

A treatise on typhoid fever, pneumonia, and other diseases, including a large number of clinical cases : also, the treatment of some diseases of animals / by T.M. Sime.

Contributors

Sime, T. M.

Publication/Creation

Cincinnati : Printed by the Western Methodist Book Concern, 1890.

Persistent URL

<https://wellcomecollection.org/works/bm47ug96>

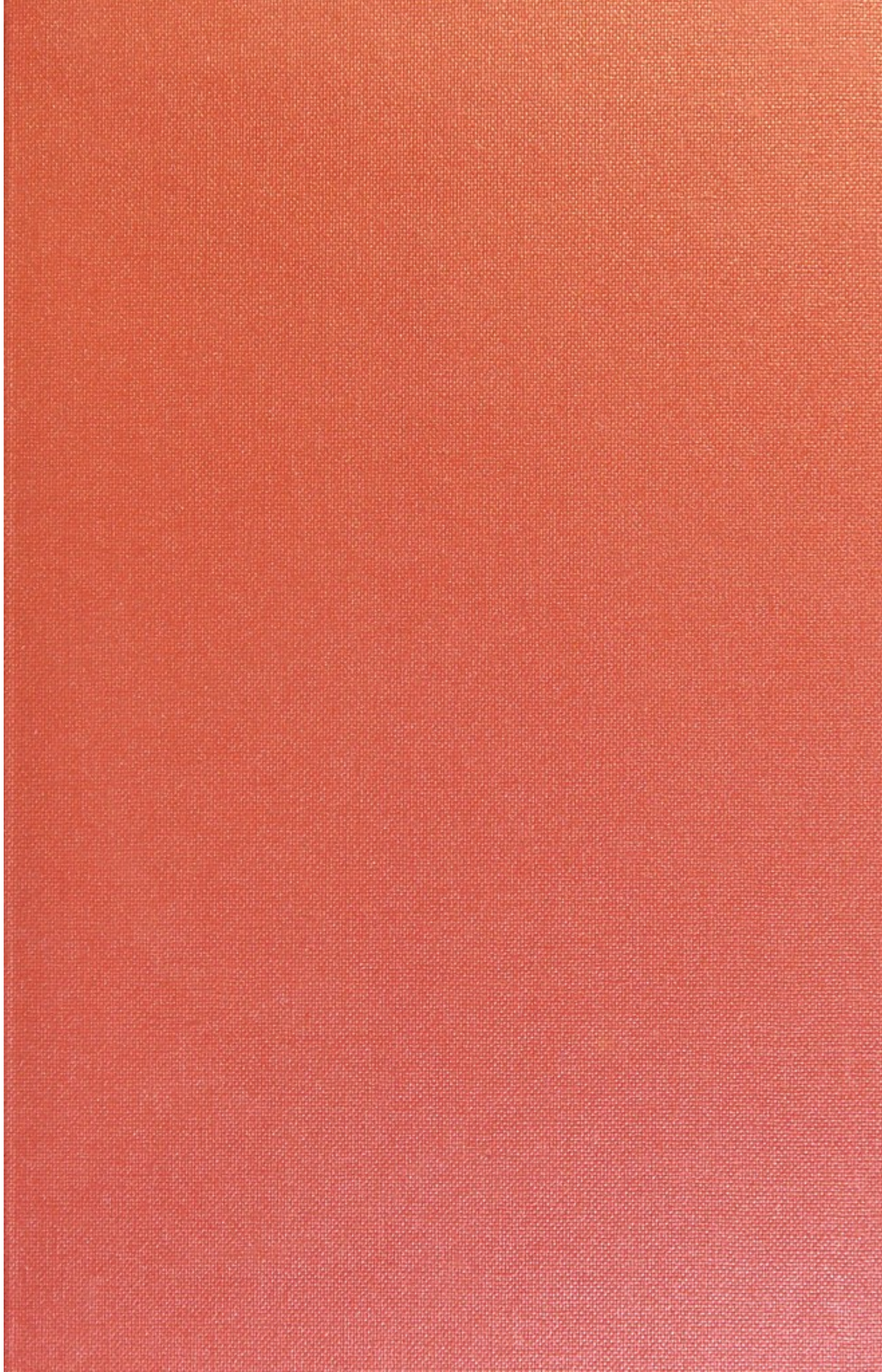
License and attribution

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





Digitized by the Internet Archive
in 2014

<https://archive.org/details/b20410724>



22101942779



A TREATISE
ON
TYPHOID FEVER, PNEUMONIA,
AND OTHER DISEASES,

INCLUDING
A LARGE NUMBER OF CLINICAL CASES.

ALSO,
The Treatment of Some Diseases of Animals.

BY
T. M. SIME, M. D.



PRINTED AND BOUND BY THE
WESTERN METHODIST BOOK CONCERN AT CINCINNATI, O.,
1890,
FOR THE AUTHOR.

22024

LONDON SCHOOL OF HYGIENE
AND
TROPICAL MEDICINE
LIBRARY

Copyright
BY T. M. SIME,
1889.

M17836

W. I. INSTITUTE LIBRARY	
Coll	welTROmec
Call	
No.	WC270
	1890
	S58t

PREFACE.

I HAVE been studying and practicing medicine almost thirty years, and for the last twenty years of my practice have been especially successful in the treatment of typhoid fever and pneumonia; of the former, I have treated in that time fully two hundred cases without losing a single patient, and of the latter disease, I have treated nearly as many cases, and have had but two deaths.

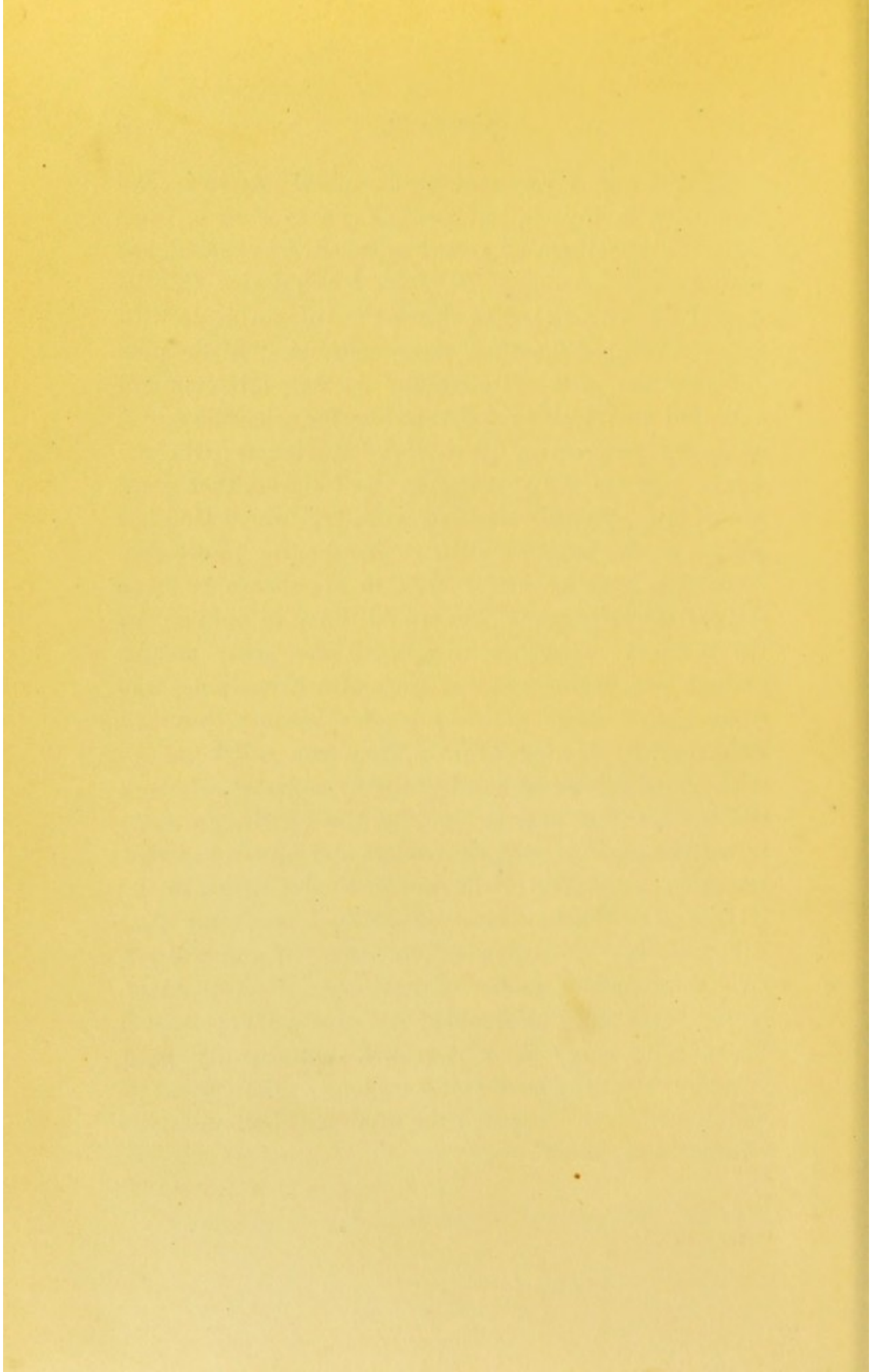
From the above facts, and knowing somewhat of the success of other physicians in the treatment of the same diseases, and prompted by a strong desire to benefit my fellow-men, I have been induced to offer to the public this small volume, hoping that, after a careful perusal, it may find some to give me credit at least for an honest purpose in my efforts to show in detail my treatment to others, and thereby save life and much suffering. I am aware that, perhaps, my book may not be found perfect, and that in some instances it may be severely criticised by men of much greater eminence than the author. But I have this to say in regard to my small work, that I have carefully read very much foreign and domestic literature on the subject of therapeutics in reference to the treatment of typhoid fever and pneumonia; among the former, some of the highest authorities of England, France, and Germany, and even away back to the great Hahnemann, founder or author of our therapeutics; then, on the

same subject, the writings of our great man, Herring, and others of a more recent date; and, from the works of these eminent authors, and my own experience and my almost universal success for the last twenty years, I am very fully convinced of the wisdom of using those therapeutic medicines as set forth in my clinical cases on these two subjects. I have ever felt that to be a doctor of medicine was one of the most important professions that a man can follow in reference to the welfare of others. When a patient intrusts his life in our hands, we should conscientiously exert our best efforts and utmost skill for his or her relief, and that as soon as possible. I feel that, in the treatment of patients, we should not alone be governed by what we have read in regard to the use of remedies, but by our every-day personal experience, which is far better.

My book may not be acceptable to some of my professional associates of our school of medicine; they may say I have attempted to do too much in this work. To these, my friends and fellow-laborers, I would state that I have found it difficult to write on the treatment of typhoid fever and pneumonia, and to construct a book that would pay the agent or the writer. To dispose of such a small book to the trade would, in all probability, have but a limited circulation. Therefore, I have coupled with this my experience in the treatment of some diseases of animals, which I have fancied would meet the necessities of some of the non-professional people, and tend to spread our views on scientific therapeutics.

To the gentlemen of the so-called regular school, my

book will not, I presume, be acceptable, as in it, and especially in my clinical cases, I aim to show or illustrate the advantage of remedies selected in accordance with our law of cure. To these I would say, Gentlemen, I beg of you not to throw the volume aside with those miserably ignorant, slang epithets, "Little pills and solutions of the Mississippi," but as gentlemen and educated men, looking and thirsting for scientific truth, study for yourselves, by careful experiment with the drugs you are daily using on well tissue, that great law of cure, "*similia similibus curantur*," which God has placed as the basis of all true therapeutic knowledge. Then you will be better able to appreciate in some degree my labors, and you would differ in opinion, on the subject of therapeutics, with the great masses around you, beginning away back with Esculapius, who administered many of his remedies because they had been used by his neighbors. Then you will be ready with me to rejoice in reading the synopsis of a lecture delivered, a few months ago, by the gentleman occupying the chair of materia medica and practice at that grand old institution, Bellevue Medical College, in the city of New York, where, in 1865, I spent my first college term. "Gentlemen," he says, "if you will put two and one-half grains of mercury into a quart of spring water of pure quality, and give your patient a tea-spoonful every hour, you will get equally good effects of the drug as if you were to give the patient at once an officinal dose; and the same will be found true of aconite napellus."



CONTENTS.

PART I.

