
Water, ʒii.
Syrup of cinnamon, ʒss.

Mix. A table-spoonful every hour, to be given in barley water.

℞. Bruised Ipecac., ʒii.
Boiling water, ʒxii.

One-third of the water is to be used at a time, so as to make three decoctions; these are to be united, and should amount to six ounces—one-third to be taken at a-time. If my memory serves me right, this is the

Brazilian method of treating dysentery, and it is much celebrated in the East.

I frequently use a strong decoction of the bayberry root, and have derived much advantage from it; it is highly extolled.

We cannot too highly estimate the value of podophyllin, ipecac. and leptandrin, as a remedy in dysentery; give a half grain of each every three hours, until it operates freely; you will find this a prompt and an efficient remedy.

A strong decoction of the common nettle has been advised in dysentery, in doses from two to four ounces.

Remedies, sometimes very simple in their character, frequently nevertheless possess great virtues in certain forms of disease, and this cannot be more fully demonstrated, than to assure you that salt and vinegar are in some parts of this union almost regarded as a specific, for this troublesome as well as dangerous complaint.

In a conversation with my friend, Dr. R. Baldwin, of Winchester, Va., a practitioner of extensive reputation and character, he assured me that he has given a teaspoonful of salt and a table-spoonful of vinegar, repeating it every hour or two, and derived more benefit from it in dysentery, than from any other remedy he ever used. It was communicated to him by Dr. Tucker, of Richmond, who, if I am correctly informed, has a high opinion of its value in this class of diseases.

Such authority is sufficient for the profession to test fully its merits.

The diet must be confined to the mildest kind of food, such as barley water, farina, and I particularly recommend the following:

℞.	Starch,	ʒvi.
	Water,	lbs. vi.

Boil till reduced to three pounds, and add,

Wine	ʒiv.
Lemon juice,	ʒi.
Simple syrup,	ʒii.

Mix and permit to cool. Or the following,

℞	Sheep suet	ʒii.
	Milk,	pint, i.
	Starch,	ʒss.

Boil slowly for half an hour. Use in small quantities.

In the chronic form of this disease, the above will be the proper diet; and the preparations of strychnine will generally give prompt relief.

DIARRHŒA.

Diarrhœa differs from dysentery in the peculiar character of the alvine discharges; it is true they are liquid and frequent, but they are not dysenteric in their character.

Symptoms.—A frequent desire to stool, evacuations generally watery, and if it is the result of acid or unwholsome food, the discharges present a buffy appearance; it is seldom attended with any pain. Every possible diversity, however, exists in the degree, duration and danger of the complaint.

Treatment.—Your first object must be to ascertain the cause, to inspect the evacuations, and your treatment must vary according to the character of the disease. If it is the result of irritant substances in the alimentary

canal, a brisk cathartic should be administered. If the stools are yellow or green, or you have any indications that it is the result of generated acid in the alimentary canal, we would advise an alkali. In such cases we frequently use the chalk mixture, with the addition of tinct. kino.

If you are satisfied, from the evacuations, that the secretions from the liver are in a manner suspended, you will find the preparations of podophyllin and leptandrin, given in small doses, well calculated to arouse that organ to action, and establish a normal condition of it.

After the administration of the podophyllin, we generally give the following:

℞. Tannic acid, grs. xii.
Syrup of rhatany,
" " gum, aa. ʒi.
Camphor water, ʒiv.
Mix, and give a tea-spoonful every hour.

To correct the secretions when the diarrhœa is the result of acid generated in the *primae viae*, (intestines,) I generally administer the following:

℞. Prepared chalk, ʒii.
Loaf sugar and gum arabic, aa. q. s.
Oil of cinnamon, gtts. iii.
Tinct. opii. ʒi.
" kino, ʒii.
" catechu, ʒi.
Distilled water, ʒiv.
Mix, and give a table-spoonful every two hours. Or

Beach's Neutralizing Mixture, which speedily arrests this variety. It is as follows:

℞. Rhubarb, pulv.,
Saleratus, pulv.,
Peppermint plant, pulv., equal parts.

To a large tea-spoonful add half-pint of boiling water; when cool, strain, sweeten with loaf sugar, and add a table-spoonful of brandy. Dose.—Table-spoonful or two, according to circumstances.

In the diarrhœa of children we frequently use the above; but an excellent remedy is powdered charcoal and magnesia, given in tea-spoonful doses,

If the disease is obstinate in its character, and does not readily yield, you can administer the following:

℞.	Sul. of copper, (green vitriol,)	grs. x.
	Pulv. opium,	grs. iv.
	Armenian bole,	
	Catechu,	aa. ʒiss.

Divide into 20 pills, give one every two or three hours, suspending all other remedies.

This should be followed by the following injection:

℞.	Bistort,	ʒi.
	Poppyheads,	ʒii.
	Water, one pint.	Infuse and strain.

The *rubus villosus* (blackberry) has long occupied the confidence of medical men in bowel affections. The best preparation is to take

Small roots of blackberry, ʒi.
Water, a pint and a half.
Boil down to a pint and strain.

Dose one or two ounces, three or four times a day.

The following syrup is highly recommended by Dr. Beach and others, in the chronic form of this disease, either in children or adults.

Take two quarts of ripe blackberries, add one pound of loaf sugar, half an ounce of nutmeg, half an ounce of cinnamon, quarter of an ounce of cloves, with the same amount of allspice; boil altogether for a short time, and when cold, add one pint of good French brandy. After standing for a few days in a close vessel or bottle, it may be strained. This makes a pleasant syrup. Dose from a tea-spoonful to a wine glass full, according to age, three or four times a day.

In that variety of diarrhœa, accompanied with pain, Hunn's drops will afford the most speedy relief; it is composed of equal parts of oils of cajeput, cloves, peppermint, and anise, each one ounce; rectified alcohol, four ounces.

Dose from one to two drachms, in hot brandy and water, sweetened, or in simple syrup, or mucilage of slippery elm.

CHOLERA MORBUS.

Cholera morbus, like diarrhœa and dysentery, is a disease of the stomach and intestines, and the symptoms which characterize it are closely allied to diarrhœa, with this difference only, that there is severe vomiting, accompanied with griping pains in the region of the stomach, frequently very intense.

Causes.—The principal one, in my opinion, is irritating and indigestible food. Fruits of almost any variety run into a state of fermentation, and generate in the stomach and bowels a superabundance of acid, which

has a great tendency to produce irritation of the mucous membrane of the whole alimentary canal.

Symptoms.—The premonitory symptoms are heart-burn, and eructations of an acid character, which are soon followed by vomiting and purging, accompanied with the most excruciating pain, which is at times peculiarly severe in the umbilical region (navel). As the disease advances, the pulse sinks, the blood recedes from the surface, the extremities become cold, a clammy perspiration follows, terminating in hiccough and cramps, and unless reaction is speedily produced, will in many cases, especially in feeble constitutions, terminate fatally.

Treatment.—Your first object will be to administer such remedies as will neutralize the acid, which, in my opinion, is almost the universal cause of the disease; the remedy that will fulfil this indication to your satisfaction, is Beach's Neutralizing Mixture, (see prescription under the head of diarrhœa.) I generally combine with each dose about one fourth of a grain of morphine, and administer two table-spoonfuls of the mixture at least every half hour. I frequently alternate this with the chalk mixture. Should the symptoms not be subdued under this treatment, and there should be evident prostration, I give small portions of brandy in combination with capsicum occasionally, and prescribe a mucilaginous injection, with at least a tea-spoonful of the bicarbonate of potash, and the same amount of laudanum to be used with it. Warm fomentations to the abdomen will generally allay pain and remove the cramps; for this purpose hops dipped in hot vinegar will answer well.

Hunn's drops, of which we have already had occasion to allude, will be found of great advantage in controlling the discharges. (See *Diarrhœa.*)

ASIATIC CHOLERA.

I shall not attempt a detailed statement in reference to the history, causes, nature and character of this disease; but I shall premise by saying that, so far as I have noticed it in this city, it has not altogether exhibited that uniformity in the peculiarity of its symptoms which has been ascribed to it in many other places. The premonitory symptoms that I have observed here, begin with soreness, pain, distention and flatulency in the stomach and bowels; this is soon followed by a frequent, violent vomiting and purging of *bilious matter*, with severe tormina, heat, thirst, and a hurried respiration. There soon follows great depression of strength, with cold clammy perspiration, cramp of the extremities, with a sinking and irregular pulse, the countenance becomes hippocratic, the color of the skin of a purple tinge; collapse follows, which quickly terminates in death.

It is true that diarrhœa, nausea and vomiting were the marked symptoms in a very large proportion of the cases, but there were some cases without any nausea or vomiting.

Pathology.—I wish to call your attention to one fact in relation to its pathology. Post-mortem examinations reveal the true changes which take place during the disease; and it is these changes that should be well observed and remembered, as they are sure guides in the treatment.

The only morbid change which is developed, upon post-mortem examination, is *congestion*. "In 96 cases examined by Drs. Parkes and Massie, nearly every organ was congested."

Treatment.—In the Eclectic Medical Journal of April,

1849, I published an article upon the treatment of this disease. Then, as now, I called the attention of the profession to the pathology of the disease, and showed that it had a strong analogy to congestive fever, from the fact that in both diseases the blood recedes from the surface, and *congests* itself in and upon the internal organs. Now, any remedy that would have a tendency to produce re-action in one, would most likely be followed by the same results in the other; consequently I contend that the *cold dash*, which is so universally acknowledged in congestive fever as the most efficient remedy to produce reaction, will, if given in time, be followed with like results in cholera. The great misfortune has been, that this remedy has been looked upon as a dernier resort, and the time for its administration is postponed to that period when probably nothing could be used that would effect any good. I believe I was the first to suggest this remedy, and I am from experience satisfied that it is the great sheet anchor in producing reaction.

I am not so bigoted or so wedded to any system of medicine as to be its champion to the exclusion of others. I consider I have a perfect right to investigate all of the different systems, and avail myself of any information which I may deem important and true; and I will premise by saying, that the treatment I adopt now for cholera, has been attended with more success than when I treated it under different systems.

Your treatment will have to be regulated by the condition of your patient at the time you are called in, and one leading indication will be, in either the confirmed or collapsed stage, to *establish reaction*, and produce a determination to the surface, inducing perspiration.

If I am called at an early period of the disease, even when there is nausea, vomiting and diarrhœa, I commence the treatment by giving equal parts of rhubarb root, pulverized saleratus, and peppermint plant powdered—one pint of boiling water being added to half an ounce of this compound. After simmering it for half an hour, sweeten with loaf sugar and strain, and when nearly cold, two or three table-spoonsful of good French brandy should be added. Give two table-spoonsful of this, taken warm, in connexion with the following preparation, viz:—

℞. Pulverized cinnamon, cloves, and gum guaiacum each 1 oz., good brandy 1 quart, given in two tea-spoonsful to a table-spoonful every fifteen or twenty minutes, to an adult.

The patient should be well covered with warm clothing, and bottles of hot water, bricks and stones placed around his body. This course is almost sure to be followed by a moderate moisture of the skin, which should be kept up for eight or ten hours; to do which I give ptisan of catnip or spearmint, and apply hot tincture of cayenne, by flannel cloths over the abdomen; if this fails to keep up the perspiration, I administer the following, viz:

℞.	Camphor,	grs. x.
	Ipecac.,	grs. v.
	Opium,	grs. iiss.
	Super carbonate of soda,	℈ii.

Mix, and divide into two or three powders; give one every hour, or oftener. In those cases however, which are marked by violent vomiting and purging, from the commencement of the disease, and which have not

already passed into the stage of collapse; or if this train of symptoms are present at the time I am called to the patient, whether the attack commenced with them or not; in the stage of collapse, or that stage approaching to it, I then commence the treatment with the *cold dash*. Strip the patient—I generally make the assistants hold him up—turn from five to fifteen buckets of cold water upon him, in quick and rapid succession; immediately wrap him up, without wiping, in a hot blanket; apply bottles of hot water and hot bricks all round him; immerse his feet in a hot ley bath, and if the vomiting has not ceased, assist its action, by giving the following compound:—Take of the saturated acetous tincture of sanguinaria canadensis, (blood root), of lobelia inflata, tinctured in the same manner, in vinegar, and spiritous tincture of the aralia spinosa, (Southern prickly ash), equal parts, and give it in doses of from one to two table-spoonsful or more, mixed in warm water, or catnip tea, every ten minutes, until vomiting is freely produced.

The simple prescription of salt, pepper and vinegar generally acts promptly. Your most urgent indication will be, as I have heretofore said, to produce an equilibrium in the circulation, the compound tincture of guaiacum, as suggested before, is a valuable recipe to fulfil this indication, and in very urgent cases, I have used tincture of camphor, ʒiv., essence of peppermint, ʒiv., syrup of ginger, ʒss., tincture of cayenne, ʒi. A table-spoonful, from one to four in an hour.

I have given the saturated tincture of prickly ash, with the compound tincture of guaiacum, with good effect, in doses from a tea-spoonful to a table-spoonful every fifteen or twenty minutes. When there is exces-

sive irritability of the stomach, the following injection should be given after every discharge. Take—

Saturated tincture of prickly ash,	ʒss.
Water,	ʒi.
Tincture opii,	ʒss.

In a case or two of collapse which I treated, after the cold dash I applied blankets over the whole body, as hot as could be handled, after dipping them in boiling water, removing and replacing every fifteen or twenty minutes, which I have no doubt assisted the reaction. In connection with this I gave a preparation composed of equal parts of the oils of peppermint, cloves, anise, cajeput, with half of the whole amount of alcohol, given in a tea-spoonful every ten or fifteen minutes in a glass of hot brandy toddy.

"Whatever may be given by the mouth or in the form of injection, you must not forget to put in requisition the whole train of external excitants, sinapisms over the bowels and spine, cold dash, hot bricks, &c.," and I am fully under the impression that it is best to try and establish the reaction before you commence giving any remedy of a stimulating character, especially when there is active congestion.

The following is a prescription that is highly extolled, viz:

℞.	Calomel,	ʒi.
	Opium,	gr. i.
	Sugar of Lead,	grs. v.
	Cayenne,	grs. vi.

Mix, and divide into four parts, one to be taken every two hours. In our hands this recipe has never met our

expectations, and although I am aware that the advocates of this administer the calomel with the view of restoring the secretions, I am satisfied from my experience in cholera that it fails to do this; the lead, I think, exerts too depressing an influence in this disease when reaction is established; by substituting quinine for the lead, I would have no doubt that it would be a valuable remedy.

Dr. Hempel, a homœopathic physician, speaks in high terms of the spirits of camphor, ipecac., veratrum and cuprum. I have used the tincture of aconite, ten drops to ten spoonsful of water, and given two teaspoonsful every five minutes, I think, with some advantage; the veratrum and cuprum, may, and I think will arrest the discharges in *very mild* cases. But, in short, the homœopathic treatment *will not do to rely on in cholera.*

Dr. Bird, and Professors Herrick and Blany, extol *sulphur* as a *specific* in this disease; this is strong language; they say, "so far as its efficacy has been tested in the *worst stages* of *collapse*, most satisfactory results have been obtained. In two or three cases of the kind, the effect of the remedy has been to bring back pulse to the wrist, restore warmth to the surface, and stop the profuse diarrhœa and vomiting. *In truth*, the results obtained so far, have been such as to convince all of us who have administered it and witnessed its effects, that if any remedy deserves the appellation, this is the *specific* in *cholera.*" They give four or five grains every three or four hours.

The following remedies have a weight of testimony in their favor that entitle them to consideration, viz: Nitric acid, fl. ℈ii, opium, grs. ii, syrup of cinnamon, ℥ss,

water, ʒii. Mix. A table-spoonful every hour in barley water.

A liniment, which is used as a rubefacient in cholera,

℞. Nitric acid, ʒii.
Oil of turpentine, ʒiii.
Theriac honey,* ʒi.
Alcohol, ʒvi.

To be freely applied to the surface.

℞. Subnitrate of bismuth, grs. viii. (purified bismuth.)
Opium, gr. i.
Sugar, ʒii.

Mix, and divide into four powders. Much praised in cholera, one to be taken every two hours.

℞. Dried hemp tops, any quantity; boil in alcohol until all the resinous matter is dissolved. Strain, and evaporate to proper consistence.

Dr. O'Shaughnessy speaks in high terms of this in ten grain doses, to be increased as occasion may require.

℞. Acetate of lead, ϑi.
Opium, gr. i.
Conserve of roses, q, s.

Mix. Divide into twelve pills. One every hour at

---

* If this is the remedy that holds its place in the Codex of the *Faculte de Medicine* of Paris, it will be difficult to procure; it was originally composed of sixty-one ingredients, and they have since added an additional number; it would not do for me to say that this is discreditable to the profession, as that which is *foreign* has heretofore been highly appreciated by Americans.

first, then every two hours. A favorite of Dr. Graves of London.

℞. Chlorate of potassa, grs. vii.
Muriate of soda (common salt), ℈i.
Carbonate of soda, ʒss.

Mix, and give for a dose. It is highly recommended.

℞. Bicarbonate of potassa, grs. x to xv.
Mint water, ʒvi.

Dissolve.—A spoonful every hour. This is highly spoken of.

The following plaster has a weight of testimony in its favor, which inclines me to the opinion that it is a valuable agent.

℞. Simple plaster, ʒvi.
Resin, ʒii.

Melt together, and add:

Sulphate of quinine, ʒi.
Oil of cajeput.
Camphor, aa. ℈i.

Mix.—This to be applied over the stomach.

Prof. R. S. Newton says, he has cured several cases of cholera, in the collapsed stage, by giving doses of ten to fifteen grains of tannin, every ten or fifteen minutes, until the discharges ceased, and continuing it afterwards at longer intervals, with other treatment.

The prickly ash (I mean the Xanthoxylon Fraxinlum, not the toothache tree) has been extolled, and deservedly so, in this disease. It was extensively used by the eclectic physicians of Cincinnati, and with great success—it acted like electricity, so sudden was its in-

fluence over the system; indeed, many patients likened its action to an electric shock, which seemed to diffuse itself throughout the whole frame. We gave it in teaspoonful doses, slightly diluted, and repeated, according to circumstances, every five, ten, or fifteen minutes, with a stimulating injection, to be given immediately after each discharge from the bowels, and retained by the patient as long as possible. This is one of our most valuable agents. Dose of the tincture of the berries, as a carminative and antispasmodic, ten to thirty drops, three or four times a day. Used by some during the intermissions, as a remedy in intermittent fever, which it is said to remove speedily. There is a material difference, in their influence on the system, between the tincture of the bark or that of the berries, which should always be had in view. A patient with cholerine came very near losing life, in consequence of using the tincture of the bark instead of the berries, as prescribed; the druggist who filled the prescription supposed the properties of each were similar, and that they could be safely substituted the one for the other.

During the cholera of '49, '50, '51, Hunn's Drops were used extensively by eclectics. There is no question but that it is an invaluable remedy, and should be kept by every physician, druggist, and family. For its recipe, see *diarrhœa*.

CHOLERA INFANTUM.

This disease is always febrile, accompanied with more or less diarrhœa, before the vomiting commences; it is one of the most fatal to which children are liable.

Symptoms.—It is almost exclusively confined to cities,

it is a rare disease in the country. Some authors attribute it to the irritation of dentition, and contend that that is the principal cause of this affection. There must be some others, from the fact that the disease seldom appears in the country. It may be the impure air of cities (see our article on yellow fever), by which the infantile system is rendered irritable, and peculiarly predisposed to suffer disturbance from the irritation of of dentition.

The evacuations are generally devoid of bilious matter. It assumes soon a chronic form, which speedily creates great weakness, emaciation, and prostration. The disease seems to affect the brain; in this variety insensibility and coma soon follow. The pulse is frequent and tense; sometimes griping pain, increased on pressure. When the disease has progressed some time you have aphthæ, and very frequently a cankerous mouth.

Treatment.—Your first indication is to remove the causes. With a proper attention to diet and clothing, with a change of atmosphere, your patient will generally recover without the aid of medicine. It is only where the complaint is of long standing, or where there is evident inflammation, that medical treatment is essentially necessary. The clothing should be of that character, as not to oppress the child, but to preserve an equal temperature of the body. When treatment is essential, I generally give a diaphoretic to produce a gentle perspiration, followed by laxatives and antacids generally, to remove the irritation from the alimentary canal. If the liver is torpid, the secretions must be established; and if there should be excessive evacuations, you must arrest them by astringents. The gums if inflamed

should be freely scarified, and blisters are highly extolled; they should be placed behind the ears.

If there should be excessive vomiting, apply a mustard plaster to the stomach; if there should be much fever, give an infusion of benne leaves, or a small portion of Dover's powders. Whatever fluid is used, must be in very small quantities, so as not to irritate the stomach. To arouse the secretions of the liver, if they are suspended, we give the following:—

℞.	Podophyllin,	gr. i.
	Opium,	gr. i.
	Acetate of lead,	gr. i.

Mix, and divide into eight powders. Give one every two hours. If there should be excessive evacuations, we generally give either of the following:—Sheep's suet, ʒii.; milk, 1 pint; starch, ʒss. Boil slowly for an half hour, and give it in small quantities at a time; or, make an emulsion; take of poppy ʒss.; argillæ, pure, ℈ii.; syrup althæa, ʒss. Mix, and give in doses of a tea-spoonful.

When the irritability of the stomach ceases, it will be necessary to administer, in addition to the podophyllin, remedies to evacuate the bowels; for this purpose, rhubarb and magnesia are well adapted. I have frequently used, with the most beneficial results, mercury and chalk, and this is peculiarly applicable when the stomach is irritated and the secretion of bile deficient.

In obstinate cases, and where there was excessive discharges, I have administered Hope's mixture with decided benefit. The following is the recipe, viz:

Camphor water,	ʒiv.
Nitric acid,	gtts. iv.
Laudanum,	℈ii.

Mix, and give half tea-spoonful every hour or two. (If the nitric acid is added in larger proportion, it is liable to defeat the object of the prescription.)

To arrest the vomiting, if the mustard plaster fails, I generally use a clyster of five or six drops of laudanum in thin starch. You will find this useful throughout the complaint.

The diet should be either fresh cow's milk, diluted with water, or any of the farinaceous liquids, prepared from *parched* rice, sago, or arrow root.

We have had occasion to allude to the leaves of raspberry, in decoction with cream, as beneficial in allaying nausea; and if you combine it with aromatics, you will find it a good remedy in cholera infantum.

The common nettle is a well known plant, and a strong syrup made of the root, combined with suitable quantities of wild cherry bark and blackberry root, forms an excellent remedy for all summer complaints of children.

Dose of this decoction from a drachm to an ounce.

COLICA.

Colic has some analogy to enteritis, (inflammation of the bowels,) but there is one prominent system that will aid you in a diagnosis. *Pressure* gives ease in colic and increases the pain in every description of intestinal inflammation.

There are different varieties of colic, arising from different causes, such as nervous and bilious colic, flatulent and lead colic, the latter a very painful and dangerous disease; every variety is generally attended with costiveness and severe pain of the bowels.

When colic arises from indigestion, the preparation

of rhubarb and magnesia, with a small portion of morphine, will give speedy relief.

Flatulent Colic frequently arises from obstructed perspiration, but most commonly from vegetables, which, from indigestion ferment.

Treatment.—Hot brandy sling, strongly impregnated with any of the aromatic substances, generally gives relief. I frequently use raw brandy and camphor. You will meet cases, however, where this will fail; you will then apply warm fomentations to the abdomen, and give either of the following, viz:

Wormwood, tansy, centaury, bog bean, equal parts; pure brandy, one hundred and fifty parts, and carbonate of potash one part; digest and filter. Give one or two drachms, according to circumstances. Or, give Dewees' Carminative—℞. Carbonate of magnesia, ʒss.; tincture of assafœtidæ, ʒi.; tincture opium, ʒss.; sugar, ʒi.; water, ʒi. This can be given to an adult for a dose, but to infants, fifteen or twenty drops at a time.

Frequently, friction over the region of the navel, has a tendency to cause the gas to escape. The tinctures of the berries of the Southern prickly ash has been advantageous in violent colic.

Hunn's drops are valuable in colic. (See *Diarrhœa.*)

Bilious Colic is generally the result of long continued constipation, and this, in my opinion, is the result of torpidity of the liver, it not secreting bile in sufficient quantities, which is the natural stimulus for the healthy action of the intestines. Constipation, or its opposite, frequently ensues; some contend, however, that it is from a redundancy of bile. I am strengthened in my opinion, from the fact that it is generally extremely

difficult to produce bilious discharges, and when once established, the patient is comparatively relieved.

Symptoms.—There is generally great irritability of the stomach, a bitter taste and great heat, attended with very acute pains about the region of the navel, shifting frequently to various parts of the abdomen, and generally little or no discharge of urine.

Treatment.—To allay the vomiting, I give a drop of kreosote, if this does not have the desired effect, I generally give a table-spoonful of the neutralizing mixture, as recommended in cholera, at least every half hour. To relieve the bowels and arouse the secretions of the liver, I give the following:

℞. Aloes, ʒi., gamboge and extract of eupatorium perfoliatum, (boneset,) ʒss., castile soap, ℈i., extract podophyllum, lobelia seeds pulverized, and extract gentian, aa. ℈i., capsicum x. grs., oil of cloves, gtts. 4. Warm the extracts until they are soft, add the other articles in fine powder, mix intimately and divide into 5 gr. pills, as an active cathartic, give from four to six.

You will find cases where the pain is so acute, that you will have to use anodynes from the commencement. In such cases I give morphine, until I allay the irritation; before I give the cathartic pills, their action should be assisted by stimulating enemas, and where there is much pain, two or three scruples of laudanum can be added to the injections with advantage.

Where the disease is very violent in its character, the warm bath should be resorted to, in connection with the other remedies.

Let your enemas be composed of salts and opium, or oil and turpentine. Fomentations of hops in hot vinegar, should be applied to the abdomen.

The *Dioscorea Villora*, (mild yam,) has been successfully used in bilious colic, in doses of half a pint at a time.

PAINTERS' COLIC.

This species of colic especially, in regard to the severity of symptoms, differs materially from the other varieties.

Symptoms.—Violent pain at the pit of the stomach, a hard and quick pulse, excessive thirst, violent constipation, frequent desire to stool, without being able to evacuate anything; a frequent vomiting, the muscles of the abdomen seem to contract into knots. Painters' colic exhibits an example of slow poisoning, it is produced in lead mines and lead works, and painters and glaziers are particularly liable to it, by inhalation, and not unfrequently by drinking water impregnated with lead. The metal being introduced into the system in a soluble form, makes its way elsewhere among the tissues, and lays the foundation of chronic and frequently returning pains.

Treatment.—Diluted sulphuric acid or sulphuretted waters, render lead insoluble in water, whether in the body or out of it, and they have therefore been prescribed as the standard remedies for painters' colic. Observation, however, has shown these remedies, though they assuage or remove the symptoms of the disease, still leave the lead, (which caused it) diffused in an inert state through the body, ready, when favorable conditions arise, again to act injuriously on bodily

health. Mr. Melsen, I think, has perfected this subdivision of chemical physiology, and has pointed out the means both of detecting the lurking presence of the metal in the system, and of entirely expelling it as a cause of disease. A substance known in chemistry, under the name of *Iodide* of *Potassium*, is capable of decomposing the insoluble compound of lead, and of bringing the metal into a new condition, in which it readily dissolves in water. If the system is impregnated with lead, there will be an effort on the part of nature to throw it off; the metal makes its way through the kidneys, and can be detected in the urine. Now, if you cure by sulphuric acid or sulphuretted water, with the pain the lead disappears from the urine, but remains in the system, give a dose of the iodide of potassium, and the pains of poisoning return, and lead reappears in the urine. A large dose will prostrate again with colic, but small doses at frequent intervals, will gradually cleanse the system of the lead, without any sensible suffering.

You have here a remedy that is a specific for painter's colic, when caused from lead. Its value will be appreciated in this disease, as well as in *salivation*.

You will find cases where the pain is so violent you will have to resort to remedies to allay the irritation. For this purpose I frequently give the *extract of belladonna* in large doses, and have administered, in this form of colic as well as spasmodic, *chloriform*, in increasing doses, from 20 to 140 drops, in the twenty-four hours, with the happiest effect.

Dr. Hester, of New Orleans, advises the sulphate of alumina, from one to two drachm doses, and has seen the most complete success in more than one instance.

I have given croton oil in combination with hyosciamus or belladonna, in drop doses, and it answers well in either combination to allay irritability and produce evacuations.

In violent cases the treatment of this variety is nearly the same as in bilious colic. Your main reliance, to effect a permanent cure, is on the *iodide of potassium*.

Letters on Constipated Colic, vulgarly called Patent-Dry-Belly-Ache.

We have received from a friend the manuscript copies of two letters upon this subject, from the pens of Dr. A. Smith and Dr. Bowers. It is with pleasure that I insert them in my work, together with the notice of the editor of the New Orleans Medical Journal. I have never met a case of the character, and am really thankful to my friend for the MSS.

"The following communications have been kindly transmitted to the editor by Dr. Ashbell Smith, of Galveston, Texas, describing a peculiar affection, vulgarly called "patent-dry-belly-ache," but the physicians designate it "constipated colic." One of these letters was addressed to Dr. Smith by Dr. Bowers, of Brazos Santiago, in answer to some inquiries of the former gentleman addressed to the latter. Both these letters will be found highly interesting, and we invite the attention of the reader to the subject."

Galveston, Texas, March 10th, 1849.

My Dear Dr.:—

In the summer of 1847, there prevailed in Galveston, an epidemic colic, which went by the common name of patent-belly-ache; whence or why it took the epithet, "patent," I cannot conjecture. It proved fatal to three

of the oldest residents of the City, perhaps to others, about whom I have no information.

I did not see either of the three cases alluded to above, but was told by the medical gentlemen attending them, that after an illness of a few days, the fatal termination took place very suddenly. A post-mortem examination of one of the cases was made, at which I assisted. Owing to the heat and disagreeable odor exhaled from the corpse it was very incomplete; moreover, the notes which I took have been misplaced in the confusion of my papers, by reason of a fire which occurred on the lot adjoining me a few days since. I can, however, state from memory, that the omentum was entirely infected, glued in some two or three points to the intestines, and that in these points the intestines were ulcerated and perforated. The perforations were from a half line to two or three lines in diameter, and smeared about their edges with thick green pus. The examination was so imperfect that I will not attempt, especially in the absence of my notes, to speak of the mucous coat of the alimentary canal, nor even to decide whether the ulceration commenced on the mucous or serous surface of the intestines. The perforation, however, appears to me to explain the suddenness of the death in the case examined, and I incline to think that a like phenomenon took place in the other suddenly fatal cases.

I had several cases in my practice, but I shall not attempt to describe minutely the disease. The prominent symptoms, as presented to me, were severe abdominal pains, with most obstinate constipation; to these were very uniformly joined, general uneasiness, more or less anxiety, and great muscular prostration. The disease was seldom accompanied with fever. The symptoms

subsided, and the patient became convalescent, on obtaining free, copious, fæcal and bilious discharges. I still entertain doubt whether such discharges are to be regarded as the cause, or an effect of the solution of the disease. Sometimes the disease subsided so suddenly and completely, that I suspected an intus-susception suddenly restored; if there existed intus-susception, it was without strangulation.

The most successful treatment here, according to my observation, consisted in free cupping over the abdomen, general bleeding, calomel and opium, succeeded by castor oil, and oil of turpentine and warm bath.

For a much better account of the symptomatology and details of treatment of this disease, I beg to refer to the accompanying letter of the judicious Dr. Bowers, of Brazos Santiago.

As to the causes of this disease, I am quite in the dark. It appears to me to be obviously allied to the colics which have prevailed at various times in different parts of the world, and received names either from their localities or from their supposed causes; still the "patent belly-ache," or "constipated colic" of the coast of Texas, has relations to another disease of importance prevailing occasionally in this region, to which relations I shall draw your notice briefly before closing this letter. To return to the causes: Dr. John Taylor, a skilful practitioner of this city, attributes the colic in question to the excessive use of ice water as a beverage. The vicissitudes of heat and cold, in what way soever produced, perhaps sometimes a hot mid-day sun, with cool and humid nights, seem to me to be among the probable assignable causes; and, according to my recollection,

Baron Larrey has attributed a somewhat similar colic epidemic to such vicissitudes.

What relationship or resemblance has the Texas colic in question to the dry-belly-ache of the West Indies? I never saw the dry-belly-ache of the West Indies, nor can I now investigate the matter by reference to books.

I have stated that the patent-belly-ache prevailed here in 1847; it was succeeded by epidemic yellow fever, the latter epidemic seeming to take the place of the former.

I was absent from home during the hot season of last year, 1848, but I am certainly informed that the patent-belly-ache or constipated colic prevailed here during the last hot season, the summer and autumn of 1848, and that it was succeeded and appeared to be displaced by the yellow fever, in the same manner as happened the preceding year. I may here state that the number of cases of yellow fever in this city last year was very small, owing, perhaps, in a great measure, to the small number of unacclimated persons.

Mentioning these facts to Dr. John H. Bowers, of Brazos Santiago, he informed me, that during the hot season of 1848, a constipated colic, like that which I have attempted imperfectly to describe, prevailed as an epidemic at Brazos Santiago; that it was suddenly displaced or superceded by epidemic yellow fever; that after a period, yellow fever wholly disappeared, and the constipated colic or patent-belly-ache resumed its reign.

I begged Dr. Bowers to draw me up an account of these facts, and of the colic in question, which he has obligingly done. I have taken on myself the liberty of transmitting his communication to you, thinking that his facts possess interest for the medical public, and

that you may deem them worthy of a place in your journal. From an acquaintance of many years with Dr. Bowers, I esteem him an accurate observer and very skilful practitioner, indeed, in the experience and treatment of the diseases of our climate, I do not know that he is surpassed.

I sat down to write a few words explanatory of the accompanying letter of Dr. Bowers, they have extended to a long letter, yet I find on looking over what I have written that what I have stated would be incomplete without a few additional remarks.

I am not aware that a constipated colic or the patent-belly-ache has prevailed at Galveston previously to 1847. Galveston was commenced to be built in the spring of 1838; in the autumn of 1839 it was ravaged by yellow fever, it then contained about 2,500 inhabitants. Whether that epidemic was preceded by any other disease cannot now be certainly ascertained. I did not take up my residence in Galveston until about a week previously to the appearance of the yellow fever that year. I have not spent an entire hot season in Galveston since 1841, with the single exception of the year 1847; but on inquiring of others I cannot learn of the existence of the "colic" previously to 1847; since the settlement of Galveston to the present time, yellow fever has prevailed in 1839, 1844, 1847, and 1848, in this city.

I have not intended to intimate the opinion that the "colic" and yellow fever have any relation to or connection with each other, much less would I intimate that they are different forms of the same disease. I only give the facts and coincidences for what they are worth.

I remain, yours, &c.,

ASHBELL SMITH.

The following is the letter of Dr. Bowers, referred to by Dr. Smith:

Galveston Bay, Texas, January 30, 1849.

My Dear Doctor,—

I write you a few hurried lines in answer to your request, regarding the diseases which prevailed on Brazos Santiago, in the course of last summer, and only premise it with the remark, that I write entirely from memory, my time, during the season, having been so occupied, that I could not take any notes, being obliged to be not only both physician and apothecary, but in a great measure nurse also.

I returned from my visit to this part of the country, to the Island of Brazos Santiago, about the tenth day of July, 1848, and found many persons sick with a kind of colic, called by the people by the trite name of "patent-belly-ache." The symptoms were severe pains in the abdomen, which could be partially relieved by pressure, obstinate constipation, bilious vomiting, acid eructations, great restlessness, loss of appetite, and great wakefulness—the patient being wholly deprived of sleep. In a few of the more severe cases, the nervous system was more or less implicated, and in every instance the mind of the patient was despondent. The pulse was generally of the natural standard, but sometimes it was full, hard and tense. In three or four instances, there was considerable fever, but most cases were without any general vascular excitement; the tongue was thickly covered with a slimy yellow or dark brown coat. The most singular symptom, and the one that struck me most, was the appearance of the eyes, which were red, swollen, and resembling those of a drunken person.

In the more aggravated cases, the pains were not confined to the abdomen, but extended to the back, loins, arms, and soon to the head. No fatal cases occurred in my practice, but I frequently heard of persons dying of the disease, both at the Brazos and at the mouth of the Rio Grande. I understood the disease prevailed as high up the river as Matamoras and Brownsville, where some deaths occurred. Relapses were very frequent; I attended many who suffered with it twice, and not a few three times. The duration of the disease was from twenty-four hours to fifteen days, but it commonly yielded in four or five days.

When called upon to attend a case of colic, the first indication was to allay the distressing vomiting, which was generally accomplished by applying large sinapisms over the stomach, and keeping an immovable position on the back. I then gave a mercurial purge of fifteen grains calomel, with twenty of rhubarb and one-quarter grain morphine. If the stomach rejected the medicine, I directed warm pediluvium frequently repeated, the mustard plasters to be re-applied; injections of soap and water or salt and water to be given every half hour or hour, and then the calomel, rhubarb and opiate to be administered again. Sometimes I had to omit the rhubarb, as the stomach could not be made to retain it; in those cases the quantity of calomel was doubled, six or eight hours following this, a large dose of castor oil and spirits turpentine, or an infusion of senna, rhubarb and manna, with a little sulphate of magnesia, was exhibited, but always being careful to re-apply the mustard, else the stomach would reject the medicine.

The most potent remedy, however, and the one which never failed me in a single instance, was blood-letting,

employed ad deliquium. I first tried it in the case of a strong muscular German, whose pulse was very hard and full, and who had suffered from the disease in its most aggravated form, for seven or eight days, without receiving the slightest benefit from the ordinary treatment. I opened a vein in his arm and let the blood out by a large orifice. It took about forty ounces to produce fainting. Syncope removed the pain immediately and completely, and in less than one hour his bowels moved largely and freely. He was de facto convalescent. Two days after, he was at his usual work. The success in this instance was so complete, as to induce me to make further trials, and I found that in many instances, the medicines would operate under the lancet and before I could tie up the arm; in a few other cases, additional medicines were required after venesection, but they were then easily kept upon the stomach, and operated speedily. In every single instance, bleeding removed every vestige of pain. I never bled at the onset of the disease, as I had but few opportunities of seeing it in the forming stage, and thought it better to exhibit purgatives first; neither did I bleed every patient, as it seemed to me they all would not bear the lancet equally well. In debilitated subjects, even when the pulse was rather full and active, I preferred dispensing with it, but in robust plethoric persons, I never hesitated one moment.

After the disease had yielded, and the patient could be prevailed upon, I gave quinine. Five grains, twice daily, continued for four or five days, was thought sufficient. It is a singular fact, that of all the persons who took the quinine, but one, as far as I recollect, suffered a relapse.

The cases were very numerous, particularly towards the end of July, and but few persons escaped the disease. It is, however, a singular fact, that masters of vessels and their crews were frequently attacked with the disease, as soon as they came into soundings, and were fairly in view of the shores.

They came from ports where the disease was said not to prevail. About the middle of August, the colic epidemic suddenly ceased, and yellow fever made its appearance on the island, which differed in nothing from that of the previous year, except that most cases originated on the island.

My treatment was also unchanged. I witnessed no fatal cases, though instances of black vomit occurred in the hospital as well as at Point Isabel. This yellow fever epidemic, if epidemic it may be called, as it was not near as general as the first-mentioned disease, lasted about three weeks, when it disappeared again, and gave place to the colic, which latter remained on the island, at the mouth of the Rio Grande and at Point Isabel, until cool weather set in.

I never have been able to understand the cause of the sudden cessation of the colic epidemic, and its giving way to yellow fever, nor of the disappearance of yellow fever and the re-appearance of the first disease. The weather during the time was fine, and without any marked change. The heat was rather greater than the year previous, and the weather more sultry; we also had more northerly winds.

In September heavy gales, with rain, occurred from the north and north-east, and the whole of Brazos Island was several feet under water, with the exception of the sand hills.

There were then many cases of colic on the island, but still the disease was on the decline. When the waters left the land, no increase or diminution of the disease took place, and no change in the type. I am unable to say whether persons arriving on the island after the storms, and who had not been exposed to the predisposing cause previous to them, suffered from an attack of the disease; but I can bring no instance of the kind to my recollection. The last cases I attended, occurred in November.

I report the following as illustrating the nature and treatment of this singular affection:

Case of Epidemic Colic, with Spasms.

Mr. Gerger, a former United States wagon-master, called on me in August, 1849, for the purpose of putting himself under my medical care, suffering with the prevailing disease, which was called "patent belly-ache." He had but just recovered from an attack of yellow fever, and his skin was yet intensely yellow. The treatment differed in nothing from that of other cases. The second or third day after he was in my charge, his attendant came to me and reported him dying. I found him convulsed by spasms, with loss of consciousness, for which I directed friction and some ordinary remedies, but left him with the conviction that he would die during the night. In the morning he was still alive, and rather better. The spasms, however, came on every four or five hours; the mind never becoming rational between the attacks. The original disease, colic, had not yielded, as was evinced by the bilious vomitings and the complete constipation of his bowels, though I found it impossible to learn any thing from the patient.

It was also very difficult to administer remedies in sufficient quantities, and injections, always resisted when given, produced spasms and were ejected at once. He was also too much debilitated by yellow fever to allow of bleeding. About the third morning my servant called me and said that Mr. Gerger was dead. I went into his room to see, and found him lying on his face across the floor, some four feet from his bed, to all appearance lifeless; a slight tremor about the heart, and the faintest idea of breath, were all the signs of life I could perceive in him. I had him laid on his bed, covered him with a sheet, had an injection given him, which was retained, and had him rubbed with spirits of hartshorne and water, and then left him, to attend to the numerous other cases I had, without having the slightest hope of ever seeing him alive again. On my return to the office some six hours after, to my unspeakable surprise I found Mr. G. sitting in my arm chair, neatly dressed and shaved, and perfectly rational. It seems that an hour or two after I left him his bowels suddenly operated powerfully, and he awoke from his stupor, but without knowing where he was. The time from the moment he had the first spasm until he recovered entirely, was a perfect blank in his existence. It is, perhaps, needless to add that he recovered speedily and perfectly, and in a few days left for Matamoras. I forgot to mention the fact, that but few persons who suffered with the colic disease took the yellow fever afterwards, and vice versa, but still I recollect two instances. The first was the Master of a United States tow steamer, who had an attack of colic of some four or five days duration, from which he recovered entirely, and who had an attack of yellow fever some six weeks afterwards. The other was a

United States Wagon-master, who had the yellow fever, which was followed very shortly after his recovery by the most violent form of colic that occurred on the Island, and whose life I despaired of for some days. Both recovered their health fully.

I remain, dear Sir, with great respect,

Your friend and obedient servant,

JOHN S. BOWERS.

DR. ASHBELL SMITH, Galveston.

HÆMORRHOIDS.

There exists generally a peculiar physical temperament or hereditary disposition in those persons who suffer from this affection; it is true that age and habits of life seem to favor its development.

They are, I have no doubt, more frequently caused by torpidity of the liver, delaying the return of the portal blood; this produces costiveness, and the straining, which naturally follows, invites a determination of the blood to the anus, which produces a varicose condition of the veins, the blood becomes coagulated in those varicose enlargements, and tumors of the vessel are the result. This affection seems to present two varieties, viz: Those tumors which do not bleed are most generally distinguished as blind piles, they are usually out of sight, within the anus, the internal piles are frequently of very large dimensions, they are not so liable to injury or rupture as the external tumors, which are called bleeding piles.

Treatment.—Your first object will be to regulate the bowels, obviate costiveness, this should be done by laxatives and a due course of regimen, and should be pursued in either species, whether bleeding or blind; to a suc-

cessful treatment of this disease, much depends upon the general health. Hardened fæces have been frequently regarded as the cause of this disease, but as I before observed, you will generally find a torpid condition of the liver, accompanied with derangement of the digestive organs. Frequently the parts become very much inflamed; when such is the case the bowels should be kept in a free soluble condition, and for this purpose I generally administer the following, so as to arouse the liver to speedy action, say, from an eighth to a quarter of a grain podophyllin every two or three hours, until the secretion from that organ is established, then to fulfil the indication of keeping the bowels in a soluble condition, I give

Sublimed sulphur, ʒiss.
Confection sennæ, ʒii.
Nitre, ʒiii.
Syrupi auranto, (syrup of orange peel) q. s.

Make a confection, and give one or two drachms a day, or as circumstances may require.

You should also apply local applications to allay inflammation, and for this purpose I frequently use a small cigar, moisten it in warm water, and introduce it in the rectum, it is a most excellent remedy. A local application of pul. slippery elm will frequently relieve the intense inflammation; after the inflammation is subdued I have used the following applications, either of which, if persevered in, will, in a large majority of cases, give relief.

℞. Extract of stramonium, (Jamestown weed.)
Extract of tobacco, aa. ʒi.
Tannin, grs. v.

This should be intimately mixed, and applied four or five times a day to every tumor, and spread on a thin cloth and applied at night; when there is any bleeding increase the tannin, or take "a small paper of cut tobacco and put in a frying pan, burn it to ashes, and add hog's lard." I also add belladonna, and have found this prescription to answer well if applied three or four times a day.

I frequently use pulverized alum and the white of an egg, this will give relief when there is inflammation.

If the disease is of long standing, I direct the following alterative syrup to be taken, viz:

Stillingia,	¼ lb. (Queen's root.)
Corydallis,	℥ii.
Ampelopsis,	℥iii.
Iris. versic.,	℥i. (Blue flag.)
Podophyllin,	grs. viii.

Mix, and make a quart of syrup. Dose, one teaspoonful three times a day.

Cold water and alum and water are both good local applications. Your great object must be to keep the bowels in a soluble condition; no treatment will be of the least advantage if this is neglected; and if the bowels are suffered to become constipated before you complete the cure, the piles will certainly return.

There is a variety that very frequently becomes callous, here you will have to use the ligature, pass it through a piece of spunk, and apply to the tumor, tighten it every day; it is simple, and no danger is to be apprehended from removing the tumors in this way. I have succeeded in relieving such cases by applying the caustic potash or nitric acid.

PROLAPSUS ANI.

(FALLING OF THE FUNDAMENT.)

This disease frequently produces piles, and I have, in some instances, seen them in connection.

The bowel frequently protrudes, and is sometimes suffered to remain until it becomes so inflamed and swollen, that it is with great difficulty replaced. I have seen cases where it would have been unsafe to attempt to replace it. In such cases, use local fomentations to the part; cloths simply wrung out of warm water are very good; apply until the parts become soft, then lubricate the protruded portion well with linseed oil, and replace it with your fingers by gentle pressure. After which confine the patient to his back, and use weak injections of the sugar of lead and water; or you can substitute for this injection a strong decoction of white oak bark.

The same constitutional treatment as that recommended for piles will be necessary. He should wear a "T." bandage, and use the pile ointment.

On going to stool, he should have it so arranged that his hips would be considerably higher than his knees, and he should avoid straining as much as possible.

In cases of this character, linseed oil is highly recommended as an aperient; if it should produce griping, you can combine oil of anise, sassafras, or paregoric.

You must sustain the general health, and let the patient make free use of cold water externally.

DISEASES OF THE MOUTH AND THROAT.

APHTHÆ—THRUSH.

In general, these two terms are recognised as the same disease. I am of the opinion that they are entirely distinct, and should not be assimilated together.

Thrush is most generally confined to early infancy. Inflammation of the mucous membrane of the mouth is first observed, which in a short period present white papillæ, (pimples,) which soon becomes confluent, and generally involves the whole mouth, and sometimes extends to the fauces and as far as the pharynx; it is generally attended with diarrhœa, and very frequently with colic. In case of extreme duration, it has been known to involve the whole alimentary canal. When this is the case, you will find it very difficult of cure; but when the inflammation is confined to the mouth only, it is easily controlled.

Treatment.—Your first object will be to ascertain the condition of the bowels. If they should be constipated, or if there be diarrhœa, the result of acidities of the stomach, I generally administer two or three grains of hydrg. cum cretæ, (mercury and chalk,) repeating it every three or four hours; if there be fever, I generally combine rhubarb, and very frequently use rhubarb and magnesia alone—fifteen grains of the former to a half drachm of the latter, dividing it into six doses.

The mouth should be kept perfectly clean, by frequently using an infusion of flax-seed or a solution of gum Arabic. Various detergent applications have been advised, such as borax dissolved in honey, and Van Sweeten recommends an emulsion of cream, yolk of

eggs, and syrup of poppies. In the advanced stages, Doctor Wood recommends a solution of sulphate of zinc, (white vitriol,) in the proportion of two grains or more to the ounce of water. In the same stage, rose water, acidulated with muriatic or sulphuric acid, and solutions of alum, chlorinated soda and lunar caustic, are also occasionally used. These applications should be pencilled on with a camel's hair pencil, some eight or ten times a day.

I have used the following remedies, and from my experience with them, I am satisfied they will fulfil your expectations. Make a decoction of goldthread sage and hysop, sweeten it with honey; a little borax may be added; wash the mouth often. I frequently administer an infusion of goldthread, say ʒi. put into a pint of boiling water; infuse for an hour, and strain. Give half a fluid drachm.

If the attack is malignant in its character, you should administer quinine or salacine, (the willow oak bark,) in grain doses, with two drops of muriatic acid; this can be given three or four times a day.

Aphthæ.—The marked distinction between aphthæ and thrush is, whilst the former is attended with papillæ and inflammation, it never terminates in ulceration; the latter (ulceration) is always the most prominent symptom in apthæ. When the vesicles first make their appearance, they contain a serous fluid; in a few days they break, and small ulcers, with a high grade of inflammation surround them. It attacks equally children and adults; and it is different from thrush in another respect, namely, not common in early infancy.

Treatment.—The treatment recommended in thrush, will relieve in ordinary cases; astringent applications

are indicated to heal the ulceration; and if those recommended in thrush fail, I have frequently used effectually strong solutions of the nitrate of silver, (lunar caustic,) or sulphate of copper (copperas.)

In the confluent variety, when the ulcerations coalesce and run together, and which generally is severe and obstinate, from the fact that it extends into the fauces and pharynx, and renders deglutition extremely painful. In this form I have used the following recipes, with decided advantage, viz:—

℞. Kreasote, ʒss.
Powdered gum arabic, ʒiss.
Camphor water, ʒiiss.

Mix. This should be used every two hours as a gargle.

Or,

℞. Ext. of rhatany, ʒss.
Tinct. myrrh, ʒi.
Sage water, ʒiss.

Mix. This may be used frequently as a mouth wash.

If there should be fever attending, you can administer

℞. Carbonate of potassa, ʒi.
Elder flower water, ʒvi.
Syrup of marsh mallow, ʒi.

Mix. A spoonful may be given every hour.

A very pleasant preparation is to make lozenges of borax.

℞. Borax, ʒii.
Sugar, ʒss.
Mucilage, q. s.

Mix, and make into thirty lozenges; one of which may be taken occasionally.

CANCRUM ORIS.—CANKER.

This disease frequently becomes very alarming, from the fact that it has a gangrenous tendency. The complaint is essentially ulcerative, appearing in this form at the commencement. It is considered by some as a synonyme of gangrene of the mouth.

The complaint usually makes its appearance in the gums, or inside of the cheeks or lips; though it may occur in any part of the mouth, or in the fauces. When first noticed, it is always in the form of an ulcer, often of considerable size, with a yellowish-white or grayish surface, and an inflamed border. The swelling in the mouth is sometimes so considerable, as to render an examination of the sore difficult. There is a very copious flow of saliva, and the breath is very offensive, though the fœtor is distinct from that of gangrene. The ulcer is generally painful, and is usually attended with fever and constipation. I have never known it to penetrate through the cheek, nor to end fatally. I have always found it to yield to treatment.

Treatment.—This disease is almost universally accompanied with constipation, and your first object will be to overcome this; to do which give castor oil, or rhubarb and magnesia. In obstinate cases, attended with prostration, I generally use the mineral acids in combi-

nation with quinine. The diet should consist chiefly of farina, tapioca, &c.

Your great dependence will be upon local applications. A distinguished author asserts, that he has found nothing so useful as a solution of sulphate of zinc, say fifteen grains to the fluid ounce of water, applied three or four times a day, by touching the ulcer with a camel's hair pencil. I have no doubt but this is a valuable remedy; and in this disease I can, with the same confidence, recommend the tincture of iodine and catechu, applied in the same manner.

CYNANCHE TONSILLARIS.

Quinsy.—I shall describe the disease under the name of tonsillitis, believing that to be the proper name for the disease. It is very common, and attended always with danger. It is true the tonsils are not only inflamed, but the surrounding parts are most generally affected. It prevails in this climate mostly in winter; I have seen some few cases in the spring. The inflammation sometimes involves only one gland, but most frequently both. It is very acute, and easily known by the rapid swelling of the tonsils, great pain in the glands, difficult respiration and deglutition, and I have seen the inflammation extend throughout the whole of the mucous membrane, to such an extent as to essentially interrupt the speech. When the inflammation is so extensive you will find the uvula (or what is vulgarly termed the palate of the mouth,) much elongated and considerably swollen. It is always accompanied with more or less acceleration of the pulse, with general symptomatic fever.

In some few cases you will find, in addition to the

inflammation and hardness of the glands, that they are attended with slight ulcerations upon them.

This is one of that peculiar class of diseases that requires the best medical talents. The treatment must be active to subdue the inflammation and prevent suffocation, which in many cases is liable to occur before abscess and suppuration will take place, which afford immediate relief.

It may, and does sometimes, terminate in resolution, but most frequently in suppuration, in which event the discharge is peculiarly offensive.

The exciting causes of the disease are essentially cold and wet; whether applied to the body at large, or to the feet only. Cold applied in any way is sufficient to produce the disease. Some persons, however, are peculiarly subject to inflammation of the throat, easily to take cold from vicissitudes of temperature, and in such persons the throat is particularly liable.

Treatment.—You should endeavor to produce relaxation and a free determination to the surface, by inducing perspiration as speedily as possible. For this purpose I use a warm foot and hand bath, bathing the arms up to the elbows. It is a remedy not much used, but it is one of great utility; it will induce perspiration and restore the circulation to the surface more readily than the pediluvium alone. You can assist the action of this by bathing the whole body in the alkaline wash, with the addition of good brandy. To assist these local remedies to produce relaxation and perspiration I generally give the following:

℞. Sanguinaria, (blood root,)
Lobelia seeds,

Ictodes foetidæ, (skunk cabbage,)	aa. ʒiss.
Good vinegar,	1 qt.

Before adding the vinegar, make the powder moist with alcohol, let it stand a few hours, then add the vinegar.

This should be given in half drachm doses, in a little sage tea, and repeated at intervals of twenty minutes or more. Do not carry it to the extent of vomiting, but merely to keep up its nauseating effect; or if you prefer, you can use Beach's Sudorific Mixture.

You will afford the patient much relief by the application of

℞.

Linseed oil,	ʒi.
Oil of capsicum,	ʒi.
Spts. camphor,	ʒii.
Oil of turpentine,	ʒiii.

This should be freely applied to the neck, and flannel wrung out of a strong solution of hot vinegar and salt applied immediately after.

Gargles are of much service in allaying the extreme irritability of the glands; the sudorific tincture that I have already recommended, is a valuable gargle. I frequently use a strong infusion of golden seal and borax. Some of the following are also highly extolled:

℞.

Alum,	
Nitrate of potassa,	aa. ʒi.
Cream of tartar,	ʒi.
Acetic acid,	lb. i.

Dissolve, and evaporate to dryness. Half an ounce dissolved in eight of water, is highly spoken of in inflammation of the *tonsils*. Also, the

℞. Tincture of iodine,
——— of opium, aa. ʒi.
Water, ʒvi.

Mix, and use as a gargle. This should not be used, however, unless the glands are ulcerated.

Your patient will frequently have relief afforded him by the use of the alcoholic vapor bath.

His bowels should be kept freely open with castor oil.

In protracted cases, you will derive great benefit from scarifying the tonsils freely, especially when the glands are tense and hard. If ulceration supervenes, you will find a strong solution of the acetate of copper (verdigris) made into a gargle, of great benefit.

This disease sometimes becomes chronic, when there is an enlargement of the glands, with more or less induration. In this form of the disease, give iodine internally, and use the same, in combination with hydriodate potash in ointment externally.

The walnut lotion is a most excellent remedy, in enlargement of the tonsils. It should be applied with a camel's pair pencil, and it will be found prompt in its effects. The preparation is a simple one; dissolve extract of green walnut shells, six grains, in distilled water, fifty grains.

CYNANCHE TRACHEALIS.

Croup.—This is a phlegmasial affection, consisting, in our opinion, essentially of inflammation of the mucous membrane of the upper, or superior portion of the respiratory tube.

Symptoms.—When the affection is fairly developed, we have a contracted and difficult respiration, with a

peculiar cough of ringing, barking kind, with very sonorous respiration and hoarse voice; besides the cough, if the disease be fully confirmed, we have a peculiar "hissing" respiration; but it is mostly in the inspiration it is heard—there are, however, various modifications. The voice is generally crowing or nearly suppressed, and there is great difficulty of breathing. There is generally no pain in the throat, nor is any difficulty experienced from swallowing. We have considerable expectoration, which is of a thick tenacious substance from the trachea; sometimes mixed with lymph and fibrin.

During the first stage, we have symptoms of an intense excitement of the circulation, hot skin, flushed face, pulse rapid, and great anxiety of the countenance. The general symptoms are very insidious in their character, the child being perfectly prostrated at times, before the mother is apprized of the danger. These symptoms generally occur at night, with increase of the disease on the next night; when the disease continues, the respiratory function becomes much impeded, and is almost entirely stopped; we have peculiar symptoms that mark the stage of collapse—failure of the vital powers; difficulty of breathing undiminished; pulse weak, thready and irregular; cough more suppressed; voice gone; face swollen and livid; skin cold and clammy; and, if in an infant, we may have convulsions. Patients have been known to recover at this stage, by nature making an effort at throwing off the mucous exudation.

Varieties.—There are the sthenic and asthenic—the former attacks the robust and plethoric, whilst the latter only preys upon the debilitated. The spasmodic form of croup frequently occurs, and it attacks irritable children, and those whose temperaments are nervous; as

regards the nature of croup the opinions are very various and the question quite unsettled. Drs. Elliottson, Stokes, and Eberle, agree that we meet this disease under two essentially different forms. They say, "it may occur in the first place as a primary idiopathic, and active inflammation of the respiratory mucous membrane, in which case the accompanying fever is symptomatic. In the second place we have it preceded by fever, and the formation of false membranes in the pharynx and the cavity of the mouth; which membranes by extending downwards into the glottis and larynx produce the symptoms of croup, in the advanced stage of another and totally different disease.

Duration and Cause.—The disease may last from twenty-four hours to three or four days. It is generally the result of an exposure to cold and wet, "eating indigestible articles," and, in some instances, it appears to be hereditary.

Treatment.—It must be energetic and decided, your great object should be to diminish arterial action, to prevent the formation of false membrane, and when these have been formed to promote their expulsion, and to subdue spasms, and to support the powers of life. You answer the first indication by a ready resort to the aconite, by leeches, cups or blisters to the throat, and by giving a table-spoonful of the following recipe every fifteen minutes.

℞.	Infus. senegæ,	℥iv.
	Syrup ipecac.,	℥i.
	Oxymel scillæ,	℥iii.
	Tinct. lobelia,	℥i.

Until vomiting is excited; you will also assist the first

indication by the warm bath and an active purge. If the symptoms still continue alarming I would follow by local depletion, and in extreme danger purgatives should be given with the greatest freedom. Some have advised the application of cold; I have tried it in some few instances by dashing frequently cold water over the head and neck, and have seen great benefit result from towels soaked in water and applied around the neck. Calomel was the favorite remedy of the late Dr. Rush. With Dr. Eberle, rubefacients and blisters were important remedies in the treatment of this disease. As soon as *blood* had been drawn, which I think entirely useless, he applied some irritating liniment or a blister to the throat of the patient. In general, turpentine answers better than any other rubefacient we possess. A piece of flannel may be saturated with the turpentine and applied around the neck. It can be borne only a few minutes at a time, but should be removed and reapplied constantly.

"When called to a patient laboring under this disease, the fauces should be carefully inspected. It is now well ascertained that the albumenoid exudation which forms the false membrane often commences on the surface of the inflamed tonsils, and thence spreads along the arches of the palate, and at last descends into the larynx and trachea. In such cases the fauces will be found tumefied and of a dark red color, and whether there be any appearance of false membrane or not, immediate attention should be paid to this inflammation. Dr. Mackensie states that the application of a solution of the *nitrate of silver* to the tonsils and soft palate, will, in such cases, often remove the membranous crust completely, and procure speedy and great relief, and ulti-

mately an entire removal of all the dangerous symptoms. The solution which he employs is,

℞. Nitrate of silver, ℈i.
Distilled water, ℥i.

By means of a large camel's hair pencil. This solution is to be freely applied, once or twice a day, according to the severity of the symptoms, to the whole lining membrane of the fauces. The surface of the tonsils, or wherever else the fibrinous crust is actually in view, will of course be particularly attended to; but I do not hesitate to push the pencil to the lower part of the pharynx. This remedy, so far from being productive of any irritation beyond the mere mechanical and temporary one attending its employment, uniformly alleviates the symptoms of the croup, such as the difficult respiration, the barking cough, and the anxiety of the patient.

In one instance which came under my notice, this application was beneficial. I have been informed that Dr. Heard, of Washington, has used it with great success. *Laennec* has published an account of some cases, from which it appears that insufflation of very finely powdered alum, generally affords speedy relief, not only in this variety of the disease, but also in cynanche laryngea and tonsillaris; four or five grains finely powdered, and placed in the barrel of a quill, and forcibly blown into the fauces. I have used the syrup of garlic with good effect.

Liable to Recur.—This disease occasionally takes place without any inflammation, or at least very little. I have known children have six or seven attacks of croup.

Some of the following remedies are highly spoken of,

and I can speak with confidence, that I have, in some few cases, derived signal benefit from their administration and application:

℞.		
	Powdered valerian,	ʒii.
	Oxymel of squill,	ʒi.
	Laudanum,	♏i.
	Water,	ʒi.

Mix, and give a tea-spoonful every hour, after an emetic.

Coxe's Hive Syrup is much and advantageously employed, both in regular and domestic practice, in all stages of croup. Thirty drops may be given to a child two years old, and repeated at short intervals till it vomits.

A very distinguished author, strongly recommends turpeth mineral, which, while scarcely less efficient than the antimonial, he considers safer, as less prostrating, and less disposed to act on the bowels. He gives two or three grains to a child of two years, and repeats the dose every fifteen minutes till it operates.

There are cases which will be relieved by the following cataplasm of tobacco, which, however, must be used with caution. Take, tobacco ʒi., beat up with water, and form a cataplasm, and apply to the throat.

CYNANCHE PAROTIDÆ.

Mumps.—This is an inflammation of the parotid glands, which frequently prevails in certain localities in this country as an epidemic.

It is preceded by heaviness, lassitude, and soon followed by stiffness, pain and difficulty of motion about the lower jaw. The parotid glands, one or both, be-

come very much swollen, and attended with an increase of heat in the part; the inflammation frequently involves the sublingual and submaxillary glands; when this is the case, the neck increases to such an extent in magnitude, as to become alarming.

It is generally attended with fever, and some arterial action.

But if from *exposure to cold*, or improper management, the natural process of the disease be interrupted, a singular translation of the morbid action takes place. The tumors about the throat suddenly subside, and are followed by swellings of the *testicles* in the male sex, and of the breasts in the female, accompanied with a fresh exacerbation of the fever. If the swellings of these parts be imprudently checked, by exposure to cold, or if they suddenly subside, the brain is apt to become affected, occasioning convulsions, delirium, and other dreadful symptoms, which finally terminate in death.

It occurs generally but once during life, and I am of the opinion that it is contagious. The disease is usually exceedingly mild, and seldom terminates fatally, unless under the circumstances just alluded to.

Treatment.—In a very large majority of cases, very little treatment is at all requisite. The patient should be confined to a light diet, and avoid exposure to cold and wet weather; to do this effectually, he should be directed to keep his room, and drink freely of warm ptisans (teas), such as the infusion of balm tea, with a few drops of hartshorn, sage, or catnip.

If it should be attended with any constipation of the bowels, I generally use a mustard pediluvium (foot bath), and give a small dose of castor oil every three hours, until it produces free evacuations.

If the inflammation should be very considerable, accompanied with high fever, I give five grains of Dover's powder in warm tea every half hour, until free perspiration is produced.

Carded wool or cotton is good to apply to the inflamed glands; and, when very painful, I have used a hop poultice, but more frequently advise Massie's liniment; or you may bathe it with the following

℞. Castile soap, scraped, ʒi.
Sassafras oil, ʒss.
Sweet oil, ʒi.
Camphor, ʒiii.

Mix, and apply it warm, placing carded cotton to the surface immediately after its application.

In the event that the inflammation should translate itself to the mammæ or testicles, the same general treatment must be employed; the testicles should be placed in a suspensory bandage, and emollient applications kept constantly applied.

In case of metastasis (from one organ to another) to the brain or other vital organ, antiphlogistic measures should be energetically employed, as in inflammation of these organs from other causes.

Should suppuration take place, a poultice must be applied, made by adding Indian meal to beer until it is formed into the consistence of a poultice. The above treatment has invariably been found successful.

DISEASES OF THE KIDNEYS AND BLADDER.

NEPHRITIS.

This is most frequently the result of mechanical causes, and it is also produced by *pretenders* in administering, ad libitum, turpentine or cantharides. My own impression is that the inflammation in nephritis is generally in the external membrane of the kidneys.

Symptoms—There is a pungent pain in the loins, and a very sharp pain in the region of the kidneys; it is generally, however, confined to *one side only*. On account of the great sympathy existing between the kidneys and stomach, there is frequently nausea and vomiting; it is most generally attended with some degree of fever. There is usually a frequent desire to make water, which is passed with difficulty, and in small quantities. The urine is at first clear, and afterwards assumes a brick dust appearance. It sometimes involves the testicle of the affected side; it becomes swelled, and very sore to the touch. There is generally a numbness experienced on the inner side of the thigh.

Pulse.—In the commencement of the attack, the pulse is full, hard, and frequent, but in a short time it becomes, especially if the attack is accompanied with nausea and vomiting, small and frequent.

It frequently requires great care in diagnosis to distinguish this from a rheumatic affection of the loins. In the latter, the pain is felt on *both sides*, and affects a very large surface. There is no desire to make water, no affection of the testicle, nor any pain in the thigh.

the absence of these symptoms will most generally aid you in a correct diagnosis.