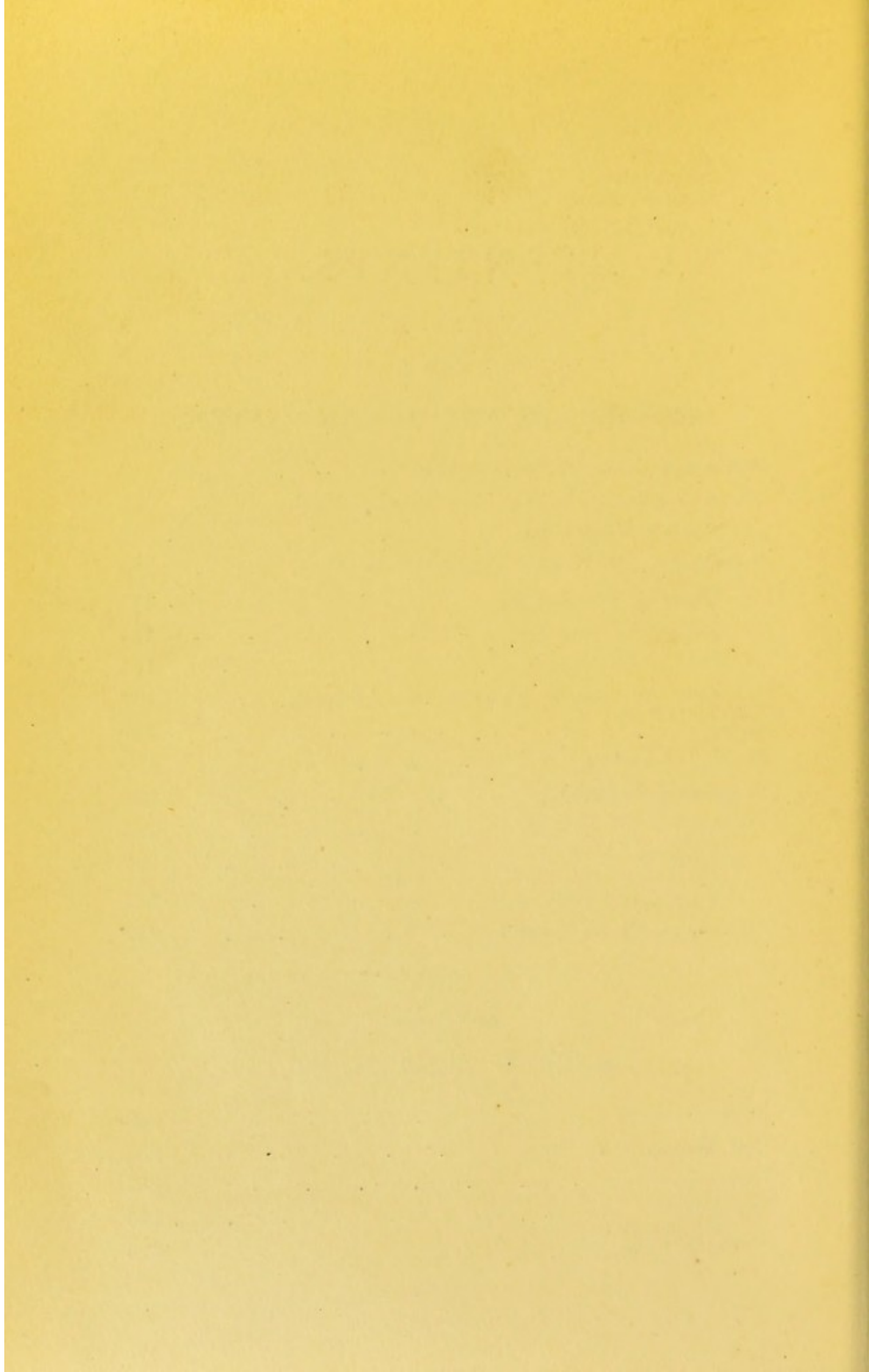
DISEASES OF THE HUMAN SYSTEM.

	PAGE.
MEDICINES USED—ABBREVIATIONS,	9
TYPHOID FEVER: Its Nature, Cause, and Cure,	11
Typhoid Pneumonia,	63
PNEUMONIA: Its Nature, Treatment, and Cure,	98
Catarrhal Pneumonia,	118
Croupous Pneumonia,	124
Lobular Pneumonia,	163
Remedies used for the above-named disease,	167
QUINSY,	180
WHOOPING-COUGH,	192
CEREBRO-MENINGITIS,	203
CROUP,	225
DIPHTHERIA,	229
Diphtheria Croup,	245
INFLUENZA, OR LA GRIPPE,	250

PART II.

ANIMAL TREATMENT.

INTRODUCTORY,	258
THE HORSE,	259
THE COW,	317
THE PIG,	325
PRESCRIPTIONS,	328



MEDICINES USED.

NAME.	ABBREVIATION.
Aconitum Napellus, 2x and 3x,	Acon. Nap.
Arsenicum, 2x and 3x,	Ars.
Apis (Bee poison),	Ap.
Arctium,	Arc.
Aurum Trifolium,	Aur. Tri.
Aurum Muriaticum,	Aur. Mur.
Asafoetida,	Asa.
Antimonium Crudum,	Ant. Crud.
Arnica,	Arn.
Baptisia,	Bapt.
Belladonna,	Bell.
Bryonia,	Bry.
Carbo Vegetabilis,	Car. Veg.
Cactus Grandiflorus,	Cact. G.
Calcaria Carbonate,	Cal. Carb.
Crotalis (Croton Oil),	Crot. Tig.
Colocynthis,	Colo.
Causticum,	Causti.
Cuprum Met.,	Cup. Met.
Chamomilla,	Cham.
Cicuta Virosa,	Cicut. Vir.
Digitaline,	Dig. or Digt'l.
Drosera Rotundifolia,	Dros. Rt.
Gelsemium,	Gels.
Hamamelis Virginiana,	Ham. Virg.
Hepar Sulphuris,	Hep. Sulph.

NAME.	ABBREVIATION.
Kali Muriaticum,	Kali Mur.
Kali Bichromate, 6x to 30x,	Kali Bich.
 Lycopodium,	 Lyc.
Merc. Sol. (Hahn.),	Merc. Sol.
Mercury Cyanide, 30x,	Merc. Cy.
Mercury Iodide,	Merc. Iod.
Nux Vomica, 2x and 3x,	Nux Vom.
Naphthalin,	Naph.
 Phosphorus,	 Phos.
Pulsatilla,	Puls.
Phytolacca Decandra,	Phyt. De.
 Rhus. Toxicodendron,	 Rhus. Tox.
Rhus. Aromatica,	Rhus. Ar.
Rumex Crispus,	Rumex Cris.
 Staphisagria,	 Staph.
Sulphur, 3x, 6x, and 30x,	Sulph.
Secale Cornutum, 2x and 3x,	Secale Cor.
 Tartar Emetic,	 Tart. Emet.
Tincture Tobaccum,	Tr. Tobac.
Tincture Cantharides,	Tr. Canth.
 Veratrum Album,	 Ver. Alb.
Veratrum Viride, 1x, 2x, and 3x,	Ver. Vir.
Viburnum Prunifolium,	Vib. Prunif.

CREAM OF PHARMACY.—METHOD OF PREPARING.

R 1 pint of Linseed Oil (raw).
 1 ounce of Hemlock Oil.
 $\frac{1}{2}$ ounce of Sassafras.
 $\frac{1}{2}$ ounce of Camphor Oil.
 $\frac{1}{2}$ ounce of Origanum.

Mix and shake thoroughly, then apply.

TYPHOID FEVER:

ITS NATURE, CAUSE, AND CURE.

TYPHOID FEVER has been variously styled by authors typhoid fever, typhus mitior, nervous fever, abdominal typhus, common continued fever, and entero-mesenteric fever, etc. This febrile affection has with it a great variety of symptoms. There is, however, a certain recognizable character in all its various forms, yet it is the same disease. It is commonly endemic, but sometimes epidemic, as at the present time, September, 1888—the same as we find in the Old World, and portions of the United States in which miasmatic or bilious fevers do not prevail—and is at times mingled with the latter within the same limits. Indeed, in all likelihood, the whole human race, in every climate under the sun, is more or less subject to its ravages. As hinted previously, writers have at times called it “continued” or “common continued fever;” but, as Wood observes, this term is not sufficiently distinctive, as other fevers, equally common in many situations, are equally continued; and, in fact, English authors generally confounded, under the title, two affections, which are probably quite distinct; namely, the disease under consideration, and proper typhus fever.

GENERAL NATURE OF TYPHOID FEVER.

Since Andral first attempted to demonstrate the perfect identity of the fevers, which previously had been classified as so many special diseases, under the names of febris nervosa versatilis, typhosa, cerebrialis, abdominalis putrida, hospital fever, etc., pathologists are now generally agreed to regard these different forms as quantitatively, but not qualitatively, different manifestations of one and the same fever; namely, *typhus*. In all portions of this continent, at various times, this disease has made its appearance essentially epidemic, and frequently has been severely fatal in its attacks, not unfrequently carrying off its hundreds, despite the exertions of the best medical experts of the day.

The persons most liable to this infection are found among the young, generally those of a strong and vigorous constitution, although persons of mature age are occasionally attacked by this fell disease. At times it is said to be, by the best authorities, caused by the constituent state of the atmosphere having either too much, or else being deficient in, ozone. Of this I am satisfied from an experience dating back some twenty years or more, having closely watched the disease in its effects on numerous patients: the great changes of temperature in this climate, the various kinds of labor, the severity of the work, and the quality of food consumed, are strong factors in engendering the disease.

I would further add that I believe typhoid fever to be really an inflammation of the spinal and sensory nerves of the system. Continued observations have

led me to this conclusion, governed by good pathological authority. When a cold is contracted from exposure, the excretions are in a manner stopped, and we fail to get rid of the waste matter for the time being. To keep up the equilibrium, should another cold be contracted, the effete matter is again thrown back on the system; then, as a natural consequence, fermentation of the obnoxious matter retained from these two atmospheric changes ensues, and you have real typhoid fever. Its *premonitory* symptoms and characteristics are as follows: A feeling of indisposition is experienced by a person affected with the disease for several days. At times he feels a certain degree of stiffness, especially in the joints and muscles of the body; and when he walks, a weakness and trembling of the knees, with a certain degree of huskiness in the respiratory organs. At times he thinks that perhaps it is laziness. When he seats himself, he does not feel inclined to get up, and when he has performed a small portion of labor, he feels tired and out of sorts, as though he had worked considerably. At night he may sleep sound; but, on rising in the morning, he is by no means refreshed. His appetite is capricious; at one time partaking of food ravenously, and at another losing all desire to eat.

The succeeding symptoms are, first, a violent frontal headache, pain being felt through the temples. This is continuous, and when he stoops becomes quite dizzy. His countenance assumes a dusky, dejected appearance, with languid sensations, felt all over the body. The pulse is excited to a hard, full beat, and his heart at times palpitates severely. Again he may feel a heavy

pain in the region of the stomach, flashes of heat over the body, especially the face, followed by constant chills up and down the spinal column. To this may be added, the bowels are sluggish; the abdomen inclines to be somewhat distended, which is not relieved by taking cathartics. Neither bathing nor sweating seems to change the feelings of the patient to any great degree. Another disagreeable feature is a painful weakness in the small of the back. Under these symptoms the patient requires to urinate seldom. The water, however, will be found unusually red, containing urates in a considerable quantity. His feelings during micturition are quite noteworthy—trembling and chilliness, together with pain and weakness. These are the great majority of the premonitory symptoms of endemic typhoid fever. If the disease at this stage is treated with appropriate remedies (which, if done, would entirely break up the symptoms, and restore the patient to his normal health in sixty to eighty hours' time), it rapidly advances. For the benefit of the practitioner and reader, I have inserted several clinical cases treated by me at this stage of the disease, which will exhibit the method of treatment and the medicines given.

CLINICAL CASE, No. 1.—Two gentlemen (brothers) called at my office at Eau Claire, Wis., on the 10th of March, 1888, one of whom said to me: "I wish, Doctor, you would examine this young man; he is complaining, and has been for several days, of not feeling well. He has just arrived from Fifield, where he was employed as cookee in a lumbering camp." I took him into my consulting-room, and from my questions and his answers, together with the objective symptoms, I soon discovered that he was laboring under a good portion of typhoid poison in his system. My answer to the young man who first addressed me was: "Your

brother is well advanced in the premonitory symptoms of typhoid fever." He remarked: "Can you prescribe medicine for him that will cure him, as we want to return by the evening train?" I replied that I could give him remedies to abort the disease in from sixty to eighty hours, leaving him free from the disease, with the sole exception of a trifling cough, which other remedial agents would soon remove. But the patient must be where I could see him as often as necessity required; otherwise he would be subject to a long spell of typhoid fever, which might result in the loss of his life. The two brothers consulted together a short time, the elder finally concluding it best to leave him under my care.

I carefully attended the youth, administered appropriate remedies, and at the end of the time specified he was ready to follow his brother, entirely free from all apparent disease. The young man confessed to me, just previous to taking his departure, that when he entered my office he could hardly drag himself along; he felt very despondent, and did not care whether he lived or died, and was ready to drop himself into the lake. My first prescription to this patient was Acon. 3x, and Phos. 3x, in alternation every hour for the first five hours; then Bapt. 1x, Phos. 3x in alternation for forty-eight hours, once each hour; directing him to eat very little, not more than a cup of weak tea and a portion of dry toast, at each meal.

In this case, and generally when the patient is not confined to his bed, I put each medicine in a two-drachm vial, using diluted alcohol for that purpose, and requesting him to turn it up twice on the tongue at the proper time,—first vial marked number one; and in one hour afterwards, vial marked number two. This plan of administering medicine is original on my part. In applying it in this manner to the tongue, the patient gets about three drops of each solution. It will be remembered that there is more nerve tissue in and about the tongue than in any other organ of the body. Hence the tongue medicine is immediately absorbed into the circulation and nature appropriates it to the parts affected. The succeeding prescription, at the end of the forty-eight hours, was Rhus Tox. 3x, and Phos. 3x; and, as the head symptoms were somewhat prominent, also Bell. 3x, all in alternation every hour until better; then every two hours. He slept

perfectly sound the third night, and in the morning pronounced himself well.

CLINICAL CASE, No. 2.—My next case occurring at this stage of the premonitory symptoms of typhoid fever, was that of a gentleman engaged in extensive business in this vicinity. He had been complaining of not feeling well for several days, perhaps a week. This was early in the month of April, 1876. He drove with his team to Gilmantown, in Buffalo County, Wisconsin. On his arrival at the before-mentioned town, he had his team put up, and, as soon as he got settled in the room, found himself so indisposed that he was compelled to retire. He spent a miserable night, tossing to and fro, unable to sleep. He was affected with chills and flashes of heat, his legs feeling like posts. In the morning he was totally unable to return home, and remained at the house twenty-four hours. On the second morning, he had his team brought up, and, after considerable exertion, managed to get into his carriage, but it was only by superhuman efforts that he regained his residence. On meeting his wife she made the observation, "My dear, you look sick." He replied, "Yes, I feel so," and retired at once to his bedroom. He lay there about two hours, when I was called in. He said: "Doctor, I am very sick; tell me my ailment. I want you to get me out of it as soon as possible. I have no time to lie here." Then I inquired of him as to his past and present symptoms. After a very careful examination, I remarked to him, that he had all the marked premonitory symptoms of typhoid fever. The patient said: "Can you cure me? I have so much business on hand, and can not possibly remain here long." I informed him that his recovery was certain (if he would follow my instructions to the letter) in from forty to sixty hours. "First, I require that you eat as little as possible." He replied: "Doctor, I will not partake of anything during that time, if you say so." He next asked: "What shall I drink—lemonade or water?" My answer was: "The latter; for it is nature's remedy." The patient lay in his bed fifty-one hours, without swallowing a morsel of food, and at the end of that time, was able to dress himself and attend to business, only feeling a little weak; but the fever had all disappeared.

This I accomplished with the following prescriptions: Bapt. 1x, Phos. 3x, in alternation; the medicines given each in half a tumbler of water; a tea-spoonful of the solution as a dose every hour for the space of forty-eight hours. My second prescription, given in two-drachm vials, in alcohol, as in Clinical Case No. 1: Rhus Tox. 3x, and Phos. 3x, every two hours. Discharged him, with a caution to take his medicines as directed, and eat sparingly for forty-eight hours. The next time I saw the patient he hailed me with the remark, "Doctor, you brought me out of that scrape all O. K."

NOTE.—In my experience for twenty years, I have learned to look upon the drug baptisia as a certain antidote for the premonitory symptoms of typhoid fever, if given in the 1x, from twenty-four to forty-eight hours, in proportion to the severity of the case; but if continued, the patient will soon feel its toxic effects, and, of course, will continue to grow worse.

CLINICAL CASE NO. 3.—In the month of March, 1879, while engaged in my profession at Durand, Wis., I received a hurried call to visit a young man who was a school-teacher in the town of Waubeck. The gentleman who requested my attendance was the father of the young man, and seemed very anxious for the welfare of his son. When I arrived at the home of the patient, I found him to be in a high state of fever—pulse 120, temperature over 100° F., tongue heavily coated, and all his symptoms indicating a well-advanced state of typhoid fever of a malarial type. I learned that he had been attended by a quack doctor for some ten days or more, who had given him quite a number of remedies of which he even did not know the nature. Several of the patient's relatives were in the room, all of whom expressed fears that he would soon be beyond medical aid. I did not tell them my thoughts, but, in reality, I believed that he was fast traveling to the grave. I prescribed Bapt. 1x, Phos. 3x, and Bell. 3x, in water, to be given alternately every half hour. I inquired of his sister how the patient had been fed. The lady replied that his diet had consisted of beef tea and milk. I instructed her how to prepare water-gruel, and directed that he should be given four table-spoonfuls at each meal, and as much

cold water as he required, though I ordered him to take small portions at a time; also, to have a warm compress applied to the forehead, and renewed as often as the cloths got cool; medicines to be given at regular periods; and that I would call in the morning. Mr. Quack Doctor came up, and diligently inquired what I had given the patient. I replied to him that he had better become a medical graduate before I instructed him further in medicine.

On my visit in the morning, I found, to my satisfaction, that the fever had fallen about daylight. The patient was now more comfortable; part of his body was in a state of perspiration, but he had not slept any during the night. However, I continued the same treatment, but ordered the medicines to be given once an hour. Before I left for home one of the patient's brothers made an inquiry in reference to his food, and observed that the quantity was too small to sustain life. I assured him that it was sufficient; that he must bear in mind that the patient was a very sick man, and consequently his stomach was weak, and could not properly digest much food; and if I gave him more nourishment it would feed the disease, and consequently prolong his illness; but under this régime I would wind it up in a very few days. I left, to call in the morning; but, before doing so, gave explicit directions to the patient's sister in regard to the quantity of gruel, and observed that I would increase it as soon as his symptoms improved.

On my calling again next forenoon, I learned that the fever had subsided about midnight, and the patient had slept soundly until near morning. His pulse was now much lower, as well as the temperature of the body; but I could see by the pulse that the fever was on the verge of return. I noticed tenderness over the iliac region, and also some rumbling of the bowels; but, on the whole, I thought that the sick man was doing well. I prescribed Rhus Tox. 3x, Phos. 3x, and Tart. Emet. 3x, in water, to be given in alternation every hour, omitting the compress, unless the patient desired it. The father, whom I found there, expressed fear that I was not giving his son Thomas sufficient food to sustain him, and he inquired if I could not give him lemonade in lieu of water. I said that he could have the former, providing it was not

made too sweet, as in that case it would prove injurious; and also repeated what I had previously said to the son about the food. I left, to call again next day.

On my return I found the patient as well as I could expect, he having slept the greater part of the previous night. I found more tenderness over the iliac region, together with some bloating and rumbling of the bowels. I told the patient's sister that the fever would return later on in the day, and, in all probability, within a day or two the sick man would have some diuretic stools. I prescribed the same medicines, to be given as usual, and increased the food to six table-spoonfuls of the gruel, given at each meal; and left, to return next afternoon. On my arrival next day, about evening, I learned that the fever had only lasted about three hours, and that the patient had slept well during the previous night, and had passed two badly smelling diuretic stools; but I thought his symptoms were all favorable. I prescribed the same medicines, to be given as before; and left, to return next day. On making my return visit, I found the father and the patient's two brothers assembled in the room, anxiously discussing the food question, and making an examination of the gruel. I proceeded at once to examine the patient's symptoms; learned that he had three discharges from the bowels during the last twenty-four hours, accompanied with profuse discharges from the nasal nares; also, he complained to me of weakness in the head, together with soreness of the brain. After some inquiries, I examined his posterior nares with a laryngoscope, and discovered a bad form of chronic nasal catarrh, with discharge from the posterior nares. I prescribed *Rhus Tox.* 3x, *Phos.* 3x, and *Aurum. Mur.* 3x, to be given in alternation, as usual. After once more renewing my directions in regard to medicines and food, I left, to return next day.

During my absence I thoroughly investigated the case in all its bearings, together with the peculiar notions of the patient's friends concerning the food. I arrived at the conclusion that my instructions had not been carried out in some way relative to the nourishment, and that this accounted for some peculiarities of the symptoms now present. On my arrival next day, I found all the friends as usual anxiously watching the patient and

the quack doctor in the neighborhood. I found that the patient had only passed one stool during the previous day, with but little fever. He still, however, complained of a weakness in the brain, with about the same amount of nasal discharge, but it was now more consistent. I asked his sister (who attended him) if he was still drinking lemonade in lieu of water, and inquired if she used much sugar in preparing it. She replied that she had made it sweet, as Thomas liked it best. I asked her to show me how much sugar she put in each tumbler, and she said two heaping spoonfuls. I observed that the quantity was too much, and had retarded the patient's recovery, and that he had better return to the water without any sweetening, which I felt sure would work an improvement. I prescribed the same medicines, to be given as usual, and was about to leave when the father and the two brothers commenced an argument about the quantity and quality of the food I had been giving him, and inquired if he could not have some milk or beef-tea substituted for the gruel, as these were also fluids. I assured them that to give either of the articles mentioned would certainly prolong the trouble and also increase the disease. I further remarked: "Gentlemen, I have thoroughly investigated your friend's condition at this time, and am fully satisfied that the quantity of acid he has taken already has been a serious hindrance to the progress of his convalescence, and that now I can not consent to any change whatsoever in regard to quantity and quality of food. You may take the patient from my hands if you wish, but let me assure you that under the above prescription he will in a few more visits be all right." I called next day, and found a decided improvement in all the symptoms, and after a few more professional visits I had the pleasure of discharging the patient entirely well, to the great surprise of his friends. Soon afterwards he paid me my bill, and is now preaching the gospel of Christ in the State of Tennessee, a hale and hearty man.

DIAGNOSIS.

A young practitioner, or one of limited experience, is liable to err in making a diagnosis of typhoid fever with its premonitory symptoms before him, as there

are several diseases evidencing some of the same objective appearances; viz., winter cholera. In the early part of this disease the skin is hot and dry, the pulse and temperature high, together with a profuse diarrhea. The head symptoms frequently predominate, and the stools are a dark-green color, but with tenesmus, which latter mentioned facts are two great distinguishing features in the early stages of this disease. Again erysipelas, especially of the traumatic type, has frequently very high fever previous to the appearance of the swelling and eruption; this disease might also be taken for typhoid fever in its early stages. Also, quinsy in its first stages simulates many of the symptoms of typhoid; the principal differential appearances show swollen parotic glands and tonsils, with a greenish tinge of the sclerotic tissue of the eye, and, I think, perhaps I might add with safety to these the very early symptoms of diphtheria and inflammatory rheumatism.

ANATOMICAL CHANGES.

Prof. C. G. Raue, of Philadelphia, says: "The principal anatomical changes which typhoid fever produces are the following: Catarrh in the chest, even into the finest bronchial tubes; enlargement of the spleen to double and even six times its natural size, and ulceration of the small intestines. These latter more or less constant anatomical changes have given rise to its appellation of ileo-typhus." Rokitansky distinguishes four stages of this typhoid process upon the mucous membrane of the small intestines, and I think I can not adopt a better classification in the pathological changes of this disease.

1. The congestive state by which the whole membrane appears swollen, injected, and covered with slime; worse so, however, in its lower portion in the neighborhood of the valvula Bauhin, which is placed at the opening of the small into the large intestines.

2. The state of infiltration, by which the general redness and swelling disappear, and become concentrated to the solitary and Peyer's glands, in the lower part of the ileum.

3. The state of softening, by which the swelling of the glands is absorbed; or the glands burst and become covered with a dry, crumbly crust; or they burst and discharge their contents, without getting covered with a crust.

4. The state of ulceration by which the affected glands suppurate and form the typhoid ulcer. These ulcers are round when originating out of a solitary follicle, and elliptic when originating out of Peyer's plaques. Their size varies from that of hemp-seed or pea to the size of half a dollar. Their basis is the submucous cellular tissue which lines the muscularis of the gut.