Treatment.—Your first indication to fulfil, is to produce a free determination to the surface by inducing perspiration. I generally administer Dover's powder in five grain doses, repeated at short intervals; and if the attack is accompanied with much inflammation, I use the uva ursi (bayberry) made into a strong tea, or administer the diuretic drops, which are composed of the following.

℞. Sweet spirits of nitre.
Oil of almonds, aa. ʒii.
Copaibæ.
Oil of turpentine, aa. ʒi.

Mix these well together, and add camphor, in powder, ℈i.

This may be given in tea-spoonful doses, three or four times a day, in the uva ursi tea, or mucilage of gum arabic or slippery-elm.

If the pain is violent, I generally order a hip-bath, as hot as it can be borne, and as soon as the patient is placed in bed I order fomentations to be applied, and for this purpose I use worm-wood and hops, steeped in hot vinegar and applied for some length of time.

If the attack is violent, you will find active purgation very essential in controlling the inflammation; the bowels should at all times, during the course of the disease, be kept in a soluble condition, and the following prescription will act most generally better than oily cathartics:

℞. Podophyllin, grs. x.
Comp. powder of rhubarb, ʒi.

Mix. Give 4 grs. morning and night. (The compound powder of rhubarb is composed of the following, viz:—Rhubarb, saleratus and peppermint, or spearmint leaves, equal parts.)

I have frequently seen cases where spasm arose from irritation of gravel passing the ureters, in such cases I cup freely over the loins, order the hot bath, and give small portions of the spirits of nitre, spirits turpentine and morphine in combination. This will generally afford relief; the dose should be repeated at least every two hours.

The patient must be directed to drink constantly mucilaginous diuretics; they must be drank cool, in large quantities. Some recommend a decoction of marsh mallows; I generally use, and with benefit, (when they can be procured) green leaves of *mullein*, made with a strong infusion, and let the patient drink at least a pint and a half a day. You will find, also, that the bark or berries of the common *sumach*, made into a strong infusion, is a most excellent remedy.

Sometimes the disease becomes chronic; in such cases I would advise Massie's liniment, to be applied on the seat of the pain, (the ℞. is given) and if it does not afford relief, apply the strengthening plaster heretofore advised. Let the patient drink of a strong infusion of liriodendron tulipifera (tulip tree) and the monarda punctata, (horsemint.) This drink may be alternated with the mullein; where the irritability is great, you will experience benefit from a strong infusion of the *althæ officinalis*, (marsh mallows) which I have heretofore suggested.

Vomiting.—If this symptom is present, saleratus, in small quantities, given in mint tea, will generally allay the irritability of the stomach.

"If the kidneys suppurate, you must support the strength, and tranquilize the patient by anodynes, &c. The common treatment of suppuration, in any part of body, is that which is required."

Regimen.—Every article of a stimulating character must be avoided. The diet must consist of vegetables and mucilaginous drinks.

Hydrocyanic acid has been advised in nephritis. Of its virtues I am not prepared to give an opinion.

The following, however, you will find of benefit:—Groats, ʒvi.; red sanders, chipped, ʒi.; chicory root, ʒiss.; water, twelve pints; boil down one-third, and add to the strained decoction, nitre, (saltpetre) ʒss; sugar, ʒii.; dissolve. This should be used tepid, morning and evening, in doses of from vi. to viii. ʒ.

℞.	Carrot seed,	ʒss.
	Boiling water,	1 pint.

Infuse. To be taken during the day. Both of the above recipes are highly and deservedly extolled.

CYSTITIS.

The various coats of the bladder are subject to inflammation, but they resemble in disease each other so closely, it is not necessary to make distinctions, for in reality, when one coat is inflamed it soon involves the others.

The bladder is subject to acute inflammation. The peculiar symptoms are a throbbing and burning sensation in the hypogastrium, (the lower part of the abdomen,) with acute pain above the pubis, which region manifests great tenderness upon pressure; a very urgent desire to urinate, with an excruciating pain at the neck

of the bladder during the passage of urine, which is generally voided in drops; it is accompanied with fever, which is generally preceded by chilly sensations.

A feeling of tension and fullness over the pubis is often experienced from distention of the bladder, consequent upon retention of the urine. The abdomen becomes swollen, tense, and exceedingly tender, especially when pressure is applied. Epigastric uneasiness, nausea and vomiting are not unfrequent.

In the onset of the disease the pulse is full and hard, but if relief is not obtained, it soon becomes irregular, small and very frequent.

It is usually accompanied with constipation of the bowels, and I view it as a very formidable disease.

Causes.—It is frequently occasioned by giving cantharides and turpentine, for gonorrhœa; sometimes the result of stricture, irritating injections and mechanical causes, as well as by the usual causes of inflammation in general.

Treatment.—It is very similar to that recommended for inflammation of the kidneys. I generally commence the treatment by giving an active dose of castor oil, and keeping the bowels in a soluble condition afterwards by the administration of saline cathartics. The hip and warm bath should be employed, together with the local application as recommended in inflammation of the kidneys.

Some authors of celebrity speak in high terms of mucilaginous injections in the way of enemas. My impression is that they do harm. I think it is very equivocal whether enemas or mucilaginous drinks should be used. I confess I have little confidence in either.

The most general indication is to promote a free diaphoresis. After the bowels have been freely evacuated, I generally administer Dover's powders in five grain doses, or the spiritus mindererus, (acetate of ammonia;) but you will frequently find the diuretic drops, as presented in inflammation of the kidneys, a most valuable remedy. You will find, in obstinate cases, the vapor bath will facilitate the action of these remedies.

When there is excessive distention and much pain upon pressure, you should immediately resort to the catheter, which, under the circumstances of the distention, must be introduced with great care. After you have relieved the bladder of its contents, by injecting through the catheter a tepid infusion of hydrastis canadensis, (golden seal,)—which is a favorite, and deservedly so, with eclectics generally—say one ounce, it will tend greatly to allay the irritation which must necessarily have been produced.

I have administered *Ellis'* recipe, after the secretion was drawn off, to allay pain, with decided advantage, viz.:

℞. Bicarbonate of soda, ʒi.
Almond mixture, ʒiv.
Copaiba, ʒii.
Laudanum, ʒi.

Mix. A table-spoonful of this to be given occasionally.

The diet must consist exclusively of farinaceous substances and mucilaginous drinks. If there is much prostration with evident debility, a small portion of ale or porter may be allowed.

CHRONIC CYSTITIS.

In acute cystitis there is often a flow of mucus from the bladder, yet this is a much more striking phenomenon in the advanced stages of the disease, when it may be considered as having assumed the chronic form; and, in many cases, the grade of inflammation from the commencement is such that the affection may be considered as of that form throughout.

The symptoms are almost those of acute cystitis, only you find them in a modified form.

Treatment.—There is a great variety of treatment recommended in the chronic form of this disease; my experience in this form is limited. Repeated purgatives are suggested by many; a large number of the profession recommend a blister over the pubis, I am of the opinion that some harm might result from this application, as strangury is easily induced when there is already irritation in the organs.

"Cathartics, which especially irritate the rectum, should be scrupulously avoided." The preparations of castor oil, magnesia, or sulphur should be used. "Most generally remedies" are resorted to which have a tendency to impregnate the urine. "The turpentines or their volatile oil are among those most employed." Diosma or buchu has, within a few years, been much commended. "Other remedies of analogous character are cubebs, balsams of tolu and peru, tar-water and kreasote." The uva ursi, (bay berry) enjoys considerable reputation.

Various teas are highly extolled, as those of "burdock, wild carrot, wild parsley seed, dandelion, and pennyroyal."

M. Andre Gilrin, speaks in high terms of fuligo,

(soot) as an injection in chronic inflammation of the bladder; he takes two ounces of soot and boils it in a pint of water, filters it through paper, and injects a small portion two or three times a day.

A distinguished author of Edinburgh recommends the following:

℞. Pareira brava, ʒvi. (a climbing shrub, native of the West Indies.)

Boiling water, pint. i.

Macerate for two hours, and strain, and give from one to two fluid ounces as a dose.

"The tincture of the chloride of iron is supposed to be particularly useful. The sulphate of quiniæ, the mineral acids," and the preparations of iron generally have also been commended.

M. Chopart is a great advocate for injections, and I find they are highly extolled by many others. "In the early stages he recommends as an injection, demulcent liquids, such as barley water, flaxseed tea, decoction of marsh mallow, &c. In the more advanced stages he substitutes stimulating substances; he begins with a weak solution, gradually increasing its strength, he advises two grains of the sulphate of zinc in the same amount of sugar of lead, to be dissolved in four ounces of water, and to be carefully injected into the bladder through the catheter without using any force."

Various other injections have been recommended by Brodie, Bird, Bretonneau, and others, such as nitric acid, nitrate of silver, corrosive sublimate, calomel, &c. But, in the language of a very distinguished author, "I should fear even the mildest injections, lest more harm should result from their mechanical irritation than good from any alterative or demulcent effect.

The diet should consist of boiled milk and farinaceous substances, and such other articles as have no tendency to occasion urinary deposits.

ISCHURIA DYSURIA.

Many persons frequently err in regard to diseases of the bladder. I have known persons frequently to style *retention*, when in truth it was suppression, and, vice versa. Dysuria implies difficulty of passing the urine. In this affection the secretion is passed with great pain, accompanied with a violent heat generally of some portion of the urethra. It is the first degree of retention of urine. *Ischuria renalis* is most generally complicated with this, and there are many that make no distinction. By suppression of urine, as the title of a distinct affection, is here meant, either a complete cessation of the secretory action of the kidneys, or a diminution of it so considerable as to be clearly morbid. In this affection of suppression of urine, there is evidently a deficiency of the secretion of urine, and generally accompanied with symptoms of nephritis; but we have seen cases where there was not the slightest symptom of inflammation.

The most prominent symptom of suppression is the diminution or suspension of the passage of urine; there is no fullness of the bladder, and very often upon examination, the organ is found empty. It is more frequent as an attendant and result of other diseases.

I have never had but one case of it. It is apt to terminate in apoplexy, and it is certainly a very dangerous disease.

Some few authors contend that it sometimes occurs as an idiopathic affection; more frequently, I suggest, as an attendant on idiopathic fevers.

Treatment.—Your remedies should be active and vigor-

ous diuretics. You should move the bowels by an active dose of senna and salts; you should introduce the catheter to ascertain the amount of secretion in the bladder, which should be immediately followed by active diuretics to arouse the secretion of the kidneys. To do this give the following. The first is a most excellent diuretic compound, viz:

℞. Queen of meadow root.
Dwarf elder bark.
Marsh mallow root.
Mountain pink, aa. ℥ss.

These should be bruised and placed in a pint of boiling water, and the same amount of gin, and steeped for four hours; strain and sweeten with honey. A wine glassful may be given every hour until relief is procured. The following is a favorite recipe of Prof. Morrow:

℞. Oil of spearmint, juniper and sassafras, of aa. ℥i.; castile soap, ʒiss. Divide into eighteen pills, give three pills three times a day.

A very distinguished author recommends in this disease, a grain of cantharides every eight hours, and the application of a blister over the pubis; this may be valuable if there is no inflammatory congestion of the kidneys, and we know that this substance has the power of producing suppression.

Some recommend the warm bath and Dover's powders, with the application of a blister on each side of the spine, for the purpose of keeping up a constant discharge from the skin. I am of the opinion that the diuretic drops, as presented in inflammation of the bladder, will be found a valuable remedy here; they should be used in connection with mucilaginous drinks.

Should the urine be scanty, high colored and loaded with lithic acid, no medicine will be found more efficacious than the bicarbonate of soda, which may be given to the amount of two or three drachms, in twenty-four hours, as drink, dissolved in a large proportion of carbonic acid water. Of course, the diet should, in acute cases, consist of vegetable food exclusively. In cases of suppression, attended with symptoms of inflammation, similar measures, with the addition of cupping over the kidneys, are required.

RETENTION OF URINE.

In this disease there is one peculiar symptom, which will enable you to form a correct diagnosis between suppression and retention. In the latter the pain is much more severe than in the former. If it is caused by any mechanical impediment, you must be careful not to confound it with suppression; the latter always implies inactivity of the kidneys, and the kidneys are sometimes, in suppression, so much distended as to form a tumor which is discernible to the eye externally. Retention, however, is frequently the result of the former. When there is an inability to make water, it suggests an immediate examination of the bladder. In such a case, the distended bladder, upon application of the fingers, will be found round, very tense, and the tumor will rise above the pubis; in these cases it must be relieved of the secretion speedily, if that be the cause, or it will finally burst into the peritoneum, (the serous membrane which lines the abdominal cavity.) Occasionally, however, you will find in tympanitic states of the abdomen, that the tumor cannot be distinguished by the touch.

A complication of ascites (dropsy of abdomen) might cause you some embarrassment; but the peculiar pain produced by pressure on the distended bladder, or, if this fail, the introduction of a finger into the rectum, or a catheter into the bladder, will soon decide the question.

Dr. Wood says, there is two conditions of retention, which materially differ in their symptoms; one in which the affection is suddenly induced, the other, in which it comes on gradually. In the former, there is usually much pain in the hypogastrium (the lower part of the abdomen) and perineum, (the space between the anus and genital organs,) with a constant and distressing desire to pass water, but ineffectual notwithstanding the strongest efforts. The pain is much increased by pressure over the pubis. If the affection continues, the patient becomes feverish, restless, anxious and exceedingly distressed, until at length a portion of the bladder gives way, and the urine, *he* thinks, more frequently escapes into the neighboring cellular tissue, than into the peritoneum, producing inflammation, sloughing, and generally death.

When all voluntary power of evacuation seems to be suspended or lost, it is generally the result of an over-extended bladder, and the very act of distention has the effect of debilitating the muscular coat, and, in the end, if continued, of entirely destroying its contractile power. Hence, the *habit of resisting* the desire to evacuate urine, may, if long enough continued, gradually induce retention.

Treatment.—When the retention, or, if I may use the term, the mere stoppage of water, is entirely complete, it will occasion serious inconvenience, and accompanied with some danger; in such cases, you should imme-

diately resort to the catheter, which will give speedy relief.

If the retention is the result of irritation or inflammation, the treatment which we have advised for the cure of inflammation of the kidneys, will be the most proper for this. In general, you will find the diuretics for suppression will meet the emergency of this variety. Place your patient in a warm bath, if you have failed to relieve him from what has been suggested; let him remain for some fifteen minutes; let him drink freely of parsley tea, with a tea-spoonful of sweet spirits of nitre occasionally. If this should not induce him to urinate, try the following—(where I learned this, I have forgotten, but it has never failed in my hands) :—Take four dozen bees from the hive, steep them in half a pint of boiling water for some half hour, then strain and let the patient drink the whole when cool. It looks extremely absurd, at the present day, to venture to propose the *bee*, (although it has been done,) as a remedial agent, but having fortified myself by experience with its use, I have no hesitation in recommending it to the profession as a therapeutical agent, which will remove strangury and retention of urine, when it results from inflammation, with more promptness and certainty than any remedy with which I am acquainted.

The spirits of mint is also very efficacious; it usually affords immediate relief.

When the retention is the result of spasm, an anodyne enema will be the most effectual remedy, in connection with tobacco or lobelia cataplasms to the perineum, (the space between the anus and genital organs.)

Retention arising from deficient power in the muscular coat, must be treated according to the circumstances

in which this loss of power originated. If the spine is the seat of the disease, you must cup and blister; and when there is deficient power or paralysis, I would advise the administration of *ergot*, by giving ten grains three times a day. I have frequently known the cold bath, or cold douche, to give almost instantaneous relief.

After the patient has entirely evacuated the bladder, he should be extremely careful afterwards, to immediately obey the call to urinate, for if he should fail to do so, the least accumulation of urine might reproduce the disease.

ENEURESIS.

This is a more disagreeable than painful disease, although there is a condition of the urinary organs attended with incontinence; the bladder in some cases becomes so highly irritated, that the sphincter muscle cannot resist the urgent desire to urinate; this is generally attended with some pain.

Children are more subject to it than adults, although I have had many applications from adults, complaining of having involuntary discharges of urine, especially when asleep. This form is what constitutes, in my opinion, true incontinence. It is evidently a debility of the urinary organs; the sphincter muscle is easily overcome from the slightest pressure of urine, or it may be quite destitute of the power of contraction. If fluids or ardent spirits have a tendency to relax or produce irritation, they should be used in great moderation.

There is another variety of incontinence, which is generally the result of a complete paralysis of the sphincter muscle, and a total loss of power in the sur-

rounding muscular fibre. This is, in most cases, the result of some mechanical injury; it is a deplorable condition for the patient.

Though incontinence in itself is of little importance to the health, it often becomes highly important in its moral influences, affecting the character and future life of the patient.

Treatment.—Incontinence, the result of debility, requires a treatment that will restore tone to the parts; this will be best effected by the administration of tonics and astringents. Take cherry tree bark and bayberry bark equal portions, bruise, and add a sufficiency of water to make a strong decoction; let the patient drink freely of this, and administer a small portion of the diuretic drops, as advised in nephritis. You will sometimes find the mineral acids and cold bath valuable remedies in this form of the disease. Should those fail to relieve this variety, you can resort to the uva ursi in combination with cantharides. I have great confidence in this latter remedy. I have administered the nitrate of potash (saltpetre) in ten grain doses, every three hours, with decided advantage.

Dr. Carter speaks favorably, for the cure of the above variety, of the tincture of iodine, and the following recipe has some celebrity, viz.:—

Powdered iodide of sulphur, grs. x.
Powdered gum arabic, q. s.

Mix, and divide into six powders—one, morning and night, for an adult.

Incontinence, which is the result of an irritated state of the bladder, or a vitiated condition of the urine, will require those remedies which are best calculated to allay

the irritability. To fulfil this indication, I generally resort to an anodyne enema, and those remedies which I have advised for cystitis, (inflammation of the bladder.)

Incontinence, the result of paralysis and a loss of muscular power, will require an active and vigorous treatment. You should cup and blister on each side of the spine, and administer small doses of the extract of nux vomica, say half grain two or three times a day. I would also advise the administration of ergot, as advised for retention of urine.

The stimulating diuretics may be employed where the affection is local. Electricity, or electro-magnetism, is advised by many.

Incontinence is sometimes connected with hysteria. When this peculiar form presents, your remedies must be those that are adapted to that affection.

No drinks should be allowed in the latter part of the day, and tea and coffee should be prohibited altogether.

DIABETIS.

This term is most usually employed to signify a superabundant secretion of urine, which may be either natural or it may contain a large quantity of saccharine matter; whenever there is a chronic excess of urine, with or without sugar in it, it is styled diabetis insipidus, in contradistinction to diabetis mellitus, or true diabetis, where there is abundant saccharine matter in the secretion.

Diabetis Insipidus.—You will frequently find an extraordinary quantity of urine secreted, that has no trace of sugar in it; this variety is more common in women than in men. In the incipient form, the urine is very

pale and transparent, and as the disease progresses, it becomes less pale, and sometimes has a brownish cast, which is soon followed by excessive thirst and extreme dryness of the skin.

In this form of the disease, there is frequently passed from half a gallon to a gallon during the day, of urine.

Dr. Prout, (author of a treatise on urinary diseases,) says, the causes of this variety are unknown; but mentions as the most probable predisposing cause, hereditary influence, intemperance, and the *abuse of the sexual propensity in early life*, mental anxiety, and *mercurial action*. It is decidedly more apt to attack those of spare habit and nervous temperament, and generally occurs in those of middle age.

Treatment.—This condition is very easily controlled, and may very frequently be recovered from, by simply wearing warm clothing. The warm bath, and the administration of iron, I have known to cure this variety. Your treatment should be regulated upon general principles; you should assist the action of the digestive organs; you should administer tonics, to give tone to the general system; regulate the bowels by enemas or gentle laxatives, and be active with your remedies, that will keep good action upon the skin. For this purpose, Dover's powders will generally answer.

Persons who have labored under this form of the disease have, by medical men who have not properly examined the urine, been said to be cured of diabetis, as though they had had the saccharine form of the disease.

Diabetis mellitus is characterized by an excessive discharge of saccharine urine; it generally exceeds in quantity, during the day, all the liquid which the patient

may have taken during the same length of time. The secretion of urine is generally pale, but as the disease progresses, it becomes of a pale yellow, or greenish yellow color, with a sweet taste, and rather agreeable smell; all of the symptoms appertaining to diabetis insipidus will be found here, such as increased quantities of urine, thirst, dry skin, and excessive hunger; clammy state of the mouth and fauces, constipated bowels, with a daily increasing emaciation. The feet and hands are generally cold, and the large mass of authors contend that there is one very remarkable symptom, and I have observed it myself, which is, "the complete loss of sexual power and desire." I venture to assert that this symptom will never be found absent, and it has frequently been the first symptom noticed by the patient himself. You will most generally find costiveness, emaciation, depressed spirits, and swollen extremities. In the latter stages, you have hectic fever accompanying it, with rather a full, quick pulse, and as the disease progresses, it becomes excessively weak.

The urine in diabetis is sometimes albuminous, which some authors assert is a favorable sign. Dr. Prout mentions, that the worst form of diabetis is where the urine is albuminous.

When there is an immoderate flow of urine, and you have doubt in regard to your diagnosis, the two following tests will generally decide the difficulty. Diabetic urine contains sugar, which, like other liquids containing a saccharine principle, is capable of undergoing vinous fermentation upon the addition of yeast, and at a suitable temperature. No such change takes place in healthy urine, under the same circumstances. To accomplish this test successfully, you add yeast, and

expose the mixture to a temperature of 70 or 80°. If it be diabetic, an effervescence will speedily commence, gas will escape, and the liquor will acquire a vinous odor.

Another test. If diabetic urine be allowed to stand without addition, in a moderate temperature, it will undergo spontaneous decomposition, becoming acid, and having the smell of sour milk. At this period another test will be, that if it is thrown into the fire it will burn like spirits.

The specific gravity of the urine is one of the best tests. Healthy urine is generally from 1.010. to 1.015.; diabetic urine reaches as high as 1.050., and many authors say they have seen it much higher.

Terminations of Diabetis.—That of consumption is decidedly the most frequent; it, however, frequently terminates in dropsy, apoplexy, diseases of the liver, &c. The general prognosis in regard to this disease is decidedly very unfavorable in its mildest form,

The most important feature for the practitioner, I conceive, is the pathology of the disease, (as for the causes, they are occult and obscure, unless it be to admit that it is sometimes the result of hereditary tendencies. Some of our ablest and most scientific physicians declare the disease to be situated and confined alone to the kidneys; while there is another class, whose opinions are entitled to great consideration, locate this disease, and almost exclusively confine it to the stomach. I am more than inclined to the latter opinion. Quite a variety of the symptoms can be explained upon both sides of these conflicting opinions. In support of the latter opinion, the disease is almost always accompanied with dyspepsia, also costiveness, emaciation, hunger, and great

debility, a peculiar sensation of prostration in the region of the stomach. Some attribute these symptoms as more applicable to the kidneys, and argue that the absence of sugar in the blood, and the frequent absence of dyspepsia, or anything connected with the stomach, except the hunger, (which the excessive loss will explain,) make it appear most probable that the disease is situated in the kidneys. On page 36 of Prout's work on the stomach and renal diseases, that distinguished author holds the following: "In diabetis, the reducing functions of the stomach are for the most part, morbidly active, while the *converting* function is more or less suspended or paralyzed. In the diabetic stomach, therefore, sugar is found in large quantity, particularly when vegetable aliments have been taken; and from the stomach the sugar readily passes into the sanguiferous system, as just stated." He further remarks, that within the last twenty-five years, that he had seen upwards of 500 cases of diabetis; and of this great number, as far as minor and concomitant symptoms have been concerned, no *two* cases had been exactly alike, or had been benefited by exactly the same treatment. How great, then, must be the diversity of the disease.

Under the head of diabetis, the same author makes allusion to the article of tobacco; and his reasoning is so much in accordance with our views of that pernicious drug, that we beg indulgence for inserting it here. We are all aware that tobacco is an article very much used, and the deleterious effects resulting from its use on the assimilating organs, entitles it to great consideration. Dr. Prout says that "it is confessedly one of the most virulent poisons in nature; yet such is the facinating influence of this noxious weed, that mankind resort to

it in every mode they can devise, to insure its stupifying and pernicious agency. Tobacco disorders the assimilating functions in general, but particularly, as I believe, the assimilation of the saccharine principle. I have never, indeed, been able to trace the developement of oxalic acid to the use of tobacco; but that some analogous and equally poisonous principle, (probably of an acid nature,) is generated in certain individuals by its abuse, is evident from their cachectic looks; and from the dark and often greenish yellow tint of their blood. The severe and peculiar dyspeptic symptoms sometimes produced by inveterate snuff taking are well known; and I have known, more than once, such cases terminate fatally with malignant disease of the stomach and liver.

Great smokers, also, especially those who employ short pipes and cigars, are said to be liable to cancerous affections of the lips. (I have known some persons in this city become so nervous from smoking, that it almost disqualified them for business. A very particular friend of mine had become so nervous from the effects of smoking, that he was almost unable to write. At my earnest request he abandoned the use of tobacco entirely, and he frequently speaks to me of the great benefit he has derived from following my advice.) It is true the strong and healthy suffer comparatively little, while the weak and predisposed to disease fall victims to its poisonous operation. Surely, if the dictates of reason were allowed to prevail, an article so injurious to the health, and so offensive in all its forms and modes of employment, would speedily be banished from common use. This is merely a sketch; the practical nature of my treatise will not admit of my extending these remarks. 'A word to the wise is sufficient.'"

Treatment.—This is one of the most peculiar and singular diseases we meet in the animal economy, and the treatment is just as various as are the opinions of different authors respecting its nature; and as Dr. Prout remarks, there is no disease in which so much mischief has been done on false principles and by random experiments as in this. I contend that diabetis is nothing more nor less than a peculiar form of dyspepsia, and I am sustained in this opinion from the authority just quoted; he says, "it is dyspepsia which principally consists in a difficulty of assimilating the saccharine alimentary principle; and that, *like all other forms of dyspepsia*, it is liable to be much modified and aggravated by concomitant circumstances.

The dietetic treatment is that which must be exclusively relied on; I am under the impression, if you can confine the patient to a strictly animal diet, recovery will be more apt to follow it than any other course that may be pursued; it is quite difficult to get a patient to obey these directions, but I never yield any thing more than stale bread, and I have treated some few cases successfully; there are some distinguished authors that oppose this mode and admit a vegetable diet, and among these, Dr. Prout, says, "I do not, however, approve of a diet exclusively animal, but consider a certain proportion of farinaceous matters proper;" this, in my opinion, is prejudicial; it is now a well established fact that those who have been enabled to confine their patients to a strictly animal diet have cured a large proportion of their cases, while, on the other hand, those that admit a vegetable diet, admit that their practice has been very unsuccessful.

In persons laboring under this disease you will gene-

rally experience much difficulty in controlling them in regard to their thirst; the regulation of their drink is one of the most important features of treatment. "For it must be observed that extensive indulgence in liquids is (on the one hand) injurious by impairing digestion, and on the other, it has a much worse effect upon the urine than merely increasing its quantity by simple dilution; since the density is commonly found to be maintained, though the quantity be greatly increased."

The quantity of food as well as drink must be carefully regulated. Weak beef tea and cold water are the only fluids that should be allowed. Dr. Prout recommends distilled water very highly, and goes so far as to admit the patient to drink porter in small quantities.

The medical treatment must be conducted on general principles, and must of course be varied according to the degree and complication of the affection.

The bowels should be kept in a soluble condition; if there is constipation give olive oil or rhubarb; under no circumstances administer a saline cathartic. If diarrhœa, the muriate of morphine.

You should endeavor to produce a determination to the surface, or otherwise keep up a good action upon the skin, this should be done by exercise or tepid bathing. Some recommend very highly opium in this disease. I have used sulphur and camphor with advantage in determining fluids to the surface. Catechu, alum and iron, is said to have cured the disease. Some European authors speak in favorable terms of kreasote; the German authors are emphatic in its praise, they say they have used it with "striking success." The following is a prescription which I received from an individual whilst

in attendance on a case of diabetis, and which certainly did much towards the cure, viz:

℞. Tannic acid, ℈ii.
Pulv. opii., gr. ss.

Mix, and divide into ten powders, give one morning, noon and night, gradually increasing the dose.

Two cases are reported in the *Hotel Dieu of Paris*, where the animal diet had failed to be of any service, but when the iodide of iron was used in the form of pills containing five grains, and four given in the twenty-four hours, it gave speedy and effectual relief.

Fouquier states that he has administered *urea* successfully in diabetis, he gave from thirty grains to ʒii in a day in a solution of distilled water.

Phosphoric acid, as recommended in the London Pharmacopæia, is said to exert a most beneficial influence over the disease.

Dr. Cruickshank alludes to the influence of the *hydrosulphate* of ammonia in diabetis; this preparation had nearly fallen into disuse; it was formerly employed with the idea of deoxygenizing the system in diabetis, and of diminishing the morbid appetite, which Dr. Cruickshank says it will do, given in five drop doses in a tumbler full of water three or four times a-day.

The two following prescriptions are highly extolled in this malady: ℞. Powdered kino, ℈i, powdered camphor, ʒss, aromatic powder, ℈i, oxide of zinc, grs. x, mucilage gum arabic sufficient. Make into twenty pills, and give two morning and evening. Or,

℞. Precipitated sulphur, ʒii.
Fennel water, fl. ʒiii.

Cinnamon water, fl. ʒi.
Syrup of opium, fl. ʒss.
Mix. Give table-spoonful every two hours.

It is of imperative consequence to success that violations of systems as to diet be scrupulously avoided.

DISEASES OF THE SKIN.

HERPES.

Herpes.—This name formerly was applied to quite a variety of cutaneous eruptions. It is a vesicular disease, occurring in circumscribed patches, characterized by a great degree of inflammation at the base of the vesicles. In severe cases it is generally preceded by more or less fever, and it may be distinguished from other vesicular diseases by the inflammation, which is generally great, with which it is attended; it is usually accompanied with severe itching and a burning pain. The secretion which appears in the vesicle at first, is perfectly limpid; it soon becomes of a milky cast, and at length concretes into scabs.

That form of herpes zoster, or what is generally called *shingles*, and the variety of *herpes præputialis* is very common, and frequently creates a great deal of excitement in the mind of the patient.

Herpes Zoster, (or shingles.)—In this variety, the clusters are generally situated upon one side of the body. Before the vesicle makes its appearance, it is preceded by violent pricking, tingling and smarting sensations. The vesicles appear in clusters, and frequently extend

half round the body; they sometimes make their appearance on the arm, thigh or neck; this eruption is generally confined to the right side, which is a very great peculiarity of the disease.

Herpes Phlyctanodes, (a cutaneous eruption, with no fixed position.)—In this variety, the eruption is very irregular, and seems to be mostly confined to the arms, neck and breast; the vesicles in phlyctanodes are not so large as in shingles.

Herpes Præputialis.—This is a variety that is very common, and young men are frequently much alarmed, believing it to be venereal. This is distinguished merely by its locality; the eruption is situated upon the *prepuce*, either upon the outer or inner surface. They also appear upon the pudenda of women; the clusters generally are very small, consisting of some five or six vesicles, which run their course and get well generally in from six to ten days.

When the vesicles appear upon the inner surface of the prepuce, they are very apt to break, and the fluid sometimes excoriates the membrane to that extent as to produce superficial ulcers; these, by the ignorant, are sometimes treated as syphilitic in their character, and frequently terminate in very obstinate ulcers; it is sufficient to distinguish it from syphilis by its vesicular origin.

Herpes Labialis.—This is distinguished merely by its locality, occurring, as its name implies, about the lips.

Herpes Cercinatus, (Ringworm.)—The distinguishing character of this disease is so well understood, that it really needs no description, every child knows *ringworm*.

There are other varieties, such as *herpes iris*, &c., which I have never seen.

Treatment.—The same treatment is applicable to almost every variety of the disease, and there is no danger to be apprehended from it. In herpes zoster, (shingles) you must make the patient avoid all stimulating food and drink. If it should be attended with febrile symptoms, you will open the bowels with a saline purgative; if there should be pain, I frequently administer Dover's Powders in 5 gr. doses every hour, which act as an anodyne and diaphoretic.

In regard to the local treatment, avoid all greasy substances; if there should be inflammation sufficient to produce disagreeable sensations, you will apply slippery-elm poultice, or a weak solution of sugar of lead, and I have sometimes used the warm bath. One of the best local applications I have ever used, and I can recommend it with confidence, is the powered oxide of zinc; this should be dusted over the vesicular eruption, it absorbs the fluid, and soon eradicates the disease. Lunar caustic and iodine are good remedies.

In herpes præputialis no internal remedy is necessary. Care must be taken to guard the parts from the clothing, which would increase the irritation. This can be done effectually by spreading Goulard's Extract on linen, and applying. As a general rule, either of the following solutions (weak) will speedily relieve this affection:—sulphate of zinc (white vitriol), sulphate of copper (green vitriol), alum, or elixir of vitriol; and I have used frequently, with perfect success, washes of the solution of the chloride of lime or soda, and have dusted with calomel and opium. According to the indication, I prefer to this latter the muriate of mercury or tincture of iodine. It is sometimes necessary to apply emollient

applications without; when this is necessary, you will find slippery elm the best.

Herpes labialis requires cooling and astringent lotions. Cream is a good application; solution of sugar of lead will most readily relieve this.

In regard to the treatment for *ringworm*, those remedies that are recommended for præputialis are highly extolled for the cure of this variety of tetter; but the most effectual and certain mode of relieving or curing ringworm, is to cut a blister plaster long and very narrow, and apply it just over the inflamed ring. By suffering it to remain for three or four hours, it will draw a blister, which you will dress with simple cerate; it will effectually cure the ringworm.

SCABIES.—PSORA.

Itch is described by most authors as a pustular disease, but with us it is generally vesicular. It is a contagious eruption, and always attended with the most excruciating itching.

I am not aware how long this disease would last if suffered to run on; it is attended with no danger except to infants.

There are two varieties of itch, but it is not the least important to draw the distinction. One of the peculiarities of this disease that is particularly noticed, is that the affected parts itch much more after night, and especially if the patient is in bed, than during the day.

The eruption at first is very minute and red, with a transparent, viscid liquid at the summit. The vesicles are almost always distinct, and not clustered like many other cutaneous eruptions.

Treatment.—It would almost be superfluous for me to say, that sulphur still stands the test as the best application for this disease. A great variety of additional remedies have been proposed, but I really think without any material benefit to the original. The following ointment is the most efficacious. Take two parts of sublimed sulphur, one of carbonate of potash, and eight of lard—mix well; half an ounce to be applied morning and night to the affected parts; the patient using, at the same time, the warm bath every day.

Dr. Hardy, who has charge of the *itch* wards in the Hospital Saint Louis of Paris, affirms that he cures his patients in two hours. The method described is as follows:—

Patients are no longer admitted into the house for the treatment of the itch, as two hours suffice to render contagion impossible, and the recovery almost certain. The patient is put into a warm bath, and rubbed for an hour with yellow soap; he then passes into a clean bath, where he continues to cleanse his skin for another hour. After leaving this bath, he is taken to a particular room fitted for the purpose; and, with the aid of one of his fellow-sufferers, he is rubbed all over for half an hour, with the ointment we have recommended.

ANTHRAX.

Carbuncle.—This is a very prevalent disease in this climate, and in the summer and spring you will find more than one variety of phlegmonous inflammation. In the general form, you find inflammation of the subcutaneous cellular tissue, or of that which surrounds the superficial organs. Now malignant anthrax differs from phlegmonous inflammation, only in the degree of intensity; it is

true, they both consist in a rapid inflammation of the skin and cellular tissue, the latter acquires in a short time a large size, and from the fact of its being deep seated and bound by the subjacent parts, it is apt to terminate in gangrene, (mortification).

"Anthrax commences as a livid red swelling, exacting attention by its burning, smarting pain, which continues more and more to an unbearable degree. Its distinction from a common healthy *boil* becomes more and more marked as it progresses; and it is only in rare instances that it does not show its true character from the beginning. As an abscess, it has no particular source or central *cone*, and, as an ulcer, it may be said to commence fistulous. As soon as the more ordinary symptoms of local inflammation have subsided, or without their having gone through their regular stages, vesication commences, and when it bursts, instead of a truncated cone with one opening or crater, as in the boil, there is a flat top" with many openings. From these orifices, instead of healthy consistent pus, an acid fluid exudes, resembling thin gruel, and excoriating all parts with which it comes in contact. "The parts where they originate seem to be in a state bordering on mortification." Some contend that it is of an essentially contagious nature, which is always connected with a general contagious disease; I am not prepared to give an opinion upon its contagious character.

It very frequently happens that anthrax is accompanied with severe constitutional symptoms, especially when it has arrived in its second or third stage; it is a matter of considerable importance, if there is much debility, to ascertain the cause; you will frequently find severe irritation and inflammation of the principal di-

gestive organs; if this inflammation of the digestive organs prevails, you will rely to a great extent upon antiphlogistics, (remedies that oppose inflammation).

Treatment.—It consists in the employment of those remedies which are best calculated to relieve inflammation and to disengage the subcutaneous cellular tissue, and to remove the strangulation of the parts; to fulfil this last indication, so soon as I am satisfied as to the character of the inflammation, I make free and deep incisions along the whole course of the inflamed surface, this I conceive to be a very important part of the treatment; I sometimes use gentle pressure to relieve the parts of the fluid contained; I generally make the incision deep enough to produce a free discharge of blood, and which gives the disorganized fluids an opportunity of discharging through the aperture. I make free incisions even if the disease has progressed to the third stage, not with the hope that they will allay the inflammation, but merely to promote the expulsion of the disorganized cellular tissue; immediately after the incisions I cover the parts with an emollient poultice, poppy leaves and slippery elm is very good, frequently if there is much *fœtor*, (offensive smell) I substitute a poultice of charcoal and yeast. A poultice containing pyroligneous acid is sometimes indicated.

If the means advised are properly followed it will generally be sufficient. But when they make their appearance in numbers they assume a very malignant character, and the means which are calculated to subdue this character are free incisions in combination with caustic potash, and you must proceed at once to a free and full application of it.

When the malignant pustule presents under the form

of a vescicle, you make a free incision to evacuate its contents immediately, after this the denuded surface should be carefully cleansed, and some recommend a dossil of lint, soaked in the chloride of antimony; but my own mode is to take adhesive plaster and place on the inflammed surface. I leave a small space in the centre, in which I place a piece of caustic potash, and cover with a piece of lint, and apply a bandage, which, with the addition of this and the adhesive straps, will confine the potash so it cannot extravisate itself over the adjoining surface. This dressing should remain on for some hours, say at least four, and then dressed with an emollient poultice, a linseed one will answer well. If on examination you should find fresh vesicles, you should immediately reapply the caustic as before directed.

The treatment of this affection should be exclusively local, except in the fourth stage, or towards the termination of the disease, when it is characterized by very dangerous constitutional symptoms.

A distinguished author advises to let the caustic potash not only thoroughly saturate the surface, but pass through the sinuses into the cavities within, until you are satisfied that no part of the mass is untouched; he says, "you need not be under any fear of increasing the patient's sufferings; on the contrary, after a little smarting for a few moments, succeeding the first touches, he becomes perfectly easy.

Caustic applications which have heretofore been highly extolled, are the liquid chloride of antimony, and the nitrate of mercury, dissolved in nitric acid. During, as well as after the separation of the slough, the parts should be dressed as in mortification.

The same treatment is to be relied upon when the

disease has advanced to the fourth stage, when you will find more or less mortification, accompanied with smallness of the pulse, anxiety, delirium, and the other symptoms which indicate that the affection has become general. Under these circumstances it will be essentially necessary, in addition to the local treatment, to exhibit tonic and stimulating remedies, such as wine, bark, &c.

Whenever the diseased portions have entirely sloughed off, the following salve will answer well, the black salve, (Beach,) which is olive oil, 3 qts., add resin and beeswax, each ʒiii, mix together with heat as high as possible; add gradually, 2¼ lb. of red lead, finely pulverized; stir it briskly until it assumes a black color, then remove it from the fire and stir until cold; when about blood warm, add pulverized camphor and oil of sassafras, ʒi.

The diet of the patient should be as nourishing as possible, and I would advise the following restorative bitters, as there is often a great tendency to prostration.

℞. Prinos vert., (black alder.)
Senecio gracilis, (life root.)
Viburnum prunefolium, (black haw.)
Platanus occiden., (sycamore bark,) aa. ʒi.
Macrotrys race., (black cohosh,) ʒii.

Pulverize and mix. To two ounces, add two pints of boiling water, two pounds of sugar, and one pint of gin. Dose, table-spoonful three times a day. A wine cordial, which I think far preferable to this, is spikenard, Solomon seal, gentian, black cherry, and peach root, of aa. ʒi.; add boiling water two quarts; simmer slowly down

to one; strain, and add two ounces loaf sugar, and two quarts of wine. Dose, one wine-glassful three times a day.

The alkaline bath should be used freely and frequently, alternated daily with a bath of the strong decoction of oak bark.

TINEA CAPITIS.

Scald head is, in my opinion, one of the most contagious diseases of the skin. There are two varieties; in one of which the eruption is not general, or, in other words, it is distinct; in the other, the eruption assumes a circular form, having the appearance of ringworm; there is no difference either in the pustules or eruption.

The disease is almost exclusively confined to children; the eruption is always confined to the head; but Dr. Wood says that it occasionally appears on other parts of the body; this may be so, but for myself, I confess I have never seen such a case. There are a variety of cutaneous diseases that are common on the body, but this disease is certainly more particularly confined to the head.

It makes its appearance in the form of minute pustules, like yellow points, scarcely rising above the surface, and appearing as if set in the skin beneath the cuticle. There is usually but a slight redness about them. They are scattered very irregularly, without any peculiar arrangement, though sometimes so crowded as to cover portions of the surface continuously. They are generally seated at the root of the hairs, one of which usually passes through each of the pustules. It is attended with considerable itching.

The speck of pus soon concretes into a small round

scab, without any rupture of the pustule; and this event sometimes takes place within the first twenty-four hours. The scabs multiply, and often meet at their circumference, so as to form a continuous incrustation of greater or less extent.

It is said by a distinguished author, that where the disease has been long established, it is thought to retard the development of the system, and to have a debilitating effect upon the intellectual faculties.

Treatment.—Owing to the obstinacy of the disease, and its peculiar pertinacity, which seldom fails to wear out the patience, as well as to baffle skill, it is essentially necessary to have a goodly number of remedies to resort to, as emergency may dictate.

There is generally more or less inflammation attending this disease, and I am of the impression that the treatment should be, to some extent, antiphlogistic, (remedies that oppose inflammation.) Others contend that the treatment must be entirely local. I generally give my patients soda powders, night and morning. I have the hair immediately removed from the affected part, and use warm water and resin soap, as advised for the cure of *itch*, and the patient should be directed to do this every morning; after which I apply the following ointment, and give it a fair trial before you abandon it.

℞. Unguenti picis liquidæ, (tar ointment,) ℥i.
—— Hydrargyri nitratis, (citron ointment,) ℥ss.

Mix well and apply night and morning. Should this ointment fail, I have resorted to an application of castor oil, and mixing as much calomel with it as to thicken it considerably; I have never failed with this, where due attention was paid to ablutions of the head. I have also

used the kreosote ointment with success. Some advise, as a local application, sulphur; and I am of the opinion the recipe recommended for itch would be of service; others, oxide of zinc; the mineral acids in the form of lotion, in the proportion of a drachm to a pint of water, and the solutions of sulphuret of potash, chloride of lime, sulphate of iron, zinc or copper, nitrate of silver.

Dr. Nigan recommends in the highest terms, the concentrated acetic acid, or radical vinegar; he saturates a sponge and applies it three or four minutes; he says one application will affect a cure.

When the disease has existed for any length of time, you will use aperient medicine, and where it is of long duration, your appropriate remedies will be the alkaline and sulphurous washes and acidulous lotions; you should use them in strength according to circumstances. "Ten or twelve grains of the potassa fusa in an ounce of distilled water, or one or two drachms of subcarbonate of potash, dissolved in a pint of tepid water, are the best alkaline applications." The first should be applied for a short time, and the latter kept constantly to the affected part. We have used a lotion compound of the following with good results:

℞.	Sulphuretti potassæ,	℥ss.
	Saponis venitæ, (turpentine soap,)	℥i.
	Spiritus rectificati, (rectified spirits,)	℥iv.
	Tincture myrrh,	℥ss.
	Lime water,	Oj.

Mix and apply night and morning. No application should be used until the head be previously shaved.

The following remedies are appreciated highly by different practitioners, such as ointment of nitric acid.

(See Dub. Pharmacopæia.) It is olive oil, one pound; lard, four ounces. Melt and add nitric acid, five drachms. Where the disease is very obstinate, the following has been advised:—Corrosive sublimate, two grains; acetate of copper, six grains; distilled water, two pints. Dissolve, use this as a wash. Dr. Ellis recommends calomel, ʒii.; burnt alum, white oxide of lead, each, ʒss.; oil of turpentine, ʒii.; simple cerate, ʒiss. Mix well. He applies this every night, washes it off in the morning, and dusts the head with starch, and washes and reapplys the ointment again at night.

Dr. Armstrong advises an ointment composed of mercury, four parts; lead, half a part. Dissolve separately in nitric acid, sufficiently; then mix with oil of almond, twenty-four parts; lard, forty-eight parts. Mix intimately, and apply.

I have myself used Banyer's ointment, and think well of it. It is litharage, two ounces; burnt alum, calomel, each, one ounce and a half; lard, two pounds; venice turpentine, half a pound. Mix and apply.

I have as much confidence in the iodide of sulphur, in this disease, as almost any other remedy. It combines with lard; you must vary its strength according to circumstances. It is generally made into ointment in the proportion of five parts of the iodide of sulphur to ninety of lard.

Dr. Litchfield reports having cured many cases of tinea capitis-porrigo, (scald head) by making this preparation into an ointment; he used a half drachm of the powder to six drachms of simple cerate.

I was induced, not long since, to try the cod liver oil in an obstinate case, and I was much astonished at the remarkable power it possessed over the disease.

Mr. Donevan has prepared a new remedy for the cure of cutaneous diseases, and especially scald head, the hydrargyri et arsenici, iodidrum, (mercury, iodine, and arsenic.) Dr. Taylor, of New York, has prescribed it and testifies that it produces a more marked and prompt effect than the various remedies usually resorted to. When applied externally in cutaneous diseases, it may be diluted with an equal portion of water, or farther, should a weaker lotion be indicated.

From the contagious nature of this disease, the utmost cleanliness should be observed; tepid and sulphurous baths should be freely indulged in.

After washing the head with soap and water well, apply the saturated tincture of polk root twice a day. Beef gall and vinegar are highly extolled.

The *anemone nemorasa,* (wood anemony) when applied to the head, is said to be a speedy cure for tinea capitis, (scald head.)

URTICARIA.

Nettle Rash.—This is an eruptive cutaneous disease; it rises in what is vulgarly termed a *whelt,* which is a round oval elevation of the skin; it is very red in its appearance, and attended with a most intolerable itching. I have seen this disease so inflammatory in its character that the patient would be swelled to an alarming extent. I have seen cases where the tongue and throat was swollen; it is said that the irritation extends itself to the mucous membrane to that extent as to produce cough. Some authors say they have seen patients unable to swallow, and nearly unable to breathe.

A very distinguished English author, says there are many causes of nettle rash. It is produced in some

persons by eating shell fish, herrings, crab soup, or drinking malt liquor, or white wine, and it is frequently the result of taking balsam copaibæ. Some persons have so peculiar an idiosyncracy of constitution, that extreme cold or heat, or any of the causes mentioned, will produce the disease readily.

Treatment.—The disease is evidently inflammatory, and requires your treatment to consist in gentle aperients, low diet, warm baths, &c. I generally move the bowels with a half grain of podophyllin, and two to four grains of the compound powder of rhubarb, as heretofore advised. In severe cases, some advise the use of the lancet. Dr. Beach says, if you will bathe the parts well with good spirits, and a little gum camphor or celandine, (tetterwort,) and drink saffron tea, you will soon cure the disease.

It sometimes assumes a chronic form, which is very obstinate. In this case you must resort to antiphlogistic means, and in regard to local applications, you will find the chlorides, prussic acid or nitric acid best to alleviate the itching.

CONVULSIVE DISEASES.

CEPHALALGIA.

Cephalalgia embraces every variety of headache, and there is such a diversity of character in regard to it, and it is so exceedingly common, that it entitles it to peculiar consideration. I shall endeavour to point out the peculiarities in regard to primary, symptomatic, and idiopathic headache, without attempting explana-

tion of the peculiar phenomena of functional diseases of the brain.

Headache is of various degrees of intensity. Sometimes it is fixed, sometimes changeable in its position; the pain, at times, seems confined to the muscles of the head, and apparently very superficial, and again we have the pain deep seated, as if the brain itself was its locality. It is sometimes very transient in its duration, and again it is protracted for days.

I have frequently seen it periodical, being either remittent or intermittent. The pain may be simple, or may be mingled with various other perverted sensations, such as giddiness, fulness or distension, weight or lightness, emptiness, heat or coldness, hissing, buzzing, ringing or roaring in the ears. I have seen it so intense and excruciating as to produce temporary blindness.

Symptomatic headache, is the result of a disease that the patient may be laboring under. *Idiopathic* headache, when the cause cannot be ascertained, or is not recognized among special diseases. It is obviously nothing more than a symptom, in either case.

Symptomatic headache is so very common, and is so frequent an attendant upon such a multiplicity of diseases, that it would be superfluous to enumerate them; suffice that you have it as an attendant symptom in all forms of meningeal and cerebral inflammation. One of the most common in that class of diseases styled *febrile*. In diseases of the stomach, bowels, kidneys, uterus and spinal affections, it is almost a constant symptom.

"Idiopathic headache is also not uncommon." In common parlance it is generally styled nervous headache; in its mode of attack it is exceedingly irregular, and also irregular in the character of the pain, it some-

times makes its appearance very suddenly, and at other times it is very tardy, and so insiduous from the slight pains accompanying it as hardly to be noticed; it gradually increases for days, until it arrives at that point which makes it almost insupportable. "More frequently than any other variety of headache, this assumes the regular periodical form." In most instances the pain is in the front of the head, "over one or both eyes. After continuing a certain length of time, it not unfrequently provokes vomiting, but differs from sick headache in the circumstance that the matter discharged from the stomach may be quite destitute of acid bile or any acid property;" patients in these case are generally irritable, easily put out of humor, and generally very impatient.

We have another form of headache, where the pain is of another description, it is termed hemicrania, (neuralgia,) it is easily distinguished from the contraction it generally produces in the muscles, and from the fact that the pain is generally confined to some particular nerve, when such is the case it is called "tic douloureux;" it sometimes does not confine itself to particular nerves, but confines itself to one locality. No intermission, attacks various parts of the head, this is very common in hysterics. "It occurs especially in hysterical patients."

We have a disease, rheumatism of the scalp, which is frequently mistaken for cephalalgia, (ordinary headache,) it is very easy to make a proper diagnosis in regard to this variety; where the pain is evidently rheumatic it is attended with a great degree of coldness, the pain is generally more acute in the evening, it frequently extends to the face; there is great tenderness of the scalp,

frequently attended with perspiration, as in common rheumatism.

The last and most important variety is *sick headache*, the pain seems to confine itself particularly over the brow, and it is generally attended with great nausea and very frequently vomiting; it is sometimes called bilious headache, and appropriately so, from the fact that the discharges from the stomach are most generally very bilious. At the present day a very large majority of medical authors attribute this disease to an affection of the stomach, which I am very sure is just in many cases but not necessarily so in all. (The stomach as well as the liver are very frequently charged by medical gentlemen, when at a loss for a correct diagnosis, with not performing their functions properly, and this is especially so in regard to the liver; my experience is, that that organ, even in this climate, is as seldom affected as almost any other.)

I have seen cases where the pain in the head was severe and existed some time before there was the least evidence even of nausea; in these cases I thought the stomach affected sympathetically. "We ought not always to infer that the stomach originally is in fault, simply because it is disturbed as well as the head." Persons who are predisposed to this variety of headache I have no doubt can bring them on by overloading the stomach. "In a great many cases the stomach is not affected until the derangement of the head has arrived at a certain point, but the state of the stomach will bring it on, and so also will costiveness; it is precisely the same with all other affections of the head and of the alimentary canal."

Treatment.—It would be almost impossible to prescribe a treatment for symptomatic headache. Whatever cause produces it, you must direct your remedies to it; when you remove the cause you will have necessarily removed the symptoms. Cephalalgia is frequently produced by the use of stimulants, also by coffee and tobacco; and you will most frequently find, when you can prevail upon your patient to abstain from these articles, that he will seldom suffer with headache. The bowels should be kept in a healthy state by mild aperients; dried figs sometimes answer this purpose well. There is sometimes a very great pain, to such an extent as to require immediate action, to relieve which bathe the feet in warm water, and apply a poultice of meal, vinegar and mustard to the extremities. Opiates will sometimes give temporary relief. Some recommend Hoffman's Anodyne, in drachm doses, and Dr. Wood says, strong tea will most generally give relief. Cologne water and bay rum, applied to the back of the neck, will sometimes afford relief. Ether, applied to the head, will frequently produce ease.

Nervous headache is generally the result of irritability of the nervous system. And I have frequently given relief by the administration of the tinctures of aconite and belladonna, in alternated drop doses every hour or two, and continued through the day. Some extol very highly valerian and diaphoretics. Dr. Beach recommends equal parts of blood root and bayberry, pulverized and used as a snuff. I have seen cold water applied to the head with decided advantage.

In this form of headache the following prescription I can confidently recommend. It is the favorite of some eclectic, whose name I have forgotten, and I regret it

the more, as he should have credit for a remedy that really possesses so much power in controlling this disease.

R. Pulv. Scuttellaria lateriflora, (scull cap,)
—— Cypripedium pubescens, (lady slipper,)
—— Nepeta catariæ, (catnip,) aa. ʒss.

Steep for twenty minutes in a quart of boiling water, strain and sweeten with sugar. Give a table-spoonful every five or ten minutes.

Very favorable reports have been made in regard to strychnine in nervous headache. I have used it advantageously in neuralgia, in the 21st part of a grain three times a day, and think well of it.

Chloroform, locally applied, is a very valuable remedy.

In some cases you will afford speedy relief by applying the following lotion:

℞. Laurel water, ʒiv.
Sulphuric ether, ʒi.
Extract belladonna, ϑii.

Cover the affected parts with folded cloths, and keep them constantly wet with this lotion.

In headache, where it is intermittent or remittent, the sulphate of quinine, in five grain doses, is your best remedy.

Sick Headache.—"This," says a very distinguished author, "is a most intractable complaint. I have known it affect many persons, in whom all the remedies that were employed failed in accomplishing any material aid. Now and then the pain is so intense that a degree of phrenitis occurs, (inflammation of the brain,) and we must then treat it as phrenitis." Your patient should avoid anything that has a tendency to disagree with his

stomach; his bowels should be kept in a soluble condition. Cleanse the stomach by a brisk emetic, and give sul. quinine or ferrocyanuret of iron, in combination with belladonna, very small doses, frequently repeated.

NEURALGIA.

Neuralgia is a term employed to designate pain of a purely nervous character.

Symptoms.—The pain is of every possible degree of severity and intensity. It is generally a stabbing or plunging pain, sometimes peculiarly lancinating—in fact, you can employ no expression, the terms of which would be too strong to convey the amount or the intensity of the pain suffered in this disease. Tic douloureux was the name formerly used to express this disease.

Those that are peculiarly subject to this disease, are generally of nervous temperaments; the least irritation will sometimes produce it; the muscles commence quivering and drawing; it may consist of one continued pain, or of a multiplicity of violent twitches, varying in a degree of intensity. Sometimes between the pain there is a constant aching; the parts become benumbed, and frequently the surrounding organs participate in this latter feeling.

The pain is generally confined to the course of a nerve, but not always; frequently darts as rapid as lightning from one point to another, when really there is no nervous communication between the two localities.

Dr. Wood says, in accordance with the general law, that where there is irritation there will be an afflux of blood, the paroxysm is often attended with more or less flushing and vascular turgescence, and occasionally, if the affected part has the power of secretion, with a

copious extravasation of liquid; as, for example, of tears, when the disease is seated in the eye, and of mucous, when in the nostrils. I have observed the superabundance of secretion, but in the cases I have witnessed, there was no flushing, no swelling, no redness, not a symptom indicating any congestion or inflammation.

It generally assumes a periodical type, and the pain is so intense as to frequently produce delirium. In hysterical females, portions of the surface, at times, become exquisitely tender.

Causes.—There is a great variety of opinion upon this point; some contend that it originates from cold, or irritation of the nerve; others contend that it is a disordered state of the nervous trunk; others again admit, as all do, that the disease frequently occurs, when it cannot be explained at all, and after death nothing has been found. In fact, the true nature of the disease is very often a great mystery.

Treatment.—There is quite a diversity of opinions in regard to the treatment of this disease, and equally as much diversity in the remedies used. Your first object should be, if possible, to ascertain the cause; if this can be ascertained, you must adopt your treatment accordingly. If it is obvious or presumable, that there is inflammation, or any evident signs or symptoms of it being rheumatic, you will resort to an antiphlogistic treatment both general and local. You may find the pain the result of inflammation; this latter may subside and the pain still remain. When the disease is rheumatic and not inflammatory, you will find the following recipe, in connection with the local application of chloroform, to answer well:

℞.	Sulphate quinine,	℈i.
	Oil of valerian,	gtts. xx.
	Aromatic sulphuric acid,	gtts. iv.

Make into an emulsion, and give one-sixth every four hours, continuing it for at least four or five days.

Dr. Wood says neuralgia is often intermitting, and when not so at first, often becomes so. The physician should always be on the watch for this state of the disease, as, by availing himself of the power of anti-periodical remedies, he will almost invariably be able to arrest it. I do not think you will ever fail in curing regular intermitting neuralgia, of the quotidian or tertian character, if you will administer the sulphate of quinine, in five grain doses, every three or four hours, between the paroxysms.

Arsenic is another anti-periodic remedy, which has proved very effectual in this form of neuralgia.

Neuralgia, not periodical in its character, but which appears to be uncomplicated, is not without remedy. We generally give subcarbonate of iron; take a drachm and divide it into six doses, and give one in syrup every four or six hours. Whilst giving this preparation, the bowels should be kept regular, by the administration of one or two pills a day, composed of equal parts of rhubarb, aloes, and castile soap.

You will frequently find the hydriodate of potash given in doses, from five to ten grains, some three or four times a day, to act well, especially if alternated with a half grain of morphine, or strong hop tea. In connection, Dr. Turnbull advises the local application of aconite, (monk's hood.) Use it according to the following formula:

℞.	Aconite, (monk's hood,)	grs. iv.
	Alchohol,	gtts. vi. to x.
	Lard,	ʒi.

Make into an ointment; rub a small portion over the affected part until the pain subsides.

There are a great variety of remedies recommended for this disease, the administration of which, will depend entirely upon the judgment of the physician, such as hydro-cyanic acid, bebeeria, electro-magnetism, (which I have seen tried and it gave immediate relief) acetate of morphine, nux vomica, strychnine, and chloride of lead.

I am of the impression that local remedies afford as much relief, and are as much to be relied on generally, as remedies given internally. The following have been highly extolled as local applications in the different varieties of neuralgia:

℞.	Resin plaster,	ʒiii.
	Ext. of belladonna,	ʒiss.

Melt the plaster by means of a water bath, and add the extract. Mix well and apply.

℞.	Soap liniment,	ʒii.
	Chloroform,	ʒi.

Mix well, and use as an application on the affected organ. I have used chloroform alone, and in combination with equal portions of spirits of camphor, and I think the latter decidedly preferable.

℞.	Ext. tobacco,	ʒi.
	Simple cerate,	ʒi.

Mix, and use as a friction over the seat of pain.

Much may be done with this variety of remedies to afford relief to the patient. The local remedies, as we

before observed, are more numerous than those internally employed. A very distinguished physician asserts, that on the whole, the most efficacious are the narcotics, (substances which have the property of stupifying.) Laudanum may be applied by lotion, or in the form of a cataplasm; the liquid preparation of opium and camphor may sometimes be usefully combined. The same remarks are applicable to hydrocyanic acid and cyanuret of potassium. The latter may be applied in the proportion of one or two grains to a fluid ounce of water; or, the following ointment is recommended for hemicrania and neuralgia:

℞.	Pure chloroform,	ʒiii.
	Cyanide of potassium,	ʒiiss.
	Lard,	ʒii.

Add sufficient of white wax to make an ointment.

The endermic method of application is sometimes also highly useful. A small blister may be made in the vicinity of the pain, the cuticle (skin) removed, and half a grain of powdered acetate of morphine sprinkled upon the surface.

This is a very painful and obstinate disease; the imagination exerts a peculiar influence. You must tranquilize your patient, and apply remedies to meet the emergencies of the case.

EPILEPSIA.

In epilepsy there is an immediate loss of sense, with convulsions of the voluntary muscles.

The patient most generally has premonitory symptoms similar to those that usher in nervous affections in general; occasionally they have no warning; have the fit,

and afterwards have no knowledge of it. The warning is generally sufficient, the patient has head-ache, and very frequently vertigo preceding. I have a patient now that always complains of an itching or tingling sensation before the fit comes on.

Symptoms.—The patient is immediately deprived of all consciousness, the countenance pale, the lips are livid, the mouth distorted and foaming, the neck and cheeks much swollen, the tongue frequently much bitten, the eyes are rolled up and appear to be set, the urine and fæces are sometimes involuntarily discharged, the respiration is very laborious, deep and irregular. This state soon passes, the patient is left much prostrated, his whole frame is bathed with perspiration; but frequently alarming symptoms follow the fit; in many instances the patient is so much prostrated that he lies in a *comatose* condition, (profound state of sleep,) temporary insanity sometimes follows the paroxysm.

The fits occur most frequently after night, generally come on very soon after the patient has gone to sleep, they generally have no knowledge of the fact unless their feelings of lassitude and prostration, which they invariably experience afterwards, imparts this information.

Those patients who are subject to these attacks generally are very dull in their intellectual faculties, with but little energy. It has been asserted that of any given number of epileptics, two-thirds at least are in a state of idiocy or dementive, (the mind becomes impaired.)

Frequency of Attacks.—The interval between the paroxysms is very variable, and there is no certainty whatever in regard to it; the few cases however I have met with here, have all presented a regular periodicity; yet

there is no doubt but this is liable to great uncertainty; and in general, as we have before remarked, not the least calculation can be made as to the period of attack.

There is a great variety in epilepsy; I have described the form we have met, and we are not as particular as some, if it is epilepsy that is enough to know, without quarrelling over the fact, whether there is a complete loss of sense, with general convulsions, or an incomplete loss of sense, with partial convulsions.

Drs. Darwin and Pritchard both affirm, and it is no mean authority, that "somnambulism or walking in sleep" is an epileptic disease; others contend that "nightmare" is a slight degree of epileptic affection.

Causes.—We see this disease very frequently, in fact it is common in infants and young children, they are certainly more subject to epilepsy than the adult, and I have no doubt, the latter more so than the aged. Some authors contend that it is more common among females than males, this is not in accordance with my experience. On examining my note book, where I have entered all the important cases I have met, I find I have seen thirty-seven cases, twenty-six of which were female children, nine male children, and two male adults.

Some contend that there is a certain hereditary disposition in epilepsy, and there is probably much truth in this opinion. The causes which predispose to epilepsy are certainly not well understood, and in a large majority of cases are inexplicable.

If there be a very strong disposition to epilepsy, then even slight exciting causes may produce it, they have been "enumerated as follows: excessive mental application or emotion, especially fright, tickling of the soles of the feet, or the sides, masturbation and venereal"

excesses. (In one of my adult cases this pernicious habit had been constantly indulged in.) "Great fatigue, long protracted watches, over-suckling, excessive pain, the presence of worms in the intestinal canal, repercussed eruptions, &c."

Dr. Hall considers all convulsive diseases to be affections of the true spinal marrow, and ranks epilepsy also among centric convulsions, which may be induced by any disease within the spine, whether effusion, tumour, or exostosis. Diseases, too, within the cranium, by irritating the excitor nerves, will induce epilepsy—too frequently, alas! of an incurable character.

Diagnosis.—Epilepsy is sometimes confounded with apoplexy and hysteria. In epilepsy you have violent *convulsions*, in *apoplexy* almost motionless—in epilepsy, the paroxysm short and face pale—quite the reverse in apoplexy. During the stage of *coma*, there may be some difficulty.

In regard to hysteria, there can be no difficuly in distinguishing epilepsy; in epilepsy, there is generally a complete loss of sense; in hysteria, quite incomplete, and in this latter you usually have laughing, crying, sobbing, &c.

There is some difficulty, at times, in distinguishing epilepsy from the convulsions of children, arising from dentition or intestinal irritation; they cannot be looked upon as epileptic, though it might be difficult to decide in what respect the convulsions differed in the two cases.

Prognosis.—If the cause be evident, and is of a removable nature, not dependent on any organic disease, and met at its commencement, there is reason to believe it may be cured. A distinguished author asserts, that

cures, sometimes, also take place in cases of considerable duration; and there is no reason to despair in any case, unless obviously connected with incurable organic disease, or evidences of deterioration in the condition of the brain.

Those cases which commence in early infancy, are generally very unfavorable.

If you cannot discover the cause, the prognosis must be unfavorable. The disease, altogether, is one of the most intractable we can have to treat. It is a disease which, in a large majority of cases, cannot be cured, though in most cases we may lessen it.

Treatment.—In regard to this, no course of treatment can be exclusively relied on in all cases. Sometimes the attack is sudden; at others, the warning is afforded; in this latter case, it would be advisable to attempt an impression on the nervous system. The treatment naturally divides itself into that which is required during the paroxysm, and that which is necessary during the intervals.

Where you have the warning, it might be useful to attempt an impression upon the nervous system, by the administration of an opiate in a large dose, and for this purpose opium should be selected.

In the paroxysm, very little treatment is demanded; in fact, nothing can be done of service, unless it be to elevate the head, and keep him from injuring himself from his own convulsive movements. Place some substance between his teeth; you may apply cold water to the head; and it is said to do good to put salt and water in the mouth.

If there is an exciting cause, it must be removed, if possible; if you can ascertain none, I then adopt an

antiphlogistic treatment. I advise the patient to abstain from all kinds of wine and liquors, to live, if possible, on nothing but a milk diet and gruel, or at least vegetable substances; avoid meat. Keep the bowels in a very soluble condition, and administer a shower bath upon the head, at least twice a day.