The pulse will rise from one hundred to one hundred and ten beats per minute in the morning, and the temperature of the body from ninety to one hundred degrees Fahrenheit. The skin is hot and dry, and the patient is very uncomfortable, generally lasting until after midnight. When morning arrives, the pulse and temperature will be found lower, and the patient will perhaps be ready to eat quite a meal, if allowed. As the day advances, the fever returns, with a still higher pulse and temperature; the patient is quite thirsty, ready to

drink almost anything, and that frequently. On this at least the second week of his illness, the head or cerebral symptoms are apt to be very prominent, and these peculiarities in the patient's condition will continue uninterrupted, unless abated by proper remedial agents. As the night approaches, his mind wanders; he is heard to talk incoherently; he tosses in the bed, can not find an easy position. Sleep is entirely absent, although he desires it. In the morning, this being the third day of the second week of his illness, the pulse and temperature will be found to have fallen during the early hours. If the patient is now carefully examined, a tenderness upon pressure will be found in the left iliac region, together with some tympanitic distension of the bowels. When night comes on, all his symptoms increase, and force is requisite to keep him in bed. On the fourth day (Prof. George B. Wood, LL. D., remarks on this stage of the disease, page 367, "Practice of Medicine," 6th edition), other symptoms are now superadded. The tongue, previously moist or clammy, usually begins to become dry, and to assume a brownish color. Deglutition is sometimes painful or difficult. The abdomen is obviously distended, so as frequently to present a convex outline from the ensiform cartilage to the pubes when the patient is on his back, and upon concussion sounds hollow or tympanitic. If the surface be carefully examined, red spots, like flea-bites, will show themselves, usually appearing at first in small numbers upon the abdomen, but afterwards increasing, and sometimes extending to the chest, and even to the limbs and face. At the same time a close inspection will often

detect an eruption of small vesicles, called sudamina, upon the neck and upper part of the chest, and occasionally also on other parts of the body. The nervous symptoms become more decided. Delirium or stupor often takes the place of the headache with which the patient had been tormented. Ringing or buzzing in the ears is followed by hardness of hearing, amounting sometimes to deafness. The eyes are often injected. The tongue is protruded with difficulty, and oftentimes trembles in the effort. The pulse and temperature increase every day as the fever advances. The appearance of the features becomes more and more stupid, while the indifference of the patient's mind increases; sleepy feelings and stupor slowly but surely set in. The tongue appears heavily coated and quite dry, and he frequently requires drink, but a small quantity of water generally suffices to slake the thirst. The bowels have become increasingly tender and somewhat bloated, while loud rumbling is almost constantly present. This being the fourth day of the second week of the disease, the bowels become relaxed and diarrhea appears.

CLINICAL CASE, No. 4.—In the spring of 1884 I was called, in great haste, to see a small boy, about eight years of age, who, his mother informed me, had been complaining for a week or more. I found the patient had all the symptoms common to a low grade of typhoid fever. I prescribed for him, early in the morning, Bapt. 1x, Phos. 3x, Tart. Emet. 3x, in water (teaspoonful doses), and small quantities of water to be given him when thirsty. Ordered him to take the medicines, in alternation, every hour; promised to call again at noon. When I returned I was surprised to find that he had a very high fever—the pulse 120°, temperature 95°, with head symptoms predominant.

ing. I gave Bell. 3x, in lieu of Tart. Emet. 3x, in alternation with the above, once an hour; also directed a wet compress of moderately cold water applied to the temples, and removed as often as dry while the fever kept up. Ordered him to receive a warm-water bath in the afternoon, and to have at tea-time four table-spoonfuls of water-gruel at each meal, which I directed how to be prepared. Calling again in the evening, I found the fever a little abated and the lad more comfortable. In the morning, at ten o'clock, I made another call, the attendant informing me that the fever kept up until 1 A. M., when the little sufferer fell into a light doze. On examination I found the pulse rising, showing returning fever. I ordered the same course of treatment continued; promised to call at noon. On going to see him at the time stated, I discovered all the fever symptoms increased—skin hot and dry, patient very uncomfortable, and his mind wandering. Continued the same treatment; ordered another warm bath in the afternoon. Called next morning at eight o'clock, when I was informed that the fever disappeared about midnight. On examination of the pulse and temperature, I found them much lower and the skin quite moist, but a thick, yellow coating on the tongue. I prescribed Rhus Tox. 3x, Phos. 3x, and Bell. 3x, to be given in alternation, as before. Called again in the afternoon of the same day, accompanied by a regular practitioner of the old school. We found the patient with all the symptoms of the previous day much increased, added to which was a tenderness over the left iliac region and loud rumbling in the bowels. My friend, the doctor, after carefully examining the patient, shook his head, when I assured him that he would come out all right under this treatment. The same medicines were renewed, and the same treatment continued, save the bathing. Visiting him on the fourth morning, the attendant informed me that the fever had gone down about 10 P. M. the previous night, and the patient's slumbers were sound until late in the morning. I prescribed Rhus Tox. 3x, Phos. 3x, Tart. Emet. 3x, to be given in alternation as before, every hour, and the lad allowed to partake of six table-spoonfuls of water-gruel at each meal. I saw him on the morning of the fifth day, at eleven o'clock. Found the fever, as usual, rising. Continued the same

medicines, the attendant informing me that there was still louder rumbling in the bowels, and the iliac region seemed to be still more tender. I remarked to her that the patient might have one or two loose stools that night or in the morning. At my professional visit next day, early in the forenoon, the party in charge of the patient informed me that the fever had gone down soon after tea-time, and that the lad had slept soundly during the night. I found the tongue commencing to clean off at each side, and the patient decidedly better in every respect. He had had only one small diuretic stool early this morning; gave him the same treatment as before. Calling again on the seventh morning, I was informed that the fever had left at 3 o'clock P. M. He had one small stool, during the night rested well, and had another stool this morning, which was more consistent. I continued the same treatment. When I went to the house on the eighth morning, I found his mother there, rejoicing that her boy was well. Prescribed the same medicines, in two-drachm vials (in pill form), to be alternated every two hours, five of the pellets as a dose; cautioned the patient to eat sparingly for at least two days, and discharged him.

CLINICAL CASE, No. 5.—In June, 1883, I was called upon to visit a patient in the country, some ten miles from my location, Mr. J. D., a farmer, aged about thirty-four. He was of a nervous-sanguine temperament. On arrival at the house I found the man very sick; pulse and temperature high; frequent chills running up his spine all morning. His wife and family manifested great alarm. On obtaining a complete history of his symptoms, together with the kind of labor he had been performing for the past ten or fifteen days, I found that he had been engaged cultivating a low piece of land situated in a swamp. Looking carefully over the symptoms, I rapidly arrived at the conclusion that this was a pure case of malarial typhoid fever. I prescribed Bact. 1x, Phos. 3x, Tart. Emet. 3x, in water, to be given in alternation once each hour; ordered a good warm-water bath, and a compress applied to the head; his diet to consist exclusively of a little water-gruel at each meal, and to drink sparingly of spring-water; left him, stating I would return to-morrow. Called

on this the second day about noon. The patient's wife was still very much alarmed, and told me that the fever, which I observed was still high, had steadily kept up during my absence, and that her husband had not slept any during the entire time. I informed her that I expected the fever to have continued from the nature of the amount of poison producing the disease. On making an examination I found the tongue covered with a thick, yellow coating; pulse 120, temperature, 103°; head symptoms strongly marked. Ordered another bath, together with compress applied to temple, and only four table-spoonfuls of water-gruel to be given at each meal, and stating that I would return about the same time to-morrow, left the following prescription: Bapt. 1x, Phos. 3x, and Bell. 3x, to be given in alternation once each hour. The next day, however, I did not return until 3 P. M.; found the fever still high. Was told by the wife that in the early part of the morning it was much lower for some two or three hours, but had returned. On examination I discovered the fever and temperature still high, but not so much as yesterday, and the balance of symptoms slightly improved. I prescribed Rhus Tox. 3x, Phos. 3x, and Bell. 3x, to be given as before, together with sponge bath, using blood-warm water and compress; left to return to-morrow. On the fourth day I visited the patient about noon; found that he had slept some two hours with marked benefit; all his symptoms were better except a noticeable tenderness over the iliac region of the bowels. Continued the same course of treatment, omitting the bath but not the compress. Visited the patient on the fifth day in the afternoon, when I learned from his wife (who appeared now more hopeful) that the fever had disappeared the night previous at about eleven o'clock, and that he had slept soundly the balance of the night, and seemed anxious to have his food increased. I examined him and found considerable fever, but of milder type, the tongue beginning to clear, and very slight tenderness of the iliac region. Prescribed Rhus Tox. 3x, Phos. 3x, and Tart. Emet. 3x; increased the gruel a little, and left to return next day. On the sixth day in the afternoon I made another visit, and found the patient rapidly improving in all his symptoms; prescribed Tart. Emet. 3x, Rhus Tox. 3x, and Phos. 3x, in two-drachm

vials in alcohol, to be taken in alternation, touching each vial twice to his tongue. I directed his wife to give him at each meal a little other food, consisting of tea and toast, and that I would call the following day but one, unless word was sent to me that he was still improving. I duly cautioned him against over-eating, and also not to resume work too soon in the swamp. I heard, the day after but one, that he was still improving, and soon afterwards saw him in the streets of the village, when he remarked that he was entirely well.

CLINICAL CASE, No. 6.—About the 10th of June, 1881, I was called to visit a man, son-in-law of William Gordon, a well-to-do farmer residing on the Chippewa bottoms, some two miles from Durand, in Pepin County, on the west side of the river. We had that season an overflow of the stream, and the water had almost surrounded the house with the sole exception of a foot-path to the door. After carefully examining the patient, I made up my mind in regard to the disease. His wife says to me: "Doctor, what is the matter with my husband?" I answered: "He has typhoid fever in a well advanced stage." She immediately burst into a flood of tears, remarking: "I lost a dear uncle by that dread disease, and must I lose my dear husband?" I inquired who was the physician who treated her relative, and she replied: "Dr. E. O. Baker, of Menomonee, Dunn County, Wisconsin." I assured her that there was not the slightest danger of losing her husband, if she would implicitly follow out my directions in giving food and medicines to the patient, with other necessary treatment. The man now had a burning fever, pulse and temperature very high; tongue severely coated; head symptoms predominating. She assured me that it was almost impossible to keep her husband in the bed during the previous night. I prescribed Bapt. 1x, Phos. 3x, and Bell 3x, in water; given in alternation every hour; ordered a warm bath soon as convenient, directing her to sponge the spine with water as hot as he could bear the application, dry the skin well, put him back to bed, and apply a large compress to the temple, wrung out of moderately cold water. I directed her how to prepare some water-gruel, of which she was to give him four table-spoonfuls at each meal, and all the spring-water he wanted in small quantities at a time;

medicines to be given on the moment until I returned next day about the same time. On the second day I arrived at the house at 10 A. M. Found the lady quite talkative; she said she had given the medicine regularly until about 1 A. M., when the fever left him, and he went to sleep for nearly two hours. On examination, I found his fever still high, but the head symptoms less prominent, so that he talked quite fluently. He said: "Doctor, what are you giving me? There does not seem to be any medicine in either of the tumblers, except the one in which the solution is a little colored." I told him that he would not be any wiser if I mentioned the names of the remedies I was giving him, but if he would continue to take them, and trust to my care, I would bring him out all right within a few days. His wife acquiesced in my remarks, and that seemed to satisfy him. I renewed the medicines, repeated my instructions, and left to return next day. I returned on the third day, finding all his symptoms much improved, and that he had slept soundly from 11 P. M., when the fever abated until early morn. I found the fever just commencing to return; a little tenderness was noted over the iliac region on the left side, accompanied with a slight rumbling in the bowels. Prescribed *Rhus Tox.* 3x, *Phos.* 3x, and *Tart. Emet.* 3x; repeated my former instructions as to all, except the bath. Before I left for home he remarked that he did not know what I was giving him; it seemed very weak medicine, but he declared that he was getting better. I returned on the fourth day, and found that he had made rapid improvement; he declared that he had slept soundly all night, the fever having left him before evening. I renewed the medicines, increased the quantity of gruel to be given at each meal, and left to return the next afternoon. On the fifth day, I made my regular visit in the afternoon, and found the patient very comfortable, and the fever continuing to shorten in the time that it remained on the patient. His wife remarked that on the previous day she had forgotten to inform me of some red spots that had made their appearance on his chest. I carefully examined them, and told her that at times they were incident to the disease, and would pass away on the termination of the fever. She also told me that in the morning he had passed a small diuretic stool, which I inspected, remarking that it was quite common, and possibly

he might have one or two more. Renewed the medicines and instructions concerning food; and left, to return next day. I came back about noon on the sixth day, found the patient progressing nicely in all respects, and that he had passed two stools since I left, the last one being quite consistent. I renewed the medicines; told her she might now give her husband a cup of weak tea and a slice of toast at each meal, and left to return the following afternoon. When I next made my visit on the seventh day, I found the patient ready to sit up; in fact, almost convalescent. I renewed the medicines in two-drachm vials (as my usual custom), to be taken alternately every two hours; left a caution in regard to eating and exposure for a few days, and discharged him. Ten days or so afterwards, while passing his home, he and his wife came out, saluted me joyfully, and declared that on leaving his bed he felt ready to go to work, and now he was sound and well. He promised to call in a few days and settle his bill for the seven visits, which he promptly did.