I introduce a seton in the nape of the neck; and a recent French author affirms that he has cured epilepsy by severe cauterizations with *caustic potash* on each side of the spine of the neck and back; he makes fresh cauterizations every five or six weeks.

All sensual excesses, including the habit of masturbation, must be abandoned. I was consulted by a patient a few days ago, who resides at Montgomery, and I traced it to onanism, and so long as he would abandon this pernicious and horrible practice, he was exempt; but my friend Dr. Arnold informed me that he thought there was not much prospect of controlling him. I believe in such cases it would be well to give dulcamara, as an antiphrodisiac remedy, (medicines capable of blunting the venereal appetite.)

That class of remedies styled tonic have been more extolled of late in the treatment of epilepsy than any other. We shall, however, in the first place, allude to those vegetable preparations which enjoy the confidence of a very large portion of the profession. Among this class of remedies, indigo, of late, has attracted considerable attention; it is given in twenty grain doses, increased to a drachm or a drachm and a half per day; it must be persevered in for months.

Dr. Henry recommends very highly the stramonium, (Jamestown weed.) Take a pound of the green leaves, mash them, press out the juice, put it into an open ves-

sel, place it in the sun until you can make pills from it. He makes the pills to contain two grains. First give an emetic, and then a pill night and morning.

I have used the miseltoe taken from off the water oak, (it should be collected in November, dried and pulverized, and kept in a close bottle,) in doses from thirty to fifty grains, gradually increasing to two drachms, two or three times a day. It is a valuable remedy. Some prefer administering it in an infusion of valerian.

The garden peony, quinine, lady slipper, snake root and capsicum are all extolled; and when the paroxysm is of regular periodicity, I would rely much on some of these remedies.

The tonics of the mineral kingdom are most generally preferred. Andral speaks in high terms of the nitrate of silver. He uses the following:

℞.	Nitrate of silver, (lunar caustic,)	grs. vi.
	Ex. of opium,	ʒi.
	Musk,	℈ii.
	Camphor,	℈iv.

Mix, and divide into 90 pills; he gives one night and morning, gradually increasing the dose. It is said that nitrate of silver has a tendency to produce discoloration of the skin, and from this fact the remedy should not be given longer than a month.

The preparations of copper have been used with benefit, as also the sulphate and oxide of zinc, others extol the preparations of iron; but besides these, which in truth may be deemed a rational treatment, there are certain *specific* remedies in this disease which we employ empirically. They do good, we have no doubt, in many instances, without our being able to assign a reason for

it. The following recipes are prescribed in many instances with success. The copper is extensively used.

℞. Cupri. acetat., (verdigris,) grs. v.
—— sulphat., (blue vitriol,) grs. v.
—— ammoniat, grs. v.
Ext. gentian, ʒi.

Mix, and divide into 20 pills. Dose.—One three times a day. The dose may be gradually increased, watching the effects upon the digestive organs.

A prescription highly extolled by a German physician, is—

℞. Ammoniated copper, grs. 2 to 4.
Powdered belladonna root, grs.1 to 4.
Sugar, ʒi.

Mix, and divide into six powders, one to be taken every two hours.

Dr. Dunglison recommends ammoniated iron, ʒi, and extract of gentian, ɔii; divide into twenty powders. Dose, one or two, and increase to five or six.

I have used the Prussian blue, but my experience is not as favorable as some others. The following is the recipe:

℞. Prussian blue, grs. xii.
Sugar, ʒi.

Mix, and divide into twelve powders. Give one every two hours.

A favorite of Dr. Ellis, is—

℞. Oxide of zinc, ɔii.
Conserve of roses, sufficient.

Mix, and divide into ten pills. Give one three or four times a day.

℞.	Chloride of zinc,	ʒiv.
	Alcohol,	fl. ʒi.
	Sulphuric ether,	fl. ʒii.

Mix. Give five drops every hour in a little sugar and water, gradually increasing the dose.

The artemisa vulgaris, or (mugwort,) where there is no organic disease, is highly spoken of by the German journals as an anti-epileptic. They give from fifty to seventy grains a half hour before the paroxysm.

The compound powder of valerian at one time enjoyed much reputation in epilepsy; it was given as follows:

℞.	Powd. valerian,	ʒi.
	Orange leaves,	℈i.
	Muriate of amoniæ, (Sal. ammoniæ,)	grs. ii.
	Oil of Cajeput,	gtts. iv.

Mix. Give tea-spoonful four times a day in hot tea.

In the uncomplicated form of epilepsy, *digitalis* is entitled to consideration.

The *cotyledon* umbilicus, (navel wort) has recently been recommended for the cure of epilepsy, and from the great success attending its administration, as reported by numerous physicians, it certainly deserves some degree of confidence from the profession.

The juice if given in one drachm doses, two or three times a day; or, if evaporated into an extract, five grains, gradually increasing the dose, if the patient will bear it.

A remedy that is entitled to great consideration from the profession for the cure of this disease, is the *marsh smallage*; it is a very dangerous and poisonous remedy. Ten or twenty grains, according to the patient's age,

repeated every five hours, and after a time gradually augmented, have cured several cases of epilepsy.

APOPLEXY.

This is a disease originating, in my opinion, most generally within the cranium, and depending upon pressure upon the brain. If a person be walking or sitting, he suddenly falls, and frequently dies immediately.

Symptoms.—It is most usually preceded by drowsiness; a heavy unpleasant sensation is felt in the head for a great length of time before the attack comes on. It is asserted not to be uncommon for persons before they become apoplectic, to have numbness of the fingers, or of some part of the body. After the attack, if death does not take place speedily, the pulse is very slow, sometimes full, and others very feeble; the face is livid and *flushed*, and most generally swollen. The attack generally lasts but a few minutes, although there are cases reported where it has lasted for hours and days; in this latter variety they seldom react out of it.

When the disease does not terminate in instant death, the symptoms generally recede till they disappear altogether. Consciousness and observation of things return, and yet, sometimes the return is not perfect. Power, consciousness, and perception return, except in one part of the body; so that, after the disease, one half of the body very frequently remains motionless, without being at all subject to the volition of the patient; and sometimes, in addition to this loss of power over half the body, there is also a loss of sense, at least, with regard to touch.

There is a peculiarity in regard to the eye; if the

pupil is dilated, there is a good prospect for recovery; if contracted, the chances are much diminished.

Patients not unfrequently recover from an attack of apoplexy, yet they are peculiarly liable to a return of the disease, "which in general sooner or later proves fatal." They very seldom survive the third attack.

In some instances, with care the disease may be removed. It most generally attacks sedentary persons and those who use a rich diet and indulge in ardent spirits freely.

Causes.—It was at one time, and very generally, supposed, that a certain peculiar formation, tended much to apoplexy; for instance, persons who have large heads, short necks, red faces, and a full habit of body, are thought to be peculiarly liable to the disease, if there is an hereditary disposition, then they may be peculiarly so.

A distinguished author observes, men who have large thick heads, are those that are usually afflicted, because that is not the shape for intellect. (It is a long headed man that is generally thought clever, and such is the fact. I have a friend who has what I term a front and back room to his head, and he is a very clever, good natured man.) This same author contends, that men possessing the physical formation I have described, are certainly very liable to apoplexy. The immediate cause of apoplexy, is a compression of the brain, occasioned by an excess of blood, and frequently the result of a collection of watery humours.

"The former is called a sanguine, and the latter a serous apoplexy. It may be occasioned by any thing that increases the circulation towards the brain, or prevents the return of blood from the head: as intense study; violent passions; wearing anything too tight

about the neck; a rich and luxurious diet; suppression of urine; suffering the body to cool suddenly, after having been greatly heated; continuing long in a warm or cold bath; *excess of venery;* the sudden striking in of an eruption; stoppage of any customary evacuation; wounds or bruises on the head; and long exposure to excessive cold."

Treatment.—If the disease is the result of pressure of a piece of bone, then you require the surgeon, and it would be great and extreme folly to administer medicine. If it be an ordinary case of apoplexy, the indication will be to check the hæmorrhage and reduce congestion; his head and shoulders should be elevated, and his neck should be unincumbered; he should have fresh air, and no one but his attendants should be about.

If the face is red, and there is evident congestion upon the brain, and the pulse full, then I advise bleeding, and to an extent proportionate to the vigor of the patient, and the force of the circulation. In the first place, I generally pour cold water upon the head for some little time, in a constant stream, and this frequently accomplishes all that you could expect from the lancet—if it reduces the action of the heart, and the pulse should be small, you must, under no consideration, use the lancet. Some commend, in high terms, the use of cupping to the nape of the neck and temples, when the pulse is feeble.

After you have tried the cold water, then the practitioner should be guided by the strength of the pulse, whether he shall bleed or not; and by this, in connexion with the general state of the constitution of the patient, to what extent he shall bleed.

You should then administer a full dose of purgative

medicine; for this purpose give one or two drops of croton oil, in combination with a strong infusion of senna, if he can swallow; if deglutition is difficult, place the croton oil on his tongue, without waiting for the action of this cathartic. You should give a strong and acrid cathartic; I would advise an infusion of the extract of colocynth, in combination with castor oil.

Water should be kept constantly applied to the head, and ice, if it can be procured; revulsion to the extremities should be kept up by mustard foot baths; and sinapisms (mustard plasters) should be applied to the feet and legs; if, under the application of water to the head and plasters to the extremities, the surface should become cool, the face pale and the pulse feeble, you must stop the cold applications, and substitute warm emollient ones.

If the force of the circulation has been reduced, and the comatose symptoms still remain, then I would advise the use of podophyllin, in small doses, for its constitutional effect. Some recommend shaving the head, and applying a blister over the whole scalp; this produces a powerful exterior revulsion, and may, I have no doubt, allay any tendency there may be to inflammation.

Great care must be taken not to push any treatment too far; for there can be no question that persons will sink after a time, entirely from these measures being pushed to too great an extent.

Attention must be paid to the urinary organs, and the catheter used, if necessary.

Diet.—It should consist of farinaceous and demulcent drinks, and in extreme prostration give beef tea.

Prophylactic Treatment.—I find, in an author of great repute, a prophylactic treatment recommended, which

coincides with my views. His bowels should be kept regularly open once a day; and if any tendency to constipation exists, he should occasionally take a small dose of sulphate of magnesia or some other saline cathartic. Should vertigo or headache, flushed face, full pulse, come on at any time, no hesitation should exist in taking blood locally, and applying cold water to the head, and I would advise cold water injection. Stimulating drinks and condiments should be wholly proscribed; tea and coffee should not be used; his diet should consist chiefly of vegetable food and milk, with boiled meats in moderation. He should never strain, walk fast, or run; he should avoid all active muscular exertion. He should sleep on a mattrass, with the head high, and never suffer himself to become excited.

PERTUSSIS.

Whooping Cough.—It is so called from the peculiar noise attendant upon the cough; it is a contagious disease, and most frequently attacks young children.

Symptoms.—If you have once seen the disease you will ever after know it; it makes its appearance similar to a common cold, and this always precedes the disease; you soon have red and watery eyes, sneezing, a dry cough, and sometimes slight fever; and at this period you cannot distinguish it from cold. It is soon followed by violent fits of coughing, with short expirations, the fits of coughing are in quick succession, and then generally followed by one deep, long whooping or crowing inspiration.

About this period the disease begins to manifest a convulsive or spasmodic character; the duration of the fits of coughing are increased, and in violent cases the

cough is at times exceedingly troublesome. We have seen paroxysms of coughing last ten minutes, during which time the face is flushed and swollen, the veins of the neck and temple distended, the eyes very prominent, and the whole countenance expressive of much distress; every muscle seems put into action, and the child apparently about to be strangled—in a few minutes it will run and play as if nothing were the matter. Fever is not essentially connected with this disease, although in many instances we find it; when it is inflammatory, the spasmodic cough will frequently continue even for months after that state has subsided.

The force of the disease varies much; in protracted cases great emaciation and debility sometimes ensue, and the patient frequently dies of exhaustion. The simple or mild form of the disease generally terminates favorably; it is peculiarly liable to complications, which are not only dangerous but frequently very fatal; those diseases most frequently in combination are pneumonia, bronchitis and croup, this latter is much to be dreaded, and will require great care and watchfulness.

Treatment.—In simple cases, or more properly speaking, mild cases, very little treatment is necessary.

In the early or catarrhal stage, we generally administer castor oil, but if there be fever, I immediately give ipecac., and push it to vomiting; the oil should be repeated every three hours, until the bowels are freely opened.

When the spasmodic symptoms appear different remedies are required. Some prefer the nervous stimulants or anti-spasmodics, and the narcotics have been found useful; these remedies are not indicated if there be fever.

Emetic remedies I have found very useful, they relax the spasm, produce nausea sufficient to depress the arterial excitement, and assist expectoration. I advise small doses of ipecac. to be frequently repeated, sufficiently often to keep the system under its influence; any of the anti-spasmodics can be combined with this beneficially when the fever has disappeared.

There are a great variety of remedies used; the black cohosh we have used with decided advantage. Dr. King reported it to the New York Philosophical Journal of 1844; he recommends the saturated tincture to be given from five to ten drops, increasing every two hours. I have used it in from ten to fifteen drops three or four times a-day, to a child a year old.

I have tested of late nitric acid, it can be given to a child of any age; and it is unquestionably very prompt in its action. Make a solution as strong as lemon juice, sweeten, and give small portions two or three times a-day; some of the physicians of New Orleans speak in high terms of it.

Of the narcotic remedies, belladonna enjoys the highest reputation in this disease, with the most of American practitioners; you will derive little good from it until the system is fully impressed with its action, this will be manifest when you have dryness of the throat and vertigo; you can use either of the following recipes:

℞. Extract of belladonna, ʒii.
Distilled water, ʒii.

Dissolve and filter, then add, syrup, 3 lbs.; boil and strain, and give from one to three drachms; or,

℞. Dried belladonna leaves, ʒi.
Digitalis,
Common nightshade, aa. ʒi.
Water, fl.ʒx.

Digest for two or three days, filter and add syrup, 2 lbs.; give a tea-spoonful every hour or two.

There is a variety of other narcotics used in whooping cough. Among them is opium, hyosciamus, lettuce and conium. Opium is a good remedy to allay cough, but its astringent qualities check expectoration. We have administered it in the following combination advantageously:

℞. Wine of ipecacuanha, ʒi.
Tincture Opii., ℈i.
Carbonate of soda, ℈i.
Syrup, fl.ʒii.
Water, ʒii.

Mix. Give a tea-spoonful every two or three hours.

Nervous stimulants are highly extolled by Dr. Wood, and he advises assafœtida to be given; to a child two years old he gives two grains three or four times a day. The following is a more preferable mode for its administration:

℞. Assafœtida, ʒi.
Water, fl.ʒiv.

Make an emulsion, and add—

Tinct. of balsam of tolu, fl.ʒss.
——— opium, ʒi.

Mix well. Give tea-spoonful every two hours to a child four years old.

You will frequently find it necessary to substitute other anti-spasmodics, many of which have much repu-

tation. I advise the following when the assafœtida fails or cannot be taken:

℞. Liquid succinate of ammonia,
Elixir of liquorice, aa. ʒii.
Wine of opium,
Syrup of ipecac., aa. ʒi.

Mix. Give from twenty drops to half tea-spoonful every three hours. Or,

Dissolve carbonate of potash, twenty grains, in a gill of water, add ten grains of powdered cochineal, sweeten with loaf sugar, and give an infant a tea-spoonful, increasing the dose according to the age of the child. This preparation is much improved by adding ten or fifteen drops of the tincture of belladonna.

The following anti-spasmodic liniment is highly extolled:

℞. Oil of amber, ʒii.
—— olives, ʒss.
Laudanum, ʒii.
Brandy, ʒiii.

Mix, and rub well between the shoulders.

There are other anti-spasmodics which have considerable reputation, such as musk, valerian, castor, and camphor.

It is necessary that we should allude to tonics, some of which have proved highly efficient remedies, and are strongly recommended; a very distinguised physician says they are undoubtedly occasionally useful, and the practitioner may know where to resort when he has ineffectually exhausted the usual round of remedies. Where there is much debility I have no doubt it might,

to a great extent, be counteracted by the proper administration of this class of remedies.

Some, if not all of the following, are highly praised by many practitioners:

℞. Powdered Peruvian bark, ʒii.
——— Seneka, ʒss.
——— Liquorice, ʒi.
Contused poppy heads, ʒiii.
——— Ipecacuanha, ℈i.
Ground ivy,
Hyssop,
Pennyroyal, aa. handful.
Sugar, one pound; water, sufficient.

Boil, and make a syrup. Give three table-spoonsful a day.

The following, it is said, has been used with great success:

℞. Tinct. of bark, ʒiii.
Paregoric elixir, ʒss.
Tinct. of Spanish flies, ʒi.

Mix. To be given in very small doses.

The following is also extolled as a tonic remedy.

℞. Sulphate of zinc, grs. x.
Powdered myrrh, ʒiss.
Conserve of roses, sufficient.

Mix, and divide into twenty pills. Give one three times a day.

The preparations of tannic acid, alum, sulphur, and lead, are recommended, also.

Dr. Maddison, of Virginia, recommends a blister to the *nucha*, or hinder part or nape of the neck; says he has

been successful in curing whooping cough by these means. He recommends this mode of treatment on the theory that the disease consists in specific irritation of the spinal cord, from the origin of the eighth pair to the origin of the phrenic nerve.

Conium, the active principle of the poison parsley, Hemlock, is extolled by the French physicians, in this disease; they give it to children in doses of from one-fortieth, to one-tenth of a grain, according to their ages, from three months to four years of age; it is a dangerous medicine, and should never be used unless prescribed by a regular physician.

Coffee is now being used with much success in this disease. Dr. Delahage gives the following formula as almost infallable:—Take of syrup of extract of coffee, four pounds; extract of belladonna, extract of ipecacuanha, of each, two scruples; mix together. Dose, two fluid drachms, or a dessert-spoonful, at morning and noon, and double this dose at night, on going to bed, for children of three to five years old; it should be taken in two or three table-spoonsful of warm water.

If your little patient should have convulsions, give assafœtida and egg as an injection, and apply garlic poultices to the extremities. Dr. Williams says, blowing into the ear, will control spasms in a child. The bowels should be kept in a healthy condition, and the secretions corrected by appropriate means. If the gums are swollen, the lancet should be freely applied to them. The diet should consist chiefly of vegetable substances, and I generally allow milk; every thing taken should be of easy digestion. The child should wear flannel next to the skin.

SINGULTUS.

Hiccough.—This is an affection of a spasmodic or convulsive character, arising from any cause that produces irritation of the nervous fibres of the stomach or diaphragm (vulgarly called midriff.)

It frequently attends, and is very annoying, when there is inflammation of the stomach, bladder, or intestines; we have seen it the result of excess in eating or drinking, especially where the substances were hard of digestion. In malignant fevers, that are almost terminating in dissolution, it is a very dangerous symptom; it argues unfavorably.

It is said to be frequently the result of scirrhus tumors of the stomach.

Treatment.—If it be the result of poison taken into the stomach, then you will administer freely sweet oil and milk, which will generally give relief.

If it proceed from an inflammation of the stomach, you will have to adopt an antiphlogistic course; cup freely over the stomach. In this form of disease we have given a few drops of nitric acid with decided benefit. Some recommend spirits of nitre, others, opium; I advise a blister after the cupping, and warm fomentations to the stomach.

When it is the result of indigestion, any alkali will frequently afford relief. I have known a Seidlitz powder, drank whilst effervescing, to cure a troublesome hiccough.

I have frequently seen cases of hiccough that proved very troublesome. In this class of cases you will have to administer your most active antispasmodic; musk, in large doses, will be found useful. Some advise, in these

cases a cataplasm of turpentine; I think I have derived more advantage from morphine, than almost any other remedy.

When hiccough is the result of flatulence, you will generally afford relief by giving brandy and peppermint; some advise fennel seed tea. It is said that the common hiccough can be generally removed by taking a pinch of snuff, or anything that will cause sneezing.

Musk.—A stimulant and antispasmodic, is a very useful remedy in violent hiccough, given in doses of from five to twenty grains.

CHOREA.

St. Vitus' Dance.—It is characterized by involuntary contractions of the muscles, and is very closely allied to paralysis agitans; there is no loss of consciousness, in fact, no perceptible disturbance of the intellect, unless the disease has continued for a great length of time; it is a disease that seems to confine itself almost exclusively to young persons.

Symptoms.—Chorea generally comes on gradually, and is preceded by irregular appetite, and violent constipation; you will soon observe that they have not complete control generally of one foot, and frequently there are catches and twitching sensations of the muscles of the neck; this is soon followed by unusual and ludicrous contortions of the face, or violent movements of the shoulder or hands; in fact, there is almost a constant flexion, extension, or rotation of these muscles. It is said the disease is particularly characterized by a catching of the fingers. I do not think there is a complete loss of the power of the will, but the muscles seem to be beyond the control of the will; in a short time the

whole body becomes more or less involved in this muscular action. It is sometimes difficult for a patient to walk, stand, or sit; fear or mental emotion increases the action of the muscles temporarily. The features undergo the most peculiar distortions, and frequently spectators seem to be amused at the poor sufferer. The gesticulations are so grotesque and diversified, that it would be exceedingly difficult to name the various gyrations. The motions, as I before observed, are a little under the power of the will, and sometimes they can restrain them temporarily, but their best effort in the disease is little more than a sudden catch.

It is asserted, in very bad cases, that the patient loses the power of maintaining a standing, or even sitting posture, and is compelled to lie in bed; and a very distinguished author says, he has seen cases where they could not even lie in bed—that it was necessary to strap them down.

It occurs most frequently between the ages of three and fourteen; females are much more subject to it than males; when the disease occurs in adults, it is seldom relieved. Females, it is said, are relieved of it upon the establishment of the menstrual secretion.

Nature.—In regard to the nature of chorea, very little, indeed, is known, beyond that it is admitted to be a functional disease of the brain, and, in my opinion, confined to the cerebral organs, although some contend that it is an affection of the spinal marrow. The motions are merely voluntary, and are somewhat subject to the will, which might be considered of cerebral origin; it is sometimes attended with headache, which is almost a positive evidence of its cerebral locality.

I have seen eight cases in Mississippi and Texas,

although I believe the disease is little known in hot climates.

Treatment.—The mass of authority, at the present time, recommend purgative medicine, which treatment, I think, originated with Dr. Hamilton, it, at least, should have originated with the Doctor, as he recommends a "*looseness*," indiscriminately.

In a majority of cases, you will have headache and constipation, and sometimes tenderness of the abdomen; your first indications will be to remove these symptoms of disease, independently of the involuntary actions.

If there is headache, I would advise cupping the temples and between the shoulders, and use cold water applications to the head.

If there be costiveness, it is our duty to remove it, and it should be promptly corrected. It is highly probable that purgation is useful, not only by removing a source of irritation from the bowels, but also by acting *revulsively* from the brain, and by depletion in plethoric cases. You must exercise great discrimination in the selection of your cathartic, to suit the temperament and condition of your patient. If he is plethoric, and there is an inflammatory or congestive state of the head, I would advise the anti-bilious pill, viz:

℞. Aloes, ℥ii.
Gamboge,
Ext. Eupatorium perfoliatum, (boneset,) aa. ʒi.
Castile soap, ʒ¾.
Ext. Podophylline, (mandrake, or may apple,)
Lobelia seeds, pulv.,
Ext. Gentian, aa. ℥ss.
Capsicum, (cayenne pepper,) ʒii.
Oil of cloves, ʒi.

Warm the extracts until they are quite soft, and add the dry articles in fine powder; mix thoroughly and add the oil; make into five gr. pills. As an active cathartic give from four to six.

This cathartic might be repeated every third day, according to the strength of the patient. In a plethoric condition of the system, some advise senna and salts. If there is too much acid generated in the stomach, accompanied with debility of the digestive organs, and evident symptoms of dyspepsia, in such cases I would advise the sulphate of magnesia or rhubarb. If it is accompanied with *amenorrhœa* (suppression of the menses,) you should administer aloes and the preparations of iron, as suppression of the menses is almost universally accompanied with debility. In regard to the biliary secretions, the anti-bilious pill will correct that if given in small doses, say one pill night and morning. If the abdomen be swollen, or there is pain on pressure, besides obviating costiveness, we should try the common remedies for inflammation.

Where it is necessary to give strength, and add tone to the nervous system, tonics, anti-spasmodics, or nervous stimulants are indicated. The preparations of iron and zinc should not be overlooked; the sulphate of zinc is mostly used, and is considered very efficient. You can give two grains three times a day, and gradually increase the dose. It is essentially necessary to use again discrimination in the selection of this class of remedies, and it would be well to combine it with one of the nervous stimulants; and Dr. Young says there is none equal to *cimicifuga*, (black snake root,) he says it will cure the disease itself. He gives from a half drachm

to a drachm of the powder three or four times a day, continuing it two or three weeks.

The sesquioxide of iron, according to Dr. Elliotson, is a *specific, truly*, if it accomplishes what he says. He affirms that he has cured forty cases with it—perseverance is all that is required. There are others equal in their praise of scutellaria lateriflora, (scull cap.) They say it has never failed to effect a cure. I do not believe in that absurd doctrine of specifics; but can safely say that I have tried this remedy as recommended by Beach, and it was entirely successful. He takes scull cap, one ounce; boiling water, one quart; strain, and sweeten with loaf sugar. I let the patient drink freely of this through the day, alternating with a tea of velerian.

Assafœtida is highly recommended in many instances, more particularly when the disease is associated with hysteria.

After the system has been depleted by purgatives, you will find the oil of amber, in doses of ten drops, three times a day, a valuable remedy. Friction, with the oil, is also used along the whole course of the spine three or four times a day.

In France they extol beyond measure the use of the sulphur bath. It should at least be tried.

Quite a variety of other remedies, both tonics and narcotics, have been given with some degree of success. Belladonna, opium and hyosciamus have their advocates. A very distinguished physician assures me that he has treated a good many cases successfully, by purgatives uutil the discharges became healthy; he then administers musk and camphor, in the doses of four grains of

each every four or five hours, with an assafœtida enema, (injection.)

The following is a list of tonic preparations, that can be used and adapted to the peculiar condition of the patient.

℞. Sulphate of copper, (blue vitriol,) ʒss.
Carbonate of Ammonia, ʒvi.

Rub in a glass mortar till effervescence ceases, wrap in bibulous paper, and dry with a gentle heat. Dose.—Quarter of a grain twice a day, gradually increasing it.

℞. Carbonate of iron, given in drachm or two drachm doses every six hours. This is a very unstable preparation, it should be combined with sugar, which protects it from the oxidizing process.

℞. Oxide of zinc, ℈ii.
Conserve of roses, sufficient.

Mix, and divide into 20 pills; give one three times a day, gradually increasing the dose.

The iodide of iron is considered to answer better than any other chalybeate. It pervades the system rapidly, and keeps the secretions in a very healthy condition, it should be given in grain doses three times a day.

Diet.—It should be nutritious and easy of digestion; and anything that is calculated to excite mentally should be avoided.

CONVULSIONS.

In convulsions some contend there is a diseased state of the muscular tissues, characterized by violent involuntary contraction, with alternate relaxation; it may or may not be accompanied with derangement of the intellect for the time; it very seldom becomes the promi-

nent object of attention, as it is generally attendant on other complaints. We have sufficiently noticed it as a symptom of cerebral inflammation. But you frequently see, it is true, convulsions which do not seem to result from any other disease, though I have no doubt they arise from irritation in some part of the body; I will notice this variety.

Symptoms.—Convulsions manifest themselves in various degrees of intensity; they occur as a prominent symptom in the course of many diseases, (as we have heretofore alluded to,) and although occurring at all ages, children are more particularly liable to them during infancy; there are many causes they proceed from, such as irritation of the bowels, dentition, (teething,) and they especially attend the course of eruptive fevers; they are sometimes, however, connected with an inflammatory state of the head, and frequently occur in hydrocephalus, (dropsy of the head). A very distinguished author says, that "convulsions may either be preceded by other signs of nervous disorder or may come on abruptly, without warning. The voluntary muscles of all parts of the body may be affected, or the spasms may be confined to one-half of the body, to a single limb, or to the features. There may be only a single attack, or several in more or less rapid succession. During the paroxysm the face is sometimes pale, sometimes purplish or livid, the lips are bluish, the features often apparently swollen, the juglar veins distended, and the pulse frequent and irregular." Sometimes there is involuntary evacuations. The duration of the convulsion is exceedingly variable. It may be only a few moments, or it may extend to hours and days, but, in the latter case, there is always some remission or intermission of the convulsive movements,

though the comatose symptoms continue. The average duration of each paroxysm is generally from five to fifteen minutes; as soon as it subsides the patient is generally disposed to sleep, and not unfrequently remains somewhat comatose for a longer or shorter period.

Convulsions sometimes end fatally, though not often, unless connected with other disease. Simple, uncomplicated functional convulsions, are seldom very dangerous. In fact, the affection is itself, probably, in many instances a safeguard, by directing irritation from the nervous centres to the circumference. Nevertheless, convulsions may prove immediately the cause of death, by interrupting the due innervation of the lungs or heart, and from that fact demand a vigilant attention as the possible evidence of very serious disease.

In connection with the causes heretofore assigned for producing convulsions, we may add strong and sudden emotion, as anger, fear, surprise, excessive artificial heat, exposure to cold, and intestinal worms. A cause not sufficiently appreciated, is the milk of the mother or nurse, this occasionally produces convulsions even when one or both are apparently healthy; some contend that agitating or exciting emotions will sometimes so affect the milk as to induce convulsions in the suckling; a distinguished author says, it may be produced from articles of food or medicine taken by the mother, he knew convulsions in an infant to be the apparent result of antimonial medicines administered to the mother; irritating purgatives frequently have the same effect on the child. "The practitioner cannot be too strongly impressed with the importance of looking to the gums and to the alimentary canal of children as the seat of the cause of convulsions. Too great vascular fullness or

excitement may induce the disease in those predisposed to it, and if, at the same time, there exists peculiar nervous disturbance, convulsions will be very apt to result. Hence their great frequency in fevers; some children never have an attack of fever without convulsions."

Diagnosis.—The most important point is your diagnosis, and to determine whether the convulsions proceed from a *vascular irritation* of the brain, or from mere *nervous* irritation or *depression.* In the former, *depleting* remedies are indicated; in the latter, anodynes and nervous stimulants; that which would prove useful in the one, would be very injurious in the other.

In convulsions produced from vascular irritation or congestion, the face is generally flushed, the pulse strong and tense, considerable heat on the surface, and the tongue furred, and they are generally preceded by febrile symptoms.

When convulsions are the result of nervous irritation, the face is usually pale, or if colored, is so in consequence not of any active determination to the head, but of the interference of the convulsions with respiration, and is rather of a livid hue than red; the pulse is frequent, but not strong. Upon the cessation of the paroxysm, the child, instead of being *comatose* (a profound deep sleep) as in the former, is, at most, simply disposed to sleep, and it frequently acts as if nothing had happened.

Treatment.—When a child is seized with convulsions, the parents and attendants generally become very much alarmed, and expect very active means to be employed by the physician. I generally place the patient where it can have fresh air, loosen every garment upon him,

order warm water. During the time of its preparation I examine the gums, and if there is the least irritation or swelling, I immediately lance the gums well. You should immediately bathe the extremities in warm water, and apply mustard plasters to the legs and feet, and if the head is at all heated, apply cold water to it. You should immediately give an active purgative injection.

Should the convulsion not yield to these measures, you will immerse the patient in warm water, and apply cold water to the head; and, if it can swallow, give an active dose of ipecac. or lobelia.

During this treatment, you should make investigation as to the precise nature of the affection. Should the face be turgid and red, and the pulse full and strong, and other symptoms indicating active congestion, I then advise blood to be taken immediately; bruised garlic should be applied to the stomach and feet, made into a poultice, and vinegar and water to the head. After the action of the purgative enema, I would advise the syrup of poppies or paragoric to be given. A distinguished physician assures me that, in this variety, he gives an emetic of ipecac.; says it frequently puts an end immediately to the convulsion, and, in cases of congestion, it is best to give it after depletion.

If the case is simply one of nervous irritation, antispasmodics will be found useful in connexion with the other remedies. Here the garlic, as prescribed, is a good remedy, and a mixture of oil of amber, olive oil, brandy, and laudanum, may be rubbed warm along the spine and over the abdomen; and, in this stage, some use assafœtida, musk, oil of turpentine, or oil of amber, either one of them as an injection.

If the enema fails to operate speedily, you should immediately give castor oil, if the patient can swallow.

In the cases of irritation producing the convulsion, besides removing the cause, (which is an important part of the treatment, and should be looked to in all cases; for instance, if there be *worms*, oil of wormseed or turpentine would be indicated,) you should diminish, if possible, the nervous susceptibility to the disease; for this purpose you can administer the tincture of *lactucarium* (wild lettuce). Some think opium more efficacious; but, before you administer narcotics, you should be well satisfied that the convulsions are the result of nervous irritation; for, if given where there was active congestion of the brain, great harm might ensue.

You will very seldom find any biliary derangement in young children; if there should be, I advise the use of *leptandrin*, (a resinous principle of leptandra virginicæ) as superior to all other remedies with children; its effects on the liver are peculiar.

The following preparations are all beneficial in convulsions:

℞. Garlic,
Lard; equal parts.

Rub well together; used on the extremities as a revulsive.

℞.	Assafœtida,	ʒii.
	Opium,	grs. ii.
	Infusion of chamomile,	ʒiv.

Mix. Use a portion as an injection, when the convulsions are violent.

The best preparation I have ever used, as an enema, is the following:

℞. Musk, grs. xii.
Sugar, ʒii.
Spirit of ammonia, (hartshorn,) gtts. xxx.
Infusion of flaxseed, ʒiv.
Mix, and inject.

When the convulsions of children occur during the process of teething, two grain doses of marsh smallage, will prove almost immediately beneficial.

Antispasmodic Tincture.—This valuable preparation should always be in the possession of every family, as it is not only useful in convulsions, but a certain remedy in cramps, spasms, tetanus, &c.

To make the preparation you take of lobelia, cayenne pepper, and skunk cabbage root, each, in powder, two ounces; diluted alcohol, one pint. Macerate for sixteen days and express and filter through paper.

This tincture may be made by combining together equal parts of the saturated tinctures of lobelia, cayenne, and skunk cabbage root. Dose, half to a tea-spoonful every ten or twenty minutes, or as often as required.

TETANUS.

Cramp.—There is a constant stretching and spasm in this disease, and the muscles are in a state of rigid, lasting contraction; seems to be confined to certain voluntary muscles, not alternating with relaxation; yet the cramp and rigidity is more violent at one time than another; it is accompanied by violent and excruciating pain, and the muscles that are cramped are very hard; it is seldom attended with any disturbance of the brain.

These spasms, which chiefly affect the muscles of the neck, jaw, and trunk, have had different names con-

ferred upon their tetanic condition. Thus, when they affect the jaw, that variety is styled *trismus;* where there is a curvature of the body backwards, and arched, this state is denominated "opesthotonos;" when, on the other hand, the body is drawn forward, it is called "*emprosthotonos;*" when drawn to one side it is termed "*pleurosthotonos.*" The first and last are decidedly the most common; these conditions are now treated as symptomatic diversities of the same disease.

There is quite a variety of opinion amongst authors in regard to the division of tetanus. Some use the terms "general" and "local," others, "acute" and "chronic;" it can only legitimately be divided into two distinct varieties, and I think they are correctly styled, "idiopathic" and "symptomatic;" the first arising, in my opinion, from causes acting directly or indirectly on the nervous system, without any known condition, pathologically; the latter from irritation in other organs, affecting indirectly the nervous centres. When originating from wounds or other injuries, it is termed "traumatic," and belongs to the latter variety.

Symptoms.—There is, indeed, quite a multiplicity of symptoms laid down by authors which, they contend, precede an attack of traumatic tetanus; this is not altogether in accordance with my experience; I have had them complain of pain in the wounded limb, and slight chilly sensations. The attack generally comes on with an uneasy feeling in the neck; the muscles of the face soon become affected, the nose contracted, the eyelids fixed; sometimes the jaw "pops" together and the tongue is frequently bit; at other times there is an unusual rigidity about the muscles of the jaw, to such an extent it is with difficulty the mouth can be opened; in

this state there is generally difficulty in swallowing. The diaphragm (or what is vulgarly termed the mid-riff) is most always affected, on which account there is violent and acute pain in the region of the stomach, accompanied with shortness of breath; it soon involves the abdominal and recti muscles—the latter are very prominent in all of their departments—it soon extends to the limbs, and very soon involves all of the voluntary muscles of the body, more or less.

The least motion frequently excites these violent spasms. They are at first slight, and most frequently at considerable intervals, but they increase gradually in frequency and violence, until the succession becomes so rapid that the system has not time to relax before another paroxysm comes on.

The pulse is generally small, feeble and irregular, and is in proportion to the violence and intensity of the affection; from the violent muscular action, there is generally a profuse perspiration.

Duration.—In regard to this, it may terminate fatally in less than twelve hours, or it may last many weeks; the greater number die between the first and fifth day; if they survive beyond this their chances for recovery are very good. When they do die it is generally during the violence of the cramps, or from being completely exhausted from their effects. The mental faculties are seldom disturbed, the bowels always costive.

If the patient becomes convalescent, his recovery is slow and gradual.

Causes.—It is said to be peculiar to hot climates and warm seasons. I have no doubt there is a peculiar predisposition requisite to the production of tetanus, and this may be a peculiar state of that part of the brain or

spinal marrow which is directly connected with the nerves of the voluntary muscles. Whatever the exciting cause may be, few are attacked, and the predisposition is unknown, and most probably will remain so.

Of the exciting causes, generally, the most common are wounds; and it seems to make but little difference as to the condition of the wound, whether healthy or unhealthy, before or after suppurition, in the process of healing, or after the healing has been completed, he is liable to lock-jaw from a wound for at least twenty-eight days.

The slightest causes sometimes produce the disease, and again the severest injuries often fail to do it. Sometimes a wound will not produce tetanus till another cause of the disease takes place—sudden cold—and then the affection makes its appearance. As examples of the kind of wounds which have given rise to tetanus, may be mentioned those produced by needles in the fingers, a splinter under the nail, the extraction of a tooth, or running nails in the feet. This is one of the most common causes; I saw two cases in this city last season from this cause, neither of which recovered. Contused or lacerated wounds are liable to produce it, and I think the former much worse in this respect than incised wounds. The majority of medical authority contend that the attack is apt to come on between the fourth and fourteenth day after receiving the injury.

Traumatic tetanus is frequently favored by sudden refrigeration, and other causes of irritation; the two causes combining may originate the disease, either of which separately would have been insufficient.

Diagnosis.—It is so striking in its symptoms, that you can hardly confound it with any other disease. You

have one very remarkable symptom—you will, in 90 cases out of one hundred, find the tongue bitten. Another very characteristic symptom is the violent and excruciating pain at the scrobiculus cordis, (the depression at the pit of the stomach;) it is not increased by pressure, but it is violent, sharp and stabbing. It is sometimes confounded with certain diseases, as with spinal meningitis, epilepsy, rheumatism and hysteria. They can easily be distinguished by a careful view of the circumstances attending each affection.

Prognosis.—This is most generally unfavorable; it is an exceedingly fatal disease; traumatic tetanus, (this arises from a wound,) is seldom recovered from; and it is said to be equally as fatal where it originates from intestinal worms; every variety, however, admits of *recovery*.

Dr. Parry says, on the subject of prognosis, that if the pulse be not above 100 or 110 up to the fourth or fifth day, patients almost always recover; but if the pulse be quicker early, the disease almost always proves fatal; and that there have been but very few recoveries when the pulse has been 100 the first day.

Treatment.—If you are called to a case of tetanus traumatic, (which variety is the result of a wound,) your first object must be to remove any source of irritation, and to palliate, as far as possible, the most prominent symptoms; consequently, to control the spasms, I generally use the compound tincture of lobelia, as advised by a very distinguished physician. The following is the recipe:

℞. Tinct of capsicum, (Cayenne pepper,)
——— myrrh,
——— cypripedium pubescens, (lady slipper,)

He advises the etherial tincture, one pint of each.

Lobelia seeds, pulverized, ʒiv.

Mix, and shake well before using; it is improved in its antispasmodic qualities by the addition of tincture of assafœtida. You can give it in doses of from one to two ounces; try and get it into his mouth, it will soon produce relaxation sufficient to enable him to swallow; you should administer the same article as an injection, it will soon produce relaxation, accompanied with nausea and vomiting.

You should keep up the nausea and relaxation by the same article or ipecac. and opium, in combination with skunk cabbage; apply my liniment (as recommended for rheumatism and other diseases) along the spine; after using the liniment immediately apply mustard plasters to the whole course of the spine.

Some advise the use of caustic potash to be applied to the wound for the purpose of exciting free suppuration; whether this has ever been of advantage is doubtful, it is not in accordance with a rational view of the pathology of the disease. I think a hop poultice, with an active narcotic, such as morphine, would be decidedly preferable to the wound, it would have a greater tendency to diminish irritation; it is but justice to say, that some contend from practical experience for the potash to the wound.

If you were to consult the different authorities and see the versatility of opinion in regard to the treatment of this disease, you would find great difficulty in arriving at any satisfactory conclusion; almost every variety of remedy has been used, and cases are reported having been cured upon directly opposite plans of management.

The medical journals teem with cases which have been cured under various kinds of treatment; many allowances must be made in regard to these statements, they at least give sufficient surety to encourage the practitioner to persevere in the use and employment of means which he may consider as indicated.

Most physicians agree as to the propriety of purging in this disease, almost any active cathartic which will not produce irritation of the mucous membrane of the bowels will answer, senna or castor oil, if there is difficulty of swallowing you might give croton oil.

To diminish the susceptibility of the nervous system to these attacks, I think opium has been used with decidedly the most advantage; some advise brandy or wine for this purpose, the latter I should not advise unless there was great prostration and evident debility of the circulation.

Dr. Morrison, of the West Indies, Dr. Latham, of England, Dr. McGregor, of Edinburgh, and most of the College of Physicians of Philadelphia, advise opium. Dr. Ringer, of Demarara, reports in a pamphlet his success with opium.

Dr. Martin, in the L'Union Medicale, relies strongly on the cyanuret of potassium, which paves the way for the use of *chloroform;* this latter is a valuable remedy, I have no doubt, in controlling the spasm. There is an article in the September number of the New Orleans Medical Journal of 1852, in which a physician of *Mississippi* reports four successful cases, treated by morphine, quinine and brandy, in large doses; I have not the report by me, but I recollect distinctly the laconic answer of that scientific and practical editor, Dr. Hester, "mayhap the cases recovered in spite of the doctor's

heroic doses." But, Doctor, this is nothing to compare with some of the first English authority, and being foreign, much weight is generally attached to it; cases are reported where gallons of wine have been used daily, and even Professor Elliottson reports giving two pounds of the sesquioxide of iron in a day, and remarkable to say the patient recovered.

M. Bailly and Bondin, and most of the French military surgeons, rely, to a great extent, on opium.

A very able article upon this subject has been written by Mr. Colles, of the R. C. S., who says in his lectures, that there was no application for wounds, in which he placed so much confidence as spirits of turpentine, when tetanus was to be apprehended, and it is also highly extolled by Dr. O'Reilly, of Ireland. They give calomel and opium—the former to prevent or arrest morbific action, the latter to tranquillize the system.

A very distinguished author says, that the most effectual plan of treatment was put into practice by Dr. Hartshorn, of Philadelphia. It consists in applying along the spine, from the occiput to the sacrum, a solution of caustic potash, containing two drachms of the alkali to four ounces of water. This is rubbed up and down the spine by means of a sponge, until the surface is much reddened, and signs of a caustic action are displayed, in some one point, by the discoloration of the skin. The remedy may be repeated when the inflammation disappears. It has been used with much success in a number of cases. Dr. H. relies upon the measure, with opium and purging.

Dr. O'Shaughnessy recommends hemp in this disease; it has been reputed in the journals to have cured cases.

A positive mode of treatment is not settled; recovery

has taken place under all modes of treatment; yet I am satisfied, from a number of cases I have treated, that you will succeed, if you follow it, in a fair proportion of cases.

See *anti-spasmodic tincture*—last paragraph under the head of infantile convulsions.

TRISMUS NASCENTIUM.

Lock-Jaw of Infants.—This is an exceedingly fatal variety of tetanus, and merits a distinct notice. It occurs in infants soon after birth, and has received the name of trismus nascentium. In some portions of our country, especially the Brazos, it is very destructive among the negro children; over one-half of the colored infants in that district perish of the disease.

Much has been written upon this subject, and in the American Journal of Medical Science, for 1848, there is a very able article from the pen of J. M. Sims, M. D., of Alabama. It is usually ascribed to irritation arising from the cutting of the cord, and dissection has generally revealed ulceration of the umbilicus, with more or less inflammation of the investments of the umbilical vessels, and of the peritoneal membrane. The attack generally comes on in either the first or second week from birth; it is always attended with contractions or spasmodic closure of the jaws, and frequently other muscles are affected. Many Southern practitioners, who have seen a great deal of it, declare that they have never known an instance of recovery.

I have seen many cases of this disease, and, in connection with the causes heretofore assigned, recollect one fact—this disease seldom if ever attacks white children; in every case that I have seen, I have found the

occipital bone, (the bone at the base of the skull,) pressed either entirely or nearly so, under the *parietal bones*, to such an extent as to form a ridge sufficiently prominent to be felt, around the superior and lateral portion of the occiput. You will find, when called to a case of this character, that the least pressure on the occiput increases the irritation and pain, and relief is immediately afforded, by pressing upon the parietal bones. May not this be accounted for from the fact, that negro children are suffered to lie constantly; never handled, unless it be to put them to the breast, and frequently that does not change the position of the child, for the occiput generally rests on the arm of the mother. On examination, you will find the occipital bone depressed, and a ridge more or less prominent will be felt, by examining the suture with your fingers it is easily discernible, when it may not be so to the eye.

I have relieved case after case by gentle manipulation of the head. I generally place the child upon its side, put my hand under the side of its head, place the other on the opposite side, and make gentle pressure upon the front part of the parietal bones; this expands them when they are in contact with the occipital bone, and leaves this bone free to assume its proper place. Gentle manpulation will soon control the difficulty, and great care should be taken that the child should never be placed upon its back.

I have no doubt but the disease is frequently produced from the irritation of the umbilicus, and I generally apply caustic potash, and establish an issue at the umbilicus; move the bowels gently with castor oil.

This has been styled an incurable disease. My directions are short, plain, and simple, and, if followed, you

will meet with success frequently, where there is but little hope to expect it.

MANIA-A-POTU.

Mania-a-potu.—This is a disease which, unfortunately, occurs frequently amongst us. It is a state of delirium with more or less agitation and tremor; generally, in fact always, follows the suspension of ardent spirits or other stimulants producing morbid irritability rather than inflammation; it approximates very closely to that state which frequently takes place after active inflammation of the brain.

Causes.—Drs. Coates, Sutton, and Chapman, have written ably upon it; the former contends that the disease is the result, not of the application of spirits and narcotics, but of the sudden intermission of the use of these articles. It is said to have followed an acute rheumatism, scarlet fever, and I have seen instances where it followed after typhus fever.

Symptoms.—The disease is evidently one of irritation; it has no symptom in common generally with inflammation. The most prominent symptom is a clammy perspiration, face generally pale, muscular tremors, imagines that he sees a great many things that are calculated to injure him, and with no disposition whatever to sleep.

Pulse.—It is soft and quick, at length becomes fluttering; he is constantly talking delirious; with difficulty you can keep him in bed. The disease exists in various degrees of intensity, and with different complications. There is, as we before remarked, a constant watchfulness; he fancies a thousand imagined wrongs; he has frightful imaginations, vague alarms, accompanied with weakness and depression; there is loss of appetite, and

tremor of the whole body. As the disease advances, he imagines he sees a variety of disgusting objects; generally imagines he sees insects or serpents about his bed or on the wall; his hallucinations are very diversified. The patient generally evinces no malice in this disease; very seldom attempts to injure those around him.

It is generally attended with more or less febrile symptoms.

Treatment.—Your first object will be to allay the paroxysm, and to calm and give support to the nervous system. The indications of treatment are clearly to stimulate the brain up to the point essential to its correct action, and after you have reinstated in its normal (healthy) functions, then to gradually withdraw the stimulant.

To fulfil the first indication, you may give brandy or spirits, such as he has been in the habit of drinking. If it does not afford relief, I generally bathe the feet and legs in warm water, and apply mustard plasters to the extremities, and give a stimulating emetic. You should persevere in the use of this latter remedy until free vomiting is produced. The following is well adapted for this purpose:—

℞. Tinct. of capsicum.
——— of myrrh.
——— cypripedium pubescens (lady slipper,)
aa. 1 pint.
Lobelia seeds pulv. ℥iv.

Mix, and shake thoroughly before using.

Give it in half drachm doses in some warm infusion, repeated at short intervals until vomiting is produced.

After the vomiting, the remedy for the disease is opium, and in full and repeated doses. I generally com-

bine it with morphine; give one grain of each every two hours. In violent cases I increase the dose, and continue its use until a decided narcotic impression is made. You should persevere in the remedy until you produce sleep, when it should be gradually omitted or diminished. This should be combined with a very nourishing diet, such as beef tea, &c.

If the pulse be very feeble, and the patient much prostrated, you may allow him ale, or a small quantity of spirits. You will find hop tea in these cases to answer a most admirable purpose.

Where the tremors are very excessive, and there seems to be a tendency to convulsions, I would advise the nervous stimulants in connection with the other remedies. Some advise the compound spirit of sulphuric ether. I have used assafœtida with decided advantage.

Wherever there is excessive prostration, sulphuric ether, administered from a drachm to half ounce at short intervals, will frequently, if combined with good brandy, sustain the patient.

The bowels should be kept free, in a soluble condition. If the hepatic secretion (secretion from the liver) is deficient, you should administer small doses of podophyllin (mandrake) or leptandrin. To keep the bowels regular, magnesia and rhubarb will answer well.

There are cases of this description where the patient labors under great irritability of stomach. If a mustard plaster over the stomach fails to allay this irritation, I then give lime water and milk, or a Seidlitz powder.

If a typhus condition should supervene, which very rarely happens, he must be supported by carbonate of ammonia, brandy, musk, and beef tea.

The tincture of hops is valuable in delirium tremens and watchfulness, in connection with nervous irritation, anxiety, or exhaustion. Dose—one to four fluid drachms.

The above is a course of treatment which my experience fully justifies in recommending to you. Others have proposed different plans, founded on the opinion that the disease was inflammatory, and have advised from this fact the lancet. This I conceive to be the most dangerous treatment, yet still it might be necessary in complicated cases. If you use the lancet, it should be with extreme caution.

The skullcap is highly extolled in this disease. It is said that an infusion drank freely will soon produce a calm sleep.

PARALYSIS.

The next disease to which I shall call your attention, and which should have properly followed apoplexy, is paralysis or palsy.

It is a disease principally affecting the nervous system, and you may define it to a loss or diminution of sense, or of motion, or of both, independent of inflammation or mechanical impediment; but dependent entirely upon the condition of its nerves, or some other part of the nervous system.

Varieties.—It is usually divided into three varieties: hemiplegia, affecting one half of the body, divided vertically; paraplegia, affecting one half of the body, divided horizontally; and paralysis partialis, affecting only one particular limb, or one particular sense. There are no other varieties of minor consideration, unless, however, it is amaurosis, partial paralysis of the eye.

Causes.—As we before remarked, this article should have followed apoplexy, as this disease frequently arises in consequence of it. Anything that has a tendency to produce pressure upon any part of the nervous system may produce it; and likewise, it may be produced by anything that prevents the flow of the nervous power from the brain into the organs of motion; hence effused fluids, tumors, over-distention, &c., frequently give rise to it. A suppression of usual evacuations, a translation of morbid secretion to the head, and pressure on the nerves by wounds or fractures will occasion it. Others contend that the long continued application of sedatives will generally produce palsy, as we find those whose occupations subject them to the constant handling of white lead, and those who are much exposed to the poisonous fumes of metals or minerals, are liable to be attacked with it. If a part become exceedingly benumbed from cold, it will produce what I term common paralysis, for a longer or shorter period. In general, whatever interferes with the structure of the nervous centres, the nervous filaments or ramifications, or its functions at the periphery, (circumference,) or at the centre, may, and most probably will, become a remote cause of paralytic symptoms.

Symptoms.—It is said by most authors to come on with a sudden and immediate loss of motion and sensibility of the parts; but in some instances it is preceded by a numbness, coldness and paleness, and sometimes by slight convulsive twitches. When the head is much effected the eye and mouth are drawn to one side, the memory and judgment much impaired, and the speech is indistinct and incoherent. If the disease affects the extremities, and has been of long duration, it not only

produces a loss of motion and sensibility, but likewise a considerable flacidity and wasting away in the muscles of the parts affected.

The most perfect form of cerebral palsy is hemiplegia, in which the affection extends over the whole of one side of the body, from the head to the foot. Sometimes it takes the form of paraplegia, or palsy of the lower extremities; and in some rare instances the affection is confined to the loss of functions in a particular nerve.

Hemiplegia, to which form of the disease the term palsy is in common language appropriated, has generally been considered as a minor degree of apoplexy. The attack is sometimes unexpected, but more commonly it is preceded for several days, or even weeks, by one or more of those symptoms formerly described as the forerunners of apoplexy; such as giddiness, drowsiness, numbness, dimness of sight, failure of the powers of the mind, forgetfulness, transient delirium, or indistinctness of articulation. For the most part the paralytic seizure is sudden; but occasionally the approaches of the disease are made more slowly, a finger, a hand or an arm, the muscles of the tongue, of the mouth, or of the eyelids being first affected, and the paralytic state gradually extending to distant parts.

This variety is not generally perfect paralysis, from the fact that the eye, the ear, nose and tongue of the affected side, have their senses actively enough. It may be a mere hysterical affection, and soon recovered from.

Sir G. Blune says, from some comparative observations made by him when physician of St. Thomas' Hospital, that he found three cases of hemiplegia on the left side, for two on the right. The pulse on the paralytic side is smaller than on the other.

A very distinguished author says, an attack of this description more frequently occurs in bed, than in any other place. Many persons who lose the use of one side suddenly, and who have no decided apoplectic attack, say that it happened in bed; or that it occurred late at night, or very early in the morning.

The general effects are various, where the muscles are deprived of the influence of the will, the face is drawn to the opposite or healthy side, from the fact that the opposite side is in a healthy connexion with the brain, and the muscles of that side master the others completely. The patient generally has not the power to spit; his saliva runs from the corner of his mouth; if his mouth is affected, his voice becomes altered, and he seldom articulates with distinctness enough to be understood.

If the disease has continued for any length of time, the mind suffers a little, especially in attention and memory; the limbs waste, diminish in size, and become very flabby.

There are a variety of cases published, where this disease has had a tendency to affect the intellectual powers, there is generally a want of memory in most of the cases reported.

Diagnosis.—There can be but little difficulty in recognizing this disease. There may be occasionally some difficulty in deciding, whether a part deprived of the power of motion, is laboring under palsy, or under inflammatory disease of a rheumatic or gouty character. They are evidently sometimes mingled; you sometimes find rheumatism in the course of a nerve, which may partially paralyze the nerves of the part in which it

exists. But, in such cases, the previous history will soon decide the point.

Paraplegia.—Palsy which affects one-half of the body, horizontally divided.—*Symptoms.*—In this variety, it is frequently accompanied with constipation and retention of urine, and again the muscles of the anus become so much paralysed, that the faeces and urine pass involuntarily. These symptoms you seldom find in hemiplegia. It is said, that in this disease, the urine is altered in quality; it is asserted that it is not sufficiently acid, or it is, perhaps, alkalescent, (becomes alkaline;) but when it is not, there is still a deficiency of acid. This is more particularly the case, where the paralysis has arisen from an injury of the spine.

It generally comes on gradually, commencing at the toes, gradually extending upwards, until it gets above the hips.

That variety of diseases occurring in the brain, which I have asserted will produce hemiphlegia, if the spinal marrow is the least involved, will produce paraplegia; it is frequently produced by fracture of the vertebræ, or caries (decay) of the same; cases are reported, where it occurred from persons working in cold water.

Treatment.—If there be a local cause, your first object must be to ascertain the condition on which the affection depends, and attempt its removal, if possible; if it should result from a fracture of the cranial bones, it will require surgical assistance, which should be immediately adopted, for removing any source of irritation. It is a primary consideration to direct your attention to the cause producing the disease, and promptly to correct the evil, if possible, whatever that may be.

In cases that come on suddenly and violently we advise you in general to pursue the course as advised in apoplexy. If it results from active congestion or inflammation you should adopt an antiphlogistic course (remedies that oppose inflammation,) in proportion to the energies of his system. In this variety purgatives would be very useful, and they rarely fail of proving beneficial to the patient; you should adopt also local depletion by cupping or blistering, with a low diet; but you must be constantly on your guard not to push this treatment too far; as a purgative I give podophyllin and leptandrin in small doses, sufficient to keep the bowels well open.

In chronic cases, the paralysis remains long after the irritation or inflammation has subsided, and in this character of cases an almost constant application of a blister as near to the seat of the disease as possible, with moderate purgation, will be of benefit, but great care must be taken not to bring him too low with your chronic treatment, he must abstain from spirits and animal food if possible, but of this you must judge, his strength must be supported; occasionally tonics are indicated, and if there be great debility, you need not fear giving him wine. Your blisters, as I before said, should be applied near the part affected, for instance, if hemiplegia, your counter irritatant should be upon the nape of the neck, especially if the head is affected, and on the spine in paraplegia; the following poultices or plasters are also sometimes beneficially applied in both instances: Take equal parts of cayenne pepper, mustard and meal, moistened with vinegar, and apply to the feet, between the shoulders, and on the parts affected.

You may substitute moxa (a mode of cauterization,

you take cotton, form it into a cone, place it upon the affected part and set it on fire at the top,) if circumstances seem to indicate it.

If you have removed the original cause, or have good reason to think so, even when such is the fact, the palsy remains in many cases from debility; in such cases "it will be advisable to make use of measures calculated to excite the nervous action. It is a very common error to resort to these measures early in the disease, and while the organic cause is still in operation. Nothing could be worse than such a proceeding." After every symptom of inflammation or irritation has subsided then stimulating remedies are indicated; of this class *strychnine* is particularly recommended; some use the other alkaline principle of nux vomica, the *brucia*; although it, (strychnine,) is a narcotic and will destroy life, it is nevertheless a powerful stimulant to the nervous system; when either of these remedies are properly timed they are undoubtedly beneficial; all evidences of excitement should have subsided before they are resorted to. "When employed it should be with great caution, and if the complaint is in any degree aggravated" they should be discontinued at once. "The best preparations, upon the whole, are probably the alcoholic extract and strychnine. Of the latter not more than one-twelfth of a grain should be given at first," and not repeated oftener than twice or three times a-day; the dose may be gradually increased until slight involuntary twitchings of the muscles take place. Other stimulants have occasionally been used with advantage, turpentine and cantharides, these are frequently used, and in connection with stimulating injections; the following is frequently used with much benefit when there is a torpid paralytic condition of the

bowels: Take cayenne pepper, one tea-spoonful, lobelia, two tea-spoonsful, add a pint of boiling water; after it has drawn some time add molasses, half a pint of milk and a gill of sweet oil, let it be injected warm, one-half at a time, it will generally excite sufficient action to promote an evacuation. Salt and water is also very good.

Friction is very necessary in this complaint; if the feet or legs swell, they should be steamed over bitter herbs; if it should be confined to either of the limbs, the irritating plaster which has heretofore been advised will be found beneficial.

If the patient does not improve under the above treatment, I would give the following alterative syrup:

℞.	Stillingia, (queen's root,)	1 pound.
	Corydallis, (stagger weed,)	½ "
	Ampelopsis, (woodbine,)	¾ "
	Iris. versic. (blue flag,)	¼ "

Mix, and make five quarts of syrup. Give one tea-spoonful three or four times a day. Some add hydriodate of potassa, ʒiss., to the above. Whilst your patient is taking this, let him rub well the affected part with my liniment.

"The douche of hot water, and when there is sufficient energy for prompt reaction, of cold water, will sometimes be found useful." Electricity is a valuable local remedy, and acupuncture has been recommended, which is to introduce needles into the flesh at some distance apart, and by being connected with the opposite galvanic poles, enable a current of the fluid to be carried through the palsied muscle itself; if it should prove the least injurious, it should be discontinued.

Opium is very proper to lessen the twitches and violent pain, I have used, also, the tincture of hops and extract of hyosciamus, (henbane) with advantage.

The following prescriptions have all been highly extolled in paralysis:

℞.	Flowers of arnica,	ʒi.
	Water,	3 pints.

Boil till reduced to two pints, strain and add syrup of ginger, ʒii. Dose, one to two ounces every two or three hours.

Dr. Thompson advises the following:

R.	Assafœtidæ,	ʒiss.
	Powdered ginger,	ʒss.
	Syrup,	q. s.

Make into thirty pills. Give three every four hours.

The following is the recipe alluded to in our treatment:

℞.	Brucia,	grs. vi.
	Distilled water,	ʒiv.
	Sugar,	ʒii.

Mix. A table-spoonful morning and evening, gradually increasing the dose.

Another—

℞.	Ext. opium,	grs. 72.
	Nitrate silver,	grs. vi.
	Musk,	grs. 48.
	Camphor,	grs. 96.

Make into ninety-six pills. Give one morning and night.

A bath of common salt and arnica is highly recommended.

Diet.—If the paralysis arises in a person of a full habit, the diet should be spare; if in a debilitated person, it should be invigorating, seasoned with spicy and aromatic vegetables, such as mustard and horseradish. Exercise is of importance; flannel should be worn next to the skin, and cold, moist or damp air avoided.

PHLEGMASIÆ DOLENS.

White or Tumid Leg.—This affection is vulgarly called milk leg. It occurs in females soon after delivery. It is sometimes seen in unmarried females, and even in males. It usually attacks one leg, and frequently the whole system is more or less affected. It first makes its appearance in the loins or lower portion of the abdomen, gradually extending down to the thigh and leg; in some instances it commences quite the reverse, beginning in the leg and extending up. It is generally preceded by a chill, succeeded by fever. The affected limb appears firm, glossy, swollen, and very painful, and in the course of 48 hours, is sometimes of twice its usual dimensions; the limb is stiff, heavy, and irritated by motion; there is generally extreme tenderness along the femoral vein, which may always be felt like a hard cord; the limb is apt to remain stiff and weak for a considerable time.

Some contend that it arises from a suppression of the *lochial* discharge, or the milk, or from cold; others contend that it is milk secreted in the leg, producing inflammation of the cellular tissue, (which are numerous cells, communicating with each other; they contain fatty matter, and are principally situated at the end of bones.) Some ascribe it to inflammation of the absorb-

ent vessels, &c. These doctrines have been taught by Builland, of France, and Davis, of England, and by a host of American physicians. It might be deemed egotistical in me to pronounce the nature of this disease as taught by these gentlemen and others in high places as absurd, but the truth is, as we have before observed, that there are many men who will pretend to science and skill who really possess neither; and I am inclined to the opinion, that you will see these dogmas advocated only by those who flatter themselves that they have learned enough in their profession, and who cease to read books, they tell you milk leg, as it is vulgarly and ignorantly called, is inflammation of the cellular tissue. I assert that no man ever saw a case in which this disease was attended with suppuration or sloughing; and I farther assert, that where these tissues do become inflammed, they are almost certain to terminate in that manner. A very distinguished author, and one who has imparted much useful information, says, he should like to see a woman get well of an inflammation of the cellular tissue of the whole limb, from the pelvis to the foot, and from the *pubes* to the great toe; one whose thigh is bigger than a man's body, and her leg swollen to the size of that of an elephant—that is to say, get well without a suppuration, or, indeed, in any way. He says farther, that some persons have supposed that the swelling is produced by a disease of the absorbents of the limb; and, in fact, nothing was known about it until Robert Lee (we copy this paragraph from the fact, that we think Dr. Lee a benefactor to his country,) made the discovery of it, and clearly demonstrated its true pathological nature; showing that the lesion of the disease is a lesion of the veins of the limb, for which he

gave it the name of crural phlebitis, the name by which it is called by all physicians who know anything about it; it is called milk-leg, vulgarly, and I think erroneously.

It is a disease, as we have before shown, that attacks both sexes.

The veins in the interior of the body are, for a long time, compressed by the gravid uterus, and sometimes compressed with great force, which is increased enormously in the throes of labor. They are not only compressed, so as in some instances absolutely to suffer contusion, but the whole of the veins of the lower extremities are, in many women, for a long time, distended by the pressure of the womb, causing œdema, (swelling,) and that very common occurrence, varix, (enlargement of a vein.) Such a constant, long continued pressure upon the vessels might well be supposed to have, in many instances, the effect of developing an inflammatory state there, which would be more likely to effect the veins below than above the point of pressure.

Affections have been observed that are almost identical with this disease, (if not the same,) in women after abortion, or where an unimpregnated uterus had suffered violence. Men have been affected in consequence of organic disease in the pelvic viscera. Dr. Stokes calls attention to occasional occurrence of inflammation of the lower extremities, in all essential points identical with that under consideration, following fevers.

It will "be first suspected by pain felt at the groin, or in the calf of the leg. I am very sure that, in many of the cases I have met with, my first detection of the existence of the malady was made in consequence of complaints as to pain in the calf of the leg." If a lady

after her confinement complains of a pain in the calf of the leg, you may safely suspect that this disease is about making its attack. You should put your thumb upon the spine of the *tibia*, (vulgarly called shin-bone) and your fingers upon the calf, and then suddenly compress the muscles against the bone; if the woman shrinks from the pressure, and makes an outcry, I next ask permission to examine the groin, and if I feel the swollen ridge and enlargement of the vessels, I know that my patient labors under phlebitis. I then examine the external iliac artery, by pressing the integuments against the brim or strait of the pelvis, as far as I can push them; when you will be very sure to detect the evidence of inflammation extending up into the body, if it goes so far inwards.

The calf of the leg will be found hard. Let the woman lie upon her back, and be directed to draw both of the knees up in the bed, until the tibia (or what is vulgarly termed shin-bone) become nearly vertical. You now take hold of the calf of the leg, lightly, from behind, and endeavor to shake it from side to side. You will find you cannot shake it, for the whole mass seems attached to the bone, or packed against it. If you shake the other calf it will be perfectly flabby and movable in your hand; the result of this comparison will settle the diagnostic.