CLINICAL CASE, No. 7.—In the month of November, 1875, I was visiting at the home of a friend, Dr. Gates, a resident of Menomonee, Dunn County, Wisconsin, when I received a call to visit a patient, an employee of Knapp, Stout & Co., who had been brought down from the woods suffering from illness. The messenger requesting my attendance was a foreman for the company. He desired me to examine the sick man, diagnose and prognose his case. On examination, I soon discovered that he was laboring under a heavy dose of typhoid poison. The disease was well advanced, he having passed eight loose stools during the previous night. In answer to the messenger's inquiry, I told him that the patient was suffering from an advanced stage of typhoid, and that if he was placed under my immediate control I could effect a cure, and he would be ready for work again in from ten to thirteen days. He was taken, according to my directions, to a boarding-house, where I visited him early in the afternoon. I found a high state of fever and temperature; stools passing almost unconsciously; tongue heavily coated; water dark-red and scant; patient's mind wandering, with frequent muttering. Pre-

scribed Bapt. 1x, Phos. 3x, also Bell. 3x, to be taken in alternation every hour. In the morning, calling on the patient, was told by the attendant that the fever had kept up until early in the morning, when he fell into a sleep lasting an hour and a half. I saw by his pulse that the fever was returning. I continued the same medicines, and promised to call in the afternoon. Late in the evening I returned again, and found the feverish symptoms somewhat abated, and the patient much more comfortable. Directed the usual diet (water-gruel) continued; renewed the same medicines, to be given as before, with a promise that I would see him the following afternoon. I called as I promised; found the patient much improved, and was told that he had slept soundly during the previous night. Prescribed Rhus Tox. 3x, Phos. 3x, and Tart. Emet. 3x; increased the quantity of gruel; medicines to be given in alternation every hour; patient to take a warm-water bath. I followed up this course of treatment for a period of thirteen days, when he became entirely restored, and on the evening of that day he went back to the woods again, and rejoined his camp and crew where he came from.

The discharges at first are small, not more perhaps than two taking place the first day, consistence rather watery, smell bad, and pass without any tenesmus. The fever is generally high during this stage, and at times it is difficult to keep the patient confined to the bed; or he is in a stupid condition, inclined to slide down to the foot of the couch. Prof. Wood again remarks, page 367, 6th edition: "Finally, if the case is to end unfavorably, the pulse gives way, and becomes either excessively frequent and fluttering, or slow and scarcely perceptible; the extremities become cool and clammy, or the whole surface is bathed in a clammy sweat; the abdomen is often enormously distended; hiccough sometimes occurs, and life is quietly and almost insensibly extinguished. Sometimes, how-

ever, when the fatal issue takes place at an earlier period, death is preceded by apparently painful struggles or convulsions." Quoting from Behr's "Science of Therapeutics," page 581, Vol. II, the author says: "In the third week of the disease, especially at the commencement, the symptoms continue to increase in intensity. The patients are now lying in a state of complete apathy; in the day-time they are only slightly delirious, but during the night the nervous exaltation is much worse, attended with subsultus tendinum and grasping at flocks. The prostration is so great that the patients are no longer able to sit erect; they are constantly lying on their backs, and the body, yielding to the law of gravitation, settles from the pillow downwards towards the middle of the bed. The tongue is only slowly protruded after loud and repeated requests; it is quite dry, with a fuliginous coating, which is likewise exhibited on the teeth and at the nostrils. Deglutition is very difficult, and it is only with a great effort that the patient is able to swallow very small quantities of liquid at one time. The diarrhea continues, but the passages are generally less copious, and not infrequently tinged with blood. The urinary discharges continue to decrease, and paralysis of the bladder is not an infrequent occurrence. The abdomen is greatly distended, and is no longer sensitive to pressure. The other symptoms continue unchanged, except that the roseola spots pale off, and become complicated with miliaria, and sometimes with ecchymoses. Bed-sores are now very apt to torment the patient. Emaciation proceeds very rapidly, and his whole appearance is that of a general

collapse. Up to the middle of the third week the fever maintains its intensity. In cases where the disease continues during the fourth week, no remission of the fever is perceptible. In most cases, however, the seventeenth day is characterized by a sudden abatement of the fever, and of most of the other derangements of the functions. This improvement at times is only apparent, inasmuch as in a few hours already the symptoms again exacerbate; but at other times it is a real improvement, marking the beginning of recovery. If the patients die, it is most generally at this period; the remission just alluded to, when followed by an exacerbation of the symptoms, is generally looked upon as a fatal change. Death takes place with symptoms of paralysis of the heart and lungs. In favorable cases, the fever remits every morning on the last days of the third week, whereas the evening exacerbations decrease in violence, the consciousness returns gradually, and with it a desire for food and drink. At this stage the fever scarcely ever shows a sudden and considerable decrease with a correspondingly sudden beginning of convalescence."

CLINICAL CASE, No. 8.—In July, 1875, I was called to attend a young man who had been complaining of the premonitory symptoms of typhoid fever for more than a week. On examination, I found the pulse over 100, temperature 94° , tongue showing a heavy coat, all symptoms indicating a severe case of malarial typhoid. I put him on four table-spoonfuls of water-gruel at each meal; prescribed Bapt. 1x, Phos. 3x, and Tart. Emet. 3x, to be given in alternation every hour; ordered a warm bath, and promised to call in the morning. I visited the patient at 10 A. M., and found that the fever, then high, had kept up all night; continued the same treatment, with change from Tart. Emet. 3x to Bell. 3x, ordered

another bath, and left the patient, to return next day. Called again about noon the following day, and observed that his condition was much improved. I learned that he had slept the greater part of the previous night. Prescribed Rhus Tox. 3x, Phos. 3x, and Bell. 3x; increased the water-gruel to six table-spoonfuls at each meal. On examination, I found the left iliac region tender upon pressure, and some rumbling in the bowels. I called next day in the forenoon; found the patient progressing nicely towards convalescence. I intended to prescribe Rhus Tox. 3x, Phos. 3x, and Tart. Emet. 3x; but instead gave Puls. 3x, which in my medicine case lay next to Phos. I made an observation that the vial was almost empty, and when I returned to my office determined to replenish it; but on attempting to do so, discovered the mistake, and that I had prescribed Puls. 3x in lieu of Phos. 3x; but I concluded I would return again to the patient in the evening, when I could change it. In the afternoon I was suddenly called to see a very sick patient a number of miles from my office, and did not get back to the patient for forty-eight hours. When I arrived at the house I found him alarmingly ill, and the attendants very much excited over his condition. I carefully inquired into all the treatment during my absence in order to ascertain if all my directions had been implicitly followed, to enable me to arrive at the cause of his changed condition, as now he appeared to be galloping towards the grave. Now I simply prescribed Rhus Tox. 3x, Phos. 3x, and Bell. 3x, to be given in alternation, with the usual quantity of gruel; and promised to call early in the afternoon. On my second visit at this time I found the patient greatly improved, and next morning he was in the same condition of progression as when I made the mistake. With this experience, I concluded that Phos. is absolutely necessary for the proper treatment of typhoid fever. After this the patient made a rapid recovery, and resumed his work.

CLINICAL CASE, NO. 9.—While engaged in practice, and in co-partnership with Dr. A. Putsch, at Winona, Minn., a case came under my experience which proves the great necessity of very abstemious feeding in the treatment of typhoid fever, in order to obtain a complete success in my method of treating the

said disease. In the autumn of 1884 I was called by Mr. F. Farnham to visit his wife, who had been complaining from eight to ten days. I found the lady having the indications of a well-marked case of typhoid fever. I prescribed Bapt. 1x, Phos. 3x, and Tart. Emet. 3x, in water; a tea-spoonful, taken in alternation, to be given every hour. I instructed a young daughter how to prepare water-gruel, and requested her to give her mother four table-spoonfuls of the gruel at each meal, and as much cold spring-water as the patient desired; directed her husband to see that she was given a warm bath towards evening. I then left, promising to call the next morning. At about 10 A. M. I made my second visit; found the pulse and temperature high, skin hot and dry, with a badly coated tongue. The patient complained that she did not relish the gruel, and inquired if she might partake of a piece of fresh beefsteak, adding that she was hungry. In reply to her urgent inquiries, I explained fully and in detail the necessity of keeping her on a small allowance of food, which would enable me to break up the disease and hasten her convalescence. I prescribed the same medicines, with the exchange of Bell. 3x for Tart. Emet. 3x; renewed my directions concerning diet, ordered another bath, and left to return in the morning. Returned to the patient on the morrow, in the afternoon, to learn that the fever, which was still high, had kept up until near morning, and also that she had not slept since I left. Making a careful examination of the case, I replaced Rhus 3x for Bapt 1x. I found considerable tenderness of the left iliac region and much rumbling from the bowels. To me the patient's entire state seemed quite unsatisfactory, and I began to fear possible consequences. At this juncture Mr. Farnham entered the room, and I diligently inquired of him and his daughter if anything had been given to the patient save what I had prescribed. They both answered that she had taken nothing else but the gruel and medicines. I ordered the same treatment continued, and promised to call again in the morning. Up to the seventh day I pursued the same course of treatment, but the case did not seem to improve. On this morning the diarrhea commenced with great violence, the lady having passed six stools the first twenty-four hours. The case remained in about the same state, fever from

day to day high, with frequent stools, until the twenty-first day. On this morning I went with the intention to have her attendants changed, or I would give up the case. On my arrival I found matters the same as usual. On inquiry, I found Mr. Farnham in the barn, doctoring a sick horse, which was lying down. I observed that I regretted to discover no improvement in the condition of his wife. "Doctor," said he, "my wife is going to die, and I came to that conclusion last night." He continued: "You are starving the woman to death, and I am going down town to purchase crackers, cheese, and port wine, and intend to feed her better." I replied: "Do so, and you will kill the patient; but if you will obey my directions I can in a short time restore your wife to her usual health. I presume you know more about doctoring your horse than I do, but you must allow that I should know more about doctoring the human system than you do. Go and hire a good sensible girl or woman, that I can have implicit confidence in to carry out my directions, and I will be able, in a few days' time, to have the patient convalescent." Mr. F. replied: "Well, as I go down street I will call at your office; I want to see your partner, Dr. Putsch, and converse with him." When I returned to my office I mentioned the strange peculiarities of the case, together with my suspicions that from the first the lady had been overfed. In a few hours afterwards Mr. Farnham stepped in, and walked clear across the room to Dr. Putsch's table. He said: "Well, Doctor, I have come to tell you about my wife, whom Dr. Sime has been treating for three weeks, and she does n't get any better. I have concluded that she is going to die under his treatment, and am now going down street to buy crackers, cheese, and port wine, to feed her better." The doctor, who had met him a short distance from his table, said: "If you do this you will kill your woman." Farnham replied that he would do so. Then remarked the doctor, "You can go to hell." "O, well!" ejaculated Mr. Farnham, "I did not intend to make you mad; I only came to talk to you about the case." Then the doctor answered: "If you will only do as required by Dr. Sime your wife will regain her health." He left the office, found a competent girl, and in a few days, under my careful treatment, his wife was fully restored.

Some time after Mrs. Farnham had entirely recovered from her illness, I learned that her husband had from the first of my visiting her continued to stimulate and feed her all the food she would eat, thinking that he would get her well sooner.

Let me say, I have long been opposed to this course with patients in the treatment of typhoid fever, although I am aware that the greater number of practitioners do this very thing, which, in my humble opinion, increases largely their death-rate. This is not mere assertion, but the result of more than twenty years' experience and close observation of the practice of others. I recollect, when a student at the Michigan University, situated at Ann Arbor, attending the lectures of Dr. Palmer, Professor of Materia Medica and Practice in the university, he said to the class: "Gentlemen, if you get a case of typhoid fever, feed the patient; yes, I say again, feed the fever." This I thought to be almost pure gospel, and carefully noted it with one other remark, and that was to give the patient from two and a half to five grains of mercury in the premonitory stage; all of which was entered in my memorandum-book. I have never followed these directions save in one instance, and that was previous to my having any knowledge of homeopathic therapeutics; and I must confess that the young man under treatment died, despite my best efforts to save him.