Treatment.—You should commence the treatment by regulating the secretions; the bowels should be kept in a soluble condition, and you should by all means endeavor to promote moisture of the skin; if the ridge along the femoral artery is hard, some benefit will result from the application of cups, scarifying freely. The patient must be confined to her back; the whole limb to be

placed upon pillows, so as slightly to elevate the whole leg above the body, and she should be told with sincerity, that if she puts her foot upon the floor, even after she is almost well, that it will almost certainly reproduce the disease. An author of reputation says, is it not very clear that if she puts her foot upon the floor and stands upon it, she will have to lift the whole column of blood in the veins, from the sole of the foot to the extremity of the vena cava, at the expense of the most enormous strain upon the sides of the vessel? It would be the grossest malpractice to allow the woman even to sit up on a sofa, until the limb is safe.

You should then take equal quantities of vinegar and boiling water; take two or three yards of flannel, or a flannel shirt or petticoat, immerse it in the hot liquor, wring it out and wrap the leg up in it; this process should last about six hours. I sometimes substitute for the former, *hops*, and steam the leg over bitter herbs; if hot applications aggravate it, you can bathe it in warm sweet oil and laudanum, carefully applying the flannel afterwards. I sometimes keep the limb wet with stramonium leaves, (Jamestown) simmered in spirits and applied cool; ley water is recommended in obstinate cases, and the limb anointed with bitter-sweet, or mullein ointments. To prevent the moisture from soiling the bed clothes, a piece of oiled silk should be spread beneath it. Some use a blanket, and fold it over the other appendages, thereby keeping up the temperature and moisture for a long time. It is advisable to continue the fomentation twice during the day and night for six hours, alternating with the oil and laudanum, as advised. It should be continued until the swelling has abated, or until you can shake the calf of the leg.

When you have arrived at this stage, adopt Dr. Physick's remedy of applying a narrow blister along the whole course of the artery; immediately after which enclose the limb in a common roller bandage, for the purpose of facilitating and hastening absorption.

Throughout the complaint you will necessarily have to use anodynes to allay the pain; for this purpose I generally combine morphine with ipecac. Another essential part of the treatment is a low diet, with perfect rest, and horizontal position, as advised.

In cases of extreme prostration, whether from the absorption of pus, or the exhaustion of the suppurating process, it will be necessary to support the system; to do which you will give wine-whey, animal broths, ammonia or infusion of Peruvian bark.

During convalescence, should considerable œdema (swelling) remain, it will be corrected by the bandage and the moderate use of diuretics, such as bitartrate of potassa and squill. She should use no more exercise than is essentially necessary, until the recovery is perfect. The leg, it is said, remains sometimes swelled for thirty years. The calibre of the vein is diminished, and in some instances, destroyed. It is all important to bear in mind, not to walk too soon; and not then, unless you have a tightly laced gaiter above the knee, which should be worn for months after the cure.

I must not forget to call your attention to the compound tincture of colchicum, which is a superior remedy in milk leg. You make the tincture as follows:—Take of colchicum seed, two ounces; black cohosh root, in powder, three ounces; boiling water, eleven fluid ounces; alcohol, twenty-one ounces. Add the boiling water to

the drugs, and when cold, add the alcohol. Macerate for two weeks; express and filter through paper.

It may be made by adding together equal parts of the tinctures of colchicum seed and black cohosh root. Dose, ten to sixty drops, or more, as circumstances indicate, every one, two, or four hours.

HÆMORRHAGES.

EPISTAXIS.

Bleeding at the nose.—The mucous membrane of the nose is decidedly the most frequent seat of hæmorrhage; there is a net work of blood vessels expanded on the internal surface of the nostrils, which have a very thin and delicate integument for their protection. Any thing that has a tendency to produce congestion of these vessels, or too great a determination of blood to the head, in either case those delicate blood vessels of the nose are easily ruptured.

In general the blood only escapes from one nostril; the hæmorrhage is generally preceded by a fullness or sense of weight about the head; but if it is of an active character, you frequently, before an attack, have signs of a local disorder, such as vertigo, flushing in the face, heat, and a disagreeable itching in the nostrils, a throbbing of the temporal arteries, redness of the eyes, sometimes disordered vision, buzzing in the ears, and not unfrequently accompanied with coldness of feet and hands, with chilly sensations, and almost sure to be preceded by costiveness.

It is very irregular in its occurrence, duration and progress; the hæmorrhage is so extensive at times as to justify alarm, and it has been known to prove fatal.

The most dangerous form of the disease is when the bleeding is of a strictly passive character, in such cases great quantities of blood are sometimes lost, and it is quite difficult to arrest it; this variety is generally confined to persons of a sanguine and plethoric habit, and those who have not advanced to manhood; and it is frequently the result of a peculiar weakness in the vessels of the part, or in persons in the decline of life.

I have, in this climate, seen cases occur from the result of lesions elsewhere; and it is by no means uncommon in our malarious districts to find persons with enlarged spleens or indurating livers particularly liable to this form of hæmorrhage.

Causes.—It occurs at all ages, and when no predisposition to this variety of hæmorrhage exists it is seldom produced except by direct violence, generally under such circumstances it is of no consequence; if, however, there should be a predisposition to it, in such cases there may not only be danger from the flow of blood itself, but of hæmorrhage from other parts, as hæmoptysis, (spitting of blood.)

It has been taught from Hippocrates down to the present time, that they who have been much subject to epistaxis, (bleeding at the nose) when young, are, at a later period, liable to hæmoptysis, (spitting of blood,) and phthisis pulmonalis, (consumption,) and it is asserted also that they suffer from hæmorrhoides, (piles.)

The exciting causes are very appreciable, such as a blow upon the nose, blowing the nose, the exercise of running, tight cravats, and in general any agency capa-

ble of producing a determination of blood to the head, or any violent effort that prevents the return of blood from the head, whilst its flow thither is favored, may serve as causes for this hæmorrhage, hence stooping or lying with the head low frequently give occasion to it.

There is frequently a predisposition so strong to it as to bring on this result without the intervention of any exciting cause; we have found it to exist to this degree frequently in our febrile and inflammatory complaints. Bleeding at the nose is a common occurrence in bilious fever, and some assert that it is also in typhus.

Treatment.—In general, bleeding at the nose soon ceases, and seldom requires the aid of a physician, unless it is in the passive form, which should be suppressed as speedily as possible, as it sometimes proves very serious.

The patient should be placed in a sitting posture, and whilst the flow of blood continues, the head should be kept elevated, the air of the chamber cool and fresh—you should now attempt to divert the blood from the head and throw it back upon the extremities, which must be effected by means calculated to equalize the circulation. A very distinguished author advises immersing the feet in a tub of warm ley water, and hyssop or pennyroyal tea taken to produce perspiration. If this should fail, cold water should be applied (ice is preferable) to the outside of the nose, head and neck. Immersion of the arms in cold water, and the application of cold to the armpits, groins, or other very sensitive parts, have also been recommended. Dashing cold water on the genital organs is a popular remedy, and is said to have had an instantaneous effect in suppressing it.

M. Negreir communicated a mechanical agency to the Royal Academie des Sciences of Paris, for arresting epistaxis. I have tried it frequently, in ordinary cases, with perfect success. He makes the patient stand up, with the head elevated; the nostril from which the blood flows, is compressed by the finger, and the corresponding arm is directed to be raised perpendicularly, and to be kept in that position for about four minutes. The explanation given by M. Negrier, of this fact, is as follows:—When an individual stands in the ordinary posture, with his arms hanging down, the force required to propel the blood through his upper extremities, is about half that which would be required if his arms were raised perpendicularly above his head. But, since the force that sends the blood through the carotid arteries is the same as that which causes it to circulate through the arteries of the arm, and there is nothing in the mere position of the arms above the head, to stimulate the heart to increased action; it is evident, that a less vigorous circulation through the carotids, must result from the increased force required to carry on the circulation through the upper extremities.

Dr. Dain reports several severe cases of nasal hæmorrhage, which he completely arrested, and when the bleeding was from both nostrils, by compressing the nostrils and raising both arms above the head.

Should these measures fail, a different class of agencies must be resorted to; recourse should be had to astringent injections. A very distinguished physician, usually employs a strong solution of alum, in the proportion of fifteen or twenty grains, or even more, to the fluid ounce, with almost uniform success. Kino, catechu, or extract of rhatany, may be added to this solu-

tion, or used separately, in the form of very strong infusion; acetate of lead may be used in the same way; the liquid should be thrown up the nostrils by means of a syringe; others advise plugging the nostrils with lint, dipped in an astringent solution of alum, or in a solution of kreosote, or of red-oak bark.

Various astringent powders, finely levigated, are recommended to be blown up the nose, by means of a quill, such as charcoal, galls, kino, alum, &c.; the pulverized gum Arabic, is highly extolled to be used as the above; and Dr. Beach says, take a piece of smoked beef that is very dry and hard—the more flesh that has been cut off the better—and grate it; this forms a fine powder; push this up the nostril as far as possible, and continue to do it till it is closed, or the bleeding ceases. He says he never knew it to fail.

Another plan consists in introducing into the nostril a piece of the intestine of the hog, closed at one end, then to inject cold water forcibly and tie the other end. It is also recommended to plug the nostrils posteriorly; it is advised to pass a catgut through the nostrils into the mouth; it is then drawn out, and a piece of sponge attached to it; when it is drawn it will press upon the posterior nerves. I have used a fine piece of sponge, saturated with collodion, and passed up the nostril quick. It is but proper to remark that direct compression and plugging have been disapproved of by some, owing to irritation produced.

After the bleeding has been arrested, its return can only be prevented by a proper consideration of the cause that produced it.

In active bleeding, regulate the diet; obviate plethora and vascular excitement; do not carry your system of

reduction so far as to produce debility; if there is a tendency to accumulation of blood, confine him to vegetables and milk.

In passive bleeding, your object in the intervals should be, to impart vigor to the functions, without over exciting them; this to be effected by nutritious diet, fresh air and exercise.

In cases that occur in youth, a saline cathartic, with light dry diet will be sufficient.

All great bodily exertions, as well as physical or mental excitements, should be specially avoided, as well as a too long indulgence in bed.

Should the bleeding occur in persons whose blood is thin, you should remove this condition by tonic remedies, such as kreosote, dilute sulphuric acid, and the preparations of iron.

If at any time there should be threatening symptoms of an attack, they should be met by saline cathartics, low diet and rest.

In either form, should the hæmorrhage return periodically, at short intervals, much might be expected from sulphate of quinine, and if this should be inapplicable, from the arsenical medicines.

In all cases, the practitioner should thoroughly investigate the condition of the system, to ascertain whether there may not be some concealed source of the hæmorrhage in organic derangements, and if successful in his search, should direct his remedies towards the removal of these causes.

HÆMOPTYSIS.

Bleeding from the Lungs.—It may proceed from the mucous membrane of the air passages, or from the air cells of the lungs; and although always an alarming disease, yet, if it be nothing more than a simple exhalation of blood from the bronchial mucous membrane, it is not necessarily a dangerous disease. In the other, where you have hæmorrhage from the air cells, it is highly dangerous, from the fact that it is generally profuse.

The first feeling generally of the patient is, not unfrequently, an unusual sensation in the trachea (windpipe) or larynx; and the mere fact of spitting of blood, is a very alarming symptom to most patients. In connection with these unusual sensations in the windpipe, there is an indescribable feeling of uneasiness about the chest, with more or less oppression in the breathing, which induces a slight cough, followed by the expectoration of blood.

These preliminary symptoms in an attack of hæmoptysis, is commonly preceded by heat and great soreness in some portion of the chest; and with the local are associated general symptoms; there is palpitation, with an accelerated pulse, generally full and hard, attended with flushed cheeks and headache, cool extremities; sometimes irregular chills are experienced, especially in the back; I have seen it accompanied with severe rigors and febrile symptoms.

The blood which is spit up is florid—generally of a bright scarlet color—and it is frothy; the appearance of the blood spit up, however, differs according to its precise origin, quantity, length of detention, &c. An author of distinguished celebrity, says, where the quantity expectorated is very great, it is less frothy, though a por-

tion will still generally be observed in this state, upon the surface of the expectorated blood, in the vessel which receives it.

If the blood has been detained long in the air passages, it is of a dark color, and this may cause you some difficulty in discriminating between it and hæmorrhage from the stomach, which is dark also, and in fact it is generally black, when it is secreted in the stomach; it most generally lays there until it becomes coagulated, and it is expectorated in clots, larger or smaller; there is another distinguishing feature in the blood, that from the stomach is never florid or frothy, you may distinguish it from hæmorrhage from the lungs, by these symptoms; in hæmorrhage from the lungs, you have cough and dyspnoea, (difficulty of breathing,) in the other you have nausea, weight in the stomach and vomiting, and the blood discharged is frequently mixed with the contents of the stomach.

In some cases, the blood appears in distinct *streaks* in mucous; in others it is intimately blended, causing the expectoration to present a rusty appearance, some have compared it to red currant jelly.

The quantity of blood varies from enough merely to tinge the expectoration, and at other times it is so great that it almost amounts to vomiting, mouthful after mouthful being expectorated. In a great majority of cases, however, the loss is moderate, and not sufficient to produce any serious impression on the system. Cases have been reported, where extraordinary quantities of blood have been discharged, and the patient has sunk immediately, but they are very rare.

When the chest is percussed, it emits its natural sound, because the blood is expectorated as fast as it

transudes; for the same reason on auscultation, no sound may be heard except the mucous *rale* with large bubbles.

Along with the phenomena already mentioned, there are often present, especially upon the first attack of spitting of blood, various symptoms ascribable to the very natural alarm of the patient, as great paleness, anxiety of countenance, a quickened and agitated, but feeble pulse, tremblings, faintness, and even nausea. These, fortunately, have in many instances a tendency to diminish the hæmorrhage. In the subsequent attacks, the patient, in general, feels less apprehension; but the idea of great danger, connected with spitting of blood, is so firmly fixed in the public mind, that few are found capable of resisting the impression entirely. When the loss of blood is great, the effects of this are added to those of alarm, and symptoms of great prostration are occasionally presented.

It rarely happens that an individual, if he live many years after the first attack, escapes a return of the hæmorrhage; and in very many cases, the returns are frequent. In these cases, the patient in general, dies ultimately of pulmonary consumption.

I have mentioned that blood is sometimes effused in the *air cells*. When there is a considerable reddish and very frothy expectoration, with great oppression of breathing and a sense of impending suffocation, and when, at the same time, an absence of respiration in a certain portion of the lung, is indicated by auscultation and percussion, there is reason to suppose that the hæmorrhage may be of the kind alluded to. These cases are always alarming and dangerous, but by no means inevitably fatal.

Causes.—The causes of hæmoptysis (spitting of blood,) are numerous; it occurs more particularly in those persons disposed to consumption; with a fine soft skin, fair hair, eyes blue, and a sanguinous temperament; and among these, it occurs more particularly in those who have a florid color. The exciting causes are violent corporeal exertion, either of the lungs in speaking, singing, coughing, &c., or of the body generally, such as straining, lifting, or any violent muscular exercise; these frequently induce it, and especially if any of the influences described be in action; it may be induced, also, from tight lacing, or vascular fullness, or mechanical impediment to the circulation, owing frequently to the presence of tubercles in the lungs.

"It succeeds, at times, to the suppression of accustomed evacuations, as of the piles or menstrual flux, and recurs periodically at the times when these fluxes have been expected."

There are certain morbid affections, which are especially productive of this hæmorrhage, such as bronchial or pulmonary inflammation, phthisis, (consumption) organic diseases of the heart, aneurism, and suppression of habitual discharges, whether healthy or morbid.

Treatment.—It is highly essential at all times to attempt to arrest the discharge; the patient should be made easy and comfortable; his shoulders considerably elevated, and he should not be allowed to move or speak. The air of the apartment should be fresh and cool; the room should be well ventilated. If he has a disposition to cough he should restrain it as much as possible.

Where the attack is slight, and merely limited to expectoration, tinged with blood, the simplest means is generally sufficient for its removal; and there are none

more simple and always ready, than that recommended by Dr. Rush. He says, pour down from a tea to a table-spoonful of clean fine salt, as soon as possible after hæmorrhage begins from the lungs. This quantity generally stops it; but the dose must be repeated daily for three or four days to prevent a return of the disorder. If the bleeding continues, the salt must be continued until it is checked, but in larger doses. I have heard of several instances in which two table-spoonsful were taken at one time for several days.

It sometimes excites a sickness at the stomach, and never fails to produce a burning sensation in the throat in its passage into the stomach, and considerable thirst afterwards.

In vol. 1st. of Medical Inquiries, they say they have found this remedy to succeed equally well in hæmorrhages, whether they were active or passive, or whether they occurred in young or old people.

The *cornu cervinae exsiccatum* (dried deer's horn) is an eclectic remedy of much value, especially in hæmorrhage; one drächm of the powder may be given every hour until the hæmorrhage ceases. It is frequently administered by taking a drachm of the powder, put it in a gill of water, (boiling) and you can give a table-spoonful of the infusion every five or ten minutes.

The mass of authority advise the lancet in this variety of hæmorrhage, but certainly discrimination is very important, before you resort to such a remedy; I have seen great injury result from the improper use of the lancet. Should there be evidences of plethora or hyperemia, (congestion) threatening apoplexy of the lungs, in such cases I would not hesitate to use prompt and ample

depletion. It is a remedy I never resort to in ordinary cases.

To invite the blood to the extremities, I generally immerse the feet in a warm ley bath, and afterwards apply mustard plasters to the extremities, and ice to the chest, when it can be had, and cup freely over the chest and shoulders.

Should the pulse be very frequent, and rather feeble than strong, I generally administer a few drops of the tincture of aconite to reduce the arterial excitement, or give ipecac. in sufficient doses, repeated at intervals of an hour, until it produces nausea, frequently bathing the hands in hot water, and applying ligatures around the extremities will arrest the discharge. Some extol digitalis; its effects, however, I do not think sufficiently active to be relied upon. The following is a favorite recipe with many practitioners:

℞.	Tinct. digitalis,	gtts. xl.
	Acid. hydrocyanic,	gtts. v.
	Mucilage gum arabic,	fl. ʒiii.
	Water,	ʒiiiss.

Mix. Give a fourth part every four or five hours.

After the pulse has been reduced in volume, I have had good success with the following, although there will be many who will oppose the opium; but, nevertheless, it is a valuable remedy.

℞.	Sugar lead,	grs. vi.
	Ipecac.,	grs. ix.
	Opium,	grs. iss.

Mix, and divide into six powders, give one every two hours.

Revulsion is frequently beneficially excited, by the administration of cathartics; those that produce active secretion from the mucous membrane should be adopted, and for this purpose, I advise

℞.	Sulphate of magnesia,	ʒvi.
	Dilute sulphuric acid,	gtts. xii.
	Mint water,	fl. ʒiii.

Give one-half, and if it does not operate in three hours, it should be repeated; when the medicine operates, the patient should not be allowed to rise from his bed, but should make use of the bed-pan.

After, as I have before observed, you have sufficiently subdued the general excitement, acetate of lead is the best remedy, although much difference of opinion exists in regard to it. I generally combine it with a grain of ipecac., and give one or two grains every five hours; if it does not arrest the hæmorrhage, repeat it every three hours; if this does not arrest it, I give three grains every three or four hours; you should not administer in all over thirty grains, as it might produce colica pictonum.

Almost all the agents that belong to the class of astringents have been given in this disease. Sulphuric acid, in a dilute state, or in the form of the elixir of vitriol, eight to ten drops in a glass of water, is a common remedy; or a lemonade, made of dilute sulphuric acid, lemon peel, sugar and water; but, if the experiments of Magendie can be relied on, sulphuric acid does not favor the coagulation of blood, but the contrary. When the case is attended with weakness and feebleness of the pulse, alum and the vegetable astringents have been used with advantage, such as kino, catechu,

rhatany, geranium, galls. They may be used in the form of infusion.

The conserve of roses is a valuable remedy, under such circumstances; it should be taken in sufficient quantity and be persisted in; it may be given to the amount of three or four ounces a day; and the infusion of wild cherry tree bark, may be used advantageously under similar circumstances.

Tannin, at this stage, has been highly extolled; the following is a good recipe for its administration:

℞.	Tannic acid,	grs. iv.
	Pulv. gum arabic,	grs. xv.
	Simple syrup,	q. s.

Mix, and divide into eight pills. Give one every three hours. This remedy sometimes produces constipation, which should be counteracted by injections.

I have used kreosote with advantage. The following recipe has been suggested; I think well of it.

℞.	Kreosote,	gtts. v.
	Mucilage gum arabic,	ʒiii.
	Syrup,	ʒi.

Dose, tea-spoonful every three hours.

Some recommend the iodide of iron, grs. ii., in solution of water, two or three times a day.

As a hæmastatic agent, Dr. Copeland extols the oil of turpentine, and adduces strong testimony of its efficacy; he says it is adapted to the active and passive orms of hæmorrhages; he gives it in large doses in the active variety and small doses in the passive. In an article by Dr. Millshire, he says it is one of the most able weapons in the hands of the practitioner. My own

opinion is, that it can only be applicable to that variety of cases, where there is no inflammatory action; it would not answer in cases of a plethoric condition.

A very distinguished author advises *ergot* in this affection, says he has seen the happiest effects result from it, he uses it as a substitute for the sugar of lead; he gives ten grains every two hours, continuing its use for a day or two. It should not be employed in cases occurring during pregnancy.

The following recipes are advised and have many advocates:

℞. Liquorice root, ʒi.
Starch.
Gum arabic.
—— tragacanth.
Poppy seeds, aa. ʒii.
Blanched almonds, ʒiv.
Sugar loaf, ʒx.

Pulverize well together, and give in doses from a-half drachm to a drachm.

℞. Carrageen, (Irish moss,) ʒss.
Water sufficient to obtain six ounces of mucilage; strain, and add
Phosphate of soda, ʒiss.
Syrup of opium, ʒiii.
Mix well, and give tea-spoonful every two hours.

The same treatment is required in *passive hæmorrhage* of the lungs as for the active form, either variety requires to be treated with some caution.

The following has been recommended in the passive form:

℞. Uva ursi, ℥iss. (bay berry.)
Milfoil, ℥i.
Water, 3 pints,
boil down to 2 pints, and add
Liquorice, ℥i.
strain, and add
Syrup of cinnamon, ℥ii.

Mix well, and give in divided doses, in the passive form of hæmoptysis.

The oil of golden rod is a favorite with many, taken in doses of three or four drops.

You must regulate the diet according to the character and stage of the hæmorrhage; in the early stages, when the hæmorrhage is active, the diet should be farinaceous substances and mucilaginous drinks, all *cold*. If there is no febrile excitement, a more nourishing diet may be allowed, such as farinaceous vegetables, with milk, as arrow root, sago, rice, &c., all to be taken cold. If the system is very much enfeebled, you can allow broths, jellies, and tender poultry.

To prevent a return of the hæmorrhage, you must have recourse to moderate exercise, "free exposure to the open air in suitable weather," to avoid the effects of vicissitudes of temperature, you should advise the patient to wear flannel. "He must avoid all stimulating drinks, and all other causes of direct excitement," you should keep the natural secretions in the best possible condition. A sea voyage is frequently advantageous, and a change of residence into a warm and equable climate is highly useful.

The patient must be extremely cautious in regard to exertion of either voice or body.

HÆMATEMESIS.

Hæmorrhage from the stomach is not an unfrequent occurrence in this climate. Frequently without any inflammation that can be discovered, and generally without much danger, a quantity of blood is discharged into the stomach. If it is not dependant on some other disease, I do not think the affection serious. It is often, I have no doubt, symptomatic; when such is the case the prognosis merges in that of the primary malady.

Symptoms.—Hæmorrhage from the stomach is frequently preceded by loss of appetite, accompanied with either nausea or vomiting; frequently he experiences sensations as if he had a load at the pit of the stomach, accompanied with pain or tenderness over that organ, indicating irritation or inflammation. Sometimes the blood, in addition to its being discharged from the stomach, is frequently passed by stool, and in this climate we have noticed this latter symptom more particularly.

These symptoms, after a time, yield to a peculiar feeling of heat or distention of the stomach; the face becomes pale, and the extremities cold, which is sometimes followed by faintness, dizziness, and evident depression of pulse. These symptoms are again succeeded by either nausea or vomiting, if not of the first, most certainly of the latter, and which partially relieves the antecedent symptoms.

Pain or tenderness in one or both hypochondriac regions, (each lateral and superior region of the abdomen is so called,) costiveness, and sallowness of skin, mark a complication of the complaint with disease of the liver or spleen.

The quantity of blood discharged is frequently very large. It accumulates in the stomach, and becomes mixed with the acids and other contents of the stomach; and when discharged it is usually black or in clots, resembling frequently flocculi floating in a colorless liquid, and having the appearance of *coffee grounds*.

The disease is sometimes periodical; happens especially in females affected with amenorrhœa, (suppression of the menses,) and frequently from the stoppage of the hæmorrhoidal flux in men.

The only affection with which this disease can be confounded is hæmorrhage from the lungs. There is a marked difference between them, which we have pointed out under the head of hæmoptysis.

Causes.—Blows received upon the region of the stomach may occasion the disease, but this is not usual. You will frequently find it occurring in persons who are dyspeptic. I do not pretend to say that it is a symptom of that disease. It is said, and with truth, to be a symptom of softening of the stomach, or cancer of the stomach. In the two last diseases a vessel may be perforated, and death take place suddenly in consequence of the copious discharge. It is common, as we have observed, in females, where the catamenial (menses) discharge is suppressed or diminished. You observe it most frequently in those who have resided long in malarious districts, and who have suffered with malarious diseases. It is frequently complicated with hepatic (liver) and spleen diseases.

The danger chiefly depends upon the source whence the hæmorrhage proceeds.

I have but little doubt that it is a frequent result of abuse of alcoholic liquors.

Treatment.—Your first object should be to soothe and allay his excitement, and perfect quiet both in body and mind should be enjoined. You should let him indulge in cold drinks; nothing warm should be allowed; for this purpose I generally let him have a table-spoonful of cold chamomile tea every five or ten minutes; bathe his feet well in warm water; after which apply mustard plasters over the stomach and abdomen, and to the extremities; this will assist materially in inviting the circulation from the seat of the disease.

The oil of turpentine, in this variety of hæmorrhage, is, in my opinion, the most valuable remedy we possess. I have used it again and again with perfect success. It must be administered in small doses, not exceeding 20 to 30 drops, every three or five hours; and at the same time it is well to let him use a small portion of cold decoction of *trillium pendulam*, (bethroot,) or *urtica dioica*, (common nettle.)

"If there should be much nausea, retching, and ineffectual efforts to vomit, with the discharge of a small portion of coagulated blood, giving rise to the suspicion that much more of the blood might be remaining in the stomach, and serving as a source of irritation, it *might* be proper to effect its complete evacuation by a moderate dose of ipecac.; this is highly recommended by *Eberle*. But under ordinary circumstances, emetics are of doubtful propriety."

If the disease arises from suppression of the menses, means should be adopted to restore them by proper remedial agents. A cathartic will frequently act beneficially on the torpid uterus, (womb) and at the same time remove from the bowels any effused blood that

may have escaped from the stomach; for this purpose the following recipe is highly extolled:

℞.	Sulphate of magnesia,	ʒiii.
	Dilute sulphuric acid,	gtts. xxx.
	Water,	fl. ʒvi.

Mix. Give one-fourth four times a day.

Where the remedies have failed to arrest hæmorrhage, I have given, beneficially, sugar of lead, in small doses, in combination with opium. Others recommend the tincture of the chloride of iron, ten drops every three hours. Pure tannin is a valuable remedy; it is recommended by Dunglison, as follows:

℞.	Tannic acid,	℈i.
	Pul. opii.	gr. i.

Mix, and divide into three powders. Give one three times a day.

To allay thirst, you may suffer him to indulge in eating ice in small pieces, or drink ice lemonade, made with sulphuric acid. If the stomach is irritable, the bowels should be kept in a soluble condition by injections; and to allay the irritability, lime water and milk is very good.

Where you have reason to believe that the hæmorrhage is the result of the liver and spleen being at fault, in such case the biliary secretion should be promoted by an alterative course of medicine, and for this purpose I would give the following:

℞.	Podophyllin, (Active principle of mandrake,)	grs. v.
	Lepandrin,	℈i.
	Loaf Sugar,	℈ii.

Mix intimately, and give two to four grains every three hours, until the stools exhibit yellow bile.

In the passive form of the disease, the plan as suggested for passive hæmorrhage, under the head of hæmoptysis must be pursued.

If faintness comes on, or the body becomes cold, the whole surface, especially the chest, must be rubbed with stimulating tinctures, as camphorated spirits, warm brandy or whiskey, cologne water, &c. In every case, after the flow of blood has been checked, it is necessary to guard against its return by the strictest attention to regimen, and the use of acid drinks. The dilute sulphuric acid, as suggested, in lemonade, will check the tendency to a return of the disease.

The diet is very important in this disease. Some recommend a dry diet; if there be any local or general excitement, the patient should be confined to gum-water with a little lemon juice, and farinaceous drinks. If the stomach should be so irritable as not to retain food, you must support the patient by nutritive enemata, and give him small portions of lime water and milk, as heretofore suggested.

HÆMATURIA.

Bleeding from the Bladder.—This is a discharge of blood from the vessels of the kidneys or bladder; it may proceed from different parts of the urinary organs; and it is generally very difficult to decide as to its precise source. It is rarely, if ever, a primary disease, but most frequently a symptomatic complaint.

The hæmorrhage is most generally preceded by symptoms indicating irritation, or inflammation of the part affected, and again frequently takes place without any

premonitory symptoms. An author of celebrity says, that when pure blood is voided suddenly, without interruption or pain, it proceeds from the kidneys; but if the blood be in small quantity, of a dark color, and emitted with heat and pain about the bottom of the belly, it proceeds from the bladder. When bloody urine is occasioned from a rough stone descending from the kidneys to the bladder, it is attended with a sharp and excruciating pain in the back, and considerable difficulty of making water. If the coats of the bladder are injured by a stone, and bloody urine follows, it is attended with the most acute pain, and a previous stoppage of water.

The blood may proceed from the kidneys, ureters, bladder, or urethra; but it is not always possible to decide with certainty upon its precise source. "In particular cases, it may be supposed to come from the kidneys, when the hæmorrhage has been preceded by pain." We think right the reverse of this, and believe the symptoms just stated, precede hæmorrhage from the bladder; it is occasioned also by a blow upon the back. In connection with the symptoms already described as appertaining to hæmorrhage from the *bladder*, the patient experiences uneasy sensations over the pubes, or along the perineum. I have attended some cases, when it was the result of a fall, receiving the blow upon the parts alluded to. There can be no certain diagnosis, in regard to hæmorrhage from the ureters; it is necessarily very uncertain.

When the hæmorrhage takes place from the urethra, it generally escapes by drops, or in a very small stream; it flows both when the urine is passed, and in the intervals; and when it is discharged with the urine, it is not

mixed intimately with the urine; and another symptom is, he cannot control the discharge, except by pressure upon the passage.

It frequently accompanies diseases of the prostate gland, and I have seen it result from mechanical violence in passing a catheter along the canal.

It is asserted, that in cases of amenorrhœa (suppression of the menses,) a vicarious discharge sometimes takes place from the urinary organs; and a similar discharge, especially from the urethra, has been noticed in the course of purpura haemorrhagica (vulgarly termed land scurvy.)

I have known it to result from the administration of cantharides internally, and likewise from spirits of turpentine. It is common in violent gonorrhœa and stricture. The point to ascertain, if possible, is, whether it comes from the kidneys or from the bladder; a very good distinguishing feature is, that the pain, if the kidneys are involved, resides in the loins, and in the pelvis, when it is in the bladder.

Bloody discharges from this organ, are always attended with a considerable degree of danger; and particularly so when attended with purulent matter, as this is evidence that there is an ulcer somewhere in the urinary passages.

It is essential you should bear in mind the causes I recapitulate—blows or falls, violent exercise, jolting, *venereal excesses;* calculi in the pelvis of the kidney, ureters, bladder, or urethra; cantharides, turpentine and drastic cathartics.

Treatment.—This depends a great deal upon the location or seat of the hæmorrhage, and the treatment must necessarily be varied according to the different causes

from which it proceeds. Sometimes it is easily cured, and again it may be very dangerous. All depends upon the cause. If the hæmorrhage is active, it must be treated as active hæmorrhage from any other mucous membrane; this will be best affected by rest, abstinence, cooling mucilaginous or demulcent drinks, and cup freely over the loins and perineum, as a substitute for the lancet; cold injections should be thrown into the rectum, combined with a small portion of laudanum. A very good preparation is to dissolve an ounce of gum arabic in one gill of water; in a glass of this, drop in ten drops of the oil of vitriol, this may be taken two or three times a day. Where the hæmorrhage is very copious, you must apply *ice*, if it can be had, over the part from which the blood proceeds. If the bowels are the least disposed to constipation, they should be kept soluble by the administration of castor oil or injections.

Some advise the use of stimulating diuretics and astringents, especially where the symptoms are inflammatory or acute, and for this purpose you give

℞. Marsh mallows, ℥iii.
Queen of Meadow, ℥iii.

Add four quarts of water and boil to one; then add two ounces of gum arabic, and half an ounce of pulverized nitre, (saltpetre).

Give a cup full 4 or 5 times a day.

A prescription which I have used a great deal, and which, I think, was suggested by Prof. Morrow, is as follows:

℞. Sweet spirits of nitre,
Oil of almonds, aa. ℥ii.
Balsam copaibæ, ℥i.
Oil of turpentine, ℥ss.

Oil of juniper,
Oil of spearmint,
Alcohol, aa. ʒi.

Shake well, and give a fluid drachm three times a day, in some mucilage.

Dr. Beach advises a decoction of peach tree leaves to be used.

Sometimes this hæmorrhage is passive, not accompanied by any symptoms of inflammation, though there may be slight irritation; when such is the case, I think warm fomentations or emollient cataplasms, preferable to the cold applications; and for the passive form of hæmorrhage, you will find turpentine a valuable remedy, in small doses, not exceeding twenty drops every three or four hours; it is said in such cases, along with the ordinary remedies for arresting active hæmorrhage, the iodide of iron will be found a valuable agent; the liquor potassi iodide, from 10 to 15 drops two or three times a day, it possesses tonic properties, and adds to the coagulability of the blood.

Sugar of lead in small and repeated doses, is advised in both the active and passive forms of the disease.

When hæmorrhage takes place in *chronic diseases of the kidney*, the same treatment must be adopted, and Dr. Eliotson says that in general, the administration of turpentine in small doses, (carefully watching it lest it should irritate the kidneys,) together with the exhibition of opiates, to relieve the pain and procure rest, and giving the patient good support, is all that is needful. We have only to treat it in the same way as we should treat hæmorrhage from other parts. Consider what is the patient's strength, on the one hand, or his debility

on the other; consider whether there are symptoms of active inflammation, or how far the hæmorrhage appears to be passive only. If the disease be not inflammatory, oil of turpentine is of great use here as in the alimentary canal; but it is necessary that you should carefully watch the patient, because that which is passive to-day, may, through sudden excitement, be active to-morrow.

Where the hæmorrhage succeeds to a suppression of the menses, or bleeding piles, you should make an effort to restore these discharges.

Where the hæmorrhage takes place from the urethra, if within reach, it may be controlled by a T bandage, if not, cold applications to the perineum will generally give relief.

The introduction of a bougie may be resorted to, but in must be used with caution.

As general rules, the application of mustard plasters to the small of the back, and cupping immediately over the seat of the pain will be beneficial in all cases.

Where you have a case unattended with pain in the bladder, or symptoms of irritation in the kidneys, you may derive benefit from the muriated tincture of iron, and frequently the addition of some gallic acid to the tincture of uva ursi, will be found to answer every indication.

Dr. Eberle succeeded in putting a permanent termination to the hæmorrhage in a case of long standing, by small doses of alum and ipecac., in conjunction with a milk diet, mucilaginous drinks, and the occasional use of a mild purgative.

℞. Powdered alum, ʒi.
——— ipecac., ϑi.

Mix, and divide into ten equal parts, one to be taken morning, noon and night.

If the blood should become coagulated in the bladder and obstruct the passage of urine, a catheter should be introduced to break it up, or warm mucilaginous substances should be thrown into the bladder through a catheter.

Every thing that would have a tendency to invite a determination of blood to the diseased organs must be avoided.

MENORRHAGIA.

Bleeding from the womb.—In accordance with its derivation, it would in strictness be an increased flow of the menses, and in this place I will consider it, without any regard to those hæmorrhages, connected with gestation.

In health the menses appear about every four weeks, and continue for about four days, and the amount discharged upon an average is about six ounces; it very frequently happens that the discharge is much more copious than this, and at times there is considerable flooding, the intervals between the discharges may be longer or shorter. When there is flooding I am of the opinion it is combined with hæmorrhage from the uterus. There are many cases where the discharge is large, yet it is not morbid, requiring no medical assistance, nor can it be regarded as a disease. "There are some females who always menstruate largely, but whose health does not appear to suffer; but when the discharge takes place more frequently and freely than usual, and manifestly produces an injurious effect on the general health,

it is a condition which requires the attention of the practitioner.

Some authors divide the hæmorrhage into the active and passive, and a very distinguished author says, there is a real foundation for this division; this division is not recognized by many authors. He says the difference is simply this, that in the former, (active) the blood is extravasated in consequence of an irritation or increased action in the vessels themselves; in the latter, (passive) it flows through the unresisting orifices merely upon the principle of gravitation, or under the impulse of the general circulating force.

Causes.—Whatever tends to produce determination of blood to the womb may cause this disease, such as sedentary habits, the free use of stimulating food and drink, heated rooms, and warm bathing carried to excess. It is said in the American Encyclopœdia (Medical,) that it is produced also from a contrary set of causes, to these I have assigned, such as scanty and unwholesome food, bad air, exposure to cold, privations of all kinds, and diseases which impair the digestive functions, predispose to the passive form of this disease, by impoverishing or depraving the blood. Others contend that it is produced from tight lacing, habitual constipation, congestion of the portal circulation, from diseases of the liver or spleen; it is frequently induced by too great exertion, inordinate dancing, mechanical irritations, excessive sexual indulgence, and frequently from fear or anger.

Some contend that cantharides, oil of turpentine, savine, aloes, as well as irritating diseases of the bladder and urinary organs, sometimes produce it.

Those who are predisposed to the disease should avoid all severe exercise in the upright posture.

Symptoms.—In many instances various premonitory symptoms are noticed for days before the discharge takes place, such as headache, giddiness, shortness of breath, a feeling of weight or fullness in the region of the womb, pains in the back and loins, slight swellings of the external parts of generation, some degree of thirst, and a frequent strong, hard pulse. Occasionally the intervals are not longer than two or three weeks; this produces prostration, and frequently also produces this hæmorrhage, the symptoms which attend are chilliness, unusual fatigue in exercise, the patient is extremely pale, and suffers much from headache and ringing in the ears; the respiration becomes hurried upon the slightest effort, accompanied with pains in the back and coldness of the extremities. The pulse is feeble, and rendered very frequent by the slightest exertion. The returns of the hæmorrhage become more irregular, and its duration longer. The discharge of blood is followed by colored serum, and this not unfrequently by a profuse leucorrhea, (a discharge of a white, yellow or greenish mucus.) The slightest causes are sufficient to induce an attack. At length the patient is scarcely ever free from hæmorhage, which varies only from the extravasation of coagulable blood, to that of a thin, bloody, serous fluid. The general symptoms are still further aggravated. Sallowness of complexion or excessive pallor, great emaciation, a very feeble and excitable pulse, respiration short, œdematous (swelling) extremities, and sometimes a general dropsical tendency, with derangement of the digestive and nervous functions, mark the extreme prostration of the system.

Treatment.—This must be conducted on general principles; and I would here remark, that this super-abundant discharge is more common among married women than virgins.

If the patient be plethoric, bleeding is universally advised. I have never yet met a case that I did not control without the use of the lancet. You should, in active cases, give a saline cathartic. The following will answer:

℞.	Epsom Salts,	ʒii.
	Warm water,	ʒvi.
	Compound tincture of senna,	ʒss.
	Syrup of roses,	ʒii.

Mix. Take two table-spoonsful for a dose.

This will remove any existing constipation. This should be combined with nauseating diaphoretics, to lesson the arterial excitement, together with rest, cool drinks, &c. Diet alone of farinaceous substances. This will be sufficient to meet the constitutional indications in active cases. You can give the diaphoretic powder.

℞.	Powdered opium,	ʒss.
	——— camphor,	ʒii.
	——— ipecac.,	ʒi.
	Cream of tartar,	ʒi.

Mix them well. Give five grains every two or three hours.

In plethoric individuals, the patient's feet should be immersed in warm water. I generally apply cloths wrung out of vinegar and spirits to the abdomen and vagina, and let them use a strong decoction of *flea bane* or bethroot. During the time she must be confined to the horizontal posture, on a mattrass or couch.

Where there is considerable hæmorrhage from the vagina, which resists in any degree these remedies, you should then resort to such as seem to exert an influence specifically over the uterine organs; for this purpose Dr. Meigs recommends the wine of secale cornutum, (ergot) a tea-spoonful three times a day. And it is here you can administer that valuable remedy, as suggested in hæmorrhage from the lungs, and it will fulfil your expectations; I allude to the cornu corvinæ exsiccatum (dried deer's horn) it is of immense value in menorrhagia and uterine hæmorrhage. You can give one drachm of the pulverized powder every half hour until the discharge ceases.

I have used, beneficially, rhatany and kino in the following proportions:

℞. Ext. rhatany, ℈i.
Pul. kino, q. s.
Make into eight pills. Give one every two hours.

Some recommend monesia, three grains, every hour or two. Prof. Simpson speaks in high terms of gallic acid, in doses from ten to twenty grains, made into pills, in the twenty-four hours.

Some recommend the tincture of cinnamon. I have used it with success. It should be given from thirty to sixty drops every hour or two.

If this does not check the discharge, let the patient drink alum whey.

Should the hæmorrhage still continue, efforts should be made to arrest it by producing contraction by hæmastasis, as advised in uterine hæmorrhage.

I have frequently given the sugar of lead in combination with opium and ipecac; one or two grains of the former,

and small portions of the latter may be administered every two hours. "When the hæmorrhage is alarmingly copious, it is necessary to employ local measures conjointly with the general. Of these, cloths wrung out of very cold water or spirits, or bladders containing ice, may be applied about the pelvis, over the pubis, or to the loins and back." Should cold not prove effectual, you can then resort to the tampon, which is used for plugging the vagina, and which, in the ordinary state of the uterus, can scarcely fail. In an article from the Cyc. of Pract. Med., it is advised to take a dossil of lint, or a fine cambric handkerchief may be gradually introduced into the vagina up to the os uteri, so as to fill the vagina firmly throughout its whole extent. Many prefer soaking the material previously in some astringent liquid; and this is, perhaps, still more efficacious. If a plug produce pain it must be withdrawn; and, at all events, it should not be allowed to remain more than twenty-four hours, because it is apt to become very offensive and irritating from the putrifaction of the discharge. On withdrawing it, unless it be done very gently and gradually, a fresh discharge of blood is apt to be occasioned; but it can easily be restrained by another plug, or some of the other remedies.

In cases where the system and uterus are both relaxed, and the hæmorrhage assumes a passive character, in this variety sulphate of zinc, sulphate of iron, tincture of chloride of iron, and sulphuric acid, are most esteemed. Astringent injections are advised, consisting of alum dissolved in an infusion of kino or catechu, or a solution of sugar of lead, may be thrown into the vagina. Some give the sulphate of zinc, two grains, and sulphate of copper, (blue vitriol) one quarter of a grain, repeated

three or four times a day; this course would be beneficially assisted by the aromatic tinctures, such as cinnamon and ginger.

In long standing cases, where the system is perfectly prostrated, you might endeavor to stimulate the uterine organs by applying a blister to the sacrum, and giving small doses of cantharides, and keeping the bowels in a soluble condition with rhubarb and castile soap.

The diet in every form of the disease, must be regulated according to the symptoms. If plethora exists, it must be restricted; if, on the other hand, there is debility, the diet should be nutricious, that which is easy of digestion; malt liquor and wine may be allowed.

I attach some recipes, that I have not alluded to in the treatment, but which evidently exert, in many cases, a good influence.

℞. Powdered catechu, ℈i.
Confection of opium, grs. xii.
Aromatic confection, q. s.

Make a bolus, to be taken twice a day.

℞. Powdered Peruvian bark, ʒi.
Isinglass, ʒiss.

Mix, and divide into sixteen powders. Dose from three to six a day, in passive menorrhagia.

℞. Euphorbia hypericifolia, (black puslam,) ʒss.
Boiling water, 1 pint.

Infuse for half an hour, and strain. Give wineglassful three times a day.

℞. Ammoniated iron,
Aromatic powder,
Ext. of Peruvian bark,
Alum, aa. ʒss.
Oil of cinnamon, gtts. xii.

Mix into a mass, and form pills of two grains each. Give from four to six, morning and evening.

℞.		
	Powdered alum,	ʒi.
	Sugar of milk,	ʒss.
	Powdered cinnamon,	grs. xv.
	Milk,	2 pints.

Boil, and strain when coagulated. This to be taken during the day.

UTERINE HÆMORRHAGE.

Flooding.—Copious and profuse floodings occur under very different states of the constitution. I wish to call your attention especially to those profuse evacuations which frequently take place after confinement. Our treatment, as suggested for immoderate flow of the menses, may be consulted with advantage.

It is a disease so common in our climate, from the fact our summers are so long, and the heat so great, that the general system becomes very much relaxed; other causes are assigned, but I give this only as a reason for its frequency.

You know there is hæmorrhage, from the common symptoms which indicate the loss of blood. Dr. Ramsbotham says:—The color vanishes from the cheeks and lips; the pulse flags; fainting occurs; the breathing becomes laborious, and drawn with sighs; the extremities lose their warmth; jactitation (extreme anxiety) ensues, and perhaps vomiting. Vomiting, indeed, is not a universal symptom of loss of blood, and seldom comes on until the system is much depressed. Under great exhaustion, I consider it a good sign, rather than a bad one, because it shows that the nervous system is not

deadened, but that impressions are still kept up between parts remote from each other, by means of sympathy; and I think also, that the very effort of vomiting tends sometimes to induce contraction in the uterus, and may thus be the means of preservation.

We know, too, that the woman is flooding, if it be external, by an examination of the linen. Sometimes we find a quantity of coagula expelled upon the napkins; at others, that part of the bed in which she lies is soaked with blood, and no misapprehension can arise as to the cause of the diminished vital energy. But the hæmorrhage may be internal, and concealed. Still our means of diagnosis are easy and certain; the simple application of the hand over the uterine tumor will be sufficient to assure us of its state; and by the sensation it conveys, we judge whether the blood is pent up within its cavity. If we find the organ large, soft, and flaccid; if it yield to the hand, and becomes harder when pressure is made upon it, and if then blood passes out of the vagina with a gurgling noise, we can be at no loss to declare the case one of concealed hæmorrhage. But, on the contrary, if the patient continue fainting, while there is no external flow—if we find the uterus as small as a foetal head, and hard, and observe no relaxation in its structure—we must seek some other cause for the symptoms of depression, besides loss of blood;—the syncope (fainting) is independent of hæmorrhage from the womb.

Treatment.—Under hæmorrhages, after the expulsion of the placenta, our indication is to evacuate the uterus, so as to ensure the closure of its cavity, and, if necessary, to rouse the flagging powers by the judicious use of stimuli. Both outward applications and manual opera-

tions will assist us in the accomplishment of our purpose. Pressure and the application of cold will often of themselves prove sufficient to restrain the flow, and they may be used in combination.

Called then to a case of this description, the first means to be employed is the grasping pressure of the hand to the uterine tumor itself. It is not enough merely to lay the open palm upon the abdomen and press steadily and flatly, but a squeezing or kneeding action should be used, by which the organ is prevented from filling and becomes distended with blood, and its fibres also are stimulated to contract. It is not unlikely the patient may complain of the pain we are putting her to. She may be desirous that our hand should be removed. If the pain she experiences, however, be that of uterine contraction, her entreaties must be disregarded; because upon contraction alone her ultimate safety will depend. At other times she will not allow us to leave her for a single moment, she feels so much comfort from the pressure of the hand and from the support which the abdominal contents receive, and she experiences such a sensation of sinking when that pressure is removed that she feels convinced she will faint if it be omitted. While hæmorrhage is going on with any activity, I place no reliance on a bandage, however tight it may be drawn, or with whatever local compresses its action may be aided. I cannot think any fold of linen applied over the uterine region, nor any thing in the shape of a tourniquet, as has been recommended, can secure contraction in a manner at all to be compared to the grasping pressure of the hand.

We have proof, indeed, that even the pressure of the hand will not always produce the desired effect; but

other means are in our power, efficacious and of easy application; and of these cold may next be resorted to. A napkin, soaked in vinegar and water, may be suddenly laid upon the hypogastric region, (the lower part of the abdomen) and the uterus will often answer the stimulus immediately. A succession of cold cloths may be used in this way, so as to keep the temperature of this part of the person below the standard, and pressure may be used occasionally at the same time. Should the bleeding, however, still continue, and the faintness increase rather than diminish, the means I next adopt (and sometimes this is much more useful than any other mode of applying cold,) is dashing a quantity of cold water upon the lower part of the abdomen. A better plan is to expose the abdomen fully, and turn the water in a stream from a distance of two or three feet, this I conceive to be the best mode of applying water. This may, perhaps, appear a rough and neither a very refined nor very delicate mode of treatment; but the case is of a highly dangerous character, and all other considerations must give way to ensuring the patient's safety. It is a universal observation, that a slight degree of cold applied suddenly and with a shock, will produce a greater effect than a more intense one continued for some time.

Dr. Gooch gives us an instance in which the uterus was stimulated to contract by a quantity of cold water thrown suddenly from an ewer on the abdomen, although it had not answered to the application of ice, which had been previously used for a considerable period.

We may, however, still be foiled, and must resort to other measures, and here I would advise the use of

Hæmastasis, (which will explain itself,) and I cannot refrain from giving you a portion of a lecture delivered by Professor Buchanan, upon this important agent, more especially in connection with uterine hæmorrhage. He says, "the simple ligature is all sufficient. If you tie a pocket handkerchief or any suitable cord, around the upper arms or thighs, and tighten it by an inserted stick sufficient to check the venous blood, but admit the passage of the arterial blood, you will in a short time have the blood vessels of the limb very greatly distended. Four ligatures applied in this manner to the arms and thighs, will in a few minutes destroy the balance of the circulation, and remove from the trunk from one-third to one-half of its usual supply of blood; an amount of reduction which the most heroic practitioner does not attempt with the lancet. If your subject be in a debilitated or anæmic condition, she will in a few moments faint, and remain in suspended animation until the ligatures are removed or loosened, which should be promptly done.

If the patient be plethoric, the blood vessels being already well filled, will not be susceptible of so much additional distention under the ligatures. They will, consequently, not have so great a power over the constitution. Hence in all cases where the patient is plethoric, and the constitution of a firm texture, it will be necessary before you can assume the control of the circulation, to know that she has been sufficiently depleted by cathartics, diuretics, and sudorifics, or otherwise which remove the watery and excrementitious portions of the blood; and that the patient should be under the relaxing influence of gentle nauseants, which relax the vascular as well as muscular system. You will also

greatly increase the facility and success of *hæmastasis* by the application of warmth and moisture to the hands and feet, which may be immersed in warm water.

As a substitute for the lancet, I cannot well exaggerate the importance of hæmastasis, in controlling severe congestion, and it is equally potent in cases of hæmorrhage. In *uterine hæmorrhage*, which has so often baffled the resources of medicine, a knowledge of hæmastasis gives you the power of retaining the blood necessary to life. It is impossible for much of the blood to flow from the ruptured vessels when you have mechanically imprisoned it in the limbs. As soon as a ligature has been applied, and the blood vessels of the limbs are well filled, the patient is nearly safe. You have imprisoned a sufficient stock of blood for all the necessary vital purposes; and it will be impossible for the heart and arteries to expel much of the portion which you have left in the trunk. You have already so lowered the action of the heart and arteries, that active hæmorrhage from small vessels, is impossible.

Some extol the propriety of introducing the hands into the uterine cavity, and assert that it seldom fails of producing the contraction we desire. The introduction of the hand is always to be avoided, if, by any other method, we can produce the same measure of good, without the chance of injury; but yet there are many states that fully warrant even this proceeding. The coat must be taken off, the left hand and arm greased, and passed gently into the uterus, and the parietes may be stimulated by the fingers moved within it, at the same time that the right hand grasps it externally; or as Gooch recommends, the bleeding vessels may be compressed with the knuckles within, while the uterine

tumor is pressed upon without; and by this combination of external and internal pressure, it is seldom that we shall not succeed in putting a stop to the discharge. If there be any fibrous coagula adhering to the internal membrane, these must be removed as cautiously as we should separate the placenta.

If the case does not yield to the treatment suggested, other expedients must be tried. Some advise injecting a quantity of iced water, vinegar, or other astringent, into the uterus itself; advantage may sometimes be derived from throwing a quantity of cold water into the uterus; but I should fear using strong astringents in the same way, lest inflammation of the uterine tissue, or of its veins, should be induced. Ice has also sometimes been introduced into the vagina with advantage, either naked or wrapped in linen or flannel; before being passed into the cavity it should be held in the hand till the corners are rounded off. It has been recommended that we should stuff the vagina with cloths steeped in any astringent at hand; my experience justifies me in saying it is a safe proceeding. Some object, and assign as their reasons, that the blood is not preserved in the woman's vessels by filling the vagina; it is escaping through their orifices, and collecting in the uterine cavity; and as the womb, by the pressure of the plug, is prevented contracting, the very object which we wish to gain is defeated by our anxious care. I do not think so.

It is advised to put the child to the breast as an efficacious means of producing uterine contractions.

As regards remedies, opium, acids and ergot are the chief. [Consult our article on immoderate flow of the menses.] We cannot conclude this article without assu-

ring you, that it is especially in this form of hæmorrhage that the hæmospastic remedies exert such a specific influence. [Consult *Hæmospasis.*]

MELÆNA.

Hæmorrhage from the Bowels—This affection, I have no doubt, is rare as an original functional disease, though I have met with it very frequently in this climate as an attendant of various organic affections.

Discharges of dark blood from the bowels, (if you have an opportunity of inspecting it,) is generally easily discovered. You may have some doubts, as it is sometimes the result of hæmatemesis, (hæmorrhage from the stomach,) and again you may confound it with hæmorrhoidal flux. It is, therefore, by no means always easy to decide, in any particular case of bloody evacuations from the alimentary canal, whether or not intestinal hæmorrhage, strictly so called, really exists.

The discharges are of various colors. It sometimes passes in large quantities, without much alteration; when such is the case I am satisfied it is from the bowels. Again you will find the discharges almost as black as pitch; when such is the case it is questionable whether it is hæmorrhage from the mucous membrane of the bowels, or from the minuter ramifications of the portal vein in the glandular texture of the liver. This variety of discharges is quite common with us. I am not prepared to give an opinion as to the fact; but a distinguished physician furnishes a very ingenious argument in support of the latter. He says, "a certain degree of congestion of the liver will occasion an excessive secretion of vitiated bile, constituting the common autumnal cholera, and the various modifications of

bilious complaints; but that when the congestion of the liver occurs to a still greater extent, the secreting ramifications of the vena porta no longer eliminate bile, but pour forth a dark and highly carbonized blood, uncharged with secretion; that this dark fluid passes through the minute biliary pores, and is conveyed through the common excretory hepatic ducts, to the duodenum, (the upper bowel,) and is carried downwards along the intestines." He conceives, therefore, that this disease differs but in a degree, in the pathological condition which occasions its symptoms, from cholera and other bilious disorders.

To distinguish it from bleeding piles, the blood which escapes from them is always passed after an evacuation, and is fresh, of a florid red color; but in hæmorrhage from the bowels, they are most generally black, and the blood is intimately mixed with the secretions, and farther, there is considerable pain in the bowels in this disease, whilst in bleeding piles it is confined to the rectum.

Symptoms.—In most cases of intestinal hæmorrhage the early symptoms are not striking or easily recognized, there may be purging of blood in some instances for some time before the patient is himself aware of the fact.

The patient generally feels some uneasiness before an attack, such as a sense of weight in the lower portion of the bowels, and they are frequently tender upon pressure; the discharges are very offensive; it is said by a distinguished author that the discharge of blood is almost universally preceded by evidences of disease. "Often this disease is of a well known and marked character, as enteritis, dysentery, enteric fever, scurvy, &c., of all of which hæmorrhage from the bowels is an occasional concomitant; you have a furred tongue, de-

ficient or disordered appetite, constipation or diarrhœa, a pale, sallow, or dingy complexion, dejection of spirits, languor, weakness, and more or less disorder of the circulation, indicating a derangement of health of some duration, of which visceral disorder and impaired digestion are the most prominent. A patient in this condition is unexpectedly affected with griping pain, nausea, increased paleness, and more or less giddiness, faintness, depression of pulse, and coolness of the extremities, attended by a discharge from the bowels, which, on examination, proves to be blood of black color, very offensive, and otherwise altered in character;" this diarrhœa, frequently, as we have before observed, exists for some days with these peculiar symptoms, without occasioning any anxiety, until attention is called to the bloody nature of the stools. "In some instances, again, the hæmorrhage comes on without any premonitory symptoms, and the evacuations from the bowels, and its attendant depression, are the first obvious signs of disease. This depression is sometimes extreme, and the patient may even sink beyond the point of reaction. Sudden prostration and death have occurred without any evacuation, and the cause has remained concealed until dissection has revealed a vast collection of blood, fluid or coagulated, in the small intestines."

Frequently these discharges are attended with much pain, which, I think, is an evidence of some organic disease of the intestines, and again, it is accompanied with little or no pain, the symptoms, in many cases, are very closely allied to that of dysentery, and the disease is quite common in those localities where dysentery is endemic.

Inflammation of the substance of the liver, especially

when it is extensive, is frequently accompanied with hæmorrhage, and if the blood be black, exhibiting a good deal of adhesion in its character, presenting at the same time both a red and bilious appearance, then I am satisfied it proceeds from that organ, and not from the mucous membrane of the intestines.

If there is structural disease of the liver, pervading that organ extensively, affecting in the least the ramifications of the vena porta, you are then liable to have hæmorrhage from the stomach or intestines, and very probably from both. "In these cases the blood discharged is dark and grumous, the stools presenting all those characters which constitute fully this disease. This form of hæmorrhage occurs frequently in persons of broken down constitutions, and who have been addicted to ardent spirits." It is frequently complicated with dropsy of the abdomen, and in such cases the chances of affording relief are very limited. You are restricted with your means to a small compass, "and it will require the utmost skill of the practitioner to meet the successive emergencies of the case."

It is superfluous to say that the general symptoms attending this disease are variable, from the fact that the number of diseases with which it is sometimes connected, renders it almost impossible to embrace an accurate description of them.

Causes.—It is peculiarly important to distinguish, as near as possible, the precise cause which produces the hæmorrhage. No treatment will be judicious or rational unless you have a proper knowledge of the pathology of the case. The suggestions we have made in regard to hæmorrhage from the stomach, are to a great extent applicable here.

Direct irritants, and I think drastic cathartics under peculiar conditions of the system, have a tendency to produce congestion, and whatever tends to produce irritation or inflammation in combination with congestion, may occasion this variety of hæmorrhage. You will frequently meet with this hæmorrhage as an attendant on the course of continued fevers, I regard it generally in such cases, as the result of congestion of the mucous membrane of the bowels. In such cases, if the discharge is abundant, you will have to adopt those remedies which we have already pointed out to control active hæmorrhage.

We have alluded to it in connection with a variety of diseases, and it is particularly connected with diseases of the liver and spleen, and sometimes attends on solid tumors, malignant ulcerative affections, organic derangements, suppression of the menses; but its most common pathological condition is probably congestion of the portal system, dependent on torpor or organic disease of the liver, or enlargement of the spleen. Hence its occasional occurrence in protracted intermittents and association with abdominal dropsy. Enteric or typhoid fever, uniting occasionally the two conditions of a hæmorrhagic state of the blood, and an inflamed and ulcerated state of the bowels, is liable to very serious complication with intestinal hæmorrhage, which sometimes renders speedily fatal, cases that might otherwise end favorably.

Treatment.—In the treatment of this affection, you must have an eye to the pathological state in which it was originated.

If the hæmorrhage is passive, and occurs as a result of scorbutis, purpura hæmorrhagica or small pox, you

will then treat it with the oil of turpentine, 20 gtts. given every six hours, and keep the bowels open with mild aperients.

Where the hæmorrhage is vicarious, resulting from suppressed catamenial secretions, it may in general be removed by the exhibition of aloetic preparations.

Where the hæmorrhage results from any organic lesion which gives rise to intestinal hæmorrhage, you frequently find it resulting from ulceration of the mucous membrane, especially in cases of dysentery and continued fever. This, under the circumstances, is a formidable symptom, and in your treatment, you must carefully avoid all substances which can prove the least irritating. Opium is here your anchor, you may give it in large doses, and at such intervals as will have a tendency to give perfect quiet and repose to the intestines, endeavoring to control, if possible, the peristaltic motion.

When the hæmorrhage is the result of inflammation of the liver, the indications are, that the remedies that will control the hepatitis, would at the same time relieve the hæmorrhage; now where we have hæmorrhage as the result of such a variety of diseases, it naturally introduces the remedy, which heretofore has been almost universally relied on, namely, CALOMEL; and which a distinguished author asserts is too often indiscriminately used; he says, "the extraordinary and immediate benefit often afforded by *mercury* in common affections of the assimilating organs, is one of the great sources of its abuse. Medical men know they can produce by its means, a certain off-hand effect; and to save themselves trouble, and at the same time to gain the doubtful reputation of being decisive and quick in their practice,

they resort to mercury without due regard to its remote consequences. Twenty or thirty years ago, this abuse of mercury was carried to a much greater extent than it is at present." A dose of calomel at night, followed by a dose of castor oil in the morning, and probably repeated two or three times, was the only panacea for all diseases, without regard to the constitution of the patient. Although the miserable consequences of this indiscriminate use of mercury were often too apparent to escape notice, yet such was its convenience, and such the force of habit, that the practice long maintained its ground. Nay, even yet, the abuse of mercury in this country is far from being obsolete, and it is a fit subject even now, for animadversion.

The effect of mercury on different constitutions, and in different states of the same constitution, are remarkably various. Some individuals, both in a state of health and of disease, are almost insensible to the action of mercury, while other individuals, under all circumstances, are affected by the minutest doses. As a general rule, I believe it is admitted, that a state of health is more susceptible of the influence of mercury than a state of disease, particularly of inflammatory diseases. Hence, many individuals who would be instantly salivated by a few grains of calomel, when in health, will be often found to bear almost any quantity of that drug when laboring under an acute inflammatory attack. These peculiar and important effects of mercury point at once to the following maxims regarding its use. Mercury ought to be cautiously administered to strangers, and to those on whose constitutions its effects have not yet been ascertained.

Mercury ought in no instance to be administered for

those slight deviations from health which can be readily removed by safer expedients.

The practical value of these maxims may be thus illustrated:—One of the supposed effects of mercury is its stimulating operation on the liver; and, admitting this common opinion of its action to be well founded, let us briefly inquire into the consequences of perpetually subjecting the liver and the other assimilating organs to the stimulus of mercury.

The stimulating effects of mercury may be analogically illustrated by the stimulating effects of dram-drinking. As the stomach accustomed to ardent spirits will scarcely tolerate any weaker beverage, so the liver, accustomed to the stimulus of mercury, will hardly respond to any other influence. Those, therefore, who in early life have, on all trivial occasions resorted to the powerful stimulus of mercury, like early dram-drinkers, are usually obliged to persist in the baneful habit. The truth of this analogy will be scarcely questioned; for, the most superficial observer must have noticed that patients who habitually take calomel are more than ordinarily subject to periodical congestions, or biliary attacks, as they are termed; and that such biliary attacks will rarely yield to any other remedy than calomel. Nor is the insensibility to gentler expedients, thus too often produced in the soundest constitutions by the use of mercury, its only fault; the habitual use of this remedy is capable of exerting positive mischief on the assimilating functions and on the kidneys of some individuals. This has been demonstrated in many instances. Moreover, those whose systems have been under the influence of mercury in a degree not far short of salivation, are notoriously liable to take cold, rheuma-

tism, &c., from slight exposure; and various formidable and fatal diseases, as consumption, &c., can be often distinctly traced to such exposure under the influence of mercury.

Many, I have no doubt, whose views have been limited to the immediate operation of mercury, will be disposed to think that what is here said of its ulterior effects is exaggerated. If, however, they will take the pains to investigate the history of mercurialized patients, and particularly the condition of their assimilating organs and kidneys, they will soon find ample proof of the truth of what has been stated; at least I can truly say, that a large proportion of the most inveterate dyspeptic and urinary diseases which I have seen, have been distinctly referable to the abuse of mercury. I am prepared for the objection, that many individuals begin the use of mercury early, and continue it with the same evident advantage to extreme old age; and I meet this objection by the statement, that many individuals begin the free use of wines and of spirits at an early, and continue to use them to an extreme old age; but no one, forgetting the millions that have in the meantime fallen victims to the abuse of fermented liquors, will contend that such ought to become the rule; and the same rule is strictly applicable to the abuse of mercury.

In these observations, for myself, I wish to be fairly understood. I am not wedded to any theory, or so prejudiced against any remedy, that I cannot render to either impartial justice. If a disease does exist, and where I thought this remedy was indicated, especially if there was no peculiar idiosyncracy of constitution to forbid it, I would not hesitate to administer it; it is an active remedy, entitled to consideration. I entertain a

high regard for it in the disease under consideration, but I hope I use it with judgment and discretion.

My medical friends fully understand this agent, consequently my remarks are more applicable to the general reader; and here permit me to impress upon you one fact, that whenever you use mercury, unless you are combatting a real disease, you are liable to produce disease by its administration. It is a dangerous remedy in many diseases, and attended with the worst consequences in many constitutions; permit me to warn you, as an honest man, against the indiscriminate use of so active and powerful a remedy.