CLINICAL CASE, No. 10.—In March, 1886, I was called to visit a patient residing at Shawtown, in the limits of the city of Eau Claire, Wisconsin. It was on a Friday morning that I left for his home. On arriving there, I found that he had been complaining for about twenty-four hours; the pulse was full; the temperature not much higher than normal. He complained of

sharp pain in the region of the bladder, accompanied with inability to pass his urine. I attempted to insert a catheter, but in consequence of the swollen state of the prostate gland was unable to effect an entrance into the bladder. After trying to accomplish this operation for some time, I resorted to applying hot compresses over the abdomen, and injected soapy warm water into the rectum. This seemed to ease the patient materially, but had no effect on the passages of urine. I ordered these appliances to be continued, and left to return in the evening. On going again I found him quite comfortable, pulse and temperature about the same, but the water difficulty still continued. I once more tried the catheter, using different sizes; but after repeated trials could obtain no entrance to the viscus. Leaving the patient as comfortable as possible under the circumstances, I left, promising to visit him again in the morning. On Sunday I visited him twice, and used every method I could think of to insert the catheter, but utterly failed. On Monday, accompanied by two eminent practitioners, Drs. Noble and Parker, I called at the home of the patient, whom we found in the greatest distress. The medical gentlemen tried to insert the catheter (of different sizes), but they did not succeed in getting a passage of any urine, although a good deal of blood came. The doctors, after looking carefully over the case, determined that nothing else could be done save an insertion of the trochar into the bladder in order to get clear of the increasing volume of water, which, of course, would prove fatal to the patient's life. Immediately on our separating, an intelligent physician was sent to consult with Dr. G. W. Pickens, who stated to him the precise condition of the case at that time. The doctor at once declared his ability to relieve his distressed condition. He started immediately. On arriving at the house, he inserted into the urethra a No. 6 catheter, and after it had reached as far as the prostate gland, he inserted his finger into the rectum. This action caused the gland to recede, and allowed the instrument to pass into the bladder, from which came out almost five quarts of urine. The patient was soon in a comfortable condition, and the doctor left for home, carrying with him the thanks of the family. Next day, and for several succeeding days, the catheter was used as Dr. Pickens directed. The urine showed considerable mucous discharge, but the patient's general condi-

tion seemed rapidly to improve. On the fourth morning after this period, I found, to my surprise, that the patient's pulse and temperature had very much increased. Dr. Pickens was again sent for, and remained until ten o'clock P. M. As the night advanced the fever increased until near midnight, when the pulse arose to 130, attended with severe flashes of heat to the face. The patient remarked that he felt as if he was standing before a very hot stove, and that his head was swimming or dizzy. Looking the case carefully over, I was forced to the conclusion that pure typhoid fever had set in. I immediately prescribed for the patient Bapt. 1x, Phos. 3x, and Bell. 3x, in water, to be taken in alternation every half hour until better. In forty-eight hours, under this treatment, the fever had very much abated, when I ordered Rhus Tox. 3x, Phos. 3x, and Tart. Emet. 3x, to be taken every hour in alternation. In sixty hours, with this course of medicinal treatment, the patient was enabled to go into his garden and do some spading. The catarrhal trouble in the bladder, however, continued and became chronic, which was removed by other medicinal treatment.

CLINICAL CASE, No. 11.—In the winter of 1875, while practicing at Durand, Pepin County, Wisconsin, I was called in great haste, on an evening after ten o'clock, to visit Perry Hardy, a wealthy citizen of the place, who, the messenger (his brother) said, was dying. As we approached the house, his lady was standing at the door with a light in her hand, and asked me, as I hurriedly stepped up the walk, to look at the contents of a small tub lying near her feet. I examined it, and saw that it was coagulated blood, in quantity about two quarts. I asked her to allow me to see the patient. We immediately passed into an inner room, where I found the sick man in a severely collapsed state, with hemorrhage still violent from the anus. I gave the first potency of Hamm., by the mouth, and a little stronger solution of the same medicine by injection. In the course of one hour and a half the hemorrhage had entirely ceased, and after a few doses of Carb. Veg. 3x, the patient, became quite revived. I learned from the lady and her attentive daughters that Dr. E. O. Baker (now of Menomonee, Wisconsin,) had been attending Mr. Hardy for a number of weeks, and during the greater part of the time the fever had continued daily, accom-

panied with profuse discharges from the bowels. I also learned that his feeding had been kept up all the time, and on the previous day he had been given beef-tea in the morning for breakfast, venison-soup at noon, and turtle-soup in the evening. The family manifested much alarm at the appearance of the patient, who seemed to be virtually in the jaws of death. They turned to me and made anxious inquiries if I thought that it was possible to raise him with my treatment. I said that as he was so exceedingly low, I could not give much encouragement, but if they wished me to take the case I would do my best, and a few days would decide; but I distinctly premised that my directions must be strictly followed, as the treatment would differ in several respects from the course pursued by the former practitioner. Close examination showed that his pulse was very low and intermitting; extremities quite cold, evidencing failure of a proper circulation. I prescribed Rhus Tox. 3x, Phos. 3x, and Digt'l. 3x, in water, alternately once an hour. I remained with him until morning, watching his symptoms and administering the medicines myself. Before leaving, directions were given to prepare water-gruel, and I ordered him to take two table-spoonfuls for breakfast; the same for dinner, together with small quantities of cold spring-water; left, promising to return in the afternoon. I arrived at the house an hour before sundown, and found the patient exceedingly low; extremities cold; pulse very feeble and intermitting. After looking over the case and all its bearings, I came to the conclusion that he was dying, owing to the failure of the heart's action; and unless I could so change my prescription as to give that organ more vitality I would certainly lose my patient before midnight. I prescribed Carb. Veg. 3x, Phos. 3x, and Digt'l. 3x, the first to be given each half hour, and the two last named medicines one hour apart. By this method I concluded he would get more carbon introduced into the system, which would naturally create a demand for more oxygen from the air, and thereby improve my patient. I remained with him until well on in the night, and the next day was gratified to find a marked improvement in his condition. His friends and family were very much rejoiced at the change for the better which had taken place in such a short period. I continued to attend him for some thirteen days, when I discharged him as convalescent.

CLINICAL CASE, No. 12.—In the month of March, 1876, I was called to attend a little girl with diphtheria, living at Mishamawqua, in Pepin County, Wisconsin. The case proved to be a severe one; but after a few days' attention a rapid improvement took place. One afternoon, making my sixth visit, she was so much better in all the symptoms, that I felt confident I could safely discharge her next day, and so remarked to her parents. I came the following afternoon, and, to my astonishment, found her in a high state of fever, pulse 130 and temperature of a corresponding degree; the tongue was considerably coated; urine scant and dark-red also; her mind wandering, and she was continually talking incoherently. Her parents were much alarmed, and I must confess that to some extent I shared the same thought, but did not exhibit it. In examining all the girl's symptoms, and recollecting that in the neighborhood there were some cases of typhoid fever, I at once concluded that this was a well marked case of the disease, and prescribed at once Bact. 1x, Phos. 3x, and Bell. 3x, to be given in water, alternately, every hour. Called at the house the next afternoon, and found that the high fever had kept up until after midnight, and returned a little more moderate at 10 A. M. I found tenderness in the iliac region, and some rumbling in the bowels. I prescribed Rhus Tox. 3x, Phos. 3x, and Bell. 3x. Ordered her to be fed exclusively on water-gruel, four table-spoonfuls at each meal. I left, promising to return next day. The following day I came back, and prescribed the same medicines, changing Bell. 3x for Tart. Emet. 3x, which treatment was continued for a few days, when I discharged her as convalescent. I might here make a remark that this case was the first instance in thirty years' practice where I found that the patient had two well-marked diseases succeed each other in so short a period of time.

CLINICAL CASE, No. 13.—Mrs. M. D., a lady residing below Shawtown, in the early part of the spring of 1887 complained of indisposition, and I was called upon to prescribe for her. Her liver appeared to be at fault; and she also showed strong symptoms of irregularity of the heart's action. She was a lady of some seventy summers, always used to a life of activity; was

very fond of washing her house-floor extensively, and performed her own clothes-washing; also attended a flower and vegetable garden; so that I was not much surprised at her feeling out of sorts. But, as the season advanced, in place of improving she began to complain more frequently, and would often have to lie down for a portion of the day. On the 5th of May, after working in the garden, about noon the residence caught on fire, and notwithstanding her exertions, together with the rest of the family, the building was consumed, as well as a portion of the furniture and wearing apparel. This caused the lady and her family a great deal of inconvenience, fatigue, and suffering. Finally, at the end of two weeks, they removed to a house in Eau Claire, situated in the Sixth Ward. This was on Saturday, the 21st of May. On Sunday morning the lady was too ill to rise from her bed. Shortly after nine o'clock I was called. On examination I found that she had all the premonitory symptoms of typhoid fever. Her pulse was well up to 100, her skin was very hot and dry, her tongue badly coated, together with a heavy frontal headache; indeed, to use her own expression, she was "sore all over." I prescribed Bapt. 1x, Phos. 3x, and Bell. 3x, in water, to be given in alternation once an hour; ordered the patient to be fed on water-gruel, and a warm compress applied to the head. I promised to call late in the evening. On my return I found the fever higher and the patient suffering intensely; she had some perspiration on the extremities. I requested the girl in waiting (whose name was Mattie) to give the lady medicines regularly, until my return in the morning, except when she was sleeping. During the forepart of the next day I learned that she had rested only a very brief period. Her symptoms showed that the disease was receding. I remarked to her that she might have one or two stools during the next twenty-four hours; ordered the same medicines continued, and promised to call next day. On my visit in the morning I found her progressing as usual, only that she seemed to be fretful, and expressed a fear that she would not recover. I assured her that she was doing well, and would soon be entirely free from the effects of the disease under which she was laboring. I prescribed Rhus Tox. 3x, Phos. 3x, and Tart. Emet. 3x, made inquiries of Mattie as to the

quantity of gruel administered to the lady; asked her slightly to increase the portion, and be very careful in her attention to her requirements. Called again next day; found the patient as before, somewhat fretful and uneasy, although I could not see that there was the slightest cause for alarm in her situation. She said to me quite suddenly: "Doctor, I am going to die. O, I feel so bad!—and these medicines are too weak to make me better; they are nothing but water." "Be assured, madam," I replied, "they are quite strong enough to meet the requirements of your disease. In treating this same ailment for the past twenty years, for your symptoms, I have given the same medicines, and have never lost a single patient. Your disease is fast decreasing; and if you will only have patience for a few days, taking my remedies as directed, you will find yourself well; in fact, better than you have been for some time." I prescribed Rhus Tox. 3x, Phos. 3x, and Digt'l. 3x, in water, to be given in alternation as usual. I instructed Mattie to be very careful in her attentions to the patient, and said that I would call next day. Returned in the afternoon of the following day; found the lady very comfortable, with no fever. I continued the same medicines, except the Digt'l., and replaced Tart. Emet. 3x; left, promising to return as soon as convenient, and said to her that, after the following day, once in two hours would be sufficient to take the remedies. On the third day after being there, I called, found her up and dressed, and almost in her usual state of health, although she appeared weak. Put her medicines in two-drachm vials in weak alcohol, and requested the patient to touch them each twice in alternation every two hours to her tongue, eat very sparingly for a few days, and left, telling her that she would have no need of any further attendance. The lady expressed her thanks, and said that I had certainly treated her very kindly during her late illness. I am happy to state that the lady has since that time enjoyed very fair health, with the sole exception of being occasionally bothered with slight trouble of the heart, which Straph. 2x always relieves.

Hemorrhage from the nose is not infrequently an early symptom; at times it is scant, at others later and quite profuse, often occurring only a few hours before

it appears from the bowels. This is considered at the same time a bad symptom, as it evidences hemorrhagic diathesis, and is apt to produce excessive exhaustion if it should be of a few days' duration.

This state of the patient requires the careful attention of the practitioner. An examination should be made of the stools at every discharge. At times the blood is red, and but little changed; then again almost black and disintegrated. Bleeding may ensue from other mucous surfaces. Purpura maligna or small spots, similar to flea-bites, may still continue on the outward surfaces of the patient.

H. R. Arndt, M. D., says in his work, "A System of Medicine," Volume III, page 302: "The fourth week is marked by the intermittence of the fever, though when the patient has been very ill the fever merely remits. The morning is now marked by an apyrexia, which is often quite complete, and the evening temperature is only about a degree and a half higher than that of the morning. The pulse is fuller and slower, though the beats increase in frequency towards night. The stupor passes away, and the patient begins to take an interest in surrounding objects. The mental faculties are clear but weak, and the silence and apathy of the preceding weeks give place to querulous complaints and inquiries after food. Sleep, when it comes, is natural and refreshing, but the patient is apt to be wakeful at night. The tongue cleans, the mouth becomes moist, and deglutition becomes easy. The abdomen is no longer tender and swollen; the stools are less frequent and more normal, the diarrhea is often replaced by constipation. The

spleen recedes to its normal size. The urine is pale and abundant, and perspirations are often copious, especially during sleep. Lysis takes place, but, contrary to popular opinion, there is no crisis, and lysis may commence as early as the beginning of the third week; that is, when the abdominal lesion does not proceed to ulceration. But, as a rule, lysis does not take place till some time during the fourth week. When the disease turns for the better, the first symptom noticeable is the shortening of the periods of the fever; the time of its continuance grows less daily, and the progress towards convalescence is slow. The extremities are frequently œdematous, and it is not an uncommon circumstance for the hair to come out in large quantities. The patient is troubled about hearing, and not infrequently becomes deaf. Boils break out over the body, and sometimes abscesses from the long bones. Severe abdominal pain sets in, accompanied with swelling, and the diarrhea becomes uncontrollable. Such cases are apt to have a fatal termination. With the above symptoms the countenance assumes a pinched-up appearance, the patient becomes more insensible to the surroundings, lips and teeth are covered with a dark scurf, the pulse is liable to give way and become fluttering and intermittent; the extremities are frequently, if not always, cold, and are covered with a purplish hue. A clammy perspiration breaks out on the face, trunk, and limbs; and when the prostration has reached its very lowest point, œdema of the lungs and paralysis of the heart generally set in, and the patient quietly passes away."

Thomas Nichol, M. D., a learned physician, makes

the following observation about typhoid fever at this stage: "Death usually takes place by asthenia about the end of the third or beginning of the fourth week, or even further on, and severe intestinal symptoms, quite independent of hemorrhage or collapse, are apt to precede the fatal event. Death by coma, the result of defective "aeration of the blood, or of retention of urea in the blood, is rarer than death by asthenia, and it may take place any time from the fourteenth day of illness. Or death may take place by a combination of coma and asthenia, and a sudden collapse from failure of the heart's action is not uncommon."

CLINICAL CASE, No. 14.—In the fall of 1875 I was called to visit a patient residing at Cedar Falls, Wis. He had been attended by a practitioner of the regular school for a long period of time, embracing several weeks. He had been stimulated and fed in the usual allopathic manner. When I arrived at the house I found violent hemorrhage from the bowels. I prescribed Hamm. 1x by the mouth, and small injections of the same medicine by the anus. In the course of an hour and a half the hemorrhage had entirely abated. I put him on Rhus Tox. 3x, Bell. 3x, and Phos. 3x, with an occasional dose of Hamm.; ordered him to be fed four table-spoonfuls of water-gruel at each meal; water to be given in small quantities; but positively forbid the patient being supplied with anything of a stimulating nature. This regimen the patient complained of, he being a saloon-keeper. But I assured him that this was the only method to secure his convalescence. In this case the hemorrhage from the bowels broke out several times; but with the injection of a solution of Hamm., and the exhibition of the 2x by the mouth, he rapidly convalesced. I attended him a few days, when I was enabled to discharge him in almost his usual health.

Relapses of this disease are not very frequent in this country, and abroad vary from three to ten per

cent. Murchison draws a distinction between a mere recrudescence—an increase of the disease after a temporary remission—and a true relapse, which he defines to be a second evolution of the specific febrile process after convalescence from the first attack is fairly established. A sudden and prolonged rise of temperature announces the advent of a relapse, say eight or ten days after convalescence from the first attack. Flying chills are followed by a perfect picture of the first attack, headache, shooting pains in the limbs, loss of appetite, nausea and vomiting, diarrhea, swelling of the spleen, and a fresh crop of rose spots. A relapse is thus a second attack of the fever; but it is usually somewhat shorter, averaging, according to Michel, sixteen days. All the morbid changes are more rapidly evolved; thus the rose spots may appear on the third day. Precisely the same changes are produced in the bowels, the mesenteric glands, the spleen, and the skin; and it may be fairly inferred that these changes are caused by the same poison that lighted up the first attack. Relapses are said to be milder than first attacks; yet of Murchison's fifty-three cases, followed by relapse, seven died, and in one-third of the whole number the relapse was more severe than the first attack. A mere error in diet, or a slight over-exertion, will, as a general thing, cause a recrudescence, not a relapse; though Liebermeister thinks that such mishaps may serve as exciting causes to the processes that follow, stimulating the development of germs which would otherwise remain inactive, or which might even have been eliminated from the body. Murchison says that relapses are more com-

mon in men than in women. The thirty-eight relapses that I have attended were equally divided between the sexes; and I am satisfied that neither age nor sex influenced their production. As a rule, relapses are single; but Trousseau, Wunderlich, and Murchison have recorded several cases marked by second relapses.

The above is a good description of typhoid fever as it generally appears; but there are few acute diseases which present themselves under a greater variety of forms. It is therefore necessary to give a short account of the principal of these:

Of the greater number of these erratic cases it is a truth that they depend upon two chief factors: First, the precise pathological condition of the individual; and, secondly, upon the density of the specific poison of the disease. Murchison remarks (and I have found from my experience that he is quite correct) that there is an acute form of the disease, in which the attack is abrupt and violent. Delirium is present almost from the beginning, pulmonary congestion is early and severe, and death may occur before the eighth day. Fortunately, these extraordinary cases are comparatively rare; and many practitioners have never seen a single case. These peculiar cases I have generally found to supervene on the subsidence of some other acute disease or affection. (See Clinical Cases 10, 12, and 15.)

CLINICAL CASE, No. 15.—Early in the spring of 1873 I was called upon to attend the wife of Mr. William McGilton, a prominent farmer residing in the town of Waubeek, Pepin County, Wis. On my arrival at the house I found the lady suf-

fering from a high fever, with increased pulse and temperature. I learned that she had been confined some two weeks before, and was doing well until the fever suddenly set in, which caused her husband much alarm. I was informed, and also shown the room she occupied. It was apart from the main building, and not quite finished, and was consequently too cold for a person in her condition. After carefully examining her symptoms, I told her husband that she was laboring under typhoid fever in an advanced stage of the disease. Mr. McGilton doubted my diagnosis. I said to him, that she had better be removed to a warmer apartment, which was done at once, and she was provided with a good nurse. I prescribed Bapt. 1x, Phos. 3x, and Bell. 3x; instructed the nurse to give the medicines (which were in water) alternately, once an hour, feed very light, and I would visit the patient next day. On my return, I found the lady decidedly easier. She had slept a little during the early part of the morning. I found that the usual fever was again about to return; continued the same medicines; cautioned the nurse (who was a very attentive woman) to give medicines regularly, and to feed very light, as too much food would certainly increase the fever; promised to call next afternoon. On my arrival I found the whole household very much alarmed, particularly Mr. McGilton, who met me at the door. He was much excited, and said: "My wife is very ill; you have made a great mistake in calling her disease typhoid fever." I entered the sick-room, and found the lady restless, with a high state of fever, skin hot and dry; also considerable soreness over the iliac regions, accompanied with loud rumblings in the bowels,—all of which symptoms for the moment I could not account for. While all this was going on, the gentleman was hopping about like a hen on a hot griddle, and talking as if he would get all the doctors in the country, as he felt assured that I was wrong in my diagnosis, for it was not typhoid fever. I took the nurse aside, and, with my pencil and paper, told her to give me a statement of what the lady had eaten during the past two days. I soon found that she had consumed sufficient food for any person in health; the last meal consisting of beef-soup and crackers, to which was added, by way of dessert, a piece of custard-pie, and also a portion of apple-pie, each

made with a rich crust. She had partaken of this indigestible food at the earnest request of her husband. I then instructed the nurse how to prepare water-gruel from oatmeal, and directed her to give the patient four table-spoonfuls at each meal, to the exclusion of all other diet; apply a hot compress to the lady's forehead, changing the same whenever the cloth got cool. Prescribed Bapt. 1x, Phos. 3x, and Bell. 3x, in water, to be given alternately every hour, and told the nurse that I would return next forenoon. I then called Mr. McGilton into an adjoining apartment, and said to him that I respected his opinion in regard to a piece of mechanism, about which I knew nothing, but he must allow me, as a physician, to understand some of the ailments of humanity, having made the same a study for thirty years. I again reiterated my diagnosis, and told him that her present alarming symptoms were due to his overfeeding her for the past two days; that, in reference to typhoid fever, I had seen a great deal, and read many of the best current works of the day treating on that disease, most of which recommended feeding and stimulating the patient from the onset of the fever, but they also declared that the disease could not be broken up, but must run its full course, which lasted, according to some authors, from three to seven weeks, and even twenty-one weeks; but in my practice with this very light farinaceous liquid food, I had never had a case, in fifteen years' experience, that lasted more than fifteen days. I remarked: "Now, sir, if you will exercise patience, giving me full control of the patient, I shall shortly be enabled to discharge your lady well." I called the next afternoon, and found the lady much improved, my directions having been strictly followed. I am happy to say that in a few days the patient was restored to her normal health, much to the satisfaction of her husband and a numerous circle of friends.

The characteristic sign of the mild form of typhoid fever is that the febrile movement is of the low grade. It is very seldom that the temperature attains 104° , and should it do so it quickly falls. The beginning is

always slow. The patient complains of chilly sensations; but it is very rare that regular chills are met with. The nose bleeds, and headache, as a general rule, is present. An enlargement of the spleen is common. The disease will frequently run from twenty-four to twenty-six days; but, as a usual thing, it terminates in a much shorter space of time.

Murchison says the abortive form is rare on this continent, though quite common in Great Britain. It does not run the regular course, and the shortening is owing to the fact that the intestinal lesions never advance to ulceration. The attack is usually abrupt; it is not preceded by prodromata; and even on the second day the temperature may be 104° , or even higher. All the symptoms of the normal disease are present; but after the eighth or ninth day the temperature gradually falls, and decided morning remissions soon appear. In many cases the leading symptoms of the disease are absent, and in 100 cases of the abortive disease Liebermeister found that the spleen was not enlarged in 29 cases, diarrhea was absent in 29, and rose-spots in 79 cases. Serious complications are rare, and this type, as a rule, is only fatal in the aged. The latent form—the typhus ambulatorius of some German writers—differs in many respects from the abortive. All the symptoms are mild, and the febrile movement is often so slight as to be hardly noticeable, and yet it usually runs the full four weeks. But often the monotony of the disease is broken by sudden delirium or alarming hemorrhage, often followed by perforation and death. This form is often styled “gastric fever” or “bilious fever,” and it is often

fatal if purgatives are administered, as they frequently are by physicians of the dominant school. In aged people, and, indeed in all over fifty, enteric fever runs a modified course. The onset is insidious, the febrile movement is less marked, the prostration is extreme, and the entire type of the disease is adynamic. Some of the most prominent symptoms of the normal type of the disease—such as acute delirium, rose-spots, marked diarrhea—are seldom seen, and yet sudden and fatal collapse is far from being rare. But perforation is not so frequent in advanced life as it is before forty.

COMPLICATIONS.

No disease, either acute or chronic, has such numerous complications as typhoid fever. Some of these complications and sequelæ, such as perforation and hemorrhage from the bowels, are simply unusual developments of the disease itself, while others—as pneumonia, bronchitis, and erysipelas—are rather to be looked upon as accidental complications, not necessarily dependent on typhoid fever.

Perforation of the intestines, justly styled by Dr. Murchison “the most important and dangerous complication of enteric fever,” is almost peculiar to this disease, being but very rarely noted in connection with tuberculosis, and possibly with dysentery. Murchison has collected elaborate statistics, from which it appears that perforation took place in 196 cases out of a total of 1,721, a percentage of 11.38. He adds that in England, of every 33 persons attacked with enteric fever, one dies of perforation, and that perforation is found in nearly one-fifth of the fatal cases.

H. R. Arndt, M. D., says: "In my experience entirely with homeopathic treatment, perforation is nothing like so common, and I have only had one case of perforation in many hundreds of cases of the disease. Perforation may happen as early as the eighth day, but it is more likely to take place in the third or fourth week, quite close to convalescence. It is most likely to take place in some cases in which abdominal pain and diarrhea are prominent, but it must be borne in mind that it may take place in mild cases attended by constipation. Perforation is attended by sudden and severe pain in the abdomen, which at once becomes tense and tympanitic. This may be accompanied by rigors and vomiting; but collapse from the severity of the pain is more common, cold hands and feet, cold sweats and a decided fall of temperature. The pulse is small, rapid and thready; the respiration is quick and shallow, and suppression of urine may lead to unfounded suspicion of the injury to the bladder."

In very severe cases the patient may die at once, but generally he survives for three or four days. Many eminent pathologists—Louis, Chomel, Rokitsansky, and others, look upon perforation as being inevitably fatal; but more extended experience has shown that recovery sometimes, but rarely, takes place. Liebermeister reports 6 recoveries after perforation, Tweedie 2, Murchison 2, and single cases are reported by Todd, Griesinger, and others. Perforation is far more common in men than in women, the proportion being as 5 to 2. Diffuse peritonitis at once results from perforation, and it is apt to be severe in

its symptoms and fatal in its results ; peritonitis of a mild type may occur without perforation.