As we before remarked, when your hæmorrhage is the result of inflammation of the liver, which is sometimes an example of sympathetic hæmorrhage, from the fact that the congestion and exhalation from the mucous membrane depends on this organ, and very frequently the spleen; consequently, when the hæmorrhage is so profuse as to be alarming, no matter with what disease it may be associated, your first indication should be to arrest it, and for this purpose I administer sugar of lead freely; some advise kino and rhatany in combination; this produces a tannate of lead, which I apprehend would not materially affect it. The infusion of roses, as advised in menorrhagia, is used here with advantage. Some advise ergot, with or without opium, to arrest the hæmorrhage. If the discharges are passive, you have no remedy to equal spirits of turpentine; it should be given from five to twenty drops every hour or two.

When you are satisfied that the hæmorrhage arises from diseases of the liver, I do not hesitate to recommend to you to administer mercury; here it will meet all of your anticipations, you will find it *the*

remedy. If the affection is merely functional, give a grain of calomel every two hours, until you administer ten grains, this will generally control the affection; if, however, there is inflammation of the liver, you should combine small portions of opium and ipecac. with the calomel.

Some substitute the nitro-muriatic acid for the calomel. In some cases you will derive much benefit by cupping over the region of the liver, and administering castor oil, 12 or 18 hours after you have given the calomel.

In this climate you will meet with many cases of enlarged spleen, which are frequently accompanied by hæmorrhages from the whole mucous membrane of the alimentary canal. I have given you its pathology heretofore. When the discharge is from the spleen it is attended with considerable exhaustion of the vital powers. If the strength of the patient will admit, you should cup him freely and fully over the spleen, and the free use of purgatives must be resorted to. Calomel is not borne well when hæmorrhage arises from the spleen; it is asserted that salivation is very easily induced. It is not uncommon to observe purpurous spots on the skin, in conjunction with this disease and enlarged spleen, a pathological condition which indicates a vitiated state of the blood. Nevertheless this variety is not so incurable nor so fatal as that connected with diseased liver. There may be cases in which, from the activity and strength of the pulse, it would be necessary to administer nauseates and aconite or digitalis, to control the circulation. Cups and fomentations to the abdomen may also be indicated in certain cases, and external derivations are often useful.

It is frequently necessary to support the strength of the patient by nutritious food, and sometimes even by stimulants. This is especially the case in the passive forms of hæmorrhage attending low fevers. Where there is nausea, milk mixed with lime-water will be found, on the whole, the most suitable article of diet. Sometimes it will be necessary to resort to animal broths and jellies. Should stimulation be advisable, it may be most safely effected by wine-whey. Care should be taken to allow no article of food which would be likely to pass undissolved through the stomach; hence liquid aliment is preferable. Vegetables, being generally difficult of digestion, should be avoided.

In convalescence great attention must be paid to the patient. He must avoid irritants of every character, and keep still and quiet.

DISEASES OF THE SEROUS AND CELLULAR TISSUE.

ASCITES.

Dropsy of the Abdomen.—By the term ascites, we understand there is a collection of water in the cavity of the abdomen; and this form of dropsy is very common. This variety of dropsy is frequently only an incident of general dropsy; in a large majority of cases, however, it is entirely local. The water is generally collected in the sac of the peritoneum, (a serous membrane which lines the abdominal cavity,) or general cavity of the abdomen, and uncombined with any morbid collection of water elsewhere. This is the species

of dropsy to which ascites should be strictly restricted. The collection is sometimes found without the peritoneum, and between this and the abdominal contents. You sometimes find the liquid secreted in sacs, and connected with the peritoneum; it is termed encysted dropsy; and there is another variety, having all the appearance of this form of dropsy, occurring in women, resulting from disease of one or both of the ovaries.

That form of dropsy which we now propose to treat, is nothing more or less than an accumulation of serous fluid in the bag of the peritoneum.

This form of dropsy, generally commences in the lower portions of the abdomen, and gradually extends upwards; this keeps on increasing until the whole abdomen becomes swelled and very much enlarged. The first sensation is usually that of an uneasy fullness of the abdomen, accompanied with loss of appetite, dryness of the skin, a great diminution of the discharge of urine, and attended with costiveness. The progressive enlargement of the abdomen is uniform, and while the patient is in an upright position, the distension is perfectly equal in the lower portion of the abdomen, but whatever position he may be in, you will find a prominence of the abdomen, on the side in which he is lying. Where the collection of water becomes great, it forces the abdominal contents to press upon the diaphragm (vulgarly called midriff) and excites coughing.

Where there is a copious collection of liquid, the practitioner may be perfectly sensible of it, if the left hand be laid flat against one side of the abdomen, and a slight blow be struck with the other hand on the opposite side; the blow gives an impulse to the collection of water, which is conveyed by a wave of the

liquid against the hand which was placed upon the abdomen, the sensation conveyed to the hand is very perceptible, and where the amount of liquid accumulated is large, the more sensible and decided is the fluctuation.

When the peritoneum contains but a small quantity of water, the fluctuation cannot be made sensible in this way; you can frequently arrive at the fact, by percussing (striking) with one finger the most dependent part of the cavity, while you should make pressure with another finger very near the part struck; by this means you may sometimes ascertain the presence of fluid; by testing in this manner you aid your diagnosis, by the sound yielded, where there is liquid collected; the sound over that region is very flat.

The disease is attended by various symptoms, besides those already enumerated, belonging to this form of dropsy in general, or when it originates as a result of organic derangement. Of the former, the countenance exhibits a pale, and frequently a bloated appearance; immoderate thirst; the skin dry and parched; the urine much diminished in quantity, high colored, and most frequently depositing a sediment, with more or less general swelling. Sometimes emaciation; the pulse is very variable.

Where it originates from organic affections, the symptoms, of course, vary.

The collection of water produces many functional disturbances, which we have noticed, such as distension and weight; difficulty of breathing and cough; nausea and colicky pains, frequently the result of compression of water on the stomach and bowels. As the collection of water increases, greater debility follows; the action

of the heart fails, drowsiness sometimes occurs, and the patient dies from syncope, (fainting,) or with symptoms of oppressed brain.

This disease may possibly be confounded, with the various forms of encysted dropsy, pregnancy, tympanitis, and distended bladder.

It is possible sometimes to confound this disease with pregnancy, but in ordinary cases of this kind there can be no difficulty. Many cases are reported where distinguished physicians have been deceived. That distinguished surgeon, Sir Astley Cooper, appointed a day for the operation of paracentesis (usually called tapping) upon a lady; in the meantime she was taken in labor and delivered. In justice to him, however, it is reported that the liquor amnii was enormous.

If pregnancy should be complicated with dropsy, the most skilful physician, with all his care and attention, will be much embarrassed in arriving at a proper diagnosis; frequently, amongst the ignorant, the character of the physician depends on a correct diagnosis. Dr. Good relates a case fully in point: "if dropsy occurs at a period of life when the catamenia are on the point of naturally taking their leave, and where the patient has been married for many years without ever having been impregnated, it is not always easy, from the collateral signs, to distinguish between the two. A lady, under these circumstances was, a few years ago, attended for several months by three or four of the most celebrated physicians of this metropolis, one of whom was a practitioner in midwifery, and concurred with the rest in affirming that her disease was an encysted tumor of the abdomen. She was, in consequence, put under a very active series of different evacuants; a fresh plan being

had recourse to as soon as a preceding had failed. She was successively purged, blistered, salivated, treated with powerful diuretics and the warm bath, but equally to no purpose, for the swelling still increased and became firmer; the face and general form were emaciated, the breathing was laborious, the discharge of urine small, and the appetite intractable, till at length these threatening symptoms were followed by a succession of sudden and excruciating pains, that the domestics, who were not prepared for their appearance, now supposed to be forerunners of a speedy dissolution, but which fortunately terminated before the arrival of a single medical attendant, in giving birth to an infant, that, like its mother, had wonderfully withstood the whole of the preceding medical warfare without injury."

You should be very particular in getting a full history of the case, especially whether she has been regular in her catamenial discharges or not, though in dropsy this discharge is very often absent.

The action of the fœtal heart, by means of the stethoscope, is the most reliable. If you still have doubts, make an examination per vagina; an experienced accoucher will have no difficulty. You should be cautious not to give a hasty decision, without very particular examination.

You will have no difficulty in diagnosticating between dropsy and tympanitis. There is an absence of fluctuation, and the universal resonance (or sound) in the latter affection are sufficient distinctions.

In relation to the distended bladder, the history of the affection, with its attendant symptoms will most generally aid you in distinguishing this disease; where you have any doubt you should introduce the catheter.

Causes.—A collection of serous fluid, "whether in the cellular membrane or in the cavities of the body, is caused by absorption falling short of exhalation in these cells and cavities." Like other dropsies, it arises in consequence of a loss of balance between those vessels whose office it is to secrete the fluid that lubricates the peritoneum, and those that take it up. Absorption is increased, although not in proportion to the exhalation. Some contend that the cause of dropsy is in the exhalant vessels which, they say, pour out more serum or water than the absorbents take up, and thus collects and forms dropsy. If the exhalants secrete too much, the absorbents remaining healthy; or, if on the other hand, the exhalants remain healthy, whilst the absorbents take up too little, accumulation of serous fluid takes place under opposite circumstances.

Dr. Eliotson believes that dropsy arises from a structural change in the peritoneum itself, and that it does not arise as is generally supposed, from a diseased liver; the doctor goes on farther to say that he has made many post mortem examinations of ascites, and that he does not recollect a case, in which the liver was not diseased in some part or other. I believe that visceral disease is one of the most common causes of this complaint, the effusion in many instances, I have no doubt, is owing to a mechanical impediment to the abdominal circulation; as where ascites occurs in one who has been long habituated to over indulgence in spirituous potations. The liver becomes softened, indurated, (hard,) hypertrophied, (enlarged,) or so diseased that the blood of the portal system cannot circulate freely through it; engorgement of the abdominal venous system consequently supervenes, and transudation or increased secre-

tion of the more watery parts of the blood takes place into the cavity of the peritoneum. Hepatic disease is without doubt, the most frequent cause of this variety of dropsy; whenever the liver is enlarged from chronic inflammation or other degeneration, especially in that condition of the liver which the French have termed *cirrhose*, and which has been termed by some anatomists, the hob-nail liver; scirrhus and tubercles also will produce it; the first named, *cirrhosis*, is one of the most frequent and fatal causes; others contend that irregularity of circulation is likewise induced by the enlargement of the spleen, so often observed as a sequel of intermitting fever, (those who have practised in this climate, cannot have failed in seeing this). Some say it is an attendant on granular disease of the kidneys, under some circumstances. The spleen and mesenteric glands may act in like manner with the liver, by diminishing the capacity of the portal vein, or its branches; I mean, of course, when they are enlarged, and under these circumstances, they may increase the irritation of the peritoneum.

Treatment.—This should be conducted upon the same principles of general dropsy; and your first indications should be to evacuate the water, and prevent the reaccumulation by restoring the tone of the system. Some place great reliance on the lancet, it is a remedy that I have never used, and flatter myself that I enjoy some reputation in the cure of dropsy, from having treated many cases successfully. If the accumulation of water is large, and the disease is active, perhaps the most efficient remedies for removing the fluid, are brisk cathartics, diuretics and local revulsives. You must be careful in your examination, to discover if possible, the

pathological cause, and if the kidneys are the least diseased, you will derive much benefit from diuretics.

To fulfil the first indication, I generally resort to the Hydragogue cathartics, (medicines that are capable of expelling effused serum from any part of the body,) and for this purpose, I generally administer the following:

℞. Powdered Gamboge, ʒss.
Carbonate of potash, ʒi.
Brandy, f.ʒxii.

Mix the powders intimately, add the spirit, and digest for four days with a gentle heat. I give it to adults in doses from half a drachm to a drachm, every three or four hours, until free purgation is produced. In a large majority of cases, you will find the liver torpid, and frequently the dropsy is the result of chronic inflammation of that organ; in this variety, you will experience much benefit from the compound pill of podophyllin:

℞. Podophyllin, (active principle of mandrake).
Scammony, (Syrian birdweed).
Gamboge, aa. ʒi.

These ingredients should be triturated well for half an hour, then add

Castile soap, ʒss.

Mix, and divide into 120 pills. You should give two pills every night; it is a valuable purgative, producing no nausea, griping or debility.

Some advise, that whatever remedy is employed for the evacuation of the serum, it is very often essential to conjoin with it the use of mercury. The mercurial,

under all circumstances, if resorted to, should be cautiously employed; where the collection of fluid depends upon visceral obstructions, I have frequently derived benefit from the following:

℞.	Pulveris digitalis,	grs. xii. (fox glove.)
	Hydrg. chloridi mitis,	grs. iv. (calomel.)
	Pulv. opii,	grs. iv.
	Confection of roses,	q. s.

Make into twelve pills, give one every six or eight hours.

For the purpose of lessening the swelling and tension of the abdomen, many advise the compound powder of jalap, or the following:

℞.	Spirea ulmaria,	ʒi. (queen of meadow.)
	Asclepias syriaca,	ʒii. (milk weed.)
	Bace. Junip.,	ʒii. (juniper berries.)
	Raph. rusticanus,	ʒi. (horse-radish.)
	Sinapis alba,	ʒss. (mustard seed.)
	Xanthox. fraxin,	ʒii. (prickly ash bark.)

Bruise all separately, and then mix. To the powder add one gallon of good cider. Give wine-glassful four or five times a day.

Elaterium is a good remedy, and frequently better than almost any other in expelling the fluids, the patient will bear up under it for a considerable time if administered every other day; you should commence with it in small doses, increasing gradually up to one and a half or two grains a day. You must be very particular in noticing the effects of hydragogue cathartics, as frequently the debilitating effects of those active cathartics cannot be borne; under these circumstances

you should resort to diuretics, and for this purpose I generally administer the following:

℞. Cortex sambucus, 1 lb. green, ½ lb. dry, (elder bark.)
Lisbon wine, 1 gallon.

Simmer about an hour, strain and bottle. Give wine-glassful three times a day.

You will also generally find that the bitartrate of potassa answers a good purpose.

As a diuretic the following is recommended by a distinguished eclectic practitioner: Take queen of the meadow roots, dwarf elder bark, marsh mallow roots, mountain pink, of each, coarsely bruised, half an ounce, place them in one pint of boiling water and one pint of good Holland gin, and steep them in a close covered vessel for four hours, then strain, and sweeten well with honey. In severe cases a wine-glassful may be given every hour until relief is obtained, after which every three or four hours.

Where you have succeeded in evacuating the water from the abdomen, to prevent its re-accumulation you will derive much benefit by giving ten grains of capsicum, morning, noon and night, and continuing in small doses and at long intervals your diuretic preparation. It is not only a useful but good plan after the fluid is evacuated, to bandage the abdomen well. Some recommend a thin belt which will produce a uniform pressure throughout, it is of great advantage.

Where the liver is not performing its functions, some advise frictions with iodine ointment, daily, or twice a day, over the region of that organ; I think I have derived in some cases slight benefit from this application. Where there are any symptoms of inflammation, many

advise cupping and blistering to the abdomen, either of which, if resorted to, should be used with great caution.

If there is organic disease of any sort I am satisfied you will derive but little if any benefit from mercury and iodine; and as a dernier resort, you will be obliged to tap the patient; I am rather an advocate of tapping early, only, however, when you are absolutely satisfied you must resort to it, after the failure of purgatives, diuretics, compression, &c. The mere fact of tapping will frequently be of great use in preventing the parts from becoming so stretched that they will not contract again.

Tapping, says a distinguished author, has been much employed, and various opinions have been expressed of its advantages. While some allow it only as a last resort, merely to obtain temporary relief when all ordinary means have failed, others have recommended it as a remedy, capable, in some instances, of effecting cures. There can be no doubt that permanent cures have, in some rare cases, followed this operation; and the opinion held by some, that by removing pressure from the kidneys, it favors the action of diuretics, is probably not entirely without foundation. Nevertheless it very generally fails to do more than yield temporary relief, and the liquid accumulates again often even more rapidly than before, so as to render a frequent resort to the operation necessary. The quantity of serum which has been drawn off, and the number of times that tapping has been repeated in some instances, are astonishing. A physician of Missouri records a case in which the operation was performed ninety-six times in the course of a few years, and the whole amount drawn off was two hundred and seventy-five gallons

and a half; and a case was reported by M. Lecanu to the Paris Royal Academy of Medicine, in which a woman was tapped eight hundred and sixty-six times, and ultimately recovered under compression of the abdomen. (Dunglison's notes to Encyclopœdia of Practical Medicine.)

On the whole, as I have before observed, it should be resorted to only when it is absolutely necessary; and in the performance of the operation it is highly important, as the fluid escapes, to make compression of the abdomen by means of a bandage, so as to supply artificially the pressure of the viscera, to which the patient has been so long habituated, and the sudden withdrawing of which has repeatedly proved fatal, when this precaution has been neglected.

You must exercise great precaution in tapping; as to the part to be selected for the purpose, and the mode of operating. I would advise the point that is usually chosen, in the linea alba, a little below the umbilicus, (navel,) the bladder being previously emptied. You should be careful to ascertain whether the disease really exists; there must not only be fluctuation, but fluctuation evident from a collection of fluid. You recollect that the bladder sometimes becomes much distended, and it is sometimes accompanied with pregnancy.

The caincæ radix, (cainca root,) where it can be procured pure, enjoys much reputation in this species of dropsy. The decoction is the best form for its administration.

℞. Caincæ root, ʒii.
Aquæ, Oiss.

Boil it down until you make a strong decoction, and give a table-spoonful three times a day.

In those cases that require the aid of a tonic to keep up the strength of the patient, and to create an appetite, we know of nothing equal to the compound infusion of peruvian bark and iron. Use the following recipe:

℞. Peruvian bark, in coarse powder, ʒi.
Sliced Colombo root, ʒiii.
Bruized cloves, ʒii.
Iron filings, ʒss.

Digest for three days in a close vessel, add peppermint water sufficient to yield a mixture of 12 ounces in filtering, then add—

Compound tincture of cardamon, ʒiii.
Tincture of orange peel, ʒiii.

Dose. One to two fluid ounces.

The following diuretic mixture is highly extolled in this variety of dropsy, namely:

℞. Extract of dandelion, ʒss.
Decoction of dandelion, fl.ʒix.
Spirits of nitric ether, fl.ʒi.
Syrup of ginger, ʒii.

Mix. This amount to be taken three times a day.

Diet.—In almost every variety of dropsy a stimulating diet is indicated; and those articles that are peculiarly pungent in their character should be freely indulged in and used with the food, such as horse-radish, cayenne pepper, mustard, &c.

I have treated numerous cases of ascites. You will have no need to put into requisition all the remedies I have laid down; by following the directions you will be apt to afford relief; if you should fail, you will find

there is an organic affection of some of the organs implicated in the disease. [See cellular dropsy, two last paragraphs.]

HYDROCEPHALUS.

Dropsy of the Head.—Hydrocephalus, at the present time, is limited to effusion occurring within the cavity of the skull. Some authors, in fact most of them, speak of acute hydrocephalus, and I question whether there is such an affection as proper acute hydrocephalus, in the sense in which the word is generally used. There is sometimes inflammation of the brain, causing, very frequently, great effusion, and it is from this fact that some authors speak of acute hydrocephalus.

It is a disease that seems to be almost peculiar to children; and we sometimes find it in adults who have had inflammation of the brain; it is frequently attended with copious effusion.

It generally occurs in infants before the closing of the fontanelles; but, as I before observed, it may happen at any period of life, rarely known, however, beyond the age of twelve or fourteen. It is a disease which is frequently observed to pervade a family, affecting the major portion of the children at a certain period. "Yet, in relation to cases in which the cranium is incapable of expansion, there must always be some doubt, as the only certain criterion of the presence of water is the increased size of the head. Various organic diseases of the brain, of a chronic character, are capable of producing symptoms closely analogous to those of hydrocephalus; and any diagnosis that may be formed in such cases must be more or less conjectural. All that can be said with pro-

priety is, that where a case exhibits the ordinary hydrocephalic signs, with the single exception of the expanded cranium, after the complete union of the bones of the head, there may probably be dropsy of the brain." The swelling or enlargement of the head is sometimes enormous, widely separating the bones of the head, and sometimes causing absorption of the brain.

Causes.—As I have already observed, it is for the most part an infantile disease, chiefly affecting children from two to fourteen years of age. It is an affection that runs in families. I have known it to succeed whooping cough, and frequently it occurs during teething. The dropsy of the head is most probably, in many instances, the result of congestion, produced from slight inflammation of the brain, and in some cases it may arise from general debility.

An author of some ability says, a morbid state of the stomach and bowels has been supposed by some to be a predisposing cause; but of all the causes which contribute to the production of this disease, cold plays the most conspicuous part.

Symptoms.—Your attention seems directed to the head intuitively, as the seat of the disease, and one of the most striking phenomena of the disease is the gradual enlargement of the same. The promonitory symptoms in children, are heaviness of the head, dullness of the mind, headache, sometimes referred to a particular spot and sometimes diffused. There is, also, a peculiar knitting of the brows, impatience, a flushed countenance, preternatural redness of the eyes, contracted pupil; the body is hot, denoting symptoms of infantile fever, and also acute inflammatory action of the vessels of the brain.

As the disease progresses, the pulse, before quick,

becomes slow, intermitting or irregular. The stomach and bowels are disturbed, the tongue is white, yellow, or brown; the pupils are permanently dilated, and cease to contract on the approach of light. The child frequently wakes screaming, and is very restless, both up and in bed. These symptoms may last only a day or two, and then come on with increased severity, or they may last many weeks.

Dr. Yeats, who has written upon "water on the brain," has made the earlier stages of this disease his particular study. He places among the premonitory symptoms occasionally present, tenderness in the scalp, stiffness of the neck, increased sensibility of the eye to light, and, in some rare cases, severe earache.

Dr. Cheyne has directed the attention of the profession to the derangement in the functions of the liver and bowels, which, he says, so often precedes, and not unfrequently seems to excite this affection of the brain. We are aware of the intimate sympathy which exists between the brain and liver, and also, between the brain, stomach, and intestines. When we consider the close and unquestionable sympathy which subsists between the head and these organs, and take along with this the greater exposure of the latter to irritating causes and consequent functional derangement, we are disposed to think that the now very generally received opinion, as to the frequent origin of hydrocephalus, in disorders of these organs, is well founded.

The head gradually enlarges, and the expansion takes place usually in all parts of the bony case of the brain, except the base; but it is generally most conspicuous in the frontal, parietal (sides of the head) and occipital regions (base of the head); the top of the head being

comparatively little affected. As the face is in general not larger than usual in health, the forehead and sides of the cranium are made to project very much, and give to the child a peculiar aspect. In some instances, it is said that the face undergoes a corresponding development, and the whole head appears gigantic. The enlargement is sometimes irregular, affecting especially the forehead, or the parietal region, and being much greater on one side than the other, so as to occasion great deformity. The sutures of the head not unfrequently open, and the bones of the cranium seem in extreme cases, to be almost floating upon a surface of liquid. It is said that in some cases in which the collection of water is very great, the head appears somewhat translucent, if placed between the eye and the light.

Stages.—When the disease is well formed, some divide it into two stages, others contend for three. It may and frequently does occur without any of the premonitory symptoms. I recapitulate briefly, the symptoms of the different stages.

First Stage.—Pain in the head, redness of the eyes, intolerance of light and sound, contracted pupil, great restlessness, symptoms of infantile fever, some contend that the pulse is rapid and full, others assert that it is slow, unequal and intermitting. Dr. Golis, who has written a treatise on hydrocephalus, says the abdomen sinks, and becomes flatter, and that this is a pathognomonic sign of the disease, (a characteristic symptom of a disease,) so that if this occur, we may be certain as to the nature of the disease; there is also costiveness, the discharges resembling tar; these symptoms may extend to the seventh day. After this, you have the

Second Stage.—Which is that of exhaustion; you have more or less blindness; the pupils no longer contracted, but dilated; general insensibility, almost a complete state of stupor; convulsions or partial paralysis occur; the pulse is quick, and during the apoplectic state, the pulse is rapid, sometimes very rapid.

Third Stage.—This stage, I believe, does not occur very frequently. There will appear to be some sensibility of the eyes and ears; the muscular power, and likewise the mind, will be partially restored. Sometimes the stupor will pass off, and the child will be perfectly conscious. Dr. Golis says these symptoms are always accompanied with a very rapid pulse, and for the most part, whatever restoration there may be, there is observed more or less stupor, and perhaps convulsive actions.

Diagnosis.—When the disease is attended by expansion of the head, you will experience little difficulty, you must however be careful, as you might confound it with a large head, as the bones sometimes become spongy from rachitis. Hypertrophy (or enlargement) of the brain, will also produce increased dimensions of the cranium. These affections are so rare that you will seldom meet with any difficulty.

Treatment.—I have before remarked that the premonitory symptoms may pass off spontaneously; and if we attend in removing them, most frequently nothing will follow. Consequently, whenever you see such symptoms as I described in the premonitory stage, you may expect hydrocephalus to follow; it is consequently your duty to attempt to remove them. This may generally be accomplished; but if we fail, and hydrocephalus does come on, we have at any rate, done our

duty. Consequently, your first indication of cure, is to attempt to prevent serous effusion, reduce any inflammatory action that may be prevailing, and to equalize the circulation.

This is a very difficult disease to remove, but prompt and suitable measures will sometimes afford complete relief. If there has been an effusion of fluid, you should attempt to evacuate it, by stimulating the absorbent vessels.

In the commencement of your treatment, you should bathe the patient well, and the extremities frequently in strong ley water, and your principal reliance must be placed upon cathartics, that have a tendency to produce copious fluid discharges; in the selection of them, you must have an eye to his physical condition and constitution. Either of the following remedies will produce abundant secretion from the bowels:—

℞.	Senna,	½ lb.
	Jalap,	¼ lb.
	Cloves or ginger,	ʒi.

Pulverize all well. You can give it to children in four to six grain doses, in sweetened water. Some advise a grain or two of cayenne pepper to the dose. Or, take

℞. Equal parts of the first prescription, and cream of tartar. Give to children in ten grain doses, administered the same way.

The following is a recipe that is extolled by Dr. Hill, in strong terms, in every variety of dropsical affections; it is a valuable remedy.

℞.	Senna and manna, (bruised)	aa. ʒss.
	Pulv. anise or fennel seeds,	
	Epsom salts or cream of tartar,	aa. ʒii.

Add 1½ pints of boiling water, and simmer it slowly down to one pint; strain and sweeten. Dose for children one-third of a tea-spoonful every half hour until it operates freely.

Either of the following may be relied upon with certainty:—

℞.	Podophyllin,	grs. ii.
	Cream of tartar,	ʒiii.

If you wish to make your cathartic stimulating, add ten grains of cayenne pepper. For childen, divide into thirty doses, and give one every two hours.

Some prefer—

℞.	Podophyllin,	grs. ii.
	Leptandrin,	grs. viii.
	Loaf sugar,	℈i.

Mix thoroughly in a mortar. Give in doses as advised in podophyllin and cream of tartar.

You will find your patient will generally have a very dry and constricted state of the skin, and you will experience much difficulty in inducing perspiration, which you must accomplish, if possible. For this purpose, I advise the sudorific tincture, which should be taken in spearmint tea. The following is the sudorific preparation which I esteem most highly. Take,

℞.	Virginia snake root, in powder,	
	Pulv. Ipecac.,	
	—— Saffron,	
	—— Camphor,	aa. ʒii.
	Opium, ʒii., or lady slipper root,	ʒviii.
	Holland gin,	6 pints.

Macerate for two weeks, strain and filter through

paper. You may give this to children in five drop doses, in spearmint tea, repeated at least every hour. If this recipe, should be too stimulating, and have a tendency to increase the arterial excitement, I then substitute the following diaphoretic powder. Take,

℞.	Opium, ʒss., or cypripedium,	ʒi.
	Pulv. camphor,	ʒii.
	—— Ipecac.,	ʒi.
	Cream of tartar, or bicarbonate of soda,	ʒi.

Mix well. Give children ss. to 1 gr. every two or three hours.

You will find great heat of the head, generally accompanying hydrocephalus, and I generally use cooling lotions externally, composed of equal parts of spirits, water and vinegar, to which add a small portion of table salt.

Most authorities advise calomel and the lancet, but with what propriety I am unable to determine; I am satisfied that either would have a tendency to increase the irritation, and do more harm than good.

Some advise, and I think correctly, that when the child exhibits signs of scrofulous diathesis, or is wasting away, the preparations of iron, iodine, or the decoction of pipsissewa (winter green) may be used, and I have no doubt with advantage.

The following is the plan employed by Golis, who has written extensively on hydrocephalus, and for which he claims great success.

The head is to be kept constantly covered with a woolen cap, and every night one or two scruples of mercurial ointment, mixed with an ointment made from juniper berries, are to be rubbed on the scalp. Cal-

omel is to be given in doses of one-quarter or one-half of a grain twice a day, care being taken that too much purging is not produced. For young infants, the best diet is mother's milk, or that of a healthy nurse; for older children, meats, eggs, and coffee made from roasted acorns. Fat substances, and all alcoholic liquids are to be excluded. In pleasant weather the child should be as much as possible in the open air; in winter, the temperature of the chamber should be about 80° or 70° F., and the child should lie on a mattrass, and be carefully guarded against currents of air. Golis asserts that this plan, duly persevered in, has produced complete and lasting cures in many instances. Should no improvement be perceived at the end of two months, he advises the use of diuretics, such as acetate of potassa and squill, in connexion with the former medicines, and the insertion of an issue in the neck and arm, which is to be kept discharging for several months. Should inflammatory symptoms intervene, the antiphlogistic treatment is to be employed. After the commencement of recovery, advantage sometimes accrues from small doses of quinia.

The great object, as we before observed, is to control any inflammation that may exist, and to promote absorption of the fluids. Some recommend for this purpose elaterium, by putting a grain into two ounces of fluid, and give a child a tea-spoonful of the mixture every now and then. Others extol highly the employment of digitalis and squills. Dr. Beach advises to take a half tea-spoonful of the dry herb, and place it in one gill of boiling water, let it stand until it becomes cold. Give a tea-spoonful every two hours, to a child, in a table-spoonful of parsley tea.

Cupping is highly spoken of in this disease. I have never tried it. It might be resorted to when other means have failed.

Dr. Vere advises, with much confidence, a strong tea of milk-weed, given in doses as much as the stomach will bear, and use the following fomentation to the head: Take of wormwood, 2 oz.; mullein and hops, 2 oz. each; stramonium, (Jamestown weed,) 1 oz.; mix, and add water and vinegar; after which the saline wash, with the addition of tincture of stramonium, was freely used four or five times a day. He advises, also, when there is the least fever, to bathe the child in ley water, and apply sinapisms of garlic to the feet; the latter always when there was pain in the head.

Dr. Watson relates the following mode of cure as having been effectual in a few cases. We question the propriety of mercury being beneficial; it is the high standing, alone, of Dr. Watson that prompts us to give his treatment. He takes ten grains of metallic mercury, rubbed down with conserve of roses; five grains of fresh squills are added, and the whole made into pills with powdered liquorice root. This quantity was taken three times a day for nearly three weeks. It acted powerfully as a diuretic, without salivation, but with great reduction of strength and flesh, and gradual relief to the symptoms. It was continued for two weeks longer, at first twice, and afterwards once daily, at the end of which time the cure was complete. The strength was restored by the use of iron; and the cure was permanent. We are under the impression that compression is a valuable agent in the treatment of this disease; but it should be carefully made to compensate in some degree, at least, for the pressure that has been removed

with the fluid. We advise Barnard's method, which is "to apply strips of adhesive plaster, about three quarters of an inch wide, completely round the head, from before backwards; then to carry cross strips from one side of the head to the other over the crown; and lastly, one long strip from the root of the nose over the vertex to the nape of the neck. This plan is applicable only in cases in which the bones are loose, and the general powers feeble, as shown by paleness of the surface, flabbiness of the muscles, &c. Should the symptoms be aggravated by pressure, it should be relaxed or abandoned.

In the latter or third stage of the disease, I advise the administration of opium, not, however, with any idea of its curative effects in this disease, but simply to produce sleep and tranquility. I have never seen any ill effects follow its use.

The following ointment is extolled in hydrocephalus:

℞.	Iodide of potassum,	3 parts.
	Iodide of mercury,	2 parts.
	Camphor,	2 parts.
	Cerate,	32 parts.

Mix. Used as an ointment to the head in hydrocephalus, in doses of a half drachm to a drachm. The following preparation of fox glove has many advocates: ℞. Powdered fox glove, x. grs., calomel, vi. grs., valerian, ℈ii., assafœtidæ, castor, each ʒss., sugar, ʒi. Mix, and divide into twenty-four powders. Give one morning and evening, in the convulsions attendant on hydrocephalus.

Regime.—Nourishment should be light, as arrow root, milk, tea, &c. When it cannot be taken by the mouth it may be given by way of injections.

HYDROTHORAX.

Dropsy of the Chest.—This term may be appropriately extended to any case of serous effusion within the thoracic cavity, (chest) and it is now more generally understood to be a collection of water in the pericardium, (the membrane which surrounds the heart,) or in the cavities of the chest itself; frequently liquid is diffused in the cellular texture of the lungs, without being deposited in the cavity of the thorax.

Causes.—It is frequently a distinct dropsical affection, and the same causes which have a tendency to produce other species of dropsy also generate this. Mercury, when used improperly, is a common cause, from the effusion and debility it frequently occasions; it sometimes is the sequelæ following inflammation of the lungs or liver.

To constitute dropsy the effusion must be so considerable as to derange in some degree the healthy functions.

Symptoms.—When there is sufficient effusion of liquids to derange the healthy functions, it produces more or less difficulty of breathing, which is increased by any bodily exertion, there is a sense of uneasiness at the lower end of the breast bone, which is increased by the least exertion, especially walking up hill, and is much greater in the horizontal than in the erect position. These symptoms are sometimes attended by a cough, with paleness of the complexion, and slight swelling of the extremities. The difficulty of breathing is slight at first, but increases rapidly as the disease advances, and frequently becomes distressing before its close; the patient cannot remain long in a recumbent posture, he lies preferably on the side most affected, with the head and upper part of the trunk almost erect; in the ad-

vanced stages of the disease he is frequently unable to lie down at all, maintaining almost constantly an upright position; it is frequently accompanied with attacks resembling spasmodic asthma, with violent palpitation of the heart. When the effusion is very great, fluctuation can sometimes be perceived by laying one hand between the ribs and striking upon the opposite side, almost the same as advised in ascites.

I have seen patients laboring under the most distressing symptoms; in general the face and extremities are cold, "the pulse, with little exception, is feeble, irregular, and intermits in a degree seldom experienced in other disorders, and a pain or sensation of numbness frequently extends itself from the heart towards the insertion of the muscles, called deltoid, situated at the upper portion of each arm. Excepting a livid hue of the lips and cheeks, the countenance is pale, and indicates a peculiar anxiety and ghastliness of appearance, and, together with the upper parts of the body, is usually covered with a profuse clammy perspiration. Drowsiness, coma, or delirium, occasioned by the difficult transmission of the blood through the lungs, and want of sleep, frequently attend the latter periods of hydrothorax, and from the same cause the expectoration is sometimes bloody. Now and then a sensation of water floating about can be distinctly perceived by the patient on any sudden change of posture. The urine is generally scanty and very high colored, like brandy or beer. There is a sense of tightness or stricture across the chest."

Irregularity and intermission of the pulse, may be regarded as amongst the most frequent attendants on

this disease, it is remarkable that in some few cases these symptoms are not present.

The patient sometimes observes that he has a sensation as if water were contained in the chest, passing from one side to the other in turning, or as if the heart were moving in a fluid.

The natural functions are variously disordered in the progress of hydrothorax; the appetite and digestion are sometimes impaired, the tongue foul and furred, and the bowels are various, but generally bound. The pressure of water upon the œsophagus has sometimes occasioned a distressing difficulty of swallowing.

The only affections with which this disease is likely to be confounded are consolidation of the lung from pneumonia or other cause, and the presence of pus or blood in the cavity.

Treatment.—In regard to the treatment we can add but little, as the remedies heretofore advised for different species of dropsy, are, in many instances, applicable to this; if the effusion is the result of an inflammatory condition of the membrane covering the lungs, then you will derive great advantage from cupping, which should be done frequently, accompanied with continued and long repeated blistering.

To remove the effusion, I generally administer, in this variety of dropsy,

℞. Mandrake, (may apple,)
Cream of tartar,
Peppermint plant, equal parts.

Some substitute the powder of jalap for the mandrake.

Give in tea-spoonful doses, mixed with boiling water, and sweetened; you must repeat according to circum-

stances. After the operation of the medicine, administer the foxglove as advised in dropsy of the head; it is a valuable remedy in this disease. This remedy is facilitated by the free use of the following tea, which is strongly diuretic:—

℞. Spearmint,
Parsley,
Elder flowers,
Dandelion roots and tops, aa. a handful.

Put them into a tea-pot, and add sufficient boiling water to make a strong infusion. This should be drank freely through the day.

I have much confidence in the application of diuretics applied externally, in dropsy of the chest and abdomen, with equal parts of the tinctures of digitalis, squill, and soap, to which you will benefit, by adding the wine of colchicum and the tincture of cantharides; this application should be rubbed on freely two or three times a day. Some speak in high terms of anointing the chest and abdomen, morning and evening, with warm sweet oil, to which they add a few grains of cayenne pepper, sufficient to heat or stimulate the skin.

If you succeed with the remedies pointed out, in evacuating the water from the thorax, to prevent its re-accumulation, I give capsicum in ten grain doses, morning, noon and night, and let the patient use wine bitters, according to the following prescription.

℞. Comfrey root,
Solomon's seal root,
Spikenard root, (bruised,) aa. ʒi.
Chamomile flowers,
Colombo root,
Gentian root, (bruised,) aa. ʒss.

Place in a vessel, cover with boiling water, and let the compound macerate for twenty-four hours, keeping it closely covered; then add of good sherry wine four pints, macerate for two weeks, and filter.

Dose, half fluid ounce, three or four times a day. It is well to give it on an empty stomach.

In those inveterate and almost hopeless cases, if the treatment here suggested has failed, then I would advise the emetic plan of treatment, when you should give an emetic every third day, accompanying it with the advantages to be derived from a vapor bath, with the administration of the compound powder of jalap, and the decoction of Indian hemp, as mentioned in dropsy of the abdomen.

Some very respectable authorities assert, that they have repeatedly carried off the effusion by the use of the following pills:—

℞.	Elaterium,	grs. vi.
	Calomel,	grs. xii.

Rub them carefully together, and with a sufficient quantity of extract of gentian, form into twelve pills.

Give one every hour, commencing early in the morning, and continue till they operate. If their action be excessive, the patient's strength must be supported by the wine bitters or strong beef tea.

Paracentesis (tapping) may be resorted to with some hope of benefit, when there is reason to believe that the disease has originated in inflammation, or mere vascular irritation of the pleura. In other cases, it would be a desperate resort, at most, calculated to afford but temporary relief, at the hazard of producing fatal inflammation. Nevertheless, when the danger of death from

suffocation is imminent, the practitioner would be justified in resorting to it as a temporary expedient. In no case should it be employed until all other means had failed.

We call your attention to the last paragraph on dropsy of the cellular membrane.

A strong decoction of the tops of common broom, is said never to fail in increasing the flow of urine, and to be especially beneficial in this form of dropsy.

Dose, of a strong decoction, four ounces every hour, until it produces some effect.

HYDROCELE.

Dropsy of the Scrotum.—There are certain forms of dropsy that belong to surgery, and need only to be glanced at for the sake of elucidating the subject. For example, this disease, hydrocele, is sometimes termed dropsy of the tunica vaginalis testis, and there is also another variety belonging to surgery, dropsy of the joints and bursæ (hydrarthrus.)

Dropsy of the scrotum is quite a common disease amongst us; it consists in an effusion of serum or water in the coats of the testicle. There is an œdematous (swelling) condition of the scrotum (vulgarly termed the bag) which may be mistaken for true hydrocele. There may be, also, a scirrhus tumor formed which gradually increases and sometimes appears transparent and elastic. There is frequently fluctuation of water which can easily be discovered. Great care is absolutely necessary in discriminating between this and hernia or rupture. There is one peculiarity, which is very marked, to distinguish this difference. In the last complaint, the

tumor recedes in a recumbent position, but not so in the former.

Symptoms.—Hydrocele is an accumulation of a fluid in the tunica vaginalis (a serous membrane inclosing the testicle.) It generally commences at the bottom of the scrotum, gradually increasing until the *bag* becomes very much enlarged and distended, extending upwards towards the abdominal ring; a distinct fluctuation is generally to be distinguished; the tumor itself is pyriform in shape, and elastic to the touch; there is no pain on pressure, unless the testicle is compressed, and no discoloration of the integuments; and by placing the patient where you have a strong light, for instance, between you and a candle, the scrotum is almost transparent; the fluid contained is most generally colorless, sometimes slightly yellow. It may affect persons at all ages, and even exist at birth. I am not aware that I have ever seen a case where both sides of the scrotum was affected at once.

The diagnosis in this disease is sometimes peculiarly difficult. "In order to come to a satisfactory conclusion, you should examine into the history of the case. Recollect that hydrocele proper begins in the form of a tumor at the bottom of the scrotum and gradually ascends; while anasarca of the scrotum is more diffused. Scirrhus of the testicle presents a uniform enlargement, is also accompanied with pain, and quite heavy, feeling to the patient and the examiner like a ball of lead. In hydrocele, moreover, where recent, before the membrane thickens, the whole mass of the tumor below the substance of the testicle is transparent or translucent, as may be ascertained by placing it, when the room is darkened, between your eye and a lighted candle. It may

be distinguished from scrotal hernia, by observing that in the latter case the tumor commences above instead of below, and if the patient cough the swelling will be enlarged, and a distinct impulse imparted to the finger pressing on it;" also, that in the latter the tumor recedes in a recumbent position, but not so in the former.

I have alluded to congenital hydrocele as possessing some peculiarities; "and cases of the same kind, which occasionally occur in after life, are incorrectly called by the same name. The original connection between the tunica vaginalis and the peritoneum, (the membrane covering the bowels) of which it was a part, continues, and the fluids that collect in the cavity of the abdomen descend and accumulate, generally producing dropsy or 'hydrocele' of the tunica vaginalis, (the serous membrane covering the testicles) as well as of the spermatic cord. This may be distinguished from common hydrocele by placing the patient on his back and raising his hips, when the swelling will entirely recede, but instantly reappear when the erect position is assumed. The other symptoms of hydrocele, as transparency, &c., have to be also considered, as the affection may be mistaken for hernia, with which it may also co-exist, (the same cause occasioning liability to both.")

Treatment.—At the commencement of the disease, especially in young persons, where a small quantity of fluid is only collected, and where the absorbent system seems to be active, you may disperse it by constitutional means and external applications. I am fully satisfied that where the disease occurs in children, it is seldom necessary to evacuate the water by the introduction of the trocar, as I am satisfied they can be cured without the aid of this. You should begin the treatment as you

would in dropsy, where there was an effusion of liquid, by the administration of active cathartics, diaphoretics, and diuretics, frequently repeated for a considerable length of time.

The parts should be fomented every day, by applying cloths wrong out of a strong decoction of bitter herbs; and you may frequently aid absorption by suspending the bag and wearing a "T" bandage. Some advise very highly stimulating applications to the scrotum, such as the muriate of ammonia and vinegar in solution, keeping the parts constantly saturated with it. Others again, advise astringent applications, and I have tried them successfully, such as the compound tincture of myrrh, with an equal quantity of marsh rosemary, or beach drops. After suspension of the bag, absorption will be much assisted by applying gentle pressure to the scrotum. I suggested, many years ago, an india rubber bag, and I find I may have been preceded by Dr. Davis, of Syracuse. It is a valuable auxiliary in the treatment of this disease. Take either of the preparations advised and completely saturate some old linen, apply it around the scrotum and pass the bag over it; it should be sufficiently small, to exert constant and uniform pressure upon the scrotum. I have cured many children by this mode of treatment.

In many cases, you will find the constitutional and external applications will fail to effect a permanent cure; in that case, I have adopted the plan of a physician who made no pretensions to surgery, as the most simple, and in my opinion, attended with less danger than the trochar: seat your patient in a chair, grasp a portion of the tumor between its anterior and inferior parts, with your thumb and finger, then with a lancet, make a

small puncture or incision, by which the contents of the scrotum will be discharged; there is no necessity for the trochar, a simple puncture is all sufficient. As soon as the water discharges itself, a tent must be introduced into the orifice, sufficiently stiff to keep the wound from healing; as a radical cure depends in a great manner upon this circumstance; some advise after the incision, to introduce a catheter or goose quill, there cannot be much objection to this course, but I have never found necessity even to do this; should any difficulty arise in consequence of the wound healing too fast, you can apply to your tent a mild escharotic. After the fluid has been entirely evacuated, some advise the injection into the scrotum, of the following preparation, every day: castile soap and water, to which a small quantity of the tincture of gum myrrh has been added. Some advise brandy and water, port wine; others, the preparations of zinc and iodine; whether any of these is better than the first, I am not prepared to say. Should any inflammation follow, you must apply a slippery elm poultice, and let the patient sit over the vapor of hot herbs. Dr. Beech advises to apply on the lint, a plaster of black salve, there may be some virtue in the application.

You will find these means generally effectual. In some chronic cases of much obstinacy, you may have to strengthen your injections by substituting for the ones advised, the tincture of capsicum and blood-root. Recollect in all cases of the drawing off the fluid, you must introduce your stimulating injections, not forgetting the india rubber bag and supensory bandage.

For hydrocele of the spermatic cord, if external compression and stimulants, aided by constitutional means,

do not succeed, I should recommend the insertion of a seton. If dropsy of the cord occurs in connection with that of the more common form of hydrocele, the tapping of the latter relieves the cord also.

In congenital hydrocele, or other cases arising from the same cause, a continued connection between the investing membranes of the testicle and of the bowels, merely letting off the fluid for the time, would be useless; and any attempt to excite inflammation by the usual means, would be endangering the life of the patient, as that inflammation would be very likely to extend to the abdomen.

You must first close the communication between the abdominal and scrotal cavities, and for this purpose, a proper truss must be worn; some advise rubbing over the cavity, oil of eggs, procured by pressing the yolk, some advise wearing the irritating plaster.

In ascites or dropsy of the abdomen, you will frequently have with it in connection, hydrocele, the pressure of the fluid sometimes produces a rupture in the peritoneum, and you will find the communication generally between the tunica vaginalis, (the membrane covering the testicles and abdomen. The truss and other means above recommended for closing the communication, can be resorted to when the dropsical tendency has been overcome.

ANASARCA.

Dropsy of the Cellular Membrane.—By anasarca, I understand a collection of serous fluid in the cellular tissue, which is diffused and characterized by general tumefaction of the whole body. I do not apply the term to the cellular tissue of internal organs, but apply

it exclusively to the exterior cellular membrane. Where the discharge even here is not copious, and the disease is partial, the term œdema (swelling) is more appropriate. It is attended with a loss of elasticity of the cellular tissue (or skin,) accompanied with paleness, softness, and generally coldness.

Symptoms.—The first symptoms which attract notice in dropsy of the cellular membrane, is swelling, which usually commences in the lower extremities, appearing towards evening, and which, for a time, disappears by the morning; it soon, however, by degrees, extends upwards, until it embraces the body. The intumescence, or swelling, is soft and very inelastic, easily distinguished from any other swelling; by pressing upon it, you make indentations, and these indentations or pitting remain for a time before the parts assume their former appearance. In this disease, I am of the opinion that the effusion takes place at various portions of the body at the same time; for I have seen the tumefaction frequently in the face, affecting more particularly the eye-lids; wherever the cellular texture is abundant and copious, for instance the eye-lids and tops of the feet, these portions frequently become greatly distended. Where the disease has become very general, the effusion sometimes passes into the serous cavities, which frequently causes death.

The bowels are generally more or less constipated, the urine scanty, high colored, depositing sometimes a reddish sediment; although I have seen some cases, where the urine was directly opposite to this, being of a light pale color. The skin is dry, seldom any perspiration; you have it attended with a sallow countenance and excessive thirst, a corded and active pulse, with a

coated tongue; these latter symptoms, however, will not always do to rely upon, as there is frequently great difference. Destitute of all evidence of undue excitement, we have, on the contrary, the indications of the extremest debility—cold surface, feeble circulation, scanty, turbid or thick urine, emaciation, and the general appearance of cachexy, (a bad habit of the body.) Towards the close of the case, whatever may have been its primitive character, much torpor and heaviness are betrayed, with a low, indistinct fever, the skin still colder and of a waxy pallor; the distention being so considerable as to force the fluid, in some places, through the cutaneous pores, and in others, where the tegument is more dense, vesicles or blisters form, which bursting, are followed occasionally by gangrene and mortification.

Anasarca, in time, presents many diversities; some authors divide it into the acute or chronic, sthenic, (that which depends upon excessive excitement,) or asthenic, (where there is debility of the whole economy, or diminution of the vital forces,) febrile and inflammatory, or anemic; (this form is characterized by every possible form of debility.) Where it resembles an acute febrile character, the lungs are apt to become involved, and you have a sharp or dull pain, with oppressed respiration; the swelling also is decidedly more firm, and the impressions made by pressure, are soon effaced. Where the disease is dependent on an asthenic or anemic condition, the swelling is soft and flabby; it pits easily, and the indentations remain some time.

I am satisfied that this form of dropsy is more curable than any other variety, when it is restricted to the cellular tissue, and induced in a good constitution; if, on the other hand, however, it is occasioned by visceral

organic lesions, or a very impure state of the system, or if complicated with any other, then it constitutes an affliction almost, indeed, hopeless.

Causes.—A writer who has written extensively upon this subject, states the causes as follows:—Anasarca succeeds severe hæmorrhages, natural or artificial, fevers and fluxes; and it frequently occurs in the latter stages of diabetis, pulmonary consumption, or obstructed menses. Under such circumstances, the dropsical symptoms commence slowly, and, as it were, imperceptibly.

Exposure to cold and damp has frequently been followed by dropsical swellings.

General anasarca arises in the next place, from excess in the use of spirituous liquors.

Another cause of this disease is disturbance in the uterine functions.

The only other circumstance requiring attention in anasarca, is its connection with some of the febrile eruptions. It has long been known that dropsy, particularly in the form of anasarca, occasionally follows scarlet fever. The same phenomenon is sometimes observed as a sequel of measles, small pox and erysipelas.

Anasarca is closely connected with hydrothorax, (dropsy of the chest.) In many cases these forms of dropsical effusion co-exist, and the remedies are the same for both.

This same author asks, "Is it not probable that the first cause of every species of dropsy exists in the kidneys, in consequence of their ceasing to perform their office, or failing to secrete the urine?" Doubtless in many instances such is the case; but our impression is, that the effusion is the result of slight and diffused inflammation of the cellular membrane, produced from

the causes above stated. And again you find cases of such extreme debility, especially when it is attended with tenuity of the blood, that the effusion takes place independent of any excitement, the fluid escaping through the relaxed exhalents.

Treatment.—A great many contend that blood letting controls this disease as if by enchantment. I have had much experience in the treatment of dropsy, and have never yet been compelled to resort to the lancet, and upon the whole, would view it as a dangerous precedent to be established in the treatment of dropsy in this climate.

When the disease has proceeded from cold, I think diaphoretics of much efficacy, and the remedies most clearly indicated. When you have decided inflammatory symptoms, you should adopt a vigorous treatment with purgatives in combination with diaphoretics, which will generally prove adequate to the removal of the effusion.

When the swelling is confined to the extremities, the result of cold, I generally make a strong decoction of bitter herbs, such as wormwood, hops, tansy and catnip, and I direct the legs to be held over this fomentation until free perspiration is produced, and immediately after envelope the limb with oil silk, or make an application of wilted cabbage leaves, or the tulip poplar leaves, previously soaked in hot water; and I immediately follow it with either of the following diaphoretic powders:

℞. Pulv. opium, ʒss.
—— camphor, ʒii.
—— ipecac., ʒi.
Cream of tartar, ʒi.

Mix, and give ten grains three or four times a day, or

Dover's powders in five grain doses every hour until free perspiration is produced.

The action of these medicines will be greatly facilitated by either of the following infusions:

℞. Sanguinaria, (alkaloid principle of blood-root,)
Hydrastis. canad., (golden seal,)
Mysica cerifera, (bayberry,)
Sumach berries, aa. equal quantities.

Pulverize them well; take an ounce of the mixture, and add one pint of boilingwater. Dose.—Table-spoonful every 15 or 20 minutes. Or,

℞. Catnip,
Asclepias, (pleurisy root or butterfly weed,) aa. ʒi.
Xanthox. berries, (prickly ash berries,)
Mentha viridis, aa. ʒss.

Make a strong infusion, and drink as warm as possible.

If there should be inflammatory symptoms, decidedly active, in addition to the treatment before suggested, we resort to purgatives, and advise either of the following:

℞.	Podophyllin,	grs. x.
	Leptandrine,	ϑii.
	White sugar,	ʒiss.

These ingredients should be mixed intimately and thoroughly in a mortar, and from five to ten grains should be given every three hours, until catharsis is produced, at the same time alternating your cathartic with the following diuretic, which I conceive is entitled to more claims than any remedy within my knowledge, in this particular form of dropsy:

℞. Gamboge pulverized, ʒss.
Carbonate of potash, ʒi.
Brandy, ʒxii.

Mix the powders intimately; add the spirit and digest for four days with a gentle heat. Given in doses from a half to one drachm.

The following is highly recommended; it is a cathartic which should be taken about twice a week, viz:

℞. Pulv. jalap root.
Cream of tartar.
Pulv. spearmint, equal parts, by night.

Mix. Of this compound, give a tea-spoonful every three hours, until it acts freely upon the bowels. The hydragogue tincture is advised to be used in combination with this. It is as follows:

℞. Take bark of sweet elder, 1 pound.
Good wine, 1 gallon.

Let it simmer a while, say an hour, strain and bottle. Dose, a wine-glassful three or four times a day, accompanying it with the use of the following infusion:

℞. Indian hemp.
Milk weed.
Dandelion roots, aa. equal parts.

Make an infusion and drink through the day.

It is a principle now that is well established, and, I believe, almost universally conceded, that mercury, in this variety of dropsy is regarded as beneficial; perhaps in those instances only, where the glandular viscera are not affected. Yet, as an agent exerting much influence over the disease, it is highly extolled by many.

I have succeeded in very obstinate cases in giving relief,

by giving emetics, repeated frequently. This should be used two or three times a week, combining it with the vapor bath, heretofore alluded to. If the disease should prove obstinate, you should administer the fox-glove; either of the following will answer:

℞.	Foliorum digitalis, (fox-glove,)	ʒss.
	Boiling water,	Oss.

Macerate for three hours, and strain. Dose, table-spoonful two or three times a day; or,

℞	Infusion of digitalis,	ʒiv.
	Tincture of digitalis,	ʒi.
	Acetatis potassæ,	ʒi.
	Tincture opii.,	gtts. x.

Mix, and give table-spoonful three or four times a day.

The prostrating effects of digitalis should always be recollected by the physician; and the rule that when it acts upon the stomach, the bowels, the pulse, or the kidneys, it should be discontinued, cannot, when we consider the power of the article, be too scrupulously observed. The fox-glove should always be given in spearmint tea.

If the urinary secretion is deficient, and you wish to avail yourself of a stimulating diuretic, use the following, recommended by the late Dr. Parrish:

℞.	Contused juniper berries.	
	Seminum Sinapaeos, (mustard.)	
	Radicis Zingiberis, (ginger,) aa.	ʒss.
	——— Armoracia contusæ.	
	——— Apii. petroselini, aa.	ʒi.
	Succi expressi et fermenti pomorum,	Oij.

Infuse, and give a wine-glassful three or four times a day.

The following I have used in general and local dropsy with much advantage:

℞.	Contused juniper berries,	ʒiss.
	Cream of tartar,	ʒi.
	Boiling water,	Oi.

Infuse. Give a tea-cupful four or six times a day, adding forty drops of spirits of nitre.

Dr. Dunglison, in his "New Remedies," recommends a decoction of caincæ, a Brazilian plant, which has of late been extensively and efficaciously employed in Europe.

℞.	Caincæ root,	ʒii.
	Water,	Oiss.

To be gradually reduced by heat to one-half. Dose, table-spoonful three times a day.

A preparation that is highly extolled by Hufeland, is

℞.	Byony root,	ʒi.
	White wine,	1 pint.

Boil gently, and filter. He gives it in wine-glassful doses.

When the effusion is the result of diseased liver, some authorities of much experience speak in high terms of

℞.	Calomel.	
	Pulv. scillæ, aa.	grs. xii.
	Conserve roses,	q. s.

Make into twelve pills. Give one night and morning. Where it is dependent on this and other visceral obstructions, the preparation of mercury and digitalis, as re-

commended in a preceding article, on the treatment of dropsy, might be very valuable.

A liniment that has been employed in symptomatic anasarca, is the following:

℞. Tincture scillæ, (squills.)
——— digitalis, aa. ʒii. (fox glove.)

Mix, and apply locally.

To prevent a relapse in all dropsical diseases, you should continue the remedy that has afforded relief sometime after the cure has been effected.

I have now given my views of the management and treatment of dropsy, and in conclusion I wish to call your attention chiefly to the regimen to be observed in dropsy; and the remarks of Professor Chapman are so much in unison with my own sentiments that I adopt them.

As to diet, this, of course, will depend much on the particular circumstances of the case. In the active or febrile forms of the disease it should be very low, and even total abstinence for a season has proved, we are told, of utility. What medical man can doubt the modus operandi of abstinence under such circumstances? The force of the circulation and the amount of blood are diminished by inanition, (starving) and it is a law fully recognized, that, in proportion to these effects, are the powers of absorption invigorated.

Dropsy of less or no activity demands an opposite course. To sustain and invigorate the system by a more nutritious and generous diet is here proper. Eggs, oysters, or jellies, or some other article containing much nutriment in small bulk, so that the stomach may not be oppressed, should be preferred. The effects of

diet, however, are to be carefully watched, since the filling up of the vessels is followed sometimes by a very manifest increase of effusion, and when this happens the food must be reduced, as well in quantity as quality.

Greater differences of opinion prevail as to drinks. These, instead of passing off by the natural emunctories, are sometimes thrown into one of the cavities of the body or cellular membrane. An apprehension which has so strongly prevailed with some as to lead them to enjoin, as much as possible, a forbearance from drinking, and it is alleged that it has in some instances effected cures. Facts of the kind, however, are of rare occurrence, and the numerous examples of the total failure of the practice have led finally to its abandonment. Difficult and painful, indeed, is it to resist the vehement thirst that often attends, and by the continuance of which such a degree of irritation is induced as to excite or exacerbate fever. It is the practice to allow a liberal use of beverages.

Common water may answer the purpose, though water impregnated with the carbonate of soda, or the tartrate of potassa, or the vegetable acids, particulary, will be found more agreeable, and of superior efficacy. Cider and water is a very pleasant beverage in cases of this nature. The juniperberry tea, however, is still more effectual, and so is an infusion of the buds of the silver pine, or the scabious, (erigeron heterophillum,) or of the root or seed of parsley. Gin, or whiskey and water are allowable in weak states, and especially where such liquors were formerly used to excess. Drinks alone have cured dropsy, on the authority of Cullen, Baker and Milman, not to mention other names of nearly equal respectability. The propriety, indeed, of in-

dulging the patient in this respect, is so incontestibly settled by the concurrent approbation of the ablest practitioners, that it would be superfluous to attempt to enforce it by any theoretical deduction, or by a recurrence to additional authority.

Granting that the practice proves occasionally prejudicial, such instances can be deemed only exceptions to a very general rule, and the mischief is so easily detected, as to be at once guarded against or arrested. Drinks, when instead of answering the purpose of their administration, by taking a wrong direction, serve only to increase effusion, and enlarge distention, will, by every practitioner of sagacity, be timely discontinued or restrained.

I attach much importance to the consideration of this disease, and cannot forbear drawing your attention to those lesions which frequently remain uncured. It is alike required, and indeed is the common practice, to institute a rigid scrutiny, or overhaul, as it were, the economy, to detect its effects and apply the means of rectification, so as to make again all sound and durable, or as far as may be attainable.

Much of the early treatment of dropsy, when well conducted, is certainly calculated to conduce to this end, or, in other words, to reinstate the order of health. Being, however, neglected, or our efforts not entirely succeeding, what remains to be done is no longer to be postponed, and, perhaps, from a clearer apprehension of the nature of the lesion, on the evacuation of the fluid, it may be treated with greater skill and efficiency. Nevertheless, the derangements of the viscera and tissues involved in dropsy, having been erected into distinct, substantive affections, claiming as such a sepa-

rate and ample examination, it would be anticipating my future design, or a recapitulation of what has previously been said, to indulge in any details regarding them at present.

But independent of such positive lesions, or any that are appreciable, a very lively predisposition sometimes ensues, and consequently no little liability to relapses. The causes most apt to re-excite the disease in this state of the system, are exposures to cold, indiscretions in eating, the abuse of spirituous liquors or other stimulating drinks, and similar influences, the avoidance of all which is henceforth to be forcibly impressed and faithfully observed.

No latent phlogosis existing, tonics may be advantageously prescribed, to renovate strength, by an improvement of the digestive and nutritive functions, as the vegetable bitters alone, or combined with preparations of iron the sulphate or tartrate, the muriated tincture, and particularly the phosphate of iron. During this course, should any tendency to effusion be manifested, it will be right occasionally, to interpose a purgative, or the sorbentia, and here the carbonate of potash with the bitters, is adopted.

Cold bathing, when it agrees well, the test of which is exciting a glow to the surface, is said to be serviceable, sometimes so in ascites, though more particularly in pure anasarca. Dashing the water on the extremities, to be followed by friction with the hand or flesh brush, are likewise so in the latter case. Bandaging to support the integuments has been practised with utility in anasarca and ascites. In hydrothorax, I should consider the application of cold, under all circumstances, to be utterly inappropriate, no disease of the chest bear-

ing its impression, generally, in whatever way employed. This practice, in any of its applications, strikes me as hazardous, and should never be adopted, except where the constitution is vigorous and sound. Disorganizations of the viscera existing, which so often happen, I should think it could scarcely fail to do harm. The warm saline bath, on the contrary, with friction, is both safer and more effectual, operating as well to restore the functions of the skin, so essential to a perfect cure, as in various other modes.

Exercise is eminently calculated to cure relapses, and has been found, in some rare instances, to cure the disease itself.

We would remark, before closing this article, that the garden artichoke is reputed to be a very beneficial remedy in most every variety of dropsy; it is recommended in the form of tincture. The leaves should be fresh and the preparation made from them, and quickly used.

Dose of the tincture, a drachm, with five grains of the extract, three times a day.

The *polytrichum juniperum*, (ground moss,)—it is a powerful diuretic, in strong infusion. In doses of two ounces of the infusion every half hour, it has been known to remove from a dropsical patient from twenty to forty pounds of water, in the space of twenty-four hours; it has done this in my hands. It may be used in connection with hydragogue cathartics, or even alone, in dropsies, with the most decided advantage; and it is a very useful article. Professor Jones considers it worthy to be ranked among the first, if not at the head of the class of diuretics.

VENEREAL DISEASES.

GONORRHEA.—CLAP.

Gonorrhea.—This is a disease too well known to require an elaborate description; it is peculiar to the human species, and may be defined as a specific inflammation, produced by the immediate contact of a virus, applied to the human body; it is most generally the product of the above inflammation with the mucous membrane of the urethra, generally communicated in the act of coition; the infection can be communicated to any portion of the body wherever the virus comes in contact with an abraded surface.

The disease most generally arises, from illicit intercourse between the sexes, and the first symptoms are made manifest in or about the organs of generation. There are two varieties of venereal disease—the one under consideration, and (Syphilis) Pox.

A very distinguished author styles this a loathsome affection, which extends to every part of the system, and is occasioned by a specific poison, conveyed by contagion or actual contact; and asserts, that it arises from a poison, which, when applied to the human body, has the power of propagating or multiplying itself, and is capable of acting both locally and constitutionally.

Dr. Steward supposes that this disease originated in the camp of Israel, as may be inferred by reading the 5th chapter of Numbers; and he says he has no doubt it was first inflicted upon mankind as a curse, in consequence of departing from moral rectitude or the law of

God. The first symptoms indicated in this disease, are made manifest in from three to five days after the connection, and it is generally ushered in with a disagreeable itching or burning pain in the glans penis, or attending the urinary discharge. This sensation is generally experienced in the urethra, a short distance from the orifice, soon after which large quantities of purulent matter, resembling pus, are thrown out.

The discharge at first is small and thin, in the course of a few days it increases rapidly, becomes thicker and of a yellowish color. The mouth of the urethra becomes inflamed and swollen, and causes a frequent desire to urinate, which is the source of much annoyance from the pain and scalding heat that is experienced at every attempt to make water. A local symptom, that is an attendant most generally, is involuntary and spasmodic erection; it occurs most frequently after the patient has been in bed for some time. The inflammation prevails to a very high degree, and prevents the extension of the urethra on the taking place of an erection, so that the penis is most generally, from this fact, curved downwards, attended with much pain, which is *enormously* increased if you attempt to straighten it. This peculiar species of priaprism is called chordee. The inflammation, which acts as a stimulus, occasions the penis to assume this downward tendency, more especially when the patient is asleep; and the pain is at times so excruciating as to produce an involuntary discharge of semen.

The inflammation and irritation may extend to the neighbouring organs. An aching is sometimes experienced in the testicles and loins, extending down the thighs." The lymphatic glands in the groin may swell,

giving rise to buboes, though these, it should be remembered, may result from any other irritation.

The constitutional symptoms are, in general, but slight. In certain states of the system, however, considerable sympathetic fever may be developed.

It is asserted, and by experience confirmed, that a first clap, in a large majority of cases, is generally more severe than subsequent ones.

Its more serious occasional results are inflammation of the glans penis and prepuce, testes, prostrate gland or bladder.

We have as sequela following this disease, especially where there is a peculiar idiosyncrasy of constitution, acute rheumatism, and sometimes the gout. A large majority of authors, however, differ with me in regard to this opinion, and attribute the sequela rather to the treatment than the disease.

The first consideration in regard to this disease is to institute an inquiry, and if possible, ascertain how it can be prevented."

"The condom, if perfect, is, of course, an absolute preventive. To insure this, however, it cannot be used the second time without having been thoroughly washed in a soap of a very costly kind. Persons who use these instruments, which in special cases are recommended by surgeons, both to prevent conception and infection, purchase them by the package, and run no risk from the second use."

There would be very little danger of contracting this disease if the parties would, immediately after connection, indulge freely in ablutions of soap and water, and excite, at the same time, if possible, urinary discharges.

I am positive as to this assertion, and conscientiously believe, that if a systematic course of proper police regulations were instituted, that this disease, in the space of a few years, would be entirely eradicated.

There may be doubts, which are just and legal ones, as to the right to pass laws restraining the human family from indulging in their various appetites. It would probably be a dead letter upon the statute book to enact or attempt to pass a law in this country against fornication; but how just would it be to pass a law which would prevent one person from poisoning another by the spread of such an infectious malady? It is manifest to my mind, that when this disease is communicated wilfully, that it should be treated as a misdemeanor of a very serious character.

We have a species of venereal disease which is frequently brought on by excess in venereal indulgence; this we call pseudo gonorrhea. It is said that contact with the menstrual fluid will sometimes occasion urethral inflammation in the male, with most of the other suspicious symptoms, and also that leucorrhea is still more generally believed capable of producing the same result. Some assert that is the cause that originally produced the disease, and is still reproducing the true gonorrheal virus.

Our business is not so much with the causes that produce this disease, as with the attending consequences resulting therefrom. Unfortunately gonorrhea has been too generally regarded and too much treated as a mere local affection. An author, who has had considerable observation in this disease coincides with me in opinion, and says, that it is no more exclusively a local affection than rheumatism or gout. You might as well say that

these are respectively only an inflammation of the small or large joints, and with equal propriety assert that small-pox is a simple disease of the skin, as that gonorrhea is nothing but a diseased condition of the mucous membrane of the part where it shows itself. We have symptomatic fever and other general as well as local symptoms; these latter are frequently attempted to be removed by what is termed the abortive treatment, which when effectual is pleasing to the patient, who is not aware that the virus in question can be so readily removed from the system.

I am fully of the opinion that a majority of the cases treated on the abortive plan will sometimes, years afterwards, develope themselves in the same or some worse form, whenever any sufficient exciting cause may operate. A distinguished author asserts that it renders the patient much more liable to rheumatism; or, on exposure to malaria, be more certain to bring on an attack of intermittent fever. We have witnessed instances where the urethral discharge, with all the primary symptoms of gonorrhea reappeared during the progress of a bilious intermittent. The appearance of the disease after violent over-exertion is by no means uncommon. Loss of sleep, anything that causes debility, will readily bring it back, where it has been *imperfectly* treated, or *prematurely* arrested. Numerous other instances might be adduced of the mischief of an exclusively local treatment. Of all these, however, perhaps stricture of the urethra, is the worse and most common result of curing up a clap by the fashionable astringents.

Treatment.—When you are called to treat a case of gonorrhea, you should first endeavor to rid or clear the system of the virus, and to do this you should resort to a thorough and perfect antiphlogistic regimen, and a brisk

purge of senna and salts, or an emeto cathartic, composed of the compound senna powder or syrup, cream of tartar, and may-apple; half drachm doses to be taken every two hours until free purging is produced. These remedies themselves have frequently prevented the development of the disease when its first symptoms had made their appearance. Still any symptom indicating the disease, is sufficient to put the patient on his guard, and call for a continuance of treatment. After the action of the cathartic we generally resort to mucilaginous diuretics, such as a strong infusion of burdock, in connection with the diuretic drops, which are composed of the following:

℞. Sweet spirits of nitre.
Oil of almonds, aa. ʒii.
Balsam copaibæ.
Oil of turpentine, aa. ʒi.

Mix these together, and add camphor in powder, one scruple. Dose, one drachm three times a day, in the mucilaginous drink. Some add to this recipe one-fourth the quantity of the tincture of cubebs.

After the action of these medicines you can resort to local applications, which are useful as palliatives in connection with the foregoing treatment. For this purpose I frequently use a cold saturated solution of borax as an injection, in combination with salæratus, in the proportion of two drachms to the pint. In quite a number of cases in connection with the foregoing treatment, I have used the following recipe with very few failures:

℞. White vitriol, grs. x.
Sugar of lead.

Borax, aa.	℈i.
Elm bark, pulv'd,	grs. x.
Hot water,	Oss.

Inject from five to six times per day. I have used warm water injections in the acute stage beneficially. Injections of a solution of nitrate of silver from two to twelve grains to the ounce, according to circumstances, are strongly recommended by Carmichael, and other surgeons, it is a valuable remedy, but should be resorted to only in cases of emergency.

A preparation that I have used with unparalleled success is the liquid chloride of zinc, twenty-four to thirty-six drops in four ounces distilled water; this preparation should be agitated and filtered through paper; of this recipe inject a very small quantity about an inch up the urethra some two or three times a day, it produces slight swelling of the glands, but is most certain to cut short the disease. The revulsive treatment is much practised in the French hospital, it consists in the application of leeches and counter irritation to the perineum, in connection with powerful doses of copaiba, cubebs, and similar remedies, the following recipes come under this head:

℞.	Pulv. cubebs,	ʒii.
	Pulv. alum,	ʒss.

Mix, and divide into nine powders, give one three times a day.

Or,

℞.	Pulv. cubebs,	ʒi.
	Holland gin,	Oi.
	Spearmint,	ʒi.

Mix, and let it stand to digest, then take balsam copaiba, ʒii., oil of wintergreen, 1 drachm, mix each of the above preparations together, and give two tea-spoonsful three times a day.

When the disease is of a very mild character, unaccompanied with pain or inflammation, I have then but little doubt that it may be cured with astringent injections, especially if the bowels be kept in a soluble condition, and the patient be allowed to drink freely of barley or flaxseed tea, with the addition of small doses of the nitrate of potash, which corrects the irritating qualities of the urine. He should observe a strictly antiphlogistic diet, abstaining from all malt, vinous distilled liquors, and from everything calculated to excite. Keep the mind as free as possible from lascivious ideas.

The second stage of gonorrhea is attended by more extensive suppuration, violent scalding, frequent, almost constant erections, producing that peculiar condition of the penis called chordee, attended sometimes with bleeding more or less from rupture of the urethra. When this stage is fully formed with its inflammatory tendencies, injections will be of little use, and frequently aggravate the symptoms; the chordee may be removed upon the application of cold water, and may be effectually controlled by pills of opium and camphor, either taken in the usual manner or pushed up the rectum. Copaiba in capsules can be administered in the same manner when it disagrees with the stomach. We have asserted that injections in the second stage are of little use, but I must confess that I have received much benefit by the injections of cold water, and more especially those made from a decoction of poppy heads as warm as they can be borne, and forming the solid contents of the de-

coction into a poultice, and applying it externally to the penis; by these means I have seen the inflammation rapidly allayed, and when chordee existed at the same time, that symptom quieted.

Some practitioners resort to general blood letting, in the inflammatory state of this disease; we do not adopt the method, having never had any difficulty in controlling the inflammatory action which attends the progress of the disease, by using freely of ipecac., given to the extent of producing nausea, when the inflammation has been controlled, you must resort to the anti-gonorrheal remedies. Prevent erections, this can be effected by keeping the parts elevated, and by the application of cold lotions.

The disease sometimes resists the usual applications of remedies, in such cases you are justified in using injections of the strongest possible nature, of nitrate of silver. With a patient in such a condition, the inflammation must be reduced by general and local treatment, applying blisters along the bottom of the penis and perineum, followed by wet cloths; you may inject a small portion of warm water, and a tea-spoonful of laudanum, up the rectum, to control the chordee, if it should be an attendant symptom; under this course, if the inflammation should not have subsided, you must introduce a catheter very slowly, well lubricated with an ointment containing a large portion of the extract of belladona. In this stage you may resort to frictions, with laudanum and emolient cataplasms, but the treatment at this point becomes more general than specific.

An author of much celebrity, advises a simple course of general treatment, which he was assured by an eclectic practitioner, in whose hands there had been

no failure in hundreds of cases, and which, he says, he has tested satisfactorily; it is as follows:

The patient, after being directed to bathe thoroughly in alkali, and drink copiously of some demulcent diuretic, is given a five grain pill, composed of equal parts of podophyllum, (mandrake). Iris versicolar (blue flag,) and cubebs, moistened with the balsam of fir or copaiba. This pill is repeated every three or four hours, or often enough to produce from five to eight operations daily. This, he says, has effectually checked the violent symptoms, in the course of a few hours after the first operation from the bowels, and often in forty-eight hours, entirely eradicated the disease; in connection with these pills, he uses injections similar to those I have directed.

In all cases, however, he directs that the patient should be cautioned, after the discharge has disappeared, not to discontinue the bathing for three or four weeks; and during at least as long a period, the pills should be occasionally used as directed. A plan of treatment which is highly extolled, is to let the patient take before each meal, and at bed time, fifteen grains balsam copaiba, drinking in the intervals, as much as the stomach can bear, of a decoction of star grass or unicorn, and taking a dram, often enough to keep the bowels freely loose, of bitters, prepared by dissolving two ounces aloes in a quart of common whiskey. The treatment that was peculiarly successful with our army in Mexico, was in the first place, to take the cathartic we have prescribed, this was followed on the next day, and perhaps the next two days, with gentler saline purgatives—the sulphate, tartrate or citrate of potash. A single dose of one of these, sufficient to act freely on

the bowels, was even sometimes found after the more drastic purge, to completely remove all symptoms. When this did not happen, the bowels were still kept loose, and the following injection ordered for the urethra :

℞.	White vitriol,	grs. vi.
	Sodæ bor.,	grs. x.
	Pulv. slippery elm,	grs. x.
	Water,	ʒii.

To this was sometimes added, when the urethra was particularly irritable, ten grains of belladonna; this lotion was found very useful where chordee was present, and also in cases of recent stricture. After the operation of the active cathartic, the patient was ordered a bolus or pills, composed of equal parts of balsam of copaiba and white wax, melted together, with oil of spearmint, added when cold, one ounce of this to four ounces of the mixture. Twenty grains of this was ordered four times a day.

It is due to a very distinguished physician, who really believes he has a specific to control this disease, to state his treatment. He takes, while in blossom, equal parts of the tops of the male and female hemp, (canabis sativa,) about 18 inches. He bruises them in a mortar and expresses the juice, adding an equal portion of alcohol. He gives it in doses of one to three drops every two or three hours. I have had no experience with the remedy; it may possess the virtues that are claimed for it.

Women.—With them this disease is comparatively mild in its symptoms, and most generally of easy cure. In the first stages it is scarcely noticed, and as it is so liable to be confounded with other discharges, the phy-

sycian seldom has an opportunity of testing what is called the abortive treatment. When the disease does exist, astringent injections heretofore advised may be used, and the patient will be apt to find relief from the revulsive treatment of cubebs and copaiba. The most important, and I may say the principal means of cure, is the antiphlogistic treatment, according to the symptoms, such as cleanliness, baths, injections, demulcent drinks, and emolient and narcotic fomentations. An author of much celebrity and experience says, that perhaps the most effectual means of all are the isolation or separation of the affected parts from each other, and rest. A tampon of fine lint of sufficient size should be introduced into the whole extent of the vagina, and moistened several times a day with a solution of the acetate of lead and sulphate of zinc; or the vegetable astringent lotions may be sufficient.

There are cases in which the acute stage does not yield readily to antiphlogistics, emolients and astringents. In such cases you must apply nitrate of silver injections, by means of lint, to produce superficial cauterization, after which the sides of the vagina must be kept apart by dry lint, which will aid materially in the cure.

After the acute state, the treatment should be active to effect a speedy resolution. The strength of the solutions used as injections, or with the tampons, may be increased at this time, and will generally produce a cure; but in many cases more tonic applications must be resorted to, such as a decoction of oak bark, with equal parts of sulphate of alum and zinc, and even corrosive sublimate is sometimes employed.

This disease sometimes produces retention of urine.

If you resort to the catheter, it must be applied with as little irritation as possible.

Emolient fomentations and injections should be tepid; but resolvents, astringents and tonics should be applied cold.

The following recipes I have selected as enjoying the confidence of a very large portion of my medical brethren. They have stood the test of time, and will continue to be used, most probably, as long as this disease prevails.

Pills.

℞. Camphoræ pulv., ℈ii.
Ext. Gum opii, grs. viii.
Mucilage, q. s.

Mix and divide into sixteen pills; given in doses of two or three every evening, to allay irritation in the neck of the bladder, chordee, &c.

Mixtures.

℞. Copaibæ resin,
Alcohol,
Syrup balsam tolut., aa. ℥i.
Aqua menth. pip., (Peppermint water.)
Aqua flor. aurantii, (Orange flower water.)
Sp. ætheris nitrici, ℥ii. (Sweet spirits nitre.)

Mix. Dose from two to six table-spoonsful daily. This is a formula of Chopard, that is much celebrated in France.

℞. Copaibæ balsam,
Sp. ætheris nit., aa. ℥ss.
Pulv. Gum arabici,
Pulv. sacch. alb., aa. ℥i. (Loaf sugar.)

Sp. lavand. comp., ʒii.
Tinct. opii, ʒi.
Aqua destill., ʒiv. (Distilled water.)

F. M. A table-spoonful for a dose, three times a day.

℞. Pulv. cubebæ, ʒi.
Sulphat. alum et potassa, ʒi.
Pulv. gum arabic,
Pulv. sacchar. alb., aa. ʒss. (Loaf sugar.)
Aqua. menth. pip., ʒxii. (Peppermint water.)

Make solution. Dose.—Three table-spoonsful four times a day.

℞. Copaibæ balsam,
Tinct. cubebæ,
Tinct. catechu,
Sp. ætheris nitrici, aa. ʒi.
Tinct. opii. camph., ʒiss.
Pulv. gum arabic,
Pulv. sacchar. alb., aa. ʒss.
Aquæ mentha, ʒivss. Mix.

Dose.—Table-spoonful two or three times a day. Capsules, containing copaiba and the oil of cubebs, have proved very useful in my practice.

Injections.

℞. Aquæ rosar, ʒiv. (Rose water.)
Sulph zinci, grs. x. (White vitriol.)
Tinct. opii, ʒss.

Mix. To be injected several times a day.

℞. Aquæ rosar, ℥iv.
Alum et pot. sulph., grs. x.

Mix. To be used frequently.

℞. Aquæ destill., ℥iv.
Plumbi. acet., ℈i. (Sugar of lead.)

Mix.

℞. Zinci sulph., (White vitriol.)
Plumbi acet., aa. ℈iss. (Sugar of lead.)
Aquæ destill., ℥viii.

Solve, filter and use for injection.

℞. Vini. rub., ℥vi.
Acidi tannic, grs. xviii. Mix.

℞. Aquæ destill., ℥iv.
Argent. nit., grs. i. (Nitrate of silver.)

Mix.

Some surgeons employ as much as a grain to the ounce. If a very powerful effect be desired, with the view of cauterizing, ten to thirty grains to the ounce of water may be used.

℞. Aquæ destill., ℥iv.
Ferri iodidi, grs. ii. (Iodide of iron.)

Mix.

The quantity of iron may be increased to as much as ten grains to the ounce of water, but as there is danger of irritation, much care is required.

℞. Querci cort., ʒii. (Oak bark.)
Aquæ Oj. (Water.)

Boil down to half pint, strain and add twenty grains alum.

Any of the foregoing injections may be used for the vagina, but generally require to be made somewhat stronger.

It ought to be observed that to use injections most successfully, they should be employed as often as every hour or two. There is almost an endless variety of them. Those which I have found to be the most useful, I have selected.

SYPHILIS.

The Pox.—It would be a pleasing task to us, if the character of our work would admit, to enter upon and give a full description of venereal diseases, their nature and history. Our work being entirely practical, we will not attempt any explanation in regard to the history or nature of this disease, yet, in the language of a distinguished author, we cannot refrain from presenting, an instance of the recent introduction of this disease, which proves emphatically that the virus is not spontaneously developed, as the result of promiscuous sexual intercourse.

"The island Tahiti, or Otaheite, the principal of the group of the Society Islands, in Polynesia, when first discovered by Captain Cook, contained a population of two hundred thousand souls. These Islanders, from their personal beauty and the softness of their manners, were considered as among the most interesting people of that portion of the globe. At the same time they were

so voluptuous in their habits, and so free and promiscuous in their amours, that the first French navigators who visited the island, called it the modern Cytheria. Chastity was a thing unthought of. Hospitality required every Islander to offer to the stranger not only food and shelter, but his wife or his daughter. The aristocracy of the island had formed an association for the purpose of encouraging a promiscuous intercourse of the sexes. With all this, such a disease was never heard of, until introduced from one of the ships, which first visited this group. It soon spread over the island, and through the whole population. This beautiful island—this enchanting paradise of the Southern seas, became one lazar-house of disease and death. Under its destroying influence, the population was gradually diminished, so that there now exists but a miserable remnant of nine thousand people, and many of these are sickly and deformed from the effects of this disease. They are wasting away. The fountains of life are drying up—the race is withering and dying, and in a few years there will be scarcely a remnant reserved of the people of this once populous and happy island.

When the English missionaries first went to Tahiti, and told them that they had come to bring them joyous tidings of salvation, the chiefs cried out, in the bitterness of their souls, "lies—lies! you bring us death; we are all dying of your accursed diseases."

Here, then, is an instance, and far from being a solitary one, which shows that syphilis is not the natural result of voluptuousness and promiscuous sexual intercourse, and we assert, so far as anything is known of its history, it has always been propagated by contagion.

When it first appeared, what causes produced the

virus, and under what circumstances it was developed, must ever remain among the hidden mysteries which abound in pathological science.

This terrible disease is propagated almost exclusively during the act of venereal intercourse, though I am fully satisfied that it can be communicated by any mode of contact, if the virus is caught upon an eroded, tender and delicate surface.

Gonorrhea and syphilis may exist at the same time, and may be confounded together.

When the surface is affected, as before described, it becomes slightly inflamed in about twenty-four hours; on the second or third day there is a slight tumefaction, and about the fourth day pustules make their appearance; by the sixth, these pustules form into a crust; under these crusts is found an ulcer, with a red surface and elevated margin. The parts most exposed and those most frequently affected, are the glans penis and prepuce. It is asserted by respectable authority, that those whose glans are habitually covered by the prepuce, are more liable to contract the disease, than those in whom that part has more of a cutaneous surface, from being uncovered.

When the disease is strictly local in its character, it is termed primary syphilis. Where it begins to manifest itself in other parts (the gradual result of the local affection) it is then termed secondary syphilis. We have again, a recurrence of these or worse symptoms "after the secondary has been cured." This has been termed tertiary syphilis. A physician who has had much experience in this class of disease says, that during the progress and continuance of the syphilitic chancre, the venereal poison appears to be produced and absorbed

into the system, producing as the next most common symptom, an enlargment of the glands, termed buboes. These, when caused by the absorption of the virus, and having suppurated and opened, form deep seated syphilitic ulcers, producing the virus capable of communicating the disease by inoculation. This is the most ordinary method of producing primary syphilis; but it is evident that the virus, wherever applied, will cause, under certain circumstances, its specific effects. Thus, the lips, the tongue, the eyelids, the nipple, or any tender or eroded spot upon the body, may be the seat of the chancre.

"The first breaking out of secondary or constitutional syphylis may take place in ten days or it may not appear for months or even years, depending apparently upon the temperament of the patient. It is usually characterized by ulceration of the fauces, (throat) destruction of the uvula, (palate) and spongy bones of the nose, pimple eruptions of the breast, extensive ulceration over the shoulder blade, on the elbow and other surfaces lying near the bones, nodes (protuberances or ridges) upon the superficial bones, mucous tubercles, and a great variety of diseases of the skin.

"It is asserted that the syphilitic virus contained in secondary ulcers will not produce the primitive affection or chancre by inoculation, but it may be transmitted from parent to child, from husband to wife, and, perhaps, also from the infant to the nurse, and from the nurse to other infants. This poison may lie dormant in the system for months or even years, or without appearing in the individual, may be the curse of his or her posterity.

"If the secondary smyptoms should not be checked

early, the disease will make rapid progress, the testicles become swelled and hardened, excrescences appear about the anus, the hair falls from the head, the eyes are blinded, the ears deafened, the bones swell, exfoliate, and rot away in deep seated ulcerations, the bones of the face are destroyed, the skull becomes eaten in holes like a honey-comb, or falls away from the brain, and, finally, the patient dies the most horrible and disgusting of deaths."

I shall now proceed to the particular description and treatment of syphilis in its first and primary stage, with all of its complications. And before entering on this portion of my subject, I may, in the language of one who has written extensively upon this subject assert, that no chemical or medical agent is now known to the profession which can be at all relied upon as a specific antidote to the primary symptoms of syphilis.

The first stage is well marked; it secretes matter of a contagious character, and manifests itself in a slight itching, where a redness is soon discovered, this soon becomes a pimple or pustule, changing its red to that of a yellow or copper color, afterwards bursts, presenting you with a chancre. These chancres sometimes exist so superficial as not to destroy the entire thickness of the skin. Their progress in general is limited by the disposition of plastic lymph which forms the characteristic induration; there are other varieties which spread over the surface in a ring-like manner; the depth of this variety of chancre bears no proportion to its surface. If a sore makes its appearance about the organs of generation, especially if it follows a suspicious sexual connection, then you have strong reasons to sup-

pose that it is syphilitic, and there is no room to doubt if in due time it should be followed by a bubo. I cannot do better in the second or declining stage than to give you a quotation from one who has had ample experience, who says, when the chancre has become a simple ulcer, it is believed to have entirely lost its power of communication to others, and contends that the chancre in its first or characteristic stage is an ulcer, the character of which I have described, yet irritable to the touch, and having a tendency to spread, or burrow, and destroy the parts as it goes. It has raised and ragged edges, and commonly an indurated base, with a tumefaction of the surrounding parts, this swelling appearing somewhat regularly circumscribed and movable like a bullet. When the ulcer is located on the prepuce or frænum, this hardness is wanting, and we have instead a more diffused inflammation, with greater painfulness. The pus of the chancre is of a corroding character, and may produce a similar ulceration on any part it comes in contact with. The period of the appearance of the chancre after infection, varies from twenty-four hours to several weeks. A few days is the most common term; it has been known in rare instances to extend to several months.

The constitutional or secondary symptoms of the disease, usually first develope themselves after the lapse of a few months, in the mucous membrane of the throat, mouth, or nose, blotches on the skin sometimes precede or accompany these mucous affections. The periosteum (the membrane covering the bones) is next implicated. You have a dull, heavy aching pain generally manifesting itself about night, accompanied with tenderness and swellings of the more exposed bones.

Buboes or swellings of the inguinal glands are among the most common symptoms, coming on soon after the chancre, and generally in proportion to the amount of irritation in surrounding parts. If the virulence of the disease is not soon lessened these swollen glands will inflame and ulcerate, which are frequently quite obstinate in their character. Swellings of the groin, however, are by no means peculiar alone to the syphilitic virus. They frequently arise from gonorrhea or any irritation about the genitals; they result oftentimes from injuries of the foot. Therefore, without other evidence of the disease in question, we should regard buboes as probably arising from other causes. But if syphilis has preceded and been apparently cured, the buboes still remaining or reappearing without other sufficient cause, they are to be looked upon as positive evidence of syphilitic virus still remaining in the system.

When the throat is the part affected the ulcerated appearance is usually first noticed upon the tonsils. Secondary ulcers frequently appear on different parts of the body, and these are sometimes replaced by a sort of chronic nettle-rash spread over the whole surface, accompanied with periodical pains, especially in the bones.

There is quite a variety of chancres, such as the diptheretic, serpignous, and the gangrenous; these varieties may be complicated with each other, and the same chancre may, in different parts, exhibit different appearances.

We have indulged already upon this subject farther than the character of our work indicates, much more could be said, and appropriately, in regard to the complications and new ulcerations which are liable to be

produced wherever the virus comes in contact with a denuded, tender, or pervious surface.

The diagnosis is not generally difficult if you can trace the symptoms to an infection, and recollect that secondary symptoms must always have been preceded by primary. Prognosis of chancre in its simplest form, and unattended with the aggravations and complication above described, is regular and simple. In a good constitution with temperate habits it begins as a pustule, an abscess, or excoriation, it becomes an ulcer, its progress is stayed by an extravisation of lymph; it takes on the reparative stage; granulations form, and cicatrization follows in from three to five weeks. This is the natural and regular course of the primary syphilitic ulcer. But in a majority of cases we must not look for results so favorable.

Treatment.—Your first great object must be to form a correct diagnosis; it, in many cases, is extremely difficult to distinguish sores which are not virulent from those of the chancre, and where you have any doubts inoculation is the only sure guide to a correct diagnosis. "This is a test, however, which patients are not always willing to submit to, yet few intelligent persons would object were the nature of the experiment properly explained. I say, here is a pustule, or ulcer, as the case may be, in a suspicious situation, and the result of a suspicious connection, perhaps, it is probably syphilitic, but possibly not. If it is not it would do you no kind of harm for me to take some of its matter on the point of my lancet, and prick the inside of your thigh. I shall treat the first sore as if it were a chancre, and if it prove to have been one by the production of the second, I have but to remove that in the same manner, and follow up

their cure with such constitutional treatment as may prevent the appearance of the dreaded secondary symptoms. Should nothing result from the inoculation, of course no preventive treatment would be necessary, and the patient, if he have the proper confidence in your skill, will be relieved from all apprehension."

The cases generally are not presented sufficiently early to attempt their speedy eradication by what I may term the abortive treatment. Your first indication will be to check, as speedily as possible, the formation of the syphilitic virus. Two modes have been pointed out to effect this object—excision and cauterization—and it is frequently a more thorough practice to combine the two. I believe that where a virulent chancre presents itself upon the prepuce, if it is not too extensive, that the most speedy cure will be effected by cutting it away, and afterwards cauterizing the wound with caustic potash. And it is a rule in my practice, and one that I seldom deviate from, that whenever a patient presents himself with any lesion or abrasion after a suspicious connection, I cauterize it without hesitation, without waiting to see the result of either lesion or abrasion.

If you have a chancre or secondary ulcers they should be washed frequently in strong soap suds, or a weak solution of the sesqui-carbonate of potash. We do not wish to be understood that the mere destruction of the sore or chancre, will prevent the further developement of the infection. I cannot, in the language of a distinguished author, assert, that the system is impregnated with the virus, producing constitutional effects immediately after the connection. But, on the contrary, I am rather of the opinion, that the virus makes its way gradually into the system, and that the malignancy of the

chancre is a local symptom, the result of this impregnation. An author of some celebrity advises a strong solution of the bi- or sesqui-carbonate of potash, to be applied to the ulcers as I have before directed, after which he advises a plaster to be applied of the inspissated juice of the phytolacca decandra, (Poke root.) If this poke plaster be used, it should be changed twice a day. To correct the fœtor, a few days application of pyroligneous acid will suffice. A good lotion may be found in a strong decoction of the epifagous virginianus, (beech drops,) especially if the sore is inclined to assume the irritable form. Another is made of the corydalis formosa; it is sometimes called turkey corn, wild turkey pea, and stagger weed; it is a good local application, and a valuable remedy, and as far as my information extends, it is only used by the eclectic practioners. It is peculiarly valuable in syphilitic affections. From one to four ounces of the decoction is given three times a day, or from a drachm to two drachms of the saturated tincture.

Whenever the chancre presents a healthy appearance we generally dress it with the black salve, the prescription of which we have heretofore given; or if the chancre has a fungus tendency, and seems to be indolent in its action, we advise the application of the following salve:

℞.	Rosin,	ʒviii.
	Beeswax,	ʒiv.
	Lard,	ʒvi.
	Verdigris, ground in oil, thick as tar,	ʒss.

Melt all together, and stir until cold, and apply as advised with the black salve.

A physician of much experience condemns greasy substances and mercurial ointment as local applications to chancres, contending that simple poultices and fomentations, with the dressings of aromatic wine, and an aqueous solution of opium answer better where there is much pain.

Others extol the black and yellow wash, or a solution of the bi-chloride of mercury. All these applications may be very beneficial, but there are none equal to the cauterization I have heretofore advised.

We have certainly said sufficient in regard to local treatment; this should never be neglected, but at the same time we should administer constitutional remedies as a guard against the progress of the disease, and the development of secondary symptoms. There are a great variety of opinions in regard to what the constitutional remedies should be in this disease; some advocate mercury, others condemn it; some have carried their sentiments to such extent, as to say, "if syphilis is an opprobrium to the human race, mercury is no less so to the medical profession. The medicine is now, at least, a far more extensive scourge than the malady." Some go so far as to assert that mercury is a specific for syphilis; I shall not myself offer any theory upon the subject, but if such be the fact, in my own opinion, I must regret that a more absolute and certain specific has not been found. Prejudices may, and have indeed opposed its administration; it was at one time almost universally used, but at the present time, my convictions are, that in this disease it must be used or avoided, according to its effects. In some cases, it evidently aggravates the symptoms; in others, it seems indispensable to a cure; those who use this latter remedy, generally prefer the proto iodide, the blue pill, or Plummer's pill, until the

gums are slightly affected; of late, we have seldom relied upon this form of constitutional treatment, but have employed one diametrically opposite, in which we substitute podophylline for mercury, believing that it exerts almost the same specific influence over the secretions as the former. We have the bowels kept in a soluble condition, and to effect this purpose, we give the iris versicolar, (blue flag,) or the iodine, combined with podophylline; or we take one-fourth a grain of podophyllin and combine with it six grains of the extract of the phytolacca decandra, (poke root,) and give this quantity night and morning, continuing according to circumstances.

Dr. Hill says, and his opinion is entitled to much consideration, that our common alterative syrup, which is the roots of the Honduras sarsaparilla, yellow parilla, burdock, and ground guaiacum wood, each ten ounces avoirdupois; bark of the root of sassafras, elder flowers, blue flag root, each eight ounces avoirdupois, we add one ounce of the hydriodate of potassæ to every quart and a half of syrup. This preparation is prepared in the Eclectic Dispensatory as follows:—Grind and mix the articles together, place the whole four pounds in a convenient vessel; cover them with alcohol of 76 per cent., and macerate for two days; then transfer the whole to a common displacement apparatus, or percolator, and gradually add hot water, until two pints have been obtained, which retain and set aside.

2. Then continue the percolation, and of the second solution reserve so much as contains a sensible amount of spirit, and distill or evaporate the alcohol from it.

3. Continue the displacement, by hot water, until the solution obtained is almost tasteless, and boil down this

weaker infusion till it begins to thicken, or until, when added to the balance remaining of the second portion, after the evaporation of the alcohol, it will make twelve pints.

4. To these two solutions combined, add sixteen pounds of refined sugar, and, by heat, dissolve carefully, removing the scum, which arises as it comes to the point of boiling. Then, if it exceeds that quantity, evaporate the syrup with constant stirring, to fourteen pints, remove from the fire, and, when nearly cold, add the two pints of tincture first obtained, and make two gallons of syrup. Each pint will contain the virtues of four ounces of the ingredients. It will be well to add to it as much of the phytolacca as can be borne by the patient. A wine-glassful three or four times a day. He says, a syrup of the article last named, with iris versicolar (blue flag) and pelopsus quinque folia, (woodbine, or wild wood vine,) equal parts of the whole, will, in many cases, prove sufficient, with the other means recommended, to eradicate every trace of the disease.

The corydalis formosa (turkey corn) has often proved a specific in the worst cases; it should be given in substance of six grain doses, using a strong decoction of the same article as a wash for the ulcers. A remedy which is considered the most reliable antidote to the syphilitic poison, is the stillingia sylvatica; (queen's delight) it should be taken either in the form of a syrup, or a strong decoction, to the extent of producing nausea or actual vomiting, as often as once every three or four days, continuing it in more moderate quantities, three or four times a day in the intervals.

During the whole course of this vegetable treatment the alkaline bath should be indulged in freely. If, on

the other hand, you resort to the mercurial plan of treatment, you must, during the reparative stage of the chancre, and as long as any hardness continues, the use of mercurial dressings and frictions around the part affected, with a mild mercurial course of constitutional treatment, must be persevered in. When induration takes place in a simple chancre, the caustic must be abandoned, and the French surgeons recommend iodine in combination with proto iodide of mercury. Ricord gives it in one grain doses in combination with henbane, every night in a pill five hours after the last meal; after this remedy has been taken for a week, the dose can be increased to a pill every night and morning.

Whilst upon the subject of primary syphilis, the treat- of buboes will require some special notice. We have told you that they are not always the result of syphilitic virus, but wherever you find them in connection with this disease, you will have hardened tumors in the groin, slightly painful and tender to the touch. A bubo ought, if possible, to be prevented from advancing to suppuration. Prompt measures should be taken to scatter them. In this stage they may be discussed. Ice or cold water and compression have been found useful in dissipating the swelling which had commenced; a reclined position in combination with the general antiphlogistic regimen, will materially aid the application. If this should fail try an application of fine salt moistened with turpentine, or the parts may be wet three or four times a day with gum camphor dissolved in spirits of turpentine. Some contend that the saturated tincture of poke root will often be sufficient; some recommend a thick plaster of mercurial ointment to be used over the indolent glands. Should these disentient means not be success-

ful, warm fomentations, frequently changed, or cloths dipped in hot water, or poultices, may prove more effectual. To assist and promote suppuration we have taken equal portions of vinegar and laudanum and used it warm by saturating a flannel rag, and keeping it constantly applied. When the glands show the least fluctuation, not a moment should be lost after the appearance of pus before it is opened to allow its escape. Otherwise the abscess would extend itself, and all the pus absorbed is so much virus carried into the system.

Some recommend opening the buboes by making small issues with caustic potash; we prefer the lancet to caustics. The incision should be made sufficiently extensive, and lengthwise of the tumor. The pus should be removed as soon as possible, the part to be washed frequently in soap-suds, in connection with a weak solution of the sesqui-carbonate of potash; this should be continued until healing is effected. In regard to the mercurial course of treatment, I incline to the opinion that it is a preventive medicine against secondary symptoms; farther than this I cannot go. I am satisfied that mercury produces certain effects; by what means it acts in preventing secondary symptoms, I confess I do not know. Quackery consists in pretending to more knowledge and ability than we possess.

"The physician whose practice in the army of Mexico was referred to under gonorrhea, had also an extensive experience in the treatment of 'primary syphilis,' or of that disease in the first stage after infection. He reports the following as his most successful practice. To the chancre, when it first appeared, he applied a mild escharotic, such as our sesqui-carbonate of potash, and

afterwards, when he had used up his supply, and could procure no more in the army or the country, (he might easily have prepared it himself) the sulphate of zinc was used instead. An hour or so after the first application of one or other article in powder, a solution of the same was freely applied as a wash. The glands and the inside of the prepuce were treated in the same way. The patients were also made to wash the parts three or four times a day in warm soap-suds. After each washing, the surface of the sore was freshly dressed with Turner's Cerate." (U. S. Dispensatory.)

No other internal remedy was prescribed, than the same cholagogue purgatives mentioned as given for gonorrhea. (Refer to the quotation under that article.) These were taken three times a week, unless the "local disease" manifested a disposition to spread beyond the original seat of the chancre, and involve the prepuce and parts below the glands. In that case, alterative doses of podophyllum and iris versicolar were given, just sufficient to keep the bowels a little loose; and the powdered caustic, also, was then resorted to more freely and frequently. If phimosis or paraphimosis came on, the prepuce being much inflamed, fomentations of elecampane and sassafras were resorted to, and the parts washed with infusions of the same articles.

After the sore assumed a healthy appearance, which he states would generally happen in the course of four or five days, simple dressings only were applied; and in about twice that time, or less than two weeks after the treatment was commenced, the worst cases yielded entirely. This, it ought to be borne in mind, was in a warm climate, where, it is well known, the disease is always milder and more easily cured.

Those mercurial preparations that are relied on for this disease, we have selected and classified as follows:

Pills.

℞. Hydrarg. bichlorid, grs. ii. (corrosive sublimate.)
Solve in aqua destil., q. s. (diss. in dist'ld. water.)
Opii, grs. ii.
Mellis, grs. xx. (honey.)
Micæ panis, q. s. (bread crumbs.)
Made into 40 pills.

This is a formula of which the Germans entertain a very high opinion. Hufeland says that corrosive sublimate may be used without detriment, and for a long time, if given in pills united with a mucilaginous vehicle, in order that it may dissolve slowly, which prevents nausea, colic and diarrhœa. It is proper to remark, he adds, that corrosive sublimate is apt to affect the lungs, and therefore, in persons of a phthisical disposition, is contra-indicated. The dose of the pills is six, ten, and even twelve, morning and evening.

℞. Hydrarg. proto chlorid.,
Antimonii sulph. precip., aa. ʒi.
Guaici resinæ pulv., ʒii.
Syrupi, ʒi.

F. M. Divide in pills of five grains each, and give one two or three times a day. It may be useful, if they act too freely on the bowels, to combine one-fourth of a grain of opium with each pill.

DECOCTIONS.

Decoctum Mezereum.

℞. Rad. Mezerei, ʒii. (spurge olive.)
Rad. Glycyrrhizæ, ʒss. (liquorice root.)
Aquæ, lb. iii. (water.)

Boil with a gentle fire, down to two pounds, and strain. In nodes and pains, this is very useful. The dose is from four to eight fluid ounces, three times a day.

Solutions.

℞. Aquæ, ʒviii. (Water.)
Ammoniæ Hydrochl., ʒii. (Muriate of ammonia.)

Solve. Particularly useful in resolving the inflammation and swelling of buboes.

℞. Aquæ destill., ʒiii.
Tinct. iodini, ʒi. Mix.

This tincture may be made stronger if desirable. It is employed in the treatment of buboes, hydrocele, &c.

Vinum Aromaticum et Opii.

℞. Vini aromaticii, ʒviij. (Aromatic wine.)
Ext. Opii., ʒss. Solve.

Employed as dressings for chancres and buboes.

Gargles.

℞. Plumbi acetatis, ʒj. (Sugar of lead.)
Syrupi simpl., ʒj. (Simple syrup.)
Decoct. hordei, lb.j. (Decoction of barley.)

Make into solution. Useful in mercurial sore mouth.

℞. Zinc sulph. ʒij. (White vitriol.)
Mellis, ʒj. (Honey.)
Tinct. Myrrhæ, ʒij.
Spirit vini gallici, ʒij.
Aquæ rosarum, ʒvj.

Make into solution. Useful as a gargle, to be used occasionally, when there is excessive salivation.

Corrosive Sublimate and Lime Water.

℞.	Hydrarg. bi-chlorid.	gr. j.
	Aquæ calcis,	℥j.

Make into solution. This may be advantageously employed in venereal ulcers of the throat.

Dr. King says: "For several years past, I have used this article as an application to chancre, in hundreds of instances, and as yet have not heard of any return of the disease, either in a secondary or tertiary form. It is to be applied while the chancre is in the pustular form, and unbroken, and before the virus is acted upon by the oxygen of the atmosphere, and absorbed into the system. As soon as the pustule is discovered, the physician will open it, and apply several drops of nitric acid to it, thus destroying the virus at once, and curing the disease in a few minutes. The pain occasioned is hardly noticed by some patients. Sometimes I wash the ulcer, subsequently, with the muriated tincture of iron. No other treatment is required unless for the purpose of allaying the patient's fears. My colleague, Professor R. S. Newton, whom I informed of the success following this course, has likewise effectually tested its utility in numerous cases."

A combination of iridin, (blue flag,) podophyllin, (mandrake,) and xanthoxylin, is a most powerful and certain remedy for syphilis, either primary or secondary.

SCROFULOUS DISEASES.

SCROFULA, OR KING'S EVIL.

This disease most generally makes its appearance between the third and seventh year of age; and all of the absorbent glands, whether situated external or internal are liable to inflammation; and if there is a scrofulous predisposition, they are liable to scrofulous inflammation.

The term scrofula is used very latitudinous by many authors, applying it to almost every morbid affection of the system; this, in my judgment, is not correct, and the term is generally applied too extensively for practical purposes.

Some authors assert, that it most commonly affects children of a lax habit, with a smooth, soft, and fine skin, fair hair, rosy cheeks, and a delicate complexion, but it is occasionally met with in those of a dark one.

M. Lugal, whose opinion, I confess, corresponds with my own, as far as my observation has extended, says, few persons who are scrofulous have light hair; in more than half of them the hair is dark; among the others, most of them have chestnut hair, which is of a dark, more commonly than a light chestnut color. The same remarks apply to the color of the eyes, and also to that of the skin, which is dark more frequently than light. This color of the hair may be explained partially by the age of our patients; they are generally from fifteen to twenty years old. In fact, we know that the color of the hair becomes darker as children grow up, and that where it is very light in the early years of childhood, it

generally changes to chestnut of different shades, as years progress, and is sometimes black at puberty. These general remarks, which are so contrary to all that has been written on the color of the hair, the eyes and skin of scrofulous patients, may be verified daily in my ward in the hospital at St. Louis.

You will perceive that scrofulous constitutions present many differences, and there may be a tendency to a scrofulous diathesis, ranging from the highest degree it can attain, to that where it is the least distinct. But, however much it may vary, it is very easy to be recognized in most cases; and, in fact, in a very large majority of cases, the constitution of scrofulous children is so marked that it is scarcely necessary to be a physician to detect it. It is essential to the physician to have a proper and correct knowledge of scrofulous constitutions. An author upon this subject, of much celebrity, says that scrofulous families are recognized by a general mark of debility, (I have seen myself many cases of this character,) which is seen in all the children. A scrofulous constitution permits, at most, a negative state of health with some, and indicates a want of strength and good organization.

In their physical formation, children of this peculiar character are not symmetrical; the trunk and extremities are not developed proportionally; the head is too large; the limbs are badly adapted to a feeble body, which is too long or too short; the limbs, too, have not their proper length; the joints are generally too large.

The median line, (a vertical line dividing the body longitudinally into two equal parts, the one right and the other left,) is frequently not in the centre of the body; it seems as if its two halfs are not properly joined,

one being higher and more anterior than the other. This latter arrangement, a consequence of unequal development, indicates an unfavorable prognosis of those diseases which will supervene afterwards.

Not unfrequently there is a want of union on one or several points of the median line. It is generally scrofulous subjects who present instances of separation of the linea alba, (Chaussier calls the linea alba the *ligne mediane* of the abdomen.) Hare-lips, which are simple or complicated, with a separation of the bones of the palatine arch, and the two halves of the *velum palati*, (a movable soft and broad septum, attached to the posterior extremity of the palatine arch, and separating the mouth from the pharynx.) In some children the chest is misshaped; the ribs are twisted; the *sternum*, (breast plate,) projects upward and forward, and its different component parts can be felt under the skin; the antero-posterior diameter of the chest is greater than the transverse.

This defective formation may change progressively between the ages of eight and twelve years. When this does not occur, we may still hope that at the period of puberty the deformity may be modified, and that the bony frame of the chest may approach the healthy state; but more frequently it continues, and thus prevents the regular developement and complete expansion of the lungs, which is an unfavorable sign, for it indicates that the scrofula is deeply rooted in the system.

Scrofulous persons are generally short in stature, but sometimes, on the contrary, very tall. These two extremes depend on the same principle, that vitality has not power sufficient to regulate the developement of the organs, which are thus arrested in the commencement,

or receive an unlimited degree of nutrition. The mouth is small or much too large; the teeth of the first and second dentition, but especially the latter appear late. They are not white, but have a blackish tint, decay readily, and are very friable. The spongy tissue of the bones are too much developed in proportion to their compact tissue and the soft parts. This state of the spongy tissue is easily recognised by the following marks, which, however, do not always co-exist: The *malar bone* (cheek bone,) is too prominent; the base of the lower jaw is too much developed, which gives the individual a peculiar rachitic appearance. The extremities of the long bones are too large: the feet and hands, which are formed principally of short and spongy bones, present, in some cases, an unnatural and ungraceful developement. The different portions of the pelvis generally are in a state of enlargement, which is much to be dreaded in females.

The excrementitious functions are irregular. The skin, cellular tissue, are extremely thin, or in a state of peculiar hypertrophy, indurated hypertrophy, (enlargement.)

Many scrofulous subjects have a dry skin, covered with a cutaneous eruption; there is a general want of transpiration, although partial sweating of the feet, hands, and under the arms often occur. These sweats generally have a marked acid smell.

The physiognomy seems prematurely old in infancy, and at a later period the contrary is true; the trunk and the limbs are then younger than the individual, that is, they have not the developement nor the force generally seen in healthy persons of the same age.

Children of a scrofulous constitution often experience

a spontaneous degree of lassitude, which is increased rather than diminished by repose.

The swelling of the upper lip is peculiar, it is more marked in the morning than during the day; in some young girls the swelling is not manifest except for a few hours after rising.

It is not necessary to enlarge any farther on this part of the subject, but you would naturally conclude from the preceding remarks that it is very evident that when children inherit scrofula from their mothers, maternal nursing can only develope the proximate cause of their malady. A child, therefore, born with scrofula, will necessarily become more scrofulous if nursed by the mother.

A scrofulous child should be raised if possible in the country. Children of this habit are peculiarly susceptible of cold, and should therefore be well defended against vicissitudes and variations of temperature. Many a delicate child has been sacrificed to the false notion of hardening the constitution by exposure, which is unfortunately so prevalent in the present day. Cold sponging or bathing is a most powerful means of increasing the vigor and diminishing the tendency to catarrhal attacks, but it should not be too early adopted in the case of scrofulous children, as their powers of reaction are small. The water should be tepid in the first instance, and gradually diminished in temperature.

Symptoms.—The first symptoms of disease as manifest generally, is enlargement of the glands, and frequently in various portions of the body, "particularly in the *neck*, behind the ears, and under the chin, which, after a time, suppurate and degenerate into ulcers, from which,

instead of pus, a white curdled matter somewhat resembling the coagulum of milk is generally discharged."

It is the superficial glands that are most frequently affected, they take on a gradual enlargement, and soon become a very hard tumor. Whether it originates in the external or internal glands it is apt to extend from one gland to another, especially those that have their locality along the seat of the absorbents, in which it first originated.

Where the predisposition to the disease is very strong, in such cases it by no means confines itself entirely to the glands, swellings originate in the subcutaneous cellular tissue, not confining itself to any particular locality, pus is secreted, numerous abscesses are formed, through which the pus is eliminated.

The duration of scrofula varies in many instances, more especially when the external glands are involved; under proper treatment it will sometimes yield in a few weeks, whilst again it will resist treatment for months or years, this, however, is to be attributed in many instances to the peculiar idiosyncrasy of the patient. The ulcers most generally heal very slowly, and when healed leave a scar of an indurated and callous character.

Diagnosis.—Scrofulous inflammation of the glands is distinguished from ordinary chronic inflammation of the same parts by the greater hardness of the tumors, their less degree of tenderness upon pressure, their longer continuance, and greater indisposition to yield to treatment, their frequent complication with other scrofulous affections, and by the state of system which precedes or attends them. The practitioner will also be influenced in forming his judgment by the hereditary or family

influences which may have seemed to create a peculiar predisposition in the patient. When, upon the occurrence of suppuration, the curdy matter above referred to is discharged, there can be no doubt as to the scrofulous nature of the case.

Treatment.—From its nature and peculiar causes it is very perceptible that the treatment should be both hygienical and therapeutical,; "and that the former is, perhaps, of even more importance than the latter." Sometimes the tumors will resist all of your applications, and even if they should yield to your remedies apparently, they will frequently again develope themselves in a more dangerous locality; and an author who has had much experience in this class of diseases, asserts, that it is no uncommon event for the recession of scrofulous swellings upon the neck, or from other external situations, to be followed by pulmonary consumption. And the late Dr. Parrish, of Philadelphia, whose experience was ample, had so much dread of such translations, that he always employed measures calculated immediately to discuss scrofulous tumors with great caution, and generally preferred leaving them entirely alone, addressing his remedies solely to the system.

Of all the remedies that have been most extensively used, iodine is, by many regarded as decidedly the most beneficial. M. Sugol considers it the most efficacious remedy we possess in scrofula; he recommends especially, the watery solution, which bears his name, internally, and baths of iodine externally; it is a valuable remedy, especially when alternated with cod liver oil, neither of which preparations do I deem it prudent to administer, if there should be any inflammatory excitement. Sugol's solution is as follows:

℞. Iodine, ℈i.
Potassii iodidi, ℈ii.
Distilled water, f.℥vii.

Dissolve. Dose—ten drops, gradually increased, three times a day.

Cod liver oil is regarded by many, and especially by the author, as a valuable agent in this disease. The dose for an adult, is from one to two table-spoonsful two or three times a day in coffee.

One of the most useful remedies, is the *pipsissewa*, which may be given with impunity for a long time. The decoction should be given to the amount of half a pint daily, to an adult, and in proportion to a child. In any stage of the disease, I have confidence in the *stillingia sylvatica*, (Queen's delight, or yaw root,) it can be used *ad libitum*, in infusion, decoction or syrup. I would advise taking a considerable quantity, about three times a day.

To discuss the tumors and enlarged glands, especially before active inflammation is manifested or developed, apply slippery elm poultices, well saturated with the compound tincture of myrrh. Some advise the discutient ointment.

In threatening or incipient inflammation, make a poultice of the indian turnip, and apply, changing it three times a day.

If you cannot discuss the glands, you should change tactics, and invite suppuration as speedily as possible, for this purpose, apply emolient fomentations, poultices of flaxseed, &c. After the abscess is formed, it should be thoroughly cleansed daily, with a weak solution of vegetable caustic. Dr. Beach says that he has found by

experience, the *bayberry* to be one of the most extraordinary remedies in scrofula, particularly in a state of ulcer, it is superior to any other article either in the animal, vegetable or mineral kingdoms; and if there is a specific in this complaint, he regards this plant as one; if there is a sinus in addition to the ulcer, it must be injected *thoroughly*, morning and night, with a strong concentrated decoction of bayberry bark alternately, with a solution of the vegetable caustic; a tea-spoonful to a half a pint of water.

The *goodyera pubescens*, (scrofula weed,) is much lauded for the cure of this disease. Some advise the fresh leaves to be steeped in milk, and applied to scrofulous ulcers in poultice, or the fresh leaves bruised, may be laid on, and renewed every three hours; at the same time, the warm infusion must be drank freely.

A strong decoction of the *common agrimony*, sweetened with honey, is reputed to cure scrofula almost invariably, if its use is persisted in.

In Germany, coffee made from roasted acorns, is a favorite remedy. Of late, the European treatment in the hands of Professor Negrier, has been found in the highest degree efficacious; he gives to children, a tea-cup full of the strong infusion of the leaves, or six grains of the aqueous extract; if there were ulcers or sore eyes, a strong decoction was applied to them.

The fresh root of the yellow dock, bruized in lard or butter, forms an excellent ointment for scrofulous ulcers, they are a discutient for the glandular tumors, and a fine application for scrofulous opthalmia.

The burnt sponge is used in combination with iodine and morphia, and I have no doubt but that it is a valu-

able compound. The following recipe has acquired much reputation:

℞.	Take of iodine,	grs. 50.
	Sulphate of morphine,	grs. x.
	Burnt sponge,	grs. 100.

Triturate well together; form into one hundred pills by the addition of syrup. Keep them in a dry place. Give two or three pills daily.

I have no hesitation in recommending the following scrofulous syrup, viz:

Take of yellow dock root, two pounds; bark of the root of false bitter-sweet, one pound; root of fifeleaf, (*ampelopsis quinq.*) and root and herb of figwort, (*scroft. mariland.*) each, half a pound.

Grind, and mix the articles together, place the whole four pounds in a convenient vessel, cover them with alcohol of seventy-six per cent., and macerate for two days. Then transfer the whole to a common displacement apparatus or percolator, and gradually add hot water, until two pints have been obtained, which retain and set aside.

2. Then continue the percolation, and of the second solution reserve so much as contains a sensible amount of spirit, and distill or evaporate the alcohol from it.

3. Continue the displacement, by hot water, until the solution obtained is almost tateless, and boil down this weaker infusion till it begins to thicken, or until, when added to the balance remaining of the second portion, after the evaporation of the alcohol, it will make twelve pints.

4. To these two solutions combined, add sixteen pounds of refined sugar, and, by heat, dissolve; care-

fully removing the scum which arises as it comes to the point of boiling. Then, if it exceeds that quantity, evaporate the syrup with constant stirring, to fourteen pints; remove from the fire, and when nearly cold, add the two pints of tincture first obtained, and make two gallons of syrup. To every pint of syrup add one ounce of the hydrodate of potass. Dose, table-spoonful three or four times a day.

It cannot be doubted that many of these alteratives are highly efficient in the cure of this disease; doubtless some have a reputation beyond their merits; it is a blessing that we have such a variety, especially for the accommodation of those patients whose tastes are so diversified.

The chlorides of barium, calcium, sarsaparilla, guaiacum, and mezeron, have all enjoyed much reputation in this disease; but amongst all of these, I believe the mass of authority is in favor of iodine and cod liver oil. Some are decidedly against the remedy in every shape. "The efficacy of this medicine has been too variously and abundantly tested to admit of reasonable question. It may be employed in all forms and stages of the complaint, unless, perhaps, where it is attended with febrile excitement."

When the ulcers are not disposed to heal, the black salve may be applied, or weak nitric acid, and other similar preparations.

Regimen.—Reference must be had to the stage of the disease, and the peculiar state of the system; if there is inflammation or febrile excitement, the patient should then be confined to a light vegetable diet; on the contrary, if he is debilitated he should have animal food.

The diet should be nutritious, principally milk. Salt water baths should be freely indulged in.

HYDRARTHRUS.

White Swelling.—This very formidable, inveterate and painful disease is confined to some one of the joints, most frequently the knee, but I have seen it in the hip and elbow. There is evidently two varieties of this very painful disease, and the distinction should be made very clear. We have what is termed rheumatic white swelling, and again, scrofulous or true white swelling, which is confined entirely to those of a scrofulous diathesis.

Rheumatic White Swelling.—In this variety the ligaments around the diseased joint take on an abnormal, (unhealthy,) action, they become very much distended, and frequently there is a very great dropsical effusion; it is not attended with much pain; the limb frequently becomes very much contracted, and the least exercise produces great aggravation of all the symptoms.

Treatment.—In this variety of white swelling my experience is limited, but I should advise the same constitutional treatment to be resorted to as recommended and advised for rheumatism. It will require a more active treatment of purgation.

In regard to the local treatment, which should first claim consideration, the parts should be cupped freely, and the following stimulating liniment applied. It is termed in the dispensatories "Rheumatic Tincture," "Rheumatic Drops or Liniment." It is as follows, viz.:

Take camphor, one pound; oil of origanum, oil of hemlock, of each half a pound; oil of sassafras, oil of cajeput, of each two ounces; oil of turpentine, one

ounce; cayenne, four ounces; alcohol, one gallon. Macerate for two weeks, and filter.

This is a most excellent local application in painful affections of this or any other character.

In ordinary cases, apply two to four tea-spoonsful to the affected part several times a day, and after bathing as above directed, apply an additional piece of flannel, which must be kept constantly wet with the drops until relieved. This should be followed by the bandage, rolled on with a considerable amount of compression, beginning at the toes and letting your bandage extend above the affected part.

So soon as the first symptom of the disease presents itself, which you can readily distinguish from the very severe pain felt deep in the joint, and from the fact that there is considerable swelling, attended with very little redness of the surface, you should then subject the affected part to the influence of bitter herb fomentations at least twice a day, such as the following: Marsh mallows, tansy, hops or wormwood; make a strong decoction, and add half a pint of soft-soap; boil again a few minutes, and place the limb over the steam, with a blanket around to prevent any escape of it; and continue this application for fifteen minutes; the liniment to be applied after each fomentation, and the bandage worn in the intervals. As a general rule the fomentation should be repeated once a day.

If the swelling remain obstinate after the cupping and compression have been tried for some time, get and keep up a free suppuration for several weeks, from the whole affected surface, by means of the irritating plaster.

I have introduced setons in some very obstinate cases,

and have seen much benefit accrue from their introduction.

Dr. Beach recommends, after fomentation, the application of a poultice, and I have no doubt it would be attended with benefit. He uses the following: One handful of dandelion roots, one handful of the hearts of mullien, and the same quantity of catnip; boil them in sweet milk, and thicken with wheat flour; steam in the evening and poultice every morning until the swelling breaks; after which it should be washed with a weak solution of mild caustic until the discharge presents a healthy appearance. You should then use Beach's Salve to heal the wound. It is made as follows: Take one handful of English clover, a lump of rosin as large as a walnut, half a pound of sheep's tallow, and one handful of bitter sweet berries; stew them on embers; apply the salve twice a day. Take an equal quantity of red precipitate and loaf sugar, with a small lump of charcoal, and powder them, to cleanse the sore of proud flesh. If the sinews should be contracted, take a pint bottle, pour it half full of sweet oil, then fill it up with chamomile flowers; let it hang in the sun three days, taking it in every evening. Rub the sinews hard with this twice every day, and heat it in with a hot iron.

If, after having removed the soreness, the joint admit of any motion, hopes may be entertained from further treatment; but if, on the contrary, it be stiff and immovable, any attempt to disturb it by motion will do harm. It should be let alone.

If the joint admit of motion, machinery which will gradually extend the limb, such as Dr. Chase's apparatus, (of Philadelphia,) will answer for this purpose. While the machinery, whatever it be, is applied to make

the extension absolute, rest on the part of the patient should be enjoined. He must not be allowed to attempt any use of the limb, or any other exercise. He should be kept perfectly free from all mental excitement or anxiety, and as much retired from company as possible. As soon as the limb has become straight, or as straight as is thought practicable, all further use of the extending force must be discontinued; but the limb should be kept in that position until free from all tenderness, if any should have been induced by the treatment.

The rattle-snake, as well as snapping-turtle oil, are both highly recommended in contracted limbs—the former must not be continued too long, as it is apt to induce weakness of the affected limb.

Scrofulous, or True White Swelling.—Upon this subject, as our experience has been limited, I cannot do better than to quote from an eclectic author, his peculiar views and treatment of this disease; this variety never occurs in any but scrofulous persons. It is nothing more nor less than scrofula in a joint. He says, that for a long time after the disease has located itself in the joint, the pain may be very slight. Gradually the patient's sufferings increase, and become at last very intense, particularly at night. The central part of the joint seems the point most affected. The swelling, also, is very slow in its progress, except in cases of a very marked scrofulous character. Even then, there is no discoloration of the skin, or, rather it appears whiter than natural, (whence the popular name.) It becomes very tense, with a smooth, shining aspect, and marked with various veins. The patient constantly experiences a sensation of increased heat in the part. In this condition the joint may remain for months, or even years,

without any material change. Gradually, however, the tumefaction increases, till the thickening of the soft parts becomes so hard as to present the appearance of enlarged bone; in very bad cases, involving the cartilages of the knee, (for as that is the joint most commonly affected, we may as well study the disease as there manifested,) the tibia, or large bone between the knee and ancle, is thrown backward, the condyles of the femur or thigh bone projecting forward. The limb, both above and below the knee, emaciates; and as a flexed position is easiest for the sufferer, anchylosis (stiff joint) takes place, with the limb permanently bent. Finally, matter collects in the joint, either from ulceration of the cartilage or bone, or both, and sinuses form for its discharge. Extensive *caries* (decay) may ensue, producing severe constitutional irritation, under which the patient gradually sinks.

Medical treatment is not generally resorted to,—at least, a physician is not called, until organic injury to the limb has occurred,—until, at least, there is considerable enlargement of the joint, with constitutional debility. As it is then too late to prevent, your best means is to remove the inflammation and swelling, by cupping and scarifying the whole surface, except any part that may be actually ulcerated. After this, apply the irritating plaster, and on removing the plaster, cup and scarify again, until free suppuration is excited. When this is brought about, continue to dress it twice a day with the plaster, to keep up the discharge. After each dressing, subject the limb to the bitter herb fomentations, by placing it over a vessel containing hops and tansy, to which may be added, with good effect, the *ambrosia elatoir*, (Roman wormwood.) It is better also

to add vinegar to the water; the vapor being confined by a blanket. If the application of the irritating plaster prove too painful, an emollient poultice may be occasionally used instead, (and for this purpose, from my own experience, you will find the pearl flowered life-everlasting a most capital emollient.) After continuing this course for ten or twelve days, or until pain and swelling have nearly subsided, you may allow the sore produced by the plaster to heal. Then follow up with your stimulating applications, (as advised for rheumatic white swelling,) and compression with the bandage, as strong as the patient can bear.

If there be ulceration, with one or more sinuses opening on the surface, inject a solution of mild caustic. Wash them out freely with this once or twice a day. This lotion is to be strengthened as the patient can bear it or until the discharge becomes healthy. After that, wash it out simply with soap and water, and allow it to heal.

Continue the steaming operation at least once a day, with stimulants and compression in the interim.

After having cleansed the parts with the vegetable potash, if the bone be not affected, discontinue that article, and use the more active stimulants proper, such as the compound tincture of myrrh. The caustic, however, is to be resumed, if there is no tendency to healing, or the discharge at any time takes on an unhealthy appearance; the latter symptom will give reason to suspect the *bone* to be involved. This can be ascertained by the probe, or by close inspection of the discharge. As long as soft, decayed bone, or discharged pieces can be discovered, the caustic must be persevered with. When these, with all fungous growths, have disappeared, dis-

continue the caustic and resume the stimulants. The cupping and scarifying may be likewise repeated should occasion arise.

Some cases will prove very tedious, and occasionally assume under treatment a very irritable character. All the measures recommended must then be laid aside, except the fomentations and emollient poultices, until the irritation is allayed.

In any case of true scrofulous white-swelling a permanent cure need not be looked for, however judicious the local treatment, without the proper constitutional remedies. The patient's surface should be subjected daily to efficient bathing and frictions and his bowels kept in a soluble condition. I would recommend those remedies to be used that I have advised in *scrofula*.

Any form of this disease will be tedious and troublesome. "It is important that you forewarn the patient and his friends of the necessity of persevering in the treatment a sufficient length of time. In some cases a cure cannot be anticipated in less than half a year," though in some, half that time may be sufficient.

The following remedies are much estimated by many authors: Cod liver oil, both internally and more especially externally.

℞. Lunar caustic, four parts.
Lard, thirty parts.

You can increase the salt up to eight. Valuable as a local application.

A cataplasm that I have used beneficially, is the following:

℞. Chloride of sodium.
——— soda, aa. ℥ss.

Water, half a pint.
Linseed meal, sufficient.

This is a most excellent cataplasm in either variety of white-swelling.

RACHITIS.

Rickets.—This is a very peculiar disease, and a variety of opinions have been promulgated in regard to its pathology; it has been by some, allied to syphilis and scurvy; my own impression is, that it arises from a deficiency of the earthy substance, in the formation and growth of the bones, and I am satisfied that if it has any affinity, in a pathological point of view, to any class of diseases, that it approximates more closely to scrofula than anything else, and I have consequently included it under the head of that class of diseases.

Symptoms.—One of the earliest symptoms of the disease, manifests itself in the glands, and there is a peculiar softness of the flesh; the bowels, or rather the abdomen, becomes enlarged, whilst at the same time there is a gradual emaciation going on, the face not only swells, but becomes very sallow. If the disease makes its appearance during dentition, the process is not only slow, but very imperfect; when the teeth appear, they are evidently unsound, liable to drop from the socket, and are carious. The peculiar modification of the bony tissue is one of the peculiar characteristics of this disease. The compact surface of the bones is thin. In the cellular structure, composing the greater portion, the cells are preternaturally large, and filled with a glutinous substance; the extremities of the long bones become spongy, and the joints, consequently, appear swollen; in some instances, mere cartilage occupies the

place of bones, consequently, in this state, the limbs are unable to support the body, and therefore pressure upon them produces great deformity; and for this reason, as well as owing to the action of the muscles inserted into them, they become crooked and very much distorted.

The head becomes greatly enlarged and deformed, the fontanelle and sutures (belonging to the head) are decidedly more open, and on this account, as I before observed, the head appears large in proportion to the rest of the body. The sternum (or breast bone) is very projecting, and if a close examination be instituted, it will in almost every case be found that this, owing in a great measure to a forward deviation of the vertebral column, this action has a tendency to produce various curvatures of the spine, while at the same time the whole pelvis is compressed by the weight of the body to such an extent as to cause the two acetabula (cavities that receive the head of the thigh bones,) toward each other, and throws the prominent portion of the sacrum forward, contracting the pelvis in many instances to very narrow dimensions.

An author of much experience, asserts that the urine in rickets has been observed to vary much in its composition, from the normal type, the deviations consisting chiefly in the diminution of urea and of uric acid, and in the increase of the salts. The color of the urine is generally either pale, or differs but little from the healthy appearance. The free acid sometimes, however, increases to an extraordinary degree. The phosphates exceed the healthy average, and a considerable sediment of oxalate of lime is by no means uncommon.

There is a form of rickets in which the head is

usually so small and misshapen, that the intellectual faculties are incapable of development, and the individual constantly remains idiotic; but, in slighter cases of rickety cachexia, it not unfrequently happens that there is unusual mental manifestation, and that the young subjects of it astonish by their precocity.

If the child lives to the age of puberty, the bones, notwithstanding these deformities, will become very firm and strong; large ridges grow along their concave surfaces, to strengthen them.

Causes.—Doctor Gregory and Sir Astley Cooper, contend that children may unquestionably be born with a predisposition to rickets; they rarely exhibit any evidences of it until towards the termination of the first year. At first, the progress of the disease is very slow, and almost imperceptible. Although, however, there may be no outward appearance of scrofula in the fœtus in utero, there must be imperfect formation; and if we regard scrofula to consist in an arrest or insufficiency of development, the view would seem to apply a fortiori to rickets. Doctor Gregory, however, doubts whether the constitutions of parents have anything to do with the production of the disease, as inattention and neglect are, he conceives, quite sufficient to account for the phenomena.

It is fair to presume that parents who have singly or together, labored under some cachectic vice, (a bad habit of body, chiefly the result of scorbutic, cancerous, or venereal diseases when in their last stages,) may impress their offspring with defective plastic energy; and, therefore, that diseases like the one now under consideration, may have their foundation in this manner. But although a predisposition may be thus laid in organiza-

tion, such predisposition, as in similar cases, requires to be excited into action before the mischief can manifest itself. The most common occasional causes would seem to be faulty nursing, and all those exciting influences which have been pointed out, as productive of scrofulous diseases. The affection is noticed chiefly where children cannot obtain sufficient or appropriate nourishment, and where they are restricted from solar light and air, in ill-ventilated and often damp apartments. Hence, it prevails chiefly in the lower ranks of life; and, amongst the children of those better off in the world, it is seen in such as are compelled to leave the breast, and are fed frequently on diet unsuitable to their age and condition. The milk of nurses who are addicted to the use of spirituous liquors, would appear to have often induced it, especially where a predisposition derived from progenitors existed.

In many of the large manufacturing establishments of Great Britain, the children are proverbially misshapen and unhealthy. When the subject of the health of children in such establishments was brought before the British Parliament some years ago, by Sir Robert Peel, Mr. Owen, of New Lanark, stated that although those employed in his manufactory were extremely well fed, clothed and lodged, looked fresh, and to a superficial observer, were healthy, yet their limbs were generally deformed; their growth stunted, and they were incapable of making much progress in the first rudiments of education. On the same inquiry, Sir A. Cooper stated that according to his experience, the result of confinement is not only to stunt the growth, but to produce deformity.

Treatment.—As regards the general management and

mode of treatment, you must almost pursue the same *verbatim* as directed for scrofula. Much depends upon a proper regulated diet, and unless attention is paid to this, all of your efforts will be abortive; if your treatment has been delayed, you will not be able to prevent deformity.

My own impression is that the preparation of iodine, and more especially the compound, known as the iodide of iron, are the most serviceable. Salt water bathing is much extolled, and should be used at least once a day; he should have the open air to breathe constantly; if the patient is at the breast, the mother should live on animal food. A decoction of the cornus florida (dog wood) should be applied to the whole body after bathing, and brisk friction with the bare hand should be used. The scrofulous syrup, which I recommended for scrofula, should be administered, and you will derive much benefit from applying the following liniment to the joints and spine, viz:

℞. Linseed oil, ℥i.
Oil of sassafras, ℥i.
Gum camphor, ℥i. Mix.

This should be applied once or twice a day; if it produces pain, you must increase the oil.

If the party whom the child sucks is troubled with acidity of the stomach, she should take freely, saleratus or prepared chalk.

I would advise the following recipes, in many instances they have proved beneficial:

℞. Magnesia, at will.
Phosphoric acid, sufficient to saturate.

Filter, and evaporate to dryness. Dose.—Ten to twenty grains.

℞. Cod liver oil, f.ʒi
Solution carbonate potassa, fl.ʒii.
Oil of calamus, gtts. iii.
Syrup of orange peel, fl.ʒi.

Mix. Dose, one to two fluid drachms, night and morning.

Or,

℞. Cod liver oil,
Syrup of orange peel,
Aniseed water, aa. fl.ʒi
Oil of calamus, gtts. iii.

Mix. Dose, three spoonsful a day.

The following I have suggested in scrofula, it is highly extolled in rickets, viz:

℞. Acorns roasted, ʒvi.
Coffee roasted, ʒii.
Water sufficient.

Boil for a short time, and strain. Dose, two or three cups full a day; or,

℞. Powdered madder,
Powdered sugar, aa. ʒii.
Powdered sulphate of potassa, ʒss.

Mix well. Dose, ten grains to a scruple.

DISEASES OF THE EAR.

OTITIS.

Inflammation of the Ear.—Diseases of the ear have heretofore been almost totally neglected; of late years, however, this important subject has engaged the attention of some of the ablest pens in the profession.

It is essential to a correct and proper treatment that you should be familiar with the anatomical construction of the ear.

Most authors divide the organ of hearing into three parts. First, the external ear, or that exterior to the membrana tympani, (the membrane lining, what is vulgarly called the drum of the ear.) Second, the middle ear, the space contained between the membrane first alluded to and the internal ear. And third, the internal ear, in which the auditory nerve is distributed. The two first of these may consequently be regarded as the physical portion of the organ of hearing, the last as the nervous portion. The external ear, it must be borne in mind, is lined by a prolongation of the skin, which passes into the meatus auditorius externus, (external opening of the ear,) and, becoming gradually thinner as it proceeds, is ultimately reflected over the outer surface of the membrana tympani. It is in this tegument that the sebacious follicles or crypts are placed, which secrete the cerumen (or wax as it is generally called.) This humor sometimes accumulates in the meatus, and may be the source of deafness, as well as of irritation and inflammation of the membrane. The distance between

the external aperture of the meatus and the membrana tympani is about one inch, in the adult; and by raising the pavilion so as to straighten the passage, and permit the rays of the sun to fall into the meatus, the membrane may be readily seen. This can be much better accomplished, however, by means of an appropriate speculum, by which, with the aid of the light of the sun, or that reflected from a mirror, the membrana tympani and meatus auditorus, (both of which I have explained before,) may be minutely examined, with the view of detecting any existing morbid condition. The external ear is, consequently, a cul-de-sac, formed by a prolongation of the common integument. It has no aperture of communication with the middle ear. The middle ear or cavity of the tympanum is bounded externally by the membrana tympani, and internally by the internal ear. It communicates with the cells in the mastoid process of the temporal bone, and with the throat by means of the eustachian tube. In the bony parietes, forming the boundary between it and the inner ear, there are two foramina or (openings,) the foramen rotundum, and the foramen ovale; both of which are closed by membranes; and to the latter is attached one extremity of a chain of bones or ossicles, which passes from the posterior surface of the membrana tympani to the foramen ovale. In health the eustachian is pervious, and readily permits the passage of air to and from the middle ear. The whole of this cavity is lined by a mucous membrane, which is reflected over the membrana tympani proper, passes down the eustachian tube, and commingles with that of the pharynx. This lining of the middle ear is, in reality, fibro-mucous in its character, having the functions both of a mucous membrane

and a periosteum, (the membrane covering the bones.) The internal ear is the most important part of the auditory apparatus, but it is of the least consequence to the therapeutist, as it is beyond the reach of his agencies. In it is distributed the auditory nerve, which enters the meatus auditorius internus in the petrous portion of the temporal bone, passes into the cavities of the internal ear, and terminates in the different parts of the membranous labyrinth. With the portio mollis, or the auditory nerve proper, the portio dura or facial nerve proceeds along the meatus auditorius internus, and passes through an opening near the base to gain the aqueduct of Fallopius, along which it proceeds, receiving the vidian twig of the fifth pair, and giving twigs, containing motor and sensitive filaments, to different parts of the middle ear.

Inflammation attacks either one, and sometimes the whole of the divisions of the ear. Where there is inflammation of the external ear it "is indicated by redness, tumefaction, pain and heat in some part of the external ear, accompanied by a mucous or purulent discharge from the external ear." The inflammation may be confined to the lining membrane, whence it has received from some the name otitis catarrhalis.

Causes.—External inflammation is frequently connected with a scrofulous habit, and it is frequently induced by the extension of *inflammatory* and cutaneous affections of the neighboring parts, frequently the result of exposing the ear to a current of air, and from cutting the hair short, especially if done in the winter.

Symptoms.—The swelling and redness can be perceived externally; where the inflammation is great it is attended with severe and acute pain, some fever, and,

at times, delirium. There is much throbbing about the ear; suppuration generally takes place, and matter is discharged.

Treatment.—For the simple earache the profession is seldom consulted. Where the pains and symptoms of inflammation are present, fomentations should be applied to the ear, and a little warm oil or laudanum dropped into it. The following is a very good application to allay the pain:—Take hops, a suitable quantity; vinegar and water, equal parts; simmer till the strength is extracted; enclose the hops in linen or flannel, and apply them over the ear; repeat the same until the pain subsides. Let the feet be bathed in warm water.

Warm fluids are sometimes injected into the ears with advantage, such as milk and water; but the introduction of any substance that would be likely to irritate is certainly objectionable. Where there is much pain and inflammation, a tartar emetic ointment is recommended to be rubbed behind the ear, and to allay the inflammation some use the following recipes:

℞.	Sugar of lead,	grs. i. to viii.
	Water,	ʒii.

Or,	℞.	White vitriol,	grs. x.
		Water,	ʒ. ii. to iv.

Inject a small quantity at a time.

If this treatment, which will almost invariably remove the pain and inflammation, should fail, I would then advise Beach's direction. He takes the

℞.	Oil of sassafras,	ʒss.
	Olive or sweet oil,	ʒi.
	Camphor,	ʒi.

Mix. Warm this liniment and pour a small quantity on a pledget of cotton and bind over the ear. If the pain continues drop some of it in the ear.

Another preparation is laudanum and the juice of roasted onions, equal parts.

The bowels should be freely acted upon, perspiration promoted, and, if these fail, give an anodyne.

"It need scarcely be said that attention must, in all cases, be directed to the cause, and that this must be removed where practicable."

PARACUSIS.

Deafness.—The recent researches of Mr. Joynbee have led him to infer that the most common cause of deafness is chronic inflammation of the lining membrane of the middle ear, and that by far the greater majority of the cases commonly called nervous deafness, ought more properly to be attributed to this cause.

Deafness is dependent upon numerous pathological causes and is usually applied to both partial and total loss of hearing. The causes may affect the external, the middle, or the internal ear.

A distinguished author says, for perfect hearing, the meatus must contain air, and no impediment, as hardened cerumen, (sometimes called wax) pus, polypus, &c., must be present to prevent the free passage of the sonorous vibrations to the membrana tympani.

Secondly.—The causes of deafness may be seated in the middle ear, and they may be of various kinds. The membrana tympani may not be entire; yet this may not destroy the hearing, although it is apt to impair it more or less. Persons have heard distinctly when the membranes of both ears have been destroyed.

The ossicles (small bones) may also become affected with caries (decay) and be discharged; yet, of itself, the loss of these does not necessarily induce complete deafness, unless the base of the stapes (the innermost small bone of the ear) is destroyed, when the membrane of the foramen ovale is apt to be injured, and the perilymph to escape. The case then becomes hopeless. Whilst the perilymph or liquor cotumnis remains, hearing may exist—the sonorous vibrations passing through even a perforated membrana tympani, and being propagated along the air in the middle ear to the membrane of the foramen rotundum, and thence to the internal ear.

Thirdly.—The causes of deafness which are seated in the internal ear, are least understood; but should any thing lead to the loss of the perilymph, to the obliteration or diminution of the vestibule, cochlea or semi-circular canals, or to pressure upon the ramifications of the auditory nerve, impaired hearing would be the necessary consequence.

Fourthly.—The proper auditory nerve—portio mollis of the seventh pair—may be compressed in some parts of its course within the cranium, or in the meatus auditorius internus, and many cases of deafness, originating in this manner, are on record.

Fifthly.—Deafness may undoubtedly be owing to a morbid condition of the part of the encephalon (this name has generally been given to the brain) concerned in the appreciation of sounds.

When deafness is noted, or making rapid progress, it is essential to inquire into its probable causes. It is a matter of great moment, however, to be able to deter-

mine whether the nerve, or the portion of the encephalon connecting with it is diseased. If, when a watch is placed in contact with the teeth of a deaf person, its ticking is not audible, or imperfectly so, the defect is evidently in the nerve—it is a case of nervous deafness.

Every case of deafness, unless caused by some extraneous body or transient phlegmasia, is apt to become worse, although it may remain stationary for a long period—at times, for a series of years;—the hearing being subject to transient changes of better and worse, without any perceptible cause, and deluding the patient with hopes of ultimate amelioration.

Treatment.—Where the external ear is very much inflamed, the effect it produces on the hearing will be transitory, and will pass away as the inflammation subsides. If there is hardened secretion in the ear, simply syringing the ear with warm water, or warm soap and water, will remove it.

If there is a chronic discharge from the ear, emollient injections should be introduced into the ear, two or three times a day, and counterirritation be established behind the ear, with attention to the general health, especially if the patient be of a scrofulous habit.

If there is inflammation of the membrane lining the eustachian tube, you should apply your remedies direct, if possible; the application of water, in connection with topical remedies, and an antiphlogistic course, will soon subdue the inflammation.

In nervous deafness, electricity is very much esteemed.

Aural medicine has of late undergone a very great change, since the discoveries of Trumbull, in the applications of the vapor of prussic acid.

Forcing air and tobacco, and other vapors into the tube, by filling the mouth with them, has long been practised.

Dr. Brown, of Cincinnati, extols the following, in many varieties of deafness:—

Fill a four ounce vial with the leaves of the house-leek, cork it tightly, and place it within an unbaked loaf of bread; when the bread is baked, remove the bottle, and there will be found a liquid of a soft, oily character, which may be dropped into the ear, say one or two drops, every night.

Glycerin is highly recommended for deafness, in which there is a partial or total absence of ceruminous (waxy) secretion, by protecting the tympanum, and gradually restoring the parts to their natural condition; it is said likewise to cause hearing, in cases where the tympanum is thickened and indurated, or whether it be in a sound state or destroyed by ulceration, but in this last not permanent; and where there is a hardness of the cerumen (wax) and induration of the tympanum, it has proved very successful, in several cases.

The plan is to moisten wool with the glycerin, pure or diluted with water, and pass it into the ear. This remedy is vouched for by Prof. Newton, who deservedly stands eminent in the profession.

The sap of walnut or hickory wood is said to be an infallible remedy for *pain* in the ear, and is highly recommended for deafness. Take a small stick, put it over the fire or stove, and place a vessel under each end to receive the sap; put it into the ear on cotton, and repeat occasionally.

DISEASES OF THE ORGANS OF REPRODUCTION.

AMENORRHŒA.

Retention of the Menses.—This is one of the most common forms of menstrual disease, and the causes producing the same are various and numerous. There is at times a partial and again a total obstruction. Any cause which has a tendency to derange the general health is apt to produce irregularities, and unless remedied, is sure to lead to very serious consequences.

When there is complete obstruction of the menstrual secretion, nature makes her efforts to obtain for it some other outlet; if these efforts of nature fail, the consequence may be fever, pulmonic disease, spasmodic affections, hysteria, epilepsy, mania, apoplexy, or green sickness, according to the general habit and disposition of the patient.

As in the case of almost any suppressed secretion, it is most probably connected with excessive or deficient vascular action in the secreting organ, or it may result from an opposite state. Uterine depression may be entirely local, or may depend upon a debilitated condition of the system.

Sometimes the uterine affection is quite local, neither depending upon vascular action or debility.

Any interruption occurring after the menses have once been established in their regular course, except when occasioned by conception, is always to be considered as a case of suppression. It most frequently arises from accidental circumstances, such as taking cold,

excessive mental excitement, or inactivity. A distinguished author affirms, that the frequent use of acids and other sedatives, is a cause which evidently, in many instances, produces a suppression of the menses. When the menses have been suppressed for any considerable length of time, it not unfrequently happens that the blood, which should have passed off by the uterus, being determined more forcibly to other organs, gives rise to hæmorrhages; hence it is frequently poured out from the nose, stomach, lungs, and other parts in such cases. At first, however, febrile or inflammatory symptoms appear, the pulse is hard and frequent, the skin hot, and there is a severe pain in the head, back and loins; besides, the patient is likewise much troubled with costiveness, colic pains, and dyspeptic and hysteric symptoms.

The class of symptoms which arise from this affection, separate and apart from those already alluded to, are, languor and debility, a pale and sickly expression of the countenance, swellings of the ankles, various nervous affections, such as paroxysms of palpitation of the heart, and dyspnoea, (difficulty of breathing,) flatulent and spasmodic pain in the bowels, loss of appetite, and in relaxed and leucophlegmatic, (a dropsical habit,) leucorrhæa, (a discharge of a white, yellowish or greenish mucous.) In subjects predisposed to phthisis pulmonalis, (consumption,) or some other local or general disease, protracted suppression of the catemenial evacuation is always particularly dangerous, from its strong tendency to develope such affections.

Treatment.—When the uterus ceases to secrete from vascular irritation, and at the same time accompanied with a general fullness, strong pulse, pain in the back

or head, flushing of the face, &c., some advise bleeding. I generally omit this, and give an active cathartic, following it with the diaphoretic powders, letting the patient drink at the same time an ounce or two of the warm infusion of the *anthemis cotula*, (wild chamomile or dog fennel,) and immediately immerse the feet in warm ley water, and have them well rubbed, and at the same time I apply flannel cloths, wrung out of hot water, to the lower portion of the abdomen. If this application should not subdue the general excitement, it might be necessary to apply a few cups to the same region.

If the disease should be dependent upon uterine depression, or otherwise debilitative condition of the general system, it then becomes local in its character, and your remedies must be selected accordingly. If the blood is in fault, its vitiated condition must be corrected; this can be done by a proper course: you must direct such remedies as will invigorate the system; the stomach and bowels should be cleansed and stimulated to a healthy action, perspiration must be promoted, and, in short, every secretion and excretion of the system. If the stomach is in a morbid condition, let an emetic be occasionally given, and afterwards a dose of mandrake, both of which may be repeated as occasion requires. The patient may then take the following tonic bitters:

℞.	Prickly ash bark,	ʒii.
	Wild cherry tree bark,	ʒii.
	Seneca snakeroot,	ʒi.
	Tansy,	ʒi.
	Aloes,	ʒss.
	Devil's bit,	ʒii.

Pulverize. To every two ounces of the powder, add half a pint of boiling water and one quart of holland gin, and take half a wine-glassful three or four times a day. This should be continued as long as benefit is derived. In debilitated conditions, iron is generally the best tonic; it tends to improve the general health, and exerts a favorable influence upon the uterine functions.

The late Dr. Dewees recommended in strong language the following, viz:

℞.	Pulverized gum guaiacum,	℥iv.
	Carbonate of soda or potash,	ʒss.
	Pulverized allspice,	ʒi.
	Diluted alcohol,	1 pint.

Digest for a few days. Add one or two drachms of hartshorn to every four ounces of the tincture. Dose, a tea-spoonful morning, noon and night, in sweetened milk or wine; gradually increasing the dose.

If this should not produce the desired effect, you may employ one of the more stimulating emmenagogues. The ammoniated tincture of guaiacum, in doses of a drachm three or four times a day, frequently exerts a very happy influence. The tincture of cantharides, oil of turpentine, and savin, are all highly emmenagogue and frequently serviceable.

Eberle extols highly the smart weed, the tincture in tea-spoonful doses three or four times a day, or an infusion to be drank freely.

The *senicio gracilis*, (life root) possesses great efficacy in promoting the menstrual secretion, it may be combined with equal parts of asarum, (snake root) and savin.

The *aletris farinosa*, or star grass, exerts a peculiar

influence upon the female organs, it imparts tone and energy to the uterus, and is a very reliable vegetable agent. Dose of the powder, five to ten grains three times a day—of the saturated tincture five to ten drops in water.

The *pilulae polygoni compositæ*, or compound pills of smartweed, are very highly extolled by Dr. King, of Cincinnati, he uses the following recipe, viz:

℞. Dried sulphate of iron.
Macrotin, aa. ʒi.
Iridin grs. xv.
Ext. of Smartweed, q. s.

Mix well together, and divide into sixty pills. Dose, one pill every two hours.

I attach some remedies which appear to promote the menstrual evacuation, solely by their tendency to determine blood to the uterus; and if there should be irritation or inflammation, the following remedies would be improper.

℞. Ext. Gentian, ʒi.
Sulphate of iron, grs. iv.
Gum aloes socc, grs. v.

Divide into twenty pills. Dose, one, morning, noon and night. Or,

℞. Pulv. rhubarb, ʒiv.
Gum aloes, ʒi.
Cayenne pepper, ʒi.
Mucilage of gum arabic, q. s.

Mix. Divide into twenty pills. Take two at night on going to bed.

℞. Powdered savin, 3i.
——— Spanish flies, grs. ii.

Mix, and divide into four powders. Give one at bed time.

Some speak highly of the following, viz:

℞. Powdered savin.
——— ginger, aa. 3i.
Sulphate of potassa, 3ii.

Mix, and divide into six powders. Give one twice a day.

SUPPRESSIONES.

Suppression of the Menses.—I cannot well draw the distinction between this and retention of the menses; it is, in young females, frequently suppressed between the ages of twelve and sixteen, and at this age it constitutes a critical period in their life, and much depends upon having this discharge established; it is sometimes attended with very painful and serious consequences, frequently undermining and impairing the constitution. The causes and symptoms are well stated by a distinguished author.

"The remote cause of this complaint is most frequently suppressed perspiration; and it may arise, in part, from an inactive and sedentary life, and such habits as are peculiar to the higher classes of society, particularly in cities and towns. The proximate cause of it seems to be a want of power in the system, arising from inability to propel the blood into the uterine vessels with sufficient force to open their extremities and allow a discharge of blood from them.

Symptoms.—Heaviness, indifference to motion, fatigue on the least exercise, palpitations at the heart, pains in the back, loins, and hips, flatulence, acidities in the stomach and bowels, costiveness, a preternatural appetite for chalk, lime, and various other absorbents, together with many dyspeptic symptoms. As it advances in its progress the face becomes pale, and afterwards assumes a yellowish hue, even verging upon green, whence it has been called green sickness; the lips lose their rosy color, the eyes are encircled with a livid areola, the whole body has an unhealthy appearance, with every indication of a want of power and energy in the constitution; the feet are affected with swellings, the breathing is much hurried by any great exertion of the body, the pulse is quick, but small, and the person is liable to a cough, and to many of the symptoms of hysteria. Sometimes a great quantity of pale urine is discharged in the morning, and not unfrequently hectic fever attends. In cases of a more chronic character 'there is a continued though variable state of sallowness, yellowness, darkness, or a wan, squalid, or sordid paleness of complexion, or a ring of darkness surrounding the eyes, and extending perhaps a little towards the temples and cheeks.'"

In regard to treatment, I recommend that which I have advised in retention of the menses. Some, however, speak highly of the hydriodate of potassa in solution, with daily bathing of the feet. I have no doubt in many instances it would be serviceable.

The patient should never expose herself to the inclemencies of the season. She should by all means avoid getting wet. The chalybeate waters will be found beneficial.

"If there should be violent pain in the bowels apply a heated brick."

The diet should be light and easy of digestion.

DYSMENORRHŒA.

Difficult Menstruation.—Dysmenorrhœa differs from amenorrhœa, where menstruation, although not wholly suppressed, is nevertheless difficult, and attended with acute and severe pain, which generally commences a day or two before, but sometimes immediately preceding the discharge. The pain is most generally confined to the back, loins and lower portion of the abdomen, sometimes intermittent; and it differs in degree of intensity from severe and almost constant soreness, to lancinating and darting pain, and sometimes attended with colic. It is generally attended with more or less constitutional disturbance, accompanied with a weakened action of the vessels of the uterus. There is frequently scalding pain on passing the urine; as soon, however, as the menses makes its appearance, the pains mitigate and gradually pass away.

"Dysmenorrhœa may occur with different conditions of the menstrual discharge. Sometimes it is as copious as usual, at others to a greater extent; but, more frequently it is diminished in quantity."

We have two or three varieties of dysmenorrhœa, evidently arising from different causes; in one variety the discharge is evidently mixed with shreds of coagulable lymph, this variety is generally attended with febrile excitement and more or less inflammation. This latter will distinguish it from the *neuralgic* form.

Dr. Oldham mentions retroversion of the womb as a sequela of the membranous form of dysmenorrhœa. The change occurs slowly, and requires several months to be

effected. The texture of the uterus becomes altered. In a recent congestion, the posterior wall is soft, compressible and painful to the touch, but after repeated engorgments it becomes harder, more solid, and very much like a fibrous growth. The principal symptoms of this large and retroverted uterus are an additional weight in the lower part of the abdomen, a painful sense of pressure about the sacrum. There is pain, also, on sitting down, with a sensation as if some body was pressed upwards.

Causes.—Difficult menstruation, like suppressed, is frequently induced by powerful mental emotion, "or by anything which interferes with the process; hence, it may be owing to cold. We meet, however, with cases in which it is difficult to discover the precise causes, and in which the female at every monthly period suffers excessively, and is only relieved by the cessation of the menses.

Treatment.—Our first attention must be directed to removing the cause, if it can be ascertained. Cold generally seems to be the principal cause, and our treatment will necessarily resolve itself into that which is proper during the interval, and that required during the attack. And it is almost impossible to follow any precise course. Where it is the result of cold, you will generally find the skin dry, and the patient laboring under a little febrile excitement. For the purpose of producing a determination to the surface, remedies should be directed to the skin. Under these circumstances we advise a hip bath, with some of the bitter herbs placed in it, such as tansy, hoarhound, and hops. The patient should use it as hot as it can be borne, and at the same time drink of a strong tea of lady-slipper

and snake root. After she is removed from the bath, the herb fomentations should be applied warm to the lower portion of the abdomen. "The condition of the system, after you have allayed pain by the bath, must be narrowly investigated, and if the disease be owing to unusual impressibility, accompanied with want of tone in the system generally, a plan of treatment is required which is adapted to improve the general health. With this view the tonics and chalybeates, as recommended in amenorrhœa, (which see) will be advisable; the cold bath and exercise will be conducive to restoring the general health. Immediately before the expected period it may be advisable to make a new impression on the nervous system by full doses of opiates. Where, on the other hand, the dysmenorrhœa is accompanied with inflammatory symptoms, the antiphlogistic regimen (regimen opposed to inflammation) should be adopted, in connection with cups to the loins and the warm bath as advised.

As a palliative, eight or ten grains of camphor every hour will have a tendency to subdue the pain.

Some have used with great success, equal parts of balsam copaiba, spirits of nitre and oil of juniper.

Doctor Fothergill states the following process will relieve in most instances; with the first sensations of pain, she must take a grain of opium every hour, until the pain ceases, and advises a recumbent position, and the patient to drink moderately of any diluting liquor, as herb teas, weak whey, or thin broth. When the time is past, a course of chalybeate bitters in small doses, may be continued till within a few days of the return, and the bowels should be kept in a soluble condition. The diaphoretic powders will be found useful;

and it is said hot bricks, enclosed in flannel wet with vinegar, or dry hot salt applied to the bowels, soon relieve the pain.

In instituting a course of treatment for a radical cure, particular attention must be paid to the general state of the system. The *tartrate of iron*, fifteen or twenty grains three or four times daily, has been highly recommended. Also seneka snake root, and the volatile tincture of guaiacum, have gained some celebrity in the relief of this painful disease.

Where the pain is confined to the lower part of the abdomen, and almost immediately over the uterus, you will derive much benefit from the extract of belladonna and sulphate of zinc, (white vitriol,) five grains of the former and twenty grains of the latter, divided into twenty pills, and give one immediately on the accession of the pain, and repeated every two or three hours until complete relief is obtained. If the patient is of a plethoric and full habit, substitute ten grains of ipecac. for the zinc. Make the same number of pills, and administer as before directed.

The inner bark of the cotton root is said to exert a fine influence in this and other uterine diseases. Take four ounces of the inner bark of the root, boil in a quart of water to a pint; the dose, one or two ounces every half hour or hour.

A strong decoction of the figwort root drank freely, is said to restore the lochial discharge when suppressed, and almost a specific in relieving pains attendant upon difficult menstruation.

In this variety of painful uterine disease, the following recipe has acquired considerable celebrity, viz:

℞. Oil of chamomile, ʒi.
Ethereal oil of hops, ʒiss.
Dissolved in sulphuric ether, f.ʒss.

Give it in doses from thirty to sixty drops, every three or four hours.

A very distinguished author asserts that quinine in dysmenorrhœa, in conjunction with extract of strammonium, (Jamestown weed,) or belladonna and macrotin, is almost a specific, if it possess but half the virtues that is attributed to this compound, it will be very valuable; in the inflammatory form of dysmenorrhœa, I would not be inclined to use it, though the addition of morphine in such cases, might counteract any injurious consequences.

The oil of chamomile alone, in doses from five to fifteen drops, will frequently relieve in this painful disease.

The Southernwood (of the south of Europe) enjoys the confidence of many in this disease, viz:

℞. Southernwood, ʒvi.
Boiling water, 1 pint.

Digest for two hours, and strain. Given frequently.

The *compound ergot pills* were favorites with the distinguished Dewees, his recipe was as follows, viz:

℞. Powdered ergot, ʒss.
Extract of gentian, ʒi.

Rub together, and make fifteen pills. Dose, one pill three times a day.

WHITES.

Leucorrhœa or Fluor Albus.—This affection is the result of a morbid secretion and discharge from the vagina; and it is said to be the most common disease to which females are subject. There are evidently two varieties, for there is no doubt that a similar discharge frequently takes place from the lining membrane of the uterus, and I have seen it exist at the same time with vaginal leucorrhœa. The source of the discharge in this latter variety, is indicated by its increase immediately before or after a monthly period, by pain in the uterus, and by the discharge assuming, at those times, a more purulent appearance, facts which are said not to hold good with regard to vaginal leucorrhœa.

Dr. Eberle says the causes of vaginal leucorrhœa are very various. In general, whatever is capable of relaxing the system, as a luxurious, indolent or sedentary manner of living, habitual exposure to a humid atmosphere, and want of pure air and wholesome nourishment, are especially calculated to predispose to the occurrence of this disease. Females of a relaxed and nervous habit of body are particularly liable to this peculiar discharge. Everything which is capable of causing irritation in the mucous membrane of the vagina may excite it. The following are the most common and powerful exciting causes of this disease. Excessive venereal indulgence, difficult labor, or the irritation caused by the employment of obstetrical instruments. Frequent and profuse menorrhagia, (immoderate flow of the menses,) frequently follow the discharge. Prolapsus uteri, (falling of the womb,) is almost invariably attended with more or less leucorrheal discharge, in consequence of the con-

tinued vaginal irritation by the fallen uterus. The abuse of emmenagogues often gives rise to obstinate leucorrhœa. Self-pollution is, by many of the German authors, regarded as one of the most frequent sources of this disagreeable affection. Piles, diseases of the uterus, tumors pressing upon the vagina, mechanical injuries, and the intemperate use of spirituous liquors, may all give rise to the disease.

The symptoms, also, are described by Eberle with so much accuracy that I will still continue to follow him.

It is asserted that, in some cases, the discharge is so acrid as to produce symptoms on those who have connection with the woman somewhat similar to the venereal disease, causing excoriations about the penis, and a discharge from the urethra. The appetite is very poor, and the feet generally swell.

Symptoms.—The disease is ushered in by an irregular discharge of a fluid from the uterus and vagina, not alike in all women, differing much in color, being of a white, green, yellow or brown color, and in many instances the discharge has the appearance of the common vaginal mucous, and again I have seen it resemble starch mixed with a mucilaginous substance. Dr. Eberle says, "Sometimes it presents the appearance of pus, possessing an acrid and corroding quality. These differences in the appearance of the discharge indicate the relative degrees of violence of the affection.

In point of quantity, also, great diversity occurs in different cases. In some instances it is so moderate as hardly to occasion any inconvenience, whilst in others it is extremely copious. When the discharge is very profuse, and of an acrid quality, the external parts of the genital organs become red, swollen and painful, and

this state of irritation usually extends into the vagina, and even to the mouth of the uterus, rendering the whole passage, and especially the *os tincae*, (the mouth of the uterus,) very tender to the touch.

When the disease is suffered to continue, it seldom fails at last to make an injurious impression upon the whole system. The countenance at length becomes pallid and sickly, the eyes dull, languid, and surrounded by a blueish or lead-colored circle; flushing of the face is alternated by a ghastly paleness; the eye-lids tumid; the mind dejected, discontented and fretful; the whole system debilitated and sluggish; the extremities cold. In process of time the feet and ankles swell; the pulse small and feeble, or small, frequent and somewhat corded; the digestive functions deranged, attended with acrid eructations, heart-burn, pains in the back, loins and lower extremities; colic pains in the lower part of the abdomen; constipation and diarrhœa, and pain in voiding the urine.

By degrees, the discharge usually becomes more and more copious and purulent; the relaxation and languor of the muscular system increase, whilst the pulse becomes more frequent and irritated. At length, in aggravated cases, the slightest bodily exertions give rise to hurried respiration and palpitation of the heart; and in instances of great severity, the powers of digestion at last become exceedingly weak; nausea and vomiting frequently come on, and finally hectic and rapid emaciation arise.

Much discussion has been had in regard to the cause; the terms debility and relaxation may most assuredly be correctly applied to this disease, in a great majority of cases. The languor, general weakness and relaxation, as well as the feeble and sluggish pulse, so fre-

quently noticed in profuse leucorrhœa, are sufficient evidence of the correctness of this observation.

Treatment.—In cases of almost any grade, you will find the cure difficult, requiring much energy and perseverance in the application and administration of remedies. The general health soon becomes involved, and one of your primary objects will be to restore the general health, and impart tone and energy to the system; this point of the treatment must be specially attended to.

Where the pulse is active, and the general habit full, you should commence your treatment with a purgative, accompanying it with low diet, which, in general, will be quite adequate to reduce the irritation of the system; if there is a loaded state of the bowels, the purgative must be repeated, and if there is functional disorder of the liver, you must give podophyllin as an alterative; this will be best accomplished, by administering in quarter or half grain doses, repeated at intervals of two or three hours, until the secretions of the liver are fully established. This should then be followed by the following recipe, viz:—

℞.	Sweet spts. nitre,	ʒii.
	Balsam copaibæ,	ʒi.
	Oil of almonds,	ʒii.
	Spts. of turpentine,	ʒi.

Mix these together, and add one scruple of camphor.

Dose, tea-spoonful, given in mucilage of gum arabic or herb tea, three or four times a day; and it should be taken on an empty stomach.

In prescribing more directly for the removal of the disease, particular attention must be paid to the actual condition of the mucous membrane of the vagina.

When the discharge is white and opaque, your local applications must be such as will have a tendency to lessen irritation, and for this purpose I advise warm water to be injected four or five times a day for three or four days; by following this plan, in connection with a vegetable diet, you will soon be enabled to resort with propriety to the means more directly calculated to remove the irritation upon which the discharge depends; and this cannot be better accomplished than by using a female syringe, and injecting the following mixture, viz:

℞.	Sugar of lead,	ʒi.
	Sul. zinc, (white vitriol,)	ʒi.
	Rain water,	Oi.

A syringe half full, should be injected up the vagina four or five times a day.

Your treatment must be adapted to the actual grade of vaginal irritation, the exciting causes, and peculiar condition of your patient; it is sometimes essential to give the restorative wine bitters, and to wear a strengthening plaster across the loins; this treatment is adapted to the languid and relaxed patient, who at the same time should use the following injection, viz:

℞. White oak bark.
Sumach berries or bark.
Witch hazel bark.
Hemlock bark.

Bruise or pulverize, and make a strong concentrated decoction; to every pint add a tea-spoonful of pulverized alum, and inject two or three times a day.

The tincture of cantharides, in doses from twenty to thirty drops, three times a day, is highly spoken of.

Dr. Beach extols very highly the following:—

℞. Tinct. aloes, ʒi.
Muriated tinct. of iron, ʒii.

Dose, forty drops, three times a day, in a little water.

Alum I have used with decided advantage in this disease, in combination with a strong decoction of marsh mallows.

In cases where the system is entirely free from inflammatory irritation in the affected parts, the spirits of turpentine will be found a remedy of much value, especially if used, whilst at the same time the patient injects the following:—

Make a weak solution of the acetate of iron, add a few drops of kreosote; inject a small portion two or three times a day.

Some speak highly of this preparation to be administered internally, in doses from five to twenty drops, in water.

Dewees extols alum and nitre, and says he has effected cures in very obstinate cases, by giving five grains of the former, with ten of the latter, three times a day.

The *macrotin*, of late, is highly and justly recommended for the cure of this disease, by a very distinguished physician.

The late Prof. T. V. Morrow says of this article:

For several months I have used the macrotin very extensively, in the treatment of a numerous class of female diseases, for the successful treatment of which I had for many years previous been in the habit of depending mainly on the macrotrys racemosa, either in the form of infusion, decoction, or tincture. My confidence in the value of the macrotrys racemosa, I am free to confess, has been such as to induce me to use perhaps a larger quantity of this medicine, for the last sixteen

years, than any practitioner in the United States, giving it a more extended range of application in the treatment of disease, and relying with more confidence on its ultimate efficiency, than any of my medical friends. My experience in the use of this article, during the period named, has been mostly confined to cases of leucorrhœa, menorrhagia, prolapsus uteri, threatened miscarriage, dysmenorrhœa, and barrenness, or sterility, in all of which cases I have obtained the most satisfactory results from the cimicifuga, or macrotrys; but deeming the macrotin a more convenient form of the medicine for practical use, and believing it to contain the virtues of the article from which it is obtained, I have accordingly used it in similar cases, with results thus far which justify the conclusion that it will be found a satisfactory substitute.

My experience in the use of the macrotin has demonstrated to my mind that there is a slight difference in the modus operandi of this form of the medicine, when compared with the usual forms in which the macrotrys racemosa has been used. That difference principally consists in the increased liability of the latter to produce a heavy, dull, and aching sensation in the forehead, in connection with a feeling of dizziness, while the former appears to manifest a greater tendency to produce aching, and somewhat painful sensations in the joints and limbs generally. I have usually given the macrotin in the form of pills, prepared by adding a small quantity of pulverized castile soap, enough to make the mass properly adhesive, and forming it into pills of the ordinary size, and giving one every three hours during the day, in all the various cases above mentioned, whenever they have come under my care, since I commenced

its use. In nearly all these cases it has proved singularly beneficial, thus affording the gratifying evidence that it will soon become one of the most popular and valuable articles of the materia medica.

Another Professor, in speaking of macrotin, remarks:

"The medicine is, in its effects, essentially the same as the macrotrys, (cimicifuga, of the U. S. Dispensatory.) It is particularly useful in chronic rheumatic affections, and in female diseases. In leucorrhœa and dysmenorrhœa, as well as menorrhagia, it is invaluable. It should be used in order to get its best effects, to the extent of producing its specific constitutional symptoms, *i. e.* a peculiar dizziness, fullness and dull aching of the head, and more or less aching in the joints. This effect should be produced every day (slightly) during the treatment, until the disease is removed. By this treatment, and the use of hip baths, leucorrhœa will often be cured in a week or ten days, without any other remedy."

I have already observed that a similar discharge may take place from the lining membrane of the uterus, either alone or along with the vaginal leucorrhœa. When such is the case it is not benefitted by astringent injections, like the vaginal discharges. Dr. Kennedy treats it by the nitrate of silver or the fluid nitrate of mercury applied directly to the part. This requires some skill in the physician in adapting instruments for its application.

The acute form requires cupping on the loins, with the hip bath and warm emollient injections into the vagina and rectum; and, after the active stage has passed away, or at any time during the chronic form, counter-irritants may be applied to the sacrum, (the lower portion of the spine) croton oil or dry cups. Internal

remedies are generally of but little use, with the exception of such as are directed to the accompanying condition of the constitution, chalybeates, for example. It may be proper to remark, however, that of late ergot is said to have succeeded. It may be given in doses of five grains three times a day. Ryan recommends the following:

℞.	Ergot,	ʒii.
	Pulv. cubebs,	ʒss.
	Pulv. cinnamon,	ʒss.
	Loaf sugar,	ʒi.

Divide into ten powders. Give one three or four times a day.

In the latter stage of the disease, gentle astringent injections, similar to those advised under vaginal leucorrhœa may be used. Attention to cleanliness is essential."

Strong tea and coffee are prohibited. The patient should take exercise sufficient to promote a healthy action of the bowels and keep them regular. This is essential in any form of the disease.

PROLAPSUS UTERI.

Falling of the Womb.—Falling of the womb is a displacement of the uterus from its natural situation, and when we consider how slightly it is connected with other parts, it may excite some degree of surprise that the displacement does not more frequently occur. It is placed at the upper part of the pelvis, with its neck resting over the cavity of the vagina. The descent of the uterus into the vagina, is the most frequent among females who stand much in the erect posture. So long, therefore, as the relations of these parts to each other

are natural, the uterus will remain in its proper position; but if the vagina becomes wider, and the uterus heavier than natural, then the latter begins to sink into the cavity of former. This is the state of the parts after parturition. The uterus is then preternaturally large and heavy, and having lately contained the fœtus and its appendages, some time must elapse before it is contracted to its original size. The vagina also, is at this time much wider than is natural, and having recently admitted the passage of a child through it, this part also, will require some days to resume its natural capacity. Sitting up prematurely in the erect position after delivery, very much disposes the uterus to this accident; and, in some patients, even when in the horizontal position, a trifling exertion, such as straining at stool, &c., will be sufficient to occasion prolapsus. There is no question that nineteen cases in twenty arise from sitting up too soon after delivery. It is, however, by no means invariably connected with parturition; on the contrary, it appears sometimes to occur from mere relaxation of the parts, as in some emaciated subjects, without any obvious deviation from their natural size or structure. This happens either partially or wholly; the womb descends into the vagina, and sometimes protrudes entirely out, which causes much distress; pains in the back, groin, bearing down with great weakness, and frequently attended with very nervous symptoms.

The uterus generally presses both behind and before, occasioning a difficulty in passing both urine and fæces. These are generally the local symptoms. The constitutional symptoms are—a disordered state of the stomach and of the whole general system.

Treatment.—Beach says a broad bandage should be worn over the lower part of the bowels, and drawn moderately tight; you should, however, before applying the bandage, be certain that the womb is in its proper place; a strengthening plaster should be applied to the back, the restorative wine bitters used, the bowels kept regular, and the surrounding parts bathed twice a day with salt and water. A decoction of oak bark, to which add a little alum, may be injected into the womb or vagina, once or twice a day.

I advise the new patent india rubber pessary, which you inflate with air; after its introduction, it produces very little irritation to the mucous membrane of the vagina, and by using it constantly, and observing a horizontal position for a week or two, with the application of cold water to the abdomen, will in nine cases out of ten, give relief.

I advise also, the abdominal supporter.

"In chronic cases of procidentia uteri, you must return the displaced uterus, and apply the pessary before alluded to, which must be regularly worn; in conjunction with this, you must endeavor to induce a contraction of the vagina, by the employment of astringent injections or lotions, as one drachm of alum dissolved in half a pint of the decoction of pomegranate bark, which may be applied three times a day. These cases are seldom cured; but when the complaint is recently discovered, that is, within a month or six weeks after its occurrence, a cure may be expected. If pregnancy should take place, the uterus, of course, soon after the third month ascends spontaneously, into the cavity of the abdomen; and if the case as formerly mentioned, is well managed after delivery, a cure is probable.

Here you have two objects of attention: the first, to insure the most strict observance of the recumbent posture, until the uterus has resumed its natural size and weight; and the second, to aid the contraction of the vagina by means of the astringent lotion."

DISEASES NOT REFERRED TO BY CLASS.

SCORBUTUS.

Scurvy.—The blood, in this disease, is generally vitiated and in a depraved condition, the system most generally debilitated, and a constant tendency to hæmorrhage, attended with more or less inflammation in various parts of the system, but especially in the gums. "There can scarcely be a doubt that its essential character is an altered state of the blood, and that all its phenomena flow directly or indirectly from that source. In this country it is very little known, and there are many practitioners even in our cities who have never seen a decided case of it. But, as its prevalence depends on causes which may be brought into operation at any time, and in any place, it becomes important that the profession should be thoroughly conversant with all that relates to it, so that it may be at once encountered when met with, and means of prevention suggested wherever they may seem to be required. This remark is especially applicable to the regulation of the diet in prisons, hospitals, asylums, garrisons, ships, &c., which frequently come under the direction of the medical man, and should

always have reference to the possible occurrence of the disease in such situations. Even the regimen of the sick, in ordinary private practice," should be regulated by the physician with some regard to scurvy, which, within the experience of the author, has appeared to result, in one instance at least, from a restricted diet, too long continued, under a medical direction.

The definition given by Dr. Good, is short but perfect, he says, spots of different hues, intermixed with livid, principally at the roots of the hair, teeth loose, gums spongy and bleeding, breath fetid, debility universal and extreme: and, he adds, occurs chiefly at sea, after exposure to a moist, cold, and foul atmosphere, with long use of salted food and stagnant water. It is not confined to mariners, for numerous and well marked cases have occurred and prevailed extensively in large inland institutions.

Causes.—A very distinguished author says, it is occasioned by cold, moist air, by the constant use of salted or smoke-dried provisions, or any kind of food that is hard of digestion and affords little nourishment; it may also proceed from the suppression of customary evacuations, as the menses, bleeding piles, &c., neglect of cleanliness, bad clothing, want of proper exercise, confined air, unwholesome food, or any disease that generally weakens the body or vitiates the humors, may cause it.

Symptoms.—The disease makes its appearance very gradual, accompanied with unusual weariness, and difficulty of breathing upon the least exertion, the gums bleed, and they are generally soft, spongy, and present a livid appearance, there is frequent hæmorrhage from the nose, and the face assumes a yellowish hue or lead color, the breath is fetid and very disagreeable. "If

attention be paid to the skin, it will generally be found covered with livid spots, which run together, especially about the thighs and legs. The legs sometimes present a dropsical appearance, and again the muscles on them seem to be wasting away, there is generally a bloody secretion which exudes from the sores, and throughout the whole course of the disease there is excessive pain experienced in the limbs; at the close you have hectic fever, and the patient is apt to be carried off with dysentery, diarrhœa, dropsy, or *inflammation.*

"Scurvy is occasionally complicated with other diseases, which greatly aggravate the danger. Of these, the most fatal are typhus fever and dysentery, which are the most common attendants, as they are produced by causes, which, if not identical, are very frequently coincident with those of the complaint under examination."

Treatment.—There is probably no disease that yields more readily to proper treatment than scurvy, and I as well as many others regard the treatment as simple. Your first object will be to remove the patient from under the influence which caused the disease, and give suitable food, especially fresh vegetables and vegetable acids; if he has been breathing a foul atmosphere have him removed to where there is a pure one; in its incipient stages, milk, fresh bread, and cider will generally give relief. Some advise with the patient's food, cream of tartar and muriatic acid, this latter remedy will, I have no doubt, used once in a while, prevent the disease, and may probably benefit it. Lemon juice is of itself an excellent remedy for scurvy, it can be used in the form of lemonade.

Dr. G. Perin, of the army, found the juice of *agave*

Americana, the *maguey* of the Mexicans, in the dose of two to three fluid ounces, three times a day, a more efficacious remedy than lime juice.

You will find a decoction or syrup of the *yellow dock*, in doses from one ounce to three, taken three or four times a day, an eminently useful article in scorbutic diseases.

In regard to the medicinal treatment, if there is constipation, correct it by laxatives, such as rhubarb and castor oil. If the appetite is feeble, it may be stimulated, in some instances, by tonic bitters and mineral acids. The astringents may sometimes be found useful in checking hæmorrhage. In obstinate wakefulness, give opium. Nitre, or a solution of this salt in vinegar, has anti-scorbutic virtues. *Under no circumstances administer mercury in this disease.*.

Wherever there is debility, and a tonic is indicated, I would advise the following to be given, viz :—

℞.	Iodide of iron,	grs. xxiv.
	Distilled water,	fl. ʒi.

Mix. Dose, a tea-spoonful, three times a day.

The following recipe has been adopted in hospital practice; it has been attended with decided advantage.

℞.	Potass. nitrat., (nitre,)	ʒii.
	——— bitartrat., (cream tartar,)	ʒss.
	Aceti,	
	Tinct. opii,	fl. ʒii.
	Aquæ, (water,)	fl. ʒiv.

Dose, two table-spoonsful, to be given three times a day.

As to local remedies, solution of chloride of lime,

very dilute muriatic acid, or metallic astringent solutions, as those of sulphate of zinc, sulphate of copper, nitrate of silver, or acetate of lead, may be applied to the gums; and a mouth-wash of solution of kreosote may be used to correct the fetor of the gangrenous ulcers. For ulcers upon the surface, the best application is said to be dressings of lint, soaked in a mixture of one part of lemon-juice and two or three parts of water, with a covering of oiled silk, to prevent evaporation. The tincture of myrrh is also a good application. If there is pain, relief will be obtained from anodyne and emollient cataplasms or fomentations.

Since I have commenced the publication of this work, "numerous experiments have been made, with a view of determining the condition of the blood in scurvy. It has frequently been found to coagulate, and even to present the cupped surface. From a comparison of those most to be relied on, it appears that, upon an average, the proportion of albumen is about as in health, that of fibrin slightly increased, and that of the red corpuscles greatly diminished. The saline constituents are in about the normal quantity. The microscopic characters of the red corpuscles, and their chemical constitution so far as discovered, do not appear to be altered. MM. Chatin and Bouvier noticed that the albumen, in a case which they examined, required a temperature for coagulation of 165° F., at least 5° higher than is requisite in health, and that the plasticity or cohesion of the fibrin was greatly diminished.

"Some interesting experiments have been made by Dr. Garrod, of London, which direct attention to *potassa* as the ingredient of the blood, a deficiency of which may be the characteristic pathological condition of

scurvy. Dr. Garrod found 1st, that articles of food, the exclusive use of which were known to produce scurvy, contained less of the salts of potassa, than those which are capable of supporting the system in the healthy state; 2nd, that those substances which act as anti-scorbutics, such as fresh fruits and vegetables, and especially potatoes, contain a large proportion of these salts; 3rd, that the blood of a scorbutic patient, examined by himself, contained a much smaller proportion of potassa than healthy blood, and that less was excreted with the urine; and 4th, that the disease may be cured by the addition of small quantities of some one of the salts of potassa to the food. Dr. Garrod also makes the suggestion, that the muscular debility of scurvy may be explained upon the supposition, that the muscles are deficient in potassa, which is contained in them largely in health, and, according to Liebig, is essential to their action." But it appears to me that much further investigation will be necessary before the truth of this hypothesis can be considered as established. Opposed to it at present are the facts, that nitre, which is a salt of potassa, though said to be occasionally useful in scurvy, has often failed to cure it; that, on the contrary, the disease has been cured simply by the addition of pure citric acid, which contains no potassa, to the diet of the patient; and that nitre is frequently used in the preparation of salted beef, which is one of the prominent substances used as food by scorbutic crews.

TUMORS.

There is such a variety of tumors that it would be difficult, in a work of this character, to give a precise description of each; suffice to say that we have the

adipose tumors, which are generally styled fatty tumors. The *fibrous tumor*; it has somewhat the appearance of the adipose tumor; it is composed, apparently, as the name implies, of a fibrinous substance, and when divided presents you a yellow or whitish substance. Cellular tumors differ from the two first, from the fact that they contain oily or sebaceous matter. Malignant tumors.—Any of the variety of tumors may become malignant, but this variety is generally known as cancer.

Treatment.—In the treatment of these cases you may sometimes succeed by promoting absorption by the application of strong stimulants, with compression constantly applied. If the ordinary stimulants fail, accompany the compression with means to excite slow but long continued inflammation of the surface. The irritation, kept on with compression for a long time, has often succeeded, especially when associated with the proper internal means for aiding absorption, such as diaphoretics, and still more, diuretics and hydragogue cathartics. The hydriodate of potash, and other preparations of iodine, have been highly recommended by many; but though I have seen successful results from their application, so far as the local absorption is concerned, the deleterious effects on the constitution generally, and the proneness of tumors so removed to return, induce me to have an equivocal regard for the remedies.

If, then, after a fair trial of the local and general means pointed out, you fail, as you may expect to do in many instances, and the tumor is so situated as to be conveniently operated upon, the knife is generally the best means you can resort to.

Tumors can, however, in some cases, be removed by the ligature or caustic potash. Dr. Beach says the fol-

lowing is the best mode of applying it: Take a stick or roll of the *caustic* potash, and enclose it in a piece of paper, all except the end, to prevent injury to the fingers; then, after wetting the most prominent part of the tumor, gently touch or rub it in a circular form about the size of a twenty-five cent piece, or according to the size of the tumor, to be continued until the skin turns brown or dark, which is usually in about five or ten minutes. As the caustic dissolves it runs down and excoriates the parts; this should be absorbed by cotton or linen. The pain is severe for a short time, and no more is experienced until the eschar separates. A poultice of elm bark and yeast must now be kept on, to favor the process of sloughing, or a detachment of the disorganized parts, which, when done, gives vent to the internal portion or substance of the tumor.

The *marshmallow*, externally applied in the form of poultice, is very useful to discuss painful inflammatory tumors and swellings of almost every kind.

Beach speaks highly of the poke root roasted and afterwards mashed, as an application to tumors.

Females.—Their breasts frequently become inflammed and indurated. I have seen relief from the application of either of the following remedies, viz.: Parsley leaves, bruised, are a valuable application; in some instances, however, they have a tendency to dry up the milk. The *celastrus scandens*, (staff vine or false bitter sweet,) has been successfully employed in inflamed and indurated breasts. As a local application to all species of painful tumors, especially swelled breasts, the *datura stramonium*, or Jamestown weed will be found a most soothing application.

The pearl flowered life everlasting, used externally as

a cataplasm in painful tumors, is very efficacious in relieving pain and disposing to sleep, often succeeding when the hop poultice has proved ineffectual.

SPRAINS.

Sprain.—By this term we understand an injury or contusion of some part of the body, without laceration or breaking of the skin. A bruise is often very painful, soon swells, and turns the skin black or purple.

Treatment.—The best application is wormwood leaves, simmered in vinegar to extract the strength, with a little salt added, to be applied cold or warm, as agrees best; nothing so soon reduces the swelling. Cold water applications, with a bandage, will be found very effective in keeping down inflammation. The last application suggested in tumors will be found efficacious. Salt and tallow mixed will prevent the skin from turning black.

If inflammation should present itself, you will resort to the same means as are required to subdue acute inflammation. If the joint is involved in the injury, suppuration about it must be prevented if possible; hence emollient applications are not indicated. Resolution is here the only safe termination of inflammation. If you would therefore escape ulceration and destruction of the joint, do not allow the lately injured joint to be moved for some time.

Strains of the wrist, produced by falls or other violence, may occasionally similate dislocation. They may be distinguished by the fact of the questionable symptoms coming on gradually, and not showing themselves immediately after the accident, as in actual dislocation. There will also be more flexibility of the hand; nor will

the swellings be likely to imitate accurately the separated extremities of the arm and carpal bones.

As soon as the reduction is effected, compresses should be placed upon the wrist, and secured by a roller, the part being kept constantly wet with cold water or spirits and water. The roller should enclose the whole hand, commencing from the end of the fingers, and be continued, moderately tight, up to the elbow. A splint should afterwards be added, and the forearm suspended in a sling.

These accidents are very painful, and liable to much swelling, if means are not instituted to prevent it; but uniform and pretty tight bandaging, will generally do this, if applied early in connection with the cold water. If the parts become very painful, they should be fomented with warm water or vinegar, or hops and vinegar. Salt and vinegar is a good application to prevent inflammation.

ULCERS.

There are many different kinds of ulcers, and in all warm climates they are quite common, and none more common than "old sore legs." There is an excess of this class over any other variety. A work has been compiled by Dr. Newton, of Cincinnati, upon this class of diseases, and I refer the reader to it, as much valuable information can be gleaned therefrom. I have had much experience in the treatment of ulcers, much of my success in their treatment, I attribute to the suggestions I received from an eclectic author of distinction, from whom I shall quote very extensively upon this subject. The division of the subject in many instances, is not necessary for practical purposes; however, they

are generally divided by writers, into a variety of classes, according to their appearance, progress and effects. I have adopted Hill, it will be sufficient for all practical purposes, though as he says, not so minute as may be found in some of the books.

I would have you distinguish the healthy ulcer; the irritable, the indolent, the varicose and specific, this last, however, includes a variety which I have already considered; as examples, I may here mention scrofulous, syphilitic, &c.

Healthy ulcer.—It is a suppurative, but not an ulcerating, i. e. destructive process. The pus discharged by it is a normal secretion. Its surface has a florid appearance, without any offensive smell. The pus is consistent, and easily removed. The granulations are small, and of a uniform size. It heals spontaneously and regularly, leaving little or no trace of having existed. Patches of granulations may be early noticed, over the top of which is thrown a delicate membrane or cuticle, which finally thickens and becomes true skin.

An example of the healthy ulcer is the common boil, which, if not an evidence of perfect health, is regarded, and no doubt correctly, as the next thing to it; a successful effort to throw off some slight obstruction or impurity. It may appear on any part of the body, and occasions no difficulty further than the local pain and temporary inconvenience.

Treatment.—This character of ulcer requires but little treatment, the "let well enough alone practice; a little salve to protect it from the atmosphere," is generally all sufficient. The only true healing salve, is that which nature prepares for herself—healthy pus. Now this, however, when produced in large quantities, may be

injurious to the general health, by being reabsorbed. In that case, it should be frequently removed, or the ulcer dressed with some substance that will absorb it. The carrot poultice answers this purpose very well, as it removes the matter without irritating the sore. The simple water dressings are, perhaps, after all, the best that can be "invented;" they may be warm or cool, rarely cold. If there should be want of action in the ulcer, the application of the tincture of gum myrrh or tincture of iodine will be found most excellent.

Irritable Ulcer.—This variety is very sore to the touch, and easily made to bleed. It generally wears a dark purplish appearance, discharging but little matter, and that of a thin, ichorous or sanious appearance, and sometimes very fœtid and corroding. Its imperfect granulations are spongy, of a dark red hue, or having a whitish vesicular look, appearing at different points, or leaving vacant spaces between them, and often disappearing again by absorption. It is bounded by a sharp undermined (or shelving) edge, sometimes rugged, nearly what would be called in botany, "serrated." The parts around the ulcer are swollen and reddened, sometimes œdematous, (swelled).

The constitutional effects of this kind of ulcer are often very great, and manifested by thirst, chills, and great nervous prostration, as well as irritability. The pain at the part affected, which is often great, is of a smarting or burning character. The worst result is, when the irritable ulcer becomes gangrenous.

Treatment.—This should be the most soothing and emolient possible; warm poultices will sometimes be sufficient. Fomentations of bitter herbs are often required, those of hops or poppy leaves are particularly

suitable. They should be repeated two or three times a day, the ulcer being, between times, dressed with the emollient poultices. One of the best of these is made of the roots of the common carrot, bruised and roasted, or still better, grated and wet in scalding water, and then allowed to cool. If these means are insufficient, lint dipped in laudanum, may be added. A poultice wet with a strong infusion of lobelia herb, or the expressed juice, will frequently relieve when other means fail. These, or some such applications as these, should be continued till the soreness and inflammatory symptoms have subsided. Be sure when dressing, never to *compress* this kind of ulcer, so long as it retains its character of irritable.

In some instances, after a long continuance of moist applications, they seem to lose their power, and the irritability returns. They should then be changed for dry. Simple flour will sometimes answer, or prepared chalk, finely pulverized. But the best dry dressing is the powder of the common puff ball, (lycopherdon borista.) Dry applications may likewise fail, and it may become necessary to return to your liquids, which may then succeed.

When the irritable ulcer presents a GANGRENOUS appearance, or where mortification really exists, it will then require an active and speedy treatment. The profession, as well as the public are acquainted with the remedies generally used for mortification. Dr. Newton has discovered in the sulphate of zinc, (white vitriol) anti-septic properties, and has employed it with such success, that it becomes a matter of much interest to the profession. He says it is sufficient to fulfil every indication, and full reliance and confidence may be placed upon it. He says:

"This agent may also be used in the treatment of some varieties of erysipelas, which wlll be referred to hereafter. Sulphate of zinc is the article to which I wish to draw the attention of practitioners, as a remedy for mortification, and to show its beneficial results, by the description of a few cases treated by it. It may be argued that the use of any remedy that will of itself produce active inflammation, could not be applied to a highly inflamed part, without producing fatal consequences, by increasing the disease beyond the reach of remedies. This will doubtless appear true to many, but experience has proved to the contrary, for it has been used in cases where the parts were in the highest state of inflammation, and although this was increased for a few hours by its action, yet in no case have I found it to produce any bad effect, or to so augment this condition, as to present any difficulty in the subsequent treatment. It will be remembered that all cases of mortification are attended with a very offensive fetor, which is one of the characteristic symptoms of this disease, and which is caused by a decomposition of the healthy structure of the parts attacked, and this very cause produces the continuance of the disease, the changing of which is the indication to be fulfilled by every variety of treatment that has been adopted.

No agent will act so immediately in producing this change as the sulphate of zinc; the most extensively mortified surface, with the offensive fetor arising from it, can be stopped in a few hours after its application, and after one or two applications the parts become hardened, and the fetor entirely removed. It fulfils two indications in this respect, viz: arresting the decompo-

sition going on in the parts, and correcting all unpleasant fetor which may exist; and it should be borne in mind, that as long as this fetor is present, the disease is not arrested. The following cases will be illustrative of the method of using it, in which I have found it useful.

Case I.—Mr. F., aged 25, residing in Fulton, came to consult me in December, 1846, with an extensive mortification of the whole palatine arch and gums of the superior maxillary, succeeding a mercurial action which had been produced and continued a long time, and which had resisted the usual treatment for its arrest. I was induced to try the sulphate of zinc, and mixed a small quantity of it in fine powder, with a sufficient quantity of flour and water to make a paste; this I spread upon soft leather and applied over the parts affected, retaining it there until the paste sufficiently adhered, by a sponge placed upon the tongue. I would here remark, that this was a well marked case. The fetor arising from the mouth was such that one could scarcely stay in the room with him.

On the succeeding day I found the fetor much diminished, and the parts secreting but little, with a portion entirely hardened. I made a second application in a similar manner, and on the next morning the unpleasant fetor was entirely removed, and the whole of the diseased parts covered with a dry, hard surface, and no vestige of secretion from any part of it. I considered this to have been carried far enough, and made no further application of the zinc, but recommended the mucilage of ulmus and warm water to be used freely in the mouth, which was pursued for three days, when the entire portion upon which the zinc had been used, sloughed off, leaving a health appearance of the parts. It may be

well to state here, that the entire structure of the arch, with a large portion of the bone came away, after which it was treated as a common ulcer, and healed in about ten days, since which time he has remained in good health.

CASE II.—Mrs. S. was under treatment for a cancerous condition of the breast. It had ulcerated, and was attended with all the unpleasant symptoms of such a condition. I made use of caustic applications for its removal, but found upon the second day, that the whole gland was in a state of mortification, and that the system was fast failing from its effects. I immediately applied the zinc, in the form of powder, covering the affected parts with it; in less than six hours a change of the fetid smell was very perceptible, but the inflammation continued without any abatement during twenty-four hours. On the next day I found the remedy had dried and hardened a portion of the diseased surface; I therefore again applied it, and covered the medicine with a poultice of elm bark, mixed with cold water; this dissolved the zinc in a few hours, and had the desired effect of changing and arresting any further extension of mortification. In this case two applications were sufficient. It will be found that in some cases, the zinc will produce a hardened surface, so as to prevent a sufficient quantity from acting throughout the diseased parts; this can be remedied by applying an elm poultice after the zinc is used, which will soften the surface enough to allow its full action, which is known, as before said, by absence of the fetor. All the dressing that is required is the elm poultice, both before and after the use of the zinc; if the first application increases the inflammation to any extent, apply the elm for ten or fifteen hours,

after which apply the zinc. The part will usually slough off in three or four days.

Case III.—J. F., aged 48, had an encephaloid tumor, situated on the leg, which required to be removed by an operation, previous to the application of medicine for its permanent cure. J. King, M. D., assisted me in removing the tumor, which had arrived at several inches in diameter. It was removed without any unnatural appearances attending the case. But on the second day, the whole incision, and for three inches around, became gangrenous, and accompanied with a high degree of inflammation. I immediately applied the zinc, and continued it for three days, when it became completely arrested, and in three days longer the diseased parts sloughed off, leaving a healthy condition of the remaining integuments, which were then treated without any further difficulty.

I have made use of this agent in forty-five cases, and in each it proved highly successful, so much so, that in only five cases was a slight constitutional treatment demanded. As these cases are all similar to those given, I deem it unnecessary to particularize any further.

In four cases of ulcerated erysipelatous inflammation, I have used the zinc with similar success, though in these instances it required a smaller quantity of the article, a greater number of applications, and at greater intervals between the applications. At some future time I may again refer to this article, and its effects in other forms of disease."

I have used the following recipes in foul and gangrenous ulcers, with advantage, viz:—Freshly prepared charcoal, sufficient; mix with simple cataplasm, in a tepid state; or,

℞. Powdered charcoal, ʒss.
Cataplasm of chamomile. Use as above.

But constitutional treatment is, after all, of more importance than any local applications, though these need never be omitted on that account. You will generally observe the patient's skin to be dry and harsh; he is also inclined to be thirsty and feverish. As a general rule, the irritable ulcers occur in irritable subjects.

There is a plain indication then for the alkaline bath, which should be used at least twice a day, in connection, perhaps, with the alcoholic vapor. An emetic slowly given, our common emetic tincture, for instance, exerts a very marked influence, the following is the recipe, viz:

℞. Bloodroot.
Lobelia seeds.
Skunk cabbage root, aa. ʒiss.

Make the powders *moist* with alcohol, and let them stand tightly covered for twenty-four hours, then add good cider vinegar one quart. Mix, and let it digest two weeks, then strain and press the dregs.

Dose, one drachm, repeated at short intervals until it produces the desired effect. This should be followed up with mild cathartics. Diaphoretics and sudorifics must not be neglected. Such as asclepias tuberosa, (pleurisy root,) gerardia pedicularia, (American fox glove,) xanthoxylum fraxineum, (prickly ash.) I have commonly prescribed an infusion of the pleurisy root, prickly ash, and skunk's cabbage, as a preparation both sudorific and anodyne.

If the gentler means fail, you must not stop here, but bring out free perspiration by means of the "alcoholic sweat," and keep it up for at least an hour, or until the irritable condition has been removed.

As soon as this is effected, and the pain ceases in the ulcer, the former dressings may be removed. You proceed as in the case of a "simple ulcer," guarding against relapse, however, by appropriate constitutional means, such as the alterative syrup, which is as follows, viz:

℞.	Sarsaparilla,	3 lbs.
	Burdock.	
	Sassafras.	
	Guaiac,	aa. 2 lbs.
	Spikenard.	
	Prickly ash.	
	Ex. Liquorice,	aa. ½ lb.
	Ex. Juglans, (butter-nut,)	℥i.
	Essence of sassafras,	℥ii.

Make four gallons of syrup. Dose, one to three teaspoonsful four times a day, before each meal and bed time, with gentle aperients and diaphoretics, and a persevering use of the alkaline bathing or sponging. As a simple alterative in these cases, the *woodbine* is one of the best in the materia medica. It should always be used green, as it loses its virtues in drying. This may be compounded with the scrofularia marylandrica, (figwort,) or viburnum prunifolium, (black haw,) or with both.

Where the patient is naturally of a nervous temperament, and there has been considerable nervous derangement, I consider the common *motherwort* almost a specific, especially if he has been a hard drinker. (I have seen cases of delirium tremens cured with it.) You can administer it in the form of a strong syrup of the leaves. I prefer equal parts of the root and leaves, as the former is strongly diuretic.

Indolent ulcer.—This is almost in every particular the

opposite of the irritable ulcer; each can be best studied in contrast with the other. Reverse the definition of the one and you have that of the other. The edges of the sore, for instance, are more erected instead of being inverted, as in the former case, being, moreover, rounded and thick, somewhat glossy and quite regular. The granulations, instead of being red and sensitive, are insensible and of a dull pale aspect, with round flat heads, and generally located on the bottom of the excavation, they have, in short, a fungoid character. The pus, instead of being ichorous, (a thin aqueous and acrid discharge,) is thick, of a dark yellow color, and so firmly adherent to the base of the ulcer that it cannot be removed without considerable force, and causing a good deal of pain, (which, of course, should not be done.)

This kind of ulcer is the more important, inasmuch as it is the most common form of sore which you will be called upon to treat professionally. They most frequently occur on the lower extremities, and much oftener in males than females, (the latter seldom being troubled with them, unless in connection with a varicose condition of the limb.)

Treatment.—The treatment of this ulcer, like its symptoms, is the very opposite of that of the irritable ulcer. Let your measures be of the most stimulating kind. The first indication, is to change the character of the sore from sluggishness to healthful activity—to excite the natural restorative action of the vessels.

If the parts around the ulcer be very hard, it may be well to scarify, and apply a strong stimulating liniment. Hot fomentations will aid you very much in this softening process. This, with perhaps a re-application of your caustic once or twice a day, will generally effect

such a change, that, in the course of a few days, the sore will assume a healthy aspect and begin to heal. Compresses and bandages should be applied; the compresses should be wet with the tincture of gum myrrh, or tincture iodine, twice a day, and if persevered in, this of itself generally will effect a cure.

If you carry your stimulating treatment so far as to change your sore into an irritable instead of a healthy ulcer, the usual emollient treatment will soon bring it down to the healthy standard. All that is then required, is some simple dressing; the common black salve answers every purpose; make as follows:—

℞.	Olive oil,	3 qts.
	Rosin,	
	Beeswax,	aa. ℥iii.

Melt the articles together, and raise the heat as high as possible, without burning, then gradually add 2½ pounds of red lead, finely pulverized; stir it briskly, until the whole mass assumes a shining dark brown or black color. Then remove it from the fire, and continue to stir until it is nearly cold. When about blood warm, add pulverized camphor and oil of sassafras each one ounce.

Dr. Beach says he has used the following ointment with success:—Take sweet clover tops and stalks, burdock leaves, and parsley, a handful of each; boil in water until you get the strength; strain, and add one pound of rosin and a quarter of a pound of fresh butter; simmer until of a proper consistence.

When the discharge is very offensive, you can correct it by applying pyroligneous acid for a day or two. The

oil of amber exerts a good influence in bringing indolent ulcers to a healthy condition.

These cases, however, after assuming a promising appearance, are very liable to relapse. The tinctures of myrrh, iodine, or bloodroot, will generally suffice for their restoration. If the milder caustic is not sufficient to keep down the fungous growth, resort to the stronger. After cauterizing, it will be better for a day or two, to use only emollients. A poultice of the indigo weed may be mentioned as suitable.

If the hardening should assume a scirrhous character, a favorable effect may be obtained from the stramonium ointment, (Jamestown weed,) or an extract of poke root. The oil of hemlock has been highly recommended, either alone or combined with the tincture of sanguinaria, (blood root.) To make it still stronger, you may add cayenne pepper. These articles make a fine lotion, where there is a gangrenous tendency.

For some time past, I have been in the habit, after cleansing indolent ulcers with the vegetable caustic, or other alkaline preparations, of putting over them the irritating plaster, (which see.) By this means you can keep up a free purulent discharge for several weeks, occasionally repeating the alkaline wash. I then dress with black salve, applying slight compression. This simple course effects a perfect cure, without any other means excepting the appropriate constitutional treatment.

The constitutional treatment, however, is scarcely less important, than in the case of irritable ulcers. The alkaline bath should be used once, if not twice every day. Administer also the alterative syrup before alluded to, with any other medicine the peculiarities of

the patient may indicate, among which will generally be an occasional active cathartic.

Varicose Ulcers are so named because they are always connected with a swollen or varicose condition of the neighboring veins. In other respects they may present the characteristics of either of the other two contrasted classes. May be either indolent or irritable. They are, however, almost always extremely tender to the touch, and often very painful when the part is exercised. The pain, indeed, is occasionally excessive, and the nervous system may become involved, even to the extent of delirium.

Varicose ulcers seldom occur any where but on the lower extremities, and then only below the knee. Nearly all the small veins adjacent to the ulcer are involved. The reddish brown color of the sore extends to some distance around. The ulcer itself may be superficial or deep and burning.

If a varicose ulcer presents the characteristics of the irritable, the first measure of treatment is to allay the irritability, by some of the means before directed. If, as is more common, it belongs to the indolent class, you will of course make use of the proper stimulants. I have found the application of moderately warm vapor, for a considerable length of time, a specific in many cases of the irritable character. In some constitutions a stream of warm water answers the same purpose.

The only peculiarity of treatment is that called for by the engorged and enfeebled state of the veins.

Among the means for correcting this condition, is a strong decoction of oak bark or marsh rosemary, or a strong solution of alum or tincture of galls, kino or cate-

chu; together with stimulants, such as capsicum, myrrh, prickly ash or southern prickly ash, (tooth-ache tree.)

In addition to your stimulants and astringents, apply strong compression by means of a roller, beginning, of course, at the extremity of the limb, and carrying it above the sore, or any veins visibly enlarged, and making the pressure bear equally on every part, or if there is any difference, be sure that it is not greater above than below.

These measures generally succeed; if they do not, scarify the parts, continue to use your roller and astringents.

Sometimes the principal veins around the ulcer have to be taken up. In passing your needle under the vessel, be careful not to wound it. When it is through, coil a wax thread over it in form of a figure 8, so as to stop the circulation. Sometimes two or three darns are necessary at a little distance apart. Keep up the pressure on the vein, till the necessary degree of inflammatory action for adhesion is brought about. Watch it scrupulously, however, lest you make a new ulcer, as troublesome as that which you are trying to cure. Remove your needles as soon as you perceive the least sign of ulceration.

This obliteration of the veins by ligature is much recommended, among other authorities, by M. Phillips, surgeon to the Marylebone Infirmary, London. It is, however, a very painful and troublesome process, and few patients will submit to it. I therefore prefer another mode of effecting the object. Cauterize each vein, (with potassa fusa,) from one to two inches from the ulcer. In the cicatrix, which is formed, the vein is effectually

obliterated. You need be under no apprehension of healing the caustic ulcer, (as you must be in that of the ligature,) such a stimulous is given to the part that it will only require a simple emollient dressing, which should be applied as soon as the parts disorganized by the caustic have sloughed off. Any irritation excited in the surrounding parts must be reduced before we can re-apply the *roller* as firmly as before.

The constitutional treatment should be more or less of what I directed when speaking of indolent or irritable ulcers.

Old Sore Legs.—Chronic Ulcers.—Fever or Brandy Sores.—This is a subject of much importance in our State, and although Prof. Hill has used the truly descriptive and not very classical name of "old sore legs," yet withal, it is a character of ulcer which is common and quite prevalent. We could hardly do better than to quote him entirely; and where I shall make additions or suggestions in the treatment, it will be found in parenthesis.

That *Old Sore Legs* is of more importance than any of the others must be evident, if for no other reason than this, that it includes all the others, the same limb often producing specimens of the indolent, the irritable, the varicose ulcer, and perhaps, too, at the same time, one or two in a tolerably healthy condition.

Although the patient is apparently well, and will tell you that his general health is perfect, he is often more or less lamed, (the ulcers being deep,) and suffers much, particularly at night. The chief suffering is from the heated state of the parts, which is so great that cold water affords no sensible relief, and you will often find that even in the coldest nights, he lies with the limb

entirely uncovered. But grown accustomed to the evil, and faithless as to any remedy, the sufferer makes no complaints, and calls for no aid.

What I wish to call your attention to more particularly, aside from the character of the ulcers themselves, is the condition of the limb. This is hardened as well as swollen; and frequently from the ankle to the knee, is as dark as a negro's leg. Where the cuticle scales off, as often happens, it leaves a shining, bluish or livid surface, which becomes white on pressure with the finger.

In actual treatment, the condition of the ulcers must be first considered, though they are in reality of trifling importance compared with the condition of the limb, which latter requires treatment just as much, whether at the time there happen to be open sores on it or not.

If the ulcers are of the indolent character, with thick tough pus adhering to the bottom, hard callous edges turned outward, &c.; your first care must be to cleanse them thoroughly. (In general, there is a free discharge of a tenacious matter from the sore, differing essentially from the healthy pus. This kind of ulcer is in almost every instance, seated in the leg, and the nearer it is to the ankle, the more difficult it is to cure.) Your best means for this purpose, is the mild powdered caustic, filling or completely covering the ulcer with it, and then putting on a slippery elm poultice. This dressing should be renewed as often as every ten or twelve hours. (Bayberry and elm make a good poultice, every one who has had much experience with ulcers of long standing, must have noticed the necessity of occasionally changing the local treatment. An application that is beneficial at one time, may prove perfectly useless at

another. The bark of the root of the wild indigo, mashed to a pulp, and thoroughly combined with slippery elm so as to form a soft poultice, is a most valuable application in indolent ulcers upon the leg. Prepared chalk and linseed oil, rubbed together to the consistence of putty, and applied to old ulcers, is recommended.) In the course of thirty-six or forty-eight hours, the pus will easily wash off, and the sore present a florid and comparitively healthy appearance; and the edges especially, be much softened. If, on the other hand, there should be any irritable ulcers, emollients must be resorted to. The whole limb must be subjected to the vapor of bitter herbs and water. The best way is to place it over a vessel, into which the ingredients are put with boiling water and vinegar, steam being kept up by hot bricks, covering the whole with a blanket to prevent the escape of the vapor. Repeat it at least once every other day; meantime, bathe the affected limb with some stimulating wash, one composed, for instance, of the spirits of turpentine, one ounce, and tinctures of cayenne pepper and camphor, each two ounces, sheathing the ulcer from its effects, for a while, by a simple cerate spread on linen. This liniment should be applied to the leg immediately after steaming it.

When these points are attended to, proceed with your most important measure—the *bandage*. (In cases of old sores, and in all cases where an ulcer is spongy or contains proud flesh, it is important to apply regular pressure, with a view to support the capillary vessels of the part.) Your bandage should be almost two inches and a half wide. Begin with it at the extremity of the great toe, so as to compress it equally all around. At

the next turn, include the second tie, and so on with the others one at a time; then go on firmly and smoothly, all over the foot, first placing compresses in the hollows around the ankle, so as to have equal pressure at every point. Continue to the knee, or should the state of the limb require it, include even the thigh also; one of the principal objects being, you should bear in mind to aid the returning circulation. Let each layer of your roller over-lap the preceding for at least two-thirds of its width. Where the limb is tapering, (as just above the ankle,) it will not lie smooth unless you fold it over itself, and slighly change its direction at almost every turn. When you have reached the knee, or as high as you wish to go, bring it in the same manner, down to the foot again, taking care to use no more force than before, lest you should drive the blood downward.

I have been thus particular about the application of the bandage, because if you omit it your other means will probably be of no avail, and if you apply it badly you may do positive mischief. Any part left constantly uncompressed by unskilful bandaging will soon become sore, and probably break out in an ill-conditioned ulcer.

(It is a curious illustration of the slow progress of improvement, that a surgeon of one of the London hospitals or infirmaries has recently published a work, in which he advocates this measure as something novel. Dr. Morrow taught it as far back as 1830, and Prof. Dudly, of Lexington, is well known to have made a hobby of it for a much longer period, the philosophy of the bandage occupying quite a prominent place in his course of surgical instruction, to the exclusion, I am told, of nearly ali other local means.)

Take off and reapply the bandage every night and morning, wetting it thoroughly in cold water each time after putting on, and as often as it may get dry. Or the wet roller may be covered again by dry ones or one of oiled cloth, to prevent evaporation, this may be more necessary at night, the patient's own sense, probably, keeping him attentive to it during the day. If the bandaged limb is dipped in water, take care that it be not kept in so long, or that the water (however applied) be not so cold as to occasion any sensations of chilliness.

But a short time will have elapsed under this treatment, continued from day to day, before the ulcers will have healed; but the cure will still be very far from complete so long as there is any hardness or discoloration in the limb. For this reason the same applications should be continued.

If the cure prove tedious, change your lotions for others not less stimulating, to which should be added some strong vegetable astringent. The system, or any part of the system may get accustomed to a particular article, yet retain its susceptibility to others of the same general character. Besides this alternation of washes, I have often treated the obstinate limb with as strong a solution of the caustic (the sesqui-carbonate of potash) as could be borne without taking off the skin, or a very strong solution of the bi-carbonate, (saleratus.) I regard these alkaline lotions as among the most powerful discutients in the materia medica for all kind of indolent swellings, They may be advantageously alternated with a strong decoction of *white oak bark*.

After the ulcers have healed, the swelling gone down, and the whole limb has assumed nearly its natural shape and color, there may still remain some hardened *tumors*

resembling cartilaginous tubercles, generally about the ankle. These should be *scarified*, so as completely to disorganize them; and the compression and stimulants continued. If this is not sufficient, a caustic *issue* must be made over and *into* each, destroying every portion of the callus. When the cauterized parts have sloughed off, the issue will close up and "leave not a trace behind."

Sinuses also may resist your ordinary treatment. *Inject* them with a very strong solution of the mild caustic, and push in *tents* charged with the same in substance. If they connect with each other, bring them together by the ligature or the knife. If they are near the surface, cut them open, or cauterize down into them.

Among all your applications, be sure, in treating this form of disease, never to apply any *oily* or greasy substance. Such things often cause the ulcers to spread and inflame very rapidly. Most old patients have learned this by experience.

The importance of *long continued treatment* is one point more that I wish you to bear in mind, especially that of *compression*, with *stimulating astringent* washes, (as extract of white-oak bark and tincture of capsicum, equal parts.) These should be persevered with for several months after all visible traces of the disease have disappeared. The limb, you should remember, has been in a preternatural condition for a long time, all the smaller vessels at least enlarged, the fasciæ and cellular tissue engorged with fluids, and the muscles themselves distended and put upon the stretch. By your treatment you have caused absorption of these extra fluids, and have necessarily left the parts in a very relaxed state, which can best be corrected by astringents and compression. In many cases you must not allow the patient to

leave off the bandage under twelve months, after having for some time used it less tightly. And after leaving off the astringent applications, cold bathing should be long practised. Even when proper constitutional treatment has been used, relapses have occurred from neglecting this attention to the peculiar change brought about in the limb. The patient, when apparently cured, can with difficulty be brought to believe so much "trouble" necessary. But it is your duty to make him understand the reason for his doing as you desire.

I advise constitutional treatment, but cannot adopt the course pursued in the wards of the Philadelphia Hospital. Dr. Gibson says, "I have succeeded in numerous instances, by the use of blue pills, and other preparations of mercury, after most other means had been tried for months ineffectually, and where the patient's constitution has been prostrated by intemperance, I give him wine, brandy, opium," &c. This is the constitutional treatment, almost verbatim, of one of the first Professors of Philadelphia, the seat of medical science. Most other means, the blue pill and other preparations of mercury, with wine, brandy and opium —in this age of improvement in the medical profession, does such teaching require comment? If such a guide is blindly followed, the consequences will be fatal. It is in many instances, that these partial and superficial views, taken by surgeons and physicians in general, and inconsiderately presented in practical works, that occasion such frequent failures, and even fatal errors. In the cases in question, the general surface is, and has been for a series of years, in a diseased condition, and the system at large is as plainly out of order. Yet opium and mercury are to be prescribed—the former

being certain in the end, to lessen the healthy action of the skin and other excreting surfaces; and the latter having a direct tendency, when used as recommended, to derange the liver and stomach, and produce, through its constitutional influence, precisely the same sort of local difficulties we are here contending against. What ulcers are so ill-conditioned and intractable as mercurial ones?

Not in a single instance do I find any application recommended for the general surface—that most important and most neglected of the health-preserving and health-restoring organs—not even soap and water does he recommend. I adopt Prof. Hill's constitutional treatment—quite different from the Professor alluded to.

First and foremost, then, I enjoin upon you to direct special attention to the general surface. Make your patient take the alkaline hand bath, (page 40,) night and morning, using brisk friction with the bare hand and harsh towel.

At the end of twenty-four or twenty-eight hours, after the first application of the roller, the patient will usually experience pain, fullness or some disagreeable sensation in the head, with cough, nausea, or perhaps some aching in the limbs. The practitioner should be on the look-out for these occurrences. They are, of course, attributable to the absorption of the large amount of unhealthy fluids so long retained in the limb,—which, under the unwonted mechanical stimulus of the bandage, we often find to diminish one-third of its size, sometimes even one-half, in the course of the first day. All this matter, which has so suddenly disappeared, must have entered the general circulation, and produced the disturbance of the vital functions, evidenced by the disagreeable symp-

toms just mentioned. So soon as they are noticed, therefore, or in anticipation of them, the patient should take a large hydragogue cathartic, composed of comp. powder or syrup of senna, and cream of tartar, or something similar, sufficient to operate freely from five to ten times. Not the least harm need be apprehended from this purging. On the contrary, it will give immediate relief. It should be repeated, though not to the same extent, as often as *once a week*, for three or four weeks, or more frequently, if any of the above symptoms re-appear. By this means, not unfrequently, serous fluid to the amount of from five to ten pounds, is thrown out in the course of ten or twelve hours, carrying with it, no doubt, a large amount of diseased matter; while at the same time such a drain from the circulation greatly increases the activity of the absorbents, thus aiding your local treatment. The patient must also be put under an alterative course, consisting especially of such articles as have a direct tendency to increase the *urinary secretion*. For this purpose, I usually prescribe a syrup or strong infusion, composed of equal parts of the root of the leonurus cardiaca, (motherwort,) scrofularia Marylandica, (figwort,) and aralia hispida, (dwarf elder,) to be taken in small quantities, at least three or four times a day; or, instead of this, you can give the alterative syrup, as follows:—

℞.		
	Sarsaparilla,	¾ lb.
	Liquorice root,	1½ lbs.
	Burdock,	1½ lbs.
	Sassafras,	¾ lb.
	Guaiac,	1½ lbs.
	Elecampane,	℥vi.
	Rose leaves,	℥vi.

Make a gallon and a half of syrup. This should be given in combination with some active diuretics.

If the patient has been much debilitated by intemperance or former medication, instead of the foregoing, we first prescribe for a while tonic bitters, such as spikenard, solomon seal, gentian, black cherry and peach root, of each one ounce; add boiling water two quarts; simmer slowly down to one, strain, and add two ounces of loaf sugar and two quarts of wine. Dose, wineglassful three times a day. Or, a syrup of prinos verticellatus, (black alder,) and leonurus cardiaca, (motherwort,) equal parts; to be taken three times a day, half an hour before each meal. I also require the patient to take a draught of cold water the first thing after rising in the morning—at least a common tumblerful. This, besides its tonic effect, will generally obviate all costiveness; if it should not, he should take small doses of podophyllin and leptandrin, half grain of the former to two grains of the latter, repeated every three or four hours; or, rhubarb and cream of tartar will answer all the purposes.

If your patient be of the scrofulous diathesis, give him the scrofulous syrup, as recommended in scrofula. If he is laboring under the mercurial taint, the same may be used with advantage, but he should then alternate the alkaline with the acid bath. Common cider vinegar answers this purpose best. He should also be encouraged to use acids freely with his food, so long as they produce no derangement of the stomach.

The diet should be plain, but palatable and nourishing; meat should not be prohibited. I have frequently found that patients restricted to a vegetable regimen sank into an irritable state, which resisted treatment; whereas,

on changing their diet, and allowing them more animal food, they were easily cured. All fermented and other alcoholic beverages, however, *should be positively forbidden;* for, under no treatment, have you reason to expect a cure while your patient's blood continues to be poisoned."

Some persons teach the absurd doctrine that all sores should not be healed; this is a humbug. Restore the general health, giving due attention to all the functions, particularly the excretory, and there will be no danger whatever. You do this, and nature will be able to preserve the general system without the sacrifice of any particular part.

Mortification.—I should have noticed this before. My friend Dr. Rogers, of Chappel Hill, assures me that when a part is threatened with gangrene, or mortification, the yeast, sassafras, or charcoal poultice, is a valuable application, and should be kept wet with cold sassafras tea or whiskey. If the parts be excessively hot and inflamed, the poultice may be kept wet with the tincture of lobelia or with wild indigo root tea.

SCALDS AND BURNS.

Scalds and Burns.—We mean by this all injuries caused by the application of heat. "Greater injury may be done by oils and some other fluids, as they can be heated above 212.°

"Scalding is likely to be more superficial, and is chiefly dangerous from the extent of surface affected.

"Burns, (including scalds) or the local effects of great heat, are divided into several kinds or degrees.

The first degree of burning is where there is only a slight irritation produced, with redness of the surface

and the stinging and peculiar pain, but without vesication. The inflammation, if any is excited, terminates in spontaneous resolution.

In the second degree there is more redness of the surface, in the first instance, and this is succeeded by diffused vesication. In this variety, if you will not puncture the distended cuticle until matter be formed beneath, the pain will be but slight, and the cure easily made.

The third degree is when the heat is so intense as, if not directly to disorganize the surface, to so far lessen its vitality as to render destructive inflammation inevitable. But if the burn be large, much constitutional irritation will generally attend it. The discharge, also, will often be excessive, and accompanied with an offensive smell. All these symptoms will be worse if there is much constitutional derangement.

The last degree is the true burning up of the part; vitality being at once destroyed and disorganization effected. The patient, in this case, experiences no pain for a time, at least none after the first touch. If there is sufficient power in the system to react, sloughing takes place, the eschar is thrown off, and a deep ulcer is formed. Not unfrequently abscesses will form there, with sinuses. The adjacent bones or joints soon become affected. The inflammation excited is sometimes immediately followed by extensive mortification.

If the patient does not die before reaction comes on, the constitutional irritation produces hectic, and he soon sinks from exhaustion.

The danger depends much upon the constitutional vigor of the patient and upon the locality of the burn, as well as upon its extent. Children are not so likely to recover from the effects of a scald as adults, owing to

the greater susceptibility of their nervous systems. Very small children are apt to be thrown into spasms, when the effect upon the brain proves speedily fatal. Very old persons suffer much less than any others; but erysipelas sometimes follows, which is very difficult to control. Erysipelatous *inflammation* is particularly to be apprehended, when the head is the part affected. When it is the abdomen, the inflammation is liable to extend to the vital organs beneath. A burn or scald on either of these locations is always to be regarded as dangerous, and proportionally more dangerous as the patient is younger. A slight injury of this kind upon the scalp is to be looked upon with suspicion; and you should take care to heal as soon as possible when upon the abdomen. Burns upon the genital organs are very hard to cure, and give rise to strong constitutional symptoms, in consequence of their peculiar susceptibility and great sympathy with all the vital functions. Upon the course of the tendons, these wounds tend more than any other to produce contraction, and where nerves are also involved in the eschar, or contraction, there will be danger for a long time after, of tetanus, or neuralgia. Violent constitutional symptoms follow an extensive burn, let it be in what part it may. There will at first be rigors, disturbed and oppressed respiration, and general depression, with a pulse for a time low and feeble; but, if there is sufficient vigor in the system for reaction, the subsequent inflammatory fever is often very violent.

Scalds, unless when caused by hotter liquids than boiling water, or unless the part should remain in the hot water long enough to be itself boiled or cooked, belong to the second degree, in which nothing worse than vesication is the necessary result. Generally, there-

fore, their only danger is from the extent of surface involved."

Treatment.—To treat scalds and burns successfully, your first object must be to apply such remedies as will effectually exclude the burnt parts from the action of the atmosphere. For slight affections of this character, especially if the skin be not destroyed, the best application is cold water, or applying linen or muslin cloths on the parts, kept wet with cold water or whiskey and water. This should be applied until the smarting ceases, (always, however, bearing in mind, when you resort to cold water, not to expose the parts so long to its application as to occasion any sensations of chilliness.) The parts, after this application, should be covered with lime water and oil. The following recipe I use, viz.:

℞. Linseed oil, fl.℥iii.
Lime water, fl.℥vi.

Make a linament and apply to the burnt surface. If there is much pain I add two fl. ounces of laudanum to this prescription; or you can make an application of the black salve, and cover the parts with oiled silk.

In many instances, where you have to resort to the best application at hand, I advise common flour to be dusted on the part; a better mode, probably, is to wet the flour with vinegar, and apply the paste to the abraded surface.

When blisters are formed they should be punctured with a needle, and the parts should be covered with a thick layer of carded cotton, kept damp with alcohol and water, and continued until the parts cease to be

painful, after which you should apply the liniment above, or the black salve.

When the outer skin is removed at the time of a burn or scald, the most emollient application is the best, and none will be found superior to pulverized slippery elm, mixed with milk and linseed oil; this should be immediately applied to exclude the atmosphere, (every family should keep it in the house,) and you should avoid removing the dressing until several hours, or even a day or more has elapsed. If the parts are entirely insensible, some stimulant should be added, such as brandy or the tincture of capsicum or of myrrh. In this case *cold* applications must be strictly proscribed, especially if the patient be chilly.

Poultices of scraped potatoes or carrots, mixed in the same manner are good applications, but nothing, in my opinion, is equal to the slippery elm preparation. The poultice will require to be moistened occasionally; and when the parts are suppurating freely a fresh one must be applied daily, until the suppuration is completed, when the black salve should be applied until the wound is healed. When granulations shoot up, forming what is termed fungous flesh, it must be touched with mild escharotics, or finely powdered marsh rosemary, at each time the dressing is removed.

Numerous applications for burns and scalds are in high repute with the profession, and amongst Southern practitioners, *rum* and *Orleans molasses* has been much extolled; I have tried it in some instances, and confess it surpassed my expectations; it can be applied with cotton or slippery elm.

Constitutional symptoms.—Generally occasion great prostration of the powers of life, more particularly

manifested by chilliness, coldness of the surface, extreme prostration of strength, a weak pulse, and sometimes stupor or delirium; under these circumstances, the symptoms "must be watched and met in all cases of serious burning. If the patient be much prostrasted, he may need stimulants, but care should be taken that stimulation be not carried too high or kept up too long; for when reaction comes about, the consequent fever is apt of itself, to need means for restraining its violence. As, however, it is desirable to effect this object without excessive depletory or weakening measures, it is better in the first place, to avoid adding in any degree to the excitement, by stimulation. Diaphoretics will very often be requisite. Among the most valuable, is a strong infusion of the asclepias tuberosa, (pleurisy root,) taken freely. To this may be added the monardo punctata, (horsemint,) or the origanum majorana, (sweet margorum). If there is much nervous irritation, the scutellaria (scullcap) should be added. Active but mild cathartics should be used. They should be repeated vigorously, when the brain becomes affected, as it frequently does, from continued nervous irritation, counterirritants and revulsives must not be forgotten in that event, though still the most important means by far, is the removal of the cause, by allaying the original irritation at its source. An important caution for those who are not accustomed to these cases, is to keep fingers, toes and other contiguous parts, from coming in contact with the abraded surface. Another cause of deformity to be guarded against, is the contraction of muscles and tendons. For this danger, you must study the anatomy of the parts, and resist the tendency with suitable splints or other modes of applying force, flexing or

extending, as the case may require. When this precaution has been neglected, the case is not quite irremediable. The contracted tendons can be divided, when necessary, though I have hitherto found it necessary in any cases that have fallen into my hands for repair, to dissect away the adhesions. Severe burns on the neck are almost necessarily followed by more or less deformity. A severe burn on the elbow or on the inside of the arm at the elbow, would, whilst healing, naturally tend to bend the arm; and if allowed to heal in this position, the patient will be unable to straighten the arm. This deformity can be prevented by applying a splint to the back of the arm, so as to keep the limb straight.

I have attached some remedies that are highly extolled, and no doubt in many instances, will be found useful.

℞. Contused root of wild indigo, ℥ii.
Lard, ℥xi.

Simmer together for an hour, and strain. This has been found beneficial to burns; or,

℞. Yolk of one egg.
Flaxseed oil, ℥ii.

Mix well. As an application to burns, some substitute the white of the eggs for the yolk.

Flaxseed oil liniment is highly extolled:

℞. Flaxseed oil, ℥xii.
Lime water, ℥vii.

Mix. As an application to burns and scalds.

VERMES.

Worms.—There is quite a variety of worms. Some authors contend there are five different species inhabiting the alimentary canal.

1. *Ascaris lumbricoides.*—The large round worm. This species varies in length from three to ten or twelve inches, and about the size of a goose quill; it is supposed by some to have some identity with the common earth worm, from which, however, it is wholly distinct.

2. *Ascaris vermicularis*, or thread worm.—It is the smallest of the intestinal worms, the male not exceeding two lines, and the female being about five lines in length.

3. *Tricocephalus dispar.*—Long thread worm. This somewhat resembles No. 2 in formation, with this difference, that this worm is an inch or two in length, and consists of two distinct portions.

4. *Tænia solium.*—Common tape worm. The tænia varies much in length, generally found from two to twelve feet in length, but sometimes reaching from sixty to one hundred feet. I have in my possession a *piece* that was passed by a patient of mine, thirty-two feet long; they are nearly a half inch in breadth, flat, white, and composed of a series of joints.

5. *Bothriocephalus latus.*—Broad tape worm. This worm is also long and flat, but is broader than the common tape worm; it is distinguished by the shape of the segments, which are broader than they are long.

Symptoms.—Where there are worms in the stomach or bowels, you have paleness of the countenance, with occasional flushes on the cheeks, picking the nose, variable

appetite, sometimes voracious, at other times entirely gone, copious secretion of saliva, and a furred tongue, swellings of the upper lip, bleeding from the nostrils, and a disposition to grind the teeth during sleep, also the belly is swollen, hard, and tympanitic, with transcient pains through the bowels, and starting in the sleep. These symptoms, however, may all exist independently of the presence of worms, and even when there are worms, most of the attending symptoms may arise from a disordered condition of the stomach and bowels. A febrile condition occasionally accompanies worms, with daily exacerbations and remissions, offensive breath, and frequently symptoms of cerebral oppression.

An author who has had much experience, says, as to many of the above disordered conditions, it is often impossible to say whether they bear to the worms the relation of cause or effect, and sometimes whether the connection may not be a mere coincidence. That worms are sometimes the cause, may be inferred from the frequently observed fact, that all the phenomena vanish when they are removed. Again it is well known that disordered digestion and general debility favor the production of worms; and the same causes which give rise to the development of these parasites are quite sufficient to produce various derangements by their direct action, wholly independent of the worms; so that the two may coexist without any necessary connection as cause and effect.

Treatment.—There is some difficulty in ascertaining whether a person has worms or not; but your object should be to expel the worms from the bowels, and afterwards to prevent their reproduction.

Your best mode to expel worms from the bowels is to

combine purgatives with anthelmintics, or you may administer the latter night and morning, for a few days, afterwards ordering the cathartics.

Anthelmintics are medicines which prove disagreeable to the worms, and thereby dispose them to leave the bowels, or so debilitate them as to disable them from maintaining their position, or destroy their life, and thus expose them to the expulsive powers of the intestines, or the digestive powers of the stomach. They may produce these effects, by acting on the susceptibilities of the worm, as medicines and poisons act on the human system, or by mechanically bruising or wounding it. Among those which operate in the former method, may be mentioned *pink-root*, *azedarach*, *the bark of Anclira inermis*, *male fern*, *the bark of pomegranate root*, *kosso*, *walnut-rind*, *common salt*, *camphor*, *various bitters*, and numerous substances characterized by containing a strongly odorous or highly stimulating volatile oil, as *turpentine*, *copaiba*, *savine*, *chenopodium* or *American wormseed*, *semen santonicæ* or *European wormseed*, *tansy*, *rue*, *wormwood*, *garlic*, and *assafœtida*. Several of the volatile oils themselves are still more efficacious, especially the *oil of turpentine* and that of *chenopodium*. Electricity passed through the bowels, in successive and somewhat violent shocks, has been supposed to injure or kill the worms, and favour their expulsion by cathartics. The mechanical anthelmintics are chiefly *cowhage*, which wounds and sometimes destroys the worms by the sharp bristles of its pods, and the *powder of tin* or of *zinc*, which bruises or scratches them by its angular particles. *Metallic mercury*, which has been recommended in worms, undoubtedly operates by its great weight. The *fixed oils* are thought by some to operate

as anthelmintics, by covering the surface of the worm, and thus closing its respiratory pores against the entrance of air.

In the choice of purgatives, attention should be paid to their anthelmintic properties. Thus, *calomel* is a powerful vermifuge, much more so than can be satisfactorily explained by a reference to its mere cathartic power. The probability is, that it proves disagreeable or injurious to the worm by the acrid property of the bile which it causes to be secreted. *Aloes* is also thought to possess vermifuge properties, independently of its purgative action, owing to its intense bitterness; this property being considered by some as extremely offensive to worms. The same may be said of *colocynth*. If there is truth in the supposition before alluded to, of the suffocating action of fixed oils on the worms, which, however, is by no means certain, at least in reference to the operation of these oils when taken into the stomach, *castor oil* and *olive oil* ought to be efficacious anthelmintics. The *oil of turpentine* in very large doses, and the *bark of pomegranate root*, unite purgative and anthelmintic powers. Considered independently of anthelmintic properties, those cathartics are the most powerfully vermifuge, which act with greatest energy on the muscular coat of the bowels. Senna, jalap, scammony, aloes, black hellebore, cevadilla, colocynth, gamboge, croton oil, and elaterium have been used, variously combined, and in various modes of preparation.

1. *Round Worm*, Ascaris Lumbricoides.—The round worm generally inhabits the small intestines, but not unfrequently makes it way upward into the stomach, or downward into the rectum; and sometimes escapes from the alimentary canal by the mouth, or by the anus. It

occasionally enters other passages which communicate with that canal; having been found in the posterior nares, the trachea, the pancreatic and biliary ducts, and the gall-bladder. It is sometimes solitary, but more generally in considerable numbers; and two hundred have been known to pass from one patient in the course of a week. The worm is supposed to feed upon the intestinal mucous, which is usually copious where these parasites exist. It occurs most frequently in children, occasionally in adults, and seldom in old persons. Of all the different worms that infest the bowels, this is usually considered as by far the most common, and certainly is so, with the exception of the Tricocephalus.

The symptoms are those already enumerated as resulting from intestinal worms in general. The most characteristic signs are perhaps a tumid abdomen, irregularity of the bowels, depraved appetite, picking of the nose, and grinding of the teeth in sleep. When these worms exist in the stomach, they occasion peculiar deranged sensations in the epigastrium, with nausea, and frequent retching, and motions on the part of the patient as if he were choking from something in the throat, produced probably by attempts of the worm to enter the œsophagus, or by its actual presence in that tube. When these motions occur in an infant, the round worm may be suspected to exist in the stomach. But the only certain proof that a patient is, or has been laboring under this worm, is the sight of it after it has passed from the bowels, or been discharged from the stomach. It sometimes comes away spontaneously from the anus, and is not unfrequently evacuated with the fæces, thus affording the requisite evidence of its existence.

The general course of treatment for worms already described is applicable to this species. A good remedy at the commencement, and one which will alone, in a great majority of cases, produce an evacuation of the worms, is an infusion of senna and pink-root, with sulphate of magnesia to correct the griping property of the cathartic, manna to cover the taste, and fennel-seed or other aromatic to correct the flavor, and to render the whole more acceptable to the stomach. This infusion may be given in a small dose once or twice a day, so as to produce two or three evacuations in the twenty-four hours, and may be continued daily, twelve every other day for one or two weeks."

A good recipe is the following in red worms or brown worms, viz.:

℞. Sennæ,
Spigelia, aa. ʒss.
Sul. magnesia, ʒii.
Manna, ʒi.
Fæniculi, ʒii.
Aquæ fervent, Oj.

To be macerated for two hours in a covered vessel. Dose.—For a child two years old, about fl.ʒss., for an adult, fl.ʒiii. or iv.

Cowhage, given in molasses or arrow-root, is a good vermifuge. To a child from one to two years old, one fourth of a tea-spoonful twice a day. Every third day it should be followed by a tea of common salt and senna, equal parts; give enough to purge.

Tape Worm.—They are very difficult to remove, adhering, I believe, with great tenacity to the mucous crust by means of suction. The remedies at present

most relied on for their expulsion are oil of turpentine and an Abysininian product called *Kosso*. It has recently acquired much reputation as a remedy for tape worm, and from the numerous reports in its favor, there can be but little doubt of its great efficacy.

"Various other remedies have been recommended. Schmucker employed powdered *cevadilla* in the dose of half a drachm daily, or half the quantity twice a day, interposing an occasional purge. Mare's milk is asserted to have been used with great advantage in Germany. Hufeland associated a decoction of garlic in milk with castor oil and tin filings. Wawruch used salicin in doses of from two to six grains every two hours, with advantage in some cases. Dr. S. Jackson, late of Northumberland, showed the author a portion of tape-worm, (tænia solium,) thirty feet long, which had been discharged by a female patient of his, upon taking a dose of castor oil, after having been, for two months, upon the use of half a fluidounce of olive oil, night and morning, to obviate constipation. Mr. Whittel has found oxide of silver, in the dose of a grain, repeated occasionally, effectual in two cases. Half a pint of an infusion, made with two ounces of pumpkin seeds and a pint of boiling water, taken after fasting for twenty-four hours, and followed in an hour or two by a dose of castor oil, is said to have proved effectual after failure with the most powerful anthelmintics. Sometimes a portion of an unbroken worm passes out through the anus, while the remainder continues within the bowels. Caution is here requisite not to break the worm in attempting to extract it. Brera recommends that it should be tied with a piece of silk. When thus treated, though the worm may draw itself within the bowel, it begins to

descend again not long afterwards. Dr. Cagnola proposed to touch the extruded portion with hydrocyanic acid, in the expectation that this poison would destroy the worm; and the experiment was successfully tried by Dr. Garleke. Caution, however, would be requisite not to incur the risk of injuring the patient. Dr. Frank, of St. Petersburg, succeeded in withdrawing the tænia whole, by passing the part without the bowel through a canula, and introducing this into the rectum, so as to overcome the resistance of the sphincter-ani."

NOTE.—The fear of making our volume too cumbersome has compelled us to omit a few articles prepared for this work. The diseases upon which they treated, (Ovarian Dropsy, &c.,) are so rare in this climate that a description of them would have been almost superfluous.

EXPLANATION OF THE PRINCIPAL ABBREVIATIONS.

℞. Recipe—Take.
M. Misce—Mix.
Sol. Solve—Dissolve.
Ana, or aa—Of each.
Qs. Quantum Sufficiat—As much as will suffice.
Lb. Libra—A pound.
℥. Uncia—An ounce.
ʒ. Drachma—A drachm or dram.
℈. Scrupulum—A Scruple.
Gr. Granum—A grain.
Pulv. Pulvis—A powder.
Tinc. Tinctura—A tincture.
Ext. Extractum—An extract.
O. Octarius—A pint.
f℥. Fluid uncia—A fluid ounce.
fʒ. Fluidrachma—A fluid drachm.
Ss. Semissis—A half. iss. One and a half.
F. M. Fiat Misturae—Make mixture.

INDEX.

Page.

A.

Abdomen, Inflammation of, . 59
" Dropsy of the, . 527
" " Diagnosis of, . 527
" " Pregnancy mistaken for, 529
" " Causes of, 531
" " Treatment of, 532
" " Tapping in, 536
" " Diet for, . 538
Acid Bath, . . . 40
Ague, (see Intermittent Fever,) 82
" Complications of, . 84
" Prevention of, . . 90
Alimentary Canal, . . 58
Alkaline Bath, . . . 40
Alcoholic Bath, . . 39
Alvine Evacuations, . . 66
" " Critical, . 69
Amaurosis, . . . 229
" Causes of, . . 229
" Treatment of, . . 230
Amenorrhœa, (see retention of Menses,) 640
Antacids, . . . 43
Anthelmintics, . . . 43
Antispasmodics, . . 44
Antispasmodic Tincture, . . 445
Anthrax, (see Carbuncles,) . 395
Anasarca, (see Dropsy of Cellular Membrane,) 560
Apthæ, ... 353
" Treatment of, . 353
" Differs from Thrush, . 353
Apoplexy, . . . 424
" Symptoms of, . . 424
" Causes of, . . 425
" Treatment of, . . 426
" Diet in, . . 427
" Prophylactic Treatment for, 427
Armstrong Dr., on Fever, . 122
" " Scald Head, 403
Arnold Dr., on Spleen, 249
Astringents, . . . 45
Asthma, . . . 278
" Symptoms of, . . 278
" Treatment of, . 279
Ascites, (see Dropsy of Abdomen,) 526
Attitude, . . . 64
Auscultation, . . . 69

Page.

B.

Bath, Acid, . . . 40
" Alcoholic, . . 39
" Alkaline, . . . 40
" Vapor, . . . 38
Bartlett, Dr., on Typhoid and Typhus Fevers, 119, 122
Barbour, Dr., on Congestive Fever, 128, 134
Balby, Dr., on Yellow Fever, . 156
Baldwin, Dr. R., on Scarlatina, 183
" " " Dysentery, . 315
Bird, Dr., on Cholera, . 326
Bladder, Diseases of the, . 367
" Inflammation of, . 370
" " Causes of, . 371
" " Treatment of, 372
" " Chronic, . 373
" " " Treatment of, 373
" Bleeding from, . 495
Bleeding at the Nose, . . 475
" " Cause of, 476
" " Treatment of, 477
" " Mechanical Agency for, 478
" from the Lungs, . 481
" " Causes of, 484
" " Symptoms of, 481
" " Treatment of, 484
" " Diet for, 490
" from the Stomach, . 491
" " Symptoms of, 491
" " Causes of, . 492
" " Treatment of, 493
" " Diet for, . 494
" from the Bladder, . 495
" " Diagnosis of, 496
" " Treatment of, 497
Bowels, Inflamed condition of the Membrane of, 60
" Hæmorrhage from, . 515
Bowers, Dr., on Dry Belly Ache, 337
Bono, Dr., on Yellow Fever, . 160
Boling, Dr., on Typhoid and Typhus Fevers, 119
Brain, Inflammation of, (see Phrenitis,) 59, 210
Brandy Sores, . . . 687
Breath, Fetid, . . 67
Bronchitis, Acute, . . 261

	Page.
Bronchitis, Acute, General Symptoms of,	261
" " the pulse in,	261
" " State of General surface in,	261
" " Progress of,	261
" " Treatment of,	263
Brown, Dr., on Deafness,	639
Bryan, Dr. L. A., on Intermittent Fever,	93
" " Scarlatina,	183
" " Erysipelas,	210
Buboes, Treatment of,	602
Buchanan, Dr., on Hæmospasis,	219
C.	
Calomel, (its use and abuse,)	520
Cathartics,	45
Cancrum Oris, (see Canker,)	355
Canker,	355
" Treatment of,	355
Carbuncles,	395
" Treatment of,	397
" Diet for,	399
Cellular Tissue, Diseases of,	526
" Membrane, Dropsy of,	560
" " Symptoms of,	561
" " Causes of,	563
" " Treatment of,	564
" " Diet for,	569
" " Proper drinks in,	570
" " Bathing in,	572
Cephalalgia, (see Headache,)	405
Chambers, Dr., on Rheumatism,	192
Chancre, Varieties of,	595
Chicken Pock, (see Varicella,)	171
Chest, Dropsy of the	550
" " Causes of,	550
" " Symptoms of,	550
" " Treatment of,	552
Cheyne, Dr., on Hydrocephalus,	541
Cholera Morbus,	319
" " Causes of,	319
" " Symptoms of,	320
" " Treatment of,	320
" Asiatic,	321
" " Pathology of,	321
" " Treatment of,	321
" " the cold dash in,	322
" " Sulphur in,	326
" Infantum,	329
" " Symptoms of,	329
" " Treatment of,	330
" " Diet in,	332
Chorea, (see St. Vitus' Dance,)	436
Clap, (see Gonorrhea,)	574
Colic,	332
" Flatulent,	333
" " Treatment of,	333
" Bilious,	333
" " Symptoms of,	334
" " Treatment of,	334
Colic, Painters,	335
" " Symptoms of,	335
" " Treatment of,	335
" Constipated,	337
" Epidemic,	346
" " Cure of with Spasms,	346
Congestive Fever,	128
" " Etiology of,	128
" " Indications of seat of Congestions,	129
" " Symptoms of,	130
" " Type of,	130
" " Treatment of,	130
" " Cold water in,	137
" " Regimen in,	143
" " Cases of, 144 to	148
Consumption,	284
" Symptoms of,	284
" State of surface in,	284
" Treatment of,	284
Constipation,	306
" Cause of,	306
" Treatment of,	306
" Diet for	309
Contagion, 81,	158
Continued Fever,	114
" " Symptoms of,	114
" " Prognosis of,	116
" " Treatment of,	116
" " Local Complications of,	118
Convulsive Diseases,	405
Convulsions,	441
" Symptoms of,	442
" Diagnosis of,	444
" Treatment of,	445
Countenance,	54
" in simple Fever,	54
" Inflammation of Chest,	54
" dull pain in Chest,	54
" Effusion into the Lungs,	54
" Phthiscal,	55
" Chronic disease of the Bowels,	55
" Organic affections of the Heart,	55
" Soporose affections,	55
" Syncope,	55
" Chlorosis,	55
" Alterations in the	64
" Hippocratic,	64
Coughs,	59
" Spasmodic,	59
Cramp,	447
" Varieties of,	448
" Symptoms of,	448
" Duration of,	449
" Causes of,	449
" Diagnosis of,	450
" Prognosis of,	451
" Treatment of,	451
Critical Days,	68

	Page.
Critical Hæmorrhages, .	69
" Sweat, . . .	69
" Alvine Discharges, .	69
Croup, ...	359
" Symptoms of, . .	359
" Varieties of, . .	360
" Duration and cause of,	361
" Treatment of, . .	361
" Liable to recur, .	362
Cuticular Surface, . .	59
Cynanche Tonsillaris, (see Quinsy,)	357
" Trachealis, (see Croup,)	359
" Parotidæ, (see Mumps,)	362
Cystitis, (see Inflammation of the Bladder,)	370

D.

Deafness, . . .	636
" Causes of, . .	636
" Treatment of, .	638
Dengue, ...	184
" Symptoms of, .	184
" Prognosis of, . .	188
" Treatment of, .	189
Dereze, Dr., on Yellow Fever, .	156
Diaphoretics, - . .	46
Diagnosis, General, . .	51
Diabetis, (see immoderate flow of Urine,)	382
Diarrhœa, . . .	315
" Symptoms of, . .	316
" Treatment of, .	316
Dickson, Dr., on use of water in Fever,	137
" " Dengue, .	189
Dimness of Sight, (see Amaurosis,)	229
Diseases not classified, .	663
Diuretics, . . .	47
Douglas, Dr., on Fever, .	121
Dropsy of the Abdomen, . .	527
" " Head, . .	539
" " Chest, . .	550
" " Scrotum, .	555
" " Cellular Membrane,	560
Dry Belly Ache, . .	337
Dundas, Dr. R., on Fever, .	120
Dysentery, . . .	310
" Symptoms of, .	310
" Causes of, . .	311
" Treatment of, .	311
Dysmenorrhœa, . . .	647
" Symptoms of,	647
" Causes of, .	648
" Treatment of,	648
Dyspepsia, . . . 60,	294
" Symptoms of, . .	294
" Causes of, . .	294
" Tobacco a cause of, .	295
" Treatment of, .	300

E.

Ear, Diseases of the, - .	632
Ear, Inflammation of the, .	632
" " Causes of,	634
" " Symptoms of,	634
" " Treatment of,	635
Elliotson, Dr., on Dropsy, .	531
" " Chorea, .	440
" " Phrenitis, .	215
" " Pneumonia,	273
Ellis, Dr., on Scald Head, .	403
Emenagogues, . .	48
Emetics, ...	47
Emollients, . . .	41
Eneuresis, (see incontinence of Urine,)	380
Enteritis, (see inflammation of Intestines,)	302
Epidemics, . . .	157
" How to prevent them in cities,	157
" Winter, . .	250
Epilepsia, (see Fits Epileptic,) .	415
Epispastics, . . .	49
Epistaxis, (see bleeding at the nose,)	475
Erysipelas, . . .	204
" Symptoms of, . .	205
" Treatment of, .	206
" Infantile, . .	209
" " Treatment of,	210
Evacuations, Alvine, . .	66
Ewing, Dr., on Anthrax, .	42
" " Yellow Fever, .	164
" " Erysipelas, .	209
" " Dengue, . .	189
Excretions, . . .	65
Explanation of Terms, . .	712
Eye, Diseases of the . .	220
" Scrofulous inflammation of the	227
" " " Symptoms of,	227

F.

Fever, from Acute inflammation,	56
" Synochus, . . .	60
" in general, . .	76
" Symptomatic, . .	76
" Proximate cause of, .	76
" Remote cause of, . .	76
" Origin of all possible causes of,	79
" Miasmata and Contagion,	81
" Intermittent, . .	82
" Remittent, . .	98
" Continued, . .	114
" Typhus and Typhoid, distinction between,	123
" Congestive, . .	128
" Yellow, . .	154
" Eruptive, . . .	165
" Scarlet, . .	175
" Arthritic, . . .	190
" Sores, . . .	687
Fenner, Dr., on Fevers,	119, 120
Fits, Epileptic, . . .	415
" " Symptoms of, .	416

Page.

Fits, Epileptic, Frequency of attacks, 416
" " Causes of, . 417
" " Diagnosis of, . 418
" " Prognosis of, . 418
" " Treatment of, . 419
Flooding, . . . 508
" Treatment of, . . 509
" Mechanical remedies, 513
Fluor Albus, . . . 652
" Causes of, . 652
" Symptoms of, . 653
" Prognosis of, . 654
" Treatment of, . 655
" Macrotin in, . 657
Fundament, Falling of the . 351
" " Cause of, 351
" " Treatment of, 351

G.

Gastritis, Acute, . . . 289
" " Pulse in, . 290
" " Causes of, . 291
" " Regimen in, . 291
" " Treatment of, . 291
" Chronic, (see Dyspepsia,) 293
Gelseminum, Sempervirens, . 151
" " Generic Characters of, 151
" " Specific Characters of, 151
" " Medical Properties of, 151
" " Dr. Hickman on, 153
Gonorrhea, . . . 574
" Supposed origin of, . 574
" Local Symptoms, . 575
" Constitutional Symptoms, 576
" Preventives of, . . 576
" Abortive treatment for, 578
" Treatment for, . . 579
" Second stage of, . 581
" In Women, . . 584
" Recipes for cure of, . 586
Gooch, Dr., on Flooding, . 511
Gout, ... 200
" Symptoms of, . . 201
" Causes of, . . 201
" Treatment of, . . 202

H.

Hæmorrhages, . . . 475
" Critical, . 69
" from the Bowels, . 515
" " Symptoms of, 516
" " Causes of, . 518
" " Treatment of, 519
Hæmoptysis, (see bleeding at the Lungs,) 481
Hæmatemesis, (see bleeding from the Stomach,) 491
Hæmaturia, (see bleeding from the Bladder,) 495

Page.

Hæmorrhoids, (see Piles,) . 348
Hand, ... 65
Hartshorn, Dr., on Cramp, . 453
Heart, Organic disease of, . 61
Head, Dropsy of the . . 539
" " Causes of, 540
" " three stages of, 542
" " Diagnosis of, 543
" " Treatment of, 543
" " Regimen in, 549
Headache, . . . 405
" Symptomatic, . 406
" Idiopathic, . . 406
" Treatment of, . 409
" Sick, . . . 410
Hepatitis, . . . 232
" Acute, . . . 232
" " Terminations of, 233
" Chronic, . . . 234
" " Treatment of, 235
" Suppurative stage, . 237
Helford, Dr., on Asthma, . 283
Hester, Dr., on Lead Colic, . 336
" " Cramp, . 453
Herpes, (see Tetter,) . . 391
" Zoster, . . 391
" Phlyctanodes, . . 392
" Præputialis, . . 392
" Cabralis, . . 392
" Cercinatus, . . 392
" Labialis, . . 394
Hickman, Dr., on Gelseminum, 153
Hillary, Dr., on Yellow Fever, . 156
Hill, Dr., on Syphilis, . 600
Holland, Dr., on Kosso, . 44
" " Consumption, 286
Homœopathy, Liebig on, . . 52
Hopkins, Dr., on Scarlatina, . 180
Hydrarthrus, . . . 619
Hydrocephalus, (see Dropsy of the Head,) 539
Hydrothorax, (see Dropsy of Chest,) 550
Hydrocele, (see Dropsy of Scrotum,) 555

I.

Ice in Fever, . . . 164
Inflammations, . . 204
Inflammation of the Brain, 59, 210
" " Abdomen, . 59
Intermittent Fever, . . 82
" " Pyrexia, . 83
" " Cold stage of, 83
" " Hot stage of, . 83
" " Sweating stage of, 83
" " Incidental Symptoms, 83
" " Periodical recurrence, 84
" " Body only partially affected, 84
" " Affects any period of life, 84

Page.

Intermittent Fever, it is liable to return, 84
" " Complications of Ague, 84
" " Local Inflammation, 85
" " Congestion and Effusion, 85
" " Enlargement of Spleen, 85
" " Diagnosis & Prognosis of, 86
" " Treatment of, . 86
" " " cold stage, 86
" " Bleeding in cold stage, 86
" " Treatment in hot stage, 87
" " " sweating stage, 88
" " Prevention of Ague, 90
Intestines, Diseases of, . 302
" Inflammation of, . 302
" " Diagnosis of, 303
" " Treatment of, 303
Irion, Dr., on Erysipelas, . 210
Ischuria Dysuria, (see Suppression of Urine,) 375
Itch, ... 394
" Description of, . . 394
" Treatment of, . . 395

J.

Jaundice, . . . 239
" Treatment of, . 239
Jones, Dr., on Fever, . . 113

K.

King & Newton, on Intermittent Fever, 94
" " "firing," 197
King, Dr., on Fever, . . 126
Kidneys, Diseases of, . . 367
" Inflammation of, . 367
" " Symptoms of, 367
" " Pulse in, . 367
" " Treatment of, 368
King's Evil, (see Scrofula,) . 608

L.

Lee, Dr. Robert, on Milk-leg, . 470
Leptandrin, . . . 238
Leucorrhœa, (see Fluor Albus,) . 652
Litchfield, Dr., on Scald Head, 403
Liver, Inflammation of, (see Hepatitis, 232
Lock-jaw, (see Cramp,) . 447
" in Infants, . . 455
" " Causes of, 455
" " Treatment of, 457
Lungs, Bleeding from the . 481

Page.

M.

Macrotin in Fluor Albus, . 657
Maddison, Dr., on Whooping Cough, 433
Mania a Potu, . . 457
" Causes of, . . 457
" Symptoms of, . 457
" Pulse in, . . 457
" Treatment of, . 458
McCraven, Dr., on Synochus Fever, 60
" " Consumption, 286
" " Yellow Fever, 163
" " Dengue, . 184
Measles, ... 171
" Contagion and Infection, 171
" Sequelæ of, . . 171
" Varieties of, . . 172
" Prognosis of, . . 172
" Treatment of, . 173
Medicines—their uses, . . 42
Medical Correspondence, . 5
Melson, Mr., on Lead Colic, . 336
Melæna, (see Hæmorrhage from the Bowels,) 575
Menorrhagia, (immoderate flow of Menses,) 501
Menses, Immoderate flow of, . 501
" " Causes of, 502
" " Symptoms of, 503
" " Treatment of, 504
" Retention of, . . 640
" " Causes of, 640
" " Treatment of, 641
" Suppression of, . 645
" " Remote cause of, 645
" " Symptoms of, 646
" " Treatment of, . 646
Menstruation Difficult, (see Dysmenorrhœa,) 647
Mercury, (its use and abuse,) . 520
Miasmata, . . . 81
Minnock, Dr., use of water in Fever, 137
" " on Erysipelas, . 210
Milk-leg, . . . 469
" Causes of, . . 469
" Symptoms of, . 471
" Treatment of, . . 472
Mortification, . . . 697
" Treatment of, . 697
Mouth, Diseases of the, . 352
Mumps, ... 364
" Treatment of, . 365

N.

Narcotics, . . . 50
Nephritis, (see Inflammation of the Kidneys,) 367
Nervous System, Morbid state of, 57
Nettle Rash, . . . 404
" " Treatment of, . 405
Neuralgia, . . . 411
" Symptoms of, . 411

Page.

Neuralgia, Causes of, . . 412
" Treatment of, . 412
Newton, Prof. R. S., on Cholera, 328
" " " Deafness, 639
" Dr., on Ulcers, . . 675
Nigan, Dr., on Scald Head, . 402
Nose, Bleeding at the, . . 475

O.

Old Sore legs, . . 687
" Treatment of, . 688
" Bandage in, . 689
Ophthalmia, . . . 220
" Simple Conjunctivitis, 221
" Treatment of, . . 222
" Chronic, . . 225
" " Treatment of, 225
" Catarrhal & Purulent, 226
" " Treatment of, 227
" Scrofulous, . 228
" Gonorrheal, . . 229
Organs of reproduction, Diseases of, 640
O'Shaughnessy, Dr., on Cholera, 327
Otitis, (see inflammation of the Ear,) 632

P.

Pain, ... 58
" Inflammatory, . . 58
" Spasmodic, . . . 58
" Neuralgic, . . 58
" Facts in regard to, . . 61
Palsy, . . . 460
" Varieties of, . . 461
" Symptoms of, . . 461
" Diagnosis of, . . 463
" Paraplegia, . . 464
" Treatment for, . . 464
" The douche in, . 467
" Diet for, . . . 469
Paracentesis, . . . 536, 554
Paracusis, (see Deafness,) . 636
Paralysis, (see Palsy,) . . 460
Parker, Dr., on Pneumonia, . 276
" " Dengue, . . 189
Parkes, Dr., on Cholera, . 321
Patent Medicines, recommended by ministers, 149
Perspiration, . . . 66
Percussion, . . . 69
Pertussis, (see Whooping Cough,) 429
Phlegmasiæ Dolens, (see Milk-leg,) 469
Phrenitis, . . . 210
" Diagnosis of, . 211
" Causes of, . . 215
" Prognosis of, . 216
" Treatment of, . . 216
Phthisis Pulmonalis, (see Consumption,) 284
Piles, ... 348
" Cause of, . . . 348
" Treatment of, . . 348
Pleuritis, Acute, . . . 254

Page.

Pleuritis, Acute, General Symptoms of, 254
" " Treatment of, 256
Pneumonia, . . . 266
" Character of Sputa, 267
" First Stage, . 269
" Second " . . 269
" Third " . 269
" Fourth " . . 269
" Prognosis of, . 269
" Causes of, . . 270
" Treatment of, . 271
" Ipecacuanha in, . 272
" Quinine in, . 276
" Bleeding in, . 273
" Typhoid, . . 277
" " Treatment of, 278
Position, Phthisical, . . 56
" in Hydrothorax, . 56
" Inflammation & Acute pain, 56
" Spasmodic pains, . 56
Pox, (see Syphilis,) . . 589
Preface, ... 9
" General, . . 27
Pregnancy, (mistaken for Dropsy,) 529
Prioleau, Prof. T., on Dengue, 186
" Dr. P. G., " . 186
Prognosis, General, . . 63
Prolapsus, Ani, (see falling of the Fundament,) 351
" Uteri, (see falling of the Womb,) 660
Pulse, ... 71
" Mode of examining, . 72
" Pathological condition of, . 73
" Frequent, . . 73
" Slow, . . . 73
" Quickness of, . . 73
" Strong, . . . 73
" Feeble, . . . 74
" Very soft, . . . 74
" Full, . . . 74
" Swell, . . . 74
" Depressed, . . 74
" Intermittent, . . 75
" Unequal, . . 75
" Undulating, . . 75
" Morbidly natural, . 75
" Shattered, . . . 75
" Obstructed, . . 75
" Compound, . . 75

Q.

Quinsey, ... 356
" Treatment of, . 357

R.

Rachitis, (see Rickets,) . 626
Respiratory Organs, . . 58
" Wheezing, . 58
Remittent Fever, . . . 98

	Page.
Remittent Fever, Symptoms of,	98
" " Remote cause of,	98
" " Etiology of,	98
" " Dr. Rogers on, 102,	112
" " Hepatic modifications,	102
" " General indications of cure,	102
Rheumatism,	190
" Symptoms of,	190
" Treatment of,	191
" Arnica in,	193
" Chronic,	193
" " Treatment of,	193
" " Cold Bathing in,	196
" " "Firing" in,	197
" " New French recipe for,	200
Rickets,	626
" Symptoms of,	626
" Causes of,	628
" Treatment of,	629
Ringworm,	392
Rolison, Dr. G., on Asthma,	279
Rogers, Dr., on Bronchitis,	265
" " Use of water in Congestive Fever,	138
" " Scarlatina,	182
" " Mortification,	697
Rubeola, (see Measles,)	171
Rush, Dr., on Yellow Fever,	156
" " Dengue,	189

S.

Scabies Psora, (see Itch,)	394
Scalp, Rheumatism of,	407
Scald Head,	400
" " Treatment of,	401
" " Donevan's remedy for,	404
Scalds and Burns,	697
" " Four degrees of,	698
" " Effects in various ages,	699
" " Treatment of,	700
Scarlatina,	175
" Simplex,	178
" Anginosa,	178
" Maligna,	178
" Faucium,	178
Scarlet Fever,	175
" " Symptoms of,	176
" " the Tongue in,	177
" " Causes of,	178
" " Prognosis of,	178
" " Treatment of,	179
" " Throat and Head in,	180
" " Stimuli in,	181
" " Prophylactics in,	181
Scorbutus, (see Scurvy,)	663
Scrofulous Diseases,	608
Scrofula,	608
" Physical formation of Patients,	609
Scrofula, Symptoms of,	612
" Diagnosis of,	613
" Treatment of,	614
" Regimen for,	618
Scrotum, Dropsy of,	555
" " Symptoms of,	556
" " Treatment of,	557
Scurvy,	663
" Causes of,	664
" Treatment of,	665
" Condition of blood in,	667
Sedatives,	50
Sensation, Morbid,	60
Serous Tissue, Diseases of,	526
Silphium perfoliatum,	250
Singultus, (see Hiccough,)	435
Skin, Diseases of,	391
Sleep, Disturbed,	57
Small Pox,	165
" " Premonitory symptoms of,	166
" " Confluent,	167
" " " attendant symptoms of,	167
" " Treatment of,	167
" " New treatment for,	169
" " To prevent pitting,	168
Smith, Dr. A., on Yellow Fever,	122
" " Colic,	337
Southmond, Dr., on Fever,	122
Spleen, Enlargement of, 85,	242
" Diseases of,	241
" Induration and softening of,	243
" Congestion of,	243
" Treatment of,	243
Splenitis, (see Spleen,)	241
Sprains,	671
" Treatment of,	671
Sputa,	59
Stedman, Dr., on Dengue,	185
Stewardson, Dr., on Pneumonia,	273
Stimulants, General,	50
Stomach, Diseases of,	289
" Bleeding from,	491
St. Vitus' Dance,	436
" " Symptoms of,	436
" " Nature of,	437
" " Treatment of,	438
Sweat, Critical,	69
Swine Pock, (see Varicella,)	171
Synochus Fever,	60
Syphilis,	589
" Causes of,	589
" Primary,	591
" Secondary,	592
" Treatment of,	596
" Various Recipes for,	605

T.

Table of Contents,	28
Tænia Solium, (see Worms,)	704
Tapping,	536

Page.

Taylor, Dr., on Scald Head, . 404
Tetanus, (see Cramp,) . . . 447
Tetters, . . . 391
" Treatment of, . . 393
Thompson, Dr., on Asthma, . 282
Thoracic Effusion, . . 56
Throat, Diseases of the . 352
Thrush, ... 352
" Prognosis of, . . 352
" Treatment of, . . 352
Tinea Capitis, (see Scald Head,) 400
Tonics, ... 51
Tongue, white & slightly loaded, 57
" pale and tumid, . . 57
" contracted and pointed, 57
" yellow and bitter, . 57
" florid papillæ, . 57
" white or brown, . . 57
" indicative of disease, 67
Tobacco, a cause of Dyspepsia, . 295
" " " Diabetis, 386
Tricocephalus Dispar, (see Worms,) 704
Trismus Nascentium, (see Lock-jaw in infants,) 455
Tucker, Dr., on Dysentery, . 315
Typhus Fever, . . 123
Typhoid " . . . 123

U.

Ulcers, ... 672
" Healthy, . . 673
" " Treatment of, . 673
" Irritable, . . 674
" " Treatment of, . 674
" " Cases of, . 677
" " Sulphate of Zinc in, 677
" Indolent, . . 681
" " Treatment of, . 682
" Varicose, . . 685
" " Treatment of . 685
" Chronic, . . 687
Urine, . . . 59, 62
" Bilious, . . 59
" Excess of, . . . 69
" Suppression of, . 375
" " Treatment of, 376
" Retention of, . . 377
" " Causes of, 377
" " Treatment of, 378
" Incontinency of, . 380
" " Treatment of, 381
" " Varieties of, 382
" Immoderate flow of, . 382
" " Treatment of, . 383
" " " . . 388
" " Termination of, 385
" " Tobacco conducive to, 386
Urticaria, (see Nettle Rash,) . 404
Uterus, Bleeding from, . . 501
Uterine Hæmorrhage, . 508

Page.

V.

Variola, Confluent, (see Small Pox,) 167
Varicella, . . . 170
Venereal Diseases, . . 574
Verbena Jamaicensis, . 165
Vere, Dr., on Hydrocephalus, . 548
Vomiting, ... 66
" 299
" Causes of, . . 299
" Treatment of, . . 300

W.

Wakefulness, . . . 60
Waller, Dr., on Scarlatina, . 180
Waring, Dr., on Dengue, . 184
Watson, Dr., on Gout, . 202
" " Hydrocephalus, 548
Winter Epidemics, . . 250
White Swelling, . . . 619
" Rheumatic, . 619
" " Treatment of, 620
" Scrofulous or True, 622
" " Symptoms of, 622
" " Treatment of, 625
Whites, (see Fluor Albus,) . 652
Whooping Cough, . . 429
" " Symptoms of, 429
" " Treatment of, . 429
Wilbur, Dr., on Fever, . 126
Womb, Bleeding from, . . 501
" Falling of the . 660
" " Causes of, . 661
" " Treatment of, 662
Worms, ... 704
" Round, . . 704
" Thread, . . . 704
" Long Thread, . 704
" Common Tape, . . 704
" Broad Tape, . . . 704
" Symptoms of, . . 704
" Treatment of, . 705

X.

Xanthoxylon Fraxineum, . 328

Y.

Yandall, Dr. L. P., on Remittent Fever, 100
Yeats, Dr., on Hydrocephalus, . 541
Yellow Fever, . . 154
" " the producing circumstances of, 155
" " Exposure, fatigue and excesses conducive to, 156
" " Treatment of, . 161
" " Ice in, . . 161
" " Newly married persons victims to, 156