Hemorrhage from the bowels is another very frequent and fatal complication of enteric fever, occurring in about four per cent of all the cases. It varies much in size, from a mere streak of blood in the stools to a formidable hemorrhage, which may at once prove fatal. It is rare in the first week, more frequent in the second, and less frequent in the third and fourth. It is usually marked by a sudden fall of temperature, with weak pulse, pale face, cold hands and feet. Soon the temperature rises, and the disease resumes its march, possibly to be interrupted by another hemorrhage. Some observers, notably Trousseau, look upon intestinal hemorrhage as being attended with little danger; while others, as Graves, think that "marked benefits result from them;" but most of us agree with Murchison, who says that, though he has known many patients to recover, he has never observed benefit from the occurrence of hemorrhage. Murchison lost 32 out of 60 cases, or 53.35 per cent, and Liebermeister reports a mortality of 38 per cent. I incline to think that both perforation and hemorrhage are rarer and less fatal under homeopathic than under that of the dominant school.

True dysentery occasionally co-exists with typhoid fever; but the relation between the two diseases is not so close as Dr. John Harley considers it to be, and an exhausting chronic diarrhea may result from the non-cicatrization of the intestinal ulcers. According to Liebermeister, parenchymatous fever, or degeneration of the liver, is found very serious or fatal, but in

my experience, only in miasmatic regions ; abscess of the liver is rare. Jaundice is an infrequent but very fatal complication, occurring in perhaps two per cent of all the cases ; it is caused either by catarrhal inflammation of the biliary passages, or by the parenchymatous degeneration already mentioned. Congestion of the parotid gland is not common, and under homeopathic treatment it never proceeds to suppuration.

Venous thrombosis is common, especially in the form of obstruction of the femoral vein, which, according to Murchison, takes place in fully one per cent of all the cases. Spontaneous gangrene is less common than in typhus. Much more common is the degeneration of the muscular tissue of the heart, which exists in nearly all really serious cases of typhoid fever, resulting from the excessive fever. But inflammation of the heart is very rare. Hemorrhage from the kidneys, bladder, or gums is sometimes present. "Epistaxis is very common during the first week of the disease, and both Murchison and Liebermeister report cases fatal from this complication alone. Œdema of the glottis is, according to Jenner and Trousseau, occasionally the cause of death, and Louis reports a fatal case of croup in a powerful man aged twenty-three. Simple laryngitis is more common, especially in Germany, while laryngeal ulcers were found by Griesinger in 31 out of 118 post-mortem examinations. They are seldom seen in the United States, probably because they may be present without causing any symptoms referable to the larynx.

Some French writers record diphtheria as an occasional complication ; but though I have seen many

hundreds of cases of both diseases, I have never seen them coexist. Bronchitis occurs in about twenty per cent of all the cases, and is chiefly seen during the first ten days of illness. It may appear, however during the fourth week, and prove fatal through the supervention of hypostatic engorgement of the lungs. Often there is no cough, or, in fact, any objective symptom whatever, and it is only recognizable by auscultation. According to Louis, no acute disease is so frequently complicated with pneumonia or enteric fever, and his opinion has been confirmed by every observer. It is commonly of the lobular variety, and it rarely occurs before the third or fourth week. It may terminate in circumscribed gangrene of the lungs, which, however, may not be recognized during life. Hypostatic congestion of the lungs, followed by œdema, is dependent on the weakness of the heart, so often present in this disease. It is most likely to come on if the patient lies constantly on the back; and it is seldom seen till the disease is far advanced, say during the third week. The pneumonia processes may terminate in pulmonary phthisis, and Hoffman considers that it is developed by the accumulation of broken-down cell-masses, which can not be absorbed, owing to the general depression and interference with the circulation of fluids in the body. Pleurisy is somewhat common, but not under reasonably good homeopathic treatment.

CLINICAL CASE, No. 16.—Early in the month of July, 1883, I was called in great haste to visit a lady who resided at Shawtown, adjacent to the city of Eau Claire, Wis. I found the patient exceedingly ill, all her symptoms showing an advanced

state of typhoid fever. The lady was very fleshy, weighing somewhere near 260 pounds; of lymphatic temperament; and her aches and pains were of the most excruciating description. Her husband was very attentive, and expressed much anxiety for her welfare. After making a minute examination of her condition, and carefully noting the symptoms, I prescribed Bapt. 1x, Phos. 3x, and Bell. 3x, in water, to be taken in alternation every hour; directed her husband how to prepare water-gruel, and administer four table-spoonfuls at each meal; also requested him to bathe the patient in warm water as soon as convenient; left the room, to return at noon. He followed me to the door and startled me with the exclamation: "Doctor, what is the matter with my wife? She is going to die. The medicine you gave her is simply nothing but water. I must have another doctor. I can not let my wife die." I replied to him that his wife was well advanced in the premonitory stage of typhoid fever, and requested him to be calm, and also patient, assuring him that the medicines were strong enough and sufficiently efficient to effect a cure of the disease, providing that he would closely follow instructions and give them as directed. I added that I would carefully reconsider all her symptoms and return again at noon. I returned at the time mentioned, and found the patient doing well, perspiring freely. I went again in the evening, and found her symptoms much improved. Ordered another warm bath at bed-time. The woman's husband appeared sulky, and would scarcely enter into any conversation. I left, promising to call in the morning. About 9 A. M., on returning to the house, I found the patient's husband at the door in a state of considerable excitement. I inquired as to the condition of his wife: He replied: "She is worse; that medicine is not strong enough to affect her." The woman had heard the last remark, and said: "Husband, I feel that I am getting better. Quit your ugly conduct. Let the doctor alone; he will cure me." I renewed the medicines, repeated my instructions, and left, stating that I would call again in the evening. On my subsequent visit I found the patient improving, and remarked to her that in all probability she would obtain some sleep; and that it was not necessary to give her medicine while sleeping. The hus-

band seemed exceedingly morose and shy of me, which induced me to feel rather uncomfortable. Thus I returned to my hotel, the Bailey House, where I was then stopping.

Some hours after I had retired to my room a loud rap came to my door, and the night-watchman said: "Doctor, there is a woman dead below Shawtown, and you are wanted at once." As soon as I could gather up my ideas my mind reverted to the patient I had just left, and to the morose, sulky-looking man; and I said to myself: "What on earth has he done to produce this effect?" Thinking over my conduct as a physician, I felt that I had so far acted correctly with the patient. I was startled, however, still more by hearing a louder rap at the door, and a voice saying: "Doctor, come quick; the policeman is here." I finished dressing myself, caught up my medicine-case, and repaired to the bar-room, where I met the officer, who said: "Doctor, there is a woman dead below Shawtown, and you are wanted immediately. You will find a livery team at the door, to convey you to the place." I inquired who the person was that was reported dead, and he said he knew not, as word had been sent by telephone for me. This information in no wise relieved my mind, and I continued my imaginings, and was at a loss to think what the man could have done to produce death to the patient. After a three miles drive we got to the house, and, to my great surprise, I found the woman and the sulky husband sound asleep. In a few moments a man came from an adjacent house, who informed me that the woman who was said to be dead was in the next building. On entering the apartment where the woman lay, a singular scene presented itself. I observed a female, partly dressed, shaking the supposed corpse in a vigorous manner. She was crying, and at the same time, in a loud voice, beseeching her to speak. I remarked to the woman not to shake her so violently; and on inquiry found that she had taken a portion of some poisonous drug (they could not say what) for the purpose of self-destruction. So, recollecting that strong coffee was an antidote for opium, belladonna, and all their alkaloids, including morphia and atropia in their various preparations, I became convinced that if I could obtain strong coffee it would readily antidote the drug which she had taken and

perfectly restore her in a short time. On examination, I discovered that the woman was quite unconscious. The only perceivable sign of life was an occasional slight quiver of the pulse. All her extremities were cold as in death. I inquired for the cook of the house, and asked if she could give me three pints of strong coffee, which I made use of as an injection into the rectum, keeping it there with a firm compress. In twenty-five minutes afterwards the patient began to talk vigorously, when an affecting scene took place, which I shall not attempt to describe.

Next day I called again on my typhoid patient; found her quite comfortable and improving. Prescribed *Rhus. Tox.* 3x, *Phos.* 3x, and *Tart. Emet.* 3x, to be taken as usual; increased her quantity of gruel at each meal, and after making her two or three more visits, discharged her as convalescent.

NOTE.—The above two cases show, to some extent, the insidious nature which is so characteristic of typhoid fever; but in the following clinical case I purpose to show prominently the abiding prejudice and stubborn tenacity with which some people hold to their previous opinions and life-long habits, which, at times, occasions mental suffering and severe trials to the practicing physician:

TYPHOID PNEUMONIA.

CLINICAL CASE, No. 17.—In the month of March, 1875, while engaged in practice at Durand, Wis., I was called to see a young lady (daughter of Mrs. J. S—), who had been on the sick-list for some three weeks. On examination, I was at a loss to make out a final diagnosis of the case. Her pulse was slow and full, and accompanied with some irregularity; her right lung and also the left one were in a condition of hepatization. Her lower extremities were cold; her urine was scant and of a dark-red color; very little cough, but some difficulty of breathing; but on carefully looking over the case, I could find no well-marked symptoms to indicate typhoid. I prescribed *Aconite* 3x, *Phos.* 3, and promised to call in the evening. On visiting my

patient again, I found but little difference, save a slight moisture of the skin. I ordered the patient to be fed scant with tea and toast, to have a good warm-water bath before bed-time, and to take her medicine (to which I added Digt'l. 3x, in order to strengthen the heart's action), given in water, to be taken once an hour when she did not sleep. In the morning, calling again, I found little change, except that the patient complained of a slight headache in the frontal region, and her tongue showed more coating than I had noticed before, which, with the fetid character of her breath, brought me to the conclusion that I had now a severe case of typhoid pneumonia to treat. I prescribed Bapt. 1x, Phos. 1x, and Digt'l. 3x; ordered the patient to be fed with water-gruel, four table-spoonfuls at each meal, and to take her medicines as usual. On visiting her again in the evening, I found a wonderful change. She complained of pains all over the body, and especially from the lungs; the fever was much higher, and she was perspiring freely, was somewhat flighty and restless. I continued the same medicines, except changing Bell. 3x for Digt'l.; requested her to have another bath, and instructed her mother to see that she had just the quantity of food ordered, and no more. I told the mother, at the request of the young lady, my diagnosis of the case, and also assured her that I felt confident of my ability to bring her out all right, if my instructions were promptly carried out. I called again in the morning, and found the patient doing well; learned that the fever had subsided about midnight, and after that the patient fell asleep and remained so for some time. During my visit, while talking with the patient and her mother, I was inclined to think that the sick girl was receiving more food than I had ordered, and that it had been given her by a German girl, who was employed in the kitchen. I mentioned my fears to the patient's mother, and endeavored to impress upon her mind that my success in the case depended in a great measure upon the small quantity of food given the patient until her stomach was in a proper condition to digest it. I continued the same medicine, and promised to call in the evening. On my return, I found the patient doing well. Her cough was considerable, but she expectorated freely; there was some tenderness over the iliac region, and a good deal of rumbling in the

bowels, but the fever had dropped off at 4 P. M. I prescribed Rhus Tox. 3x, Phos. 3x, and Tart. Em. 3x, to be taken as usual in water. Going to the patient's home in the morning, I learned that she had rested well during most of the night, and was progressing as well as could be expected, only I had reason to fear that she was getting more food than I had ordered her. After administering a caution to the hired help, and continuing the same treatment, I left, promising to return in the evening.

From unforeseen circumstances arising, I was compelled to forego my visit until the following day. I called in the afternoon, and, to my surprise, found my patient dressed and walking the room; she had still considerable fever, and her tongue was not cleaning off as it should. Looking over the case very carefully, I came to the conclusion that some one was radically interfering with my treatment of the case. I politely hinted my surmises to her mother, and again tried to impress upon her the absolute necessity of adhering strictly to my mode of treatment. I renewed the same medicines, and requested that they should be regularly given at the appointed time, except when the patient was asleep. Called again on the morrow; found the patient pacing the room as before. On rather a critical examination, I discovered that she still had a low fever; hoarse cough, with considerable expectoration; full pulse; temperature 104°, and a heavily coated tongue. From the patient's appearance, I came to the conclusion that her walking around the apartment was solely in obedience to her mother's desire. I continued the same mode of treatment, and said to the patient I would call again next day. On going to the outer door, I passed through her mother's work-room, and she requested me not to make any more visits, as she thought her daughter would recover without any more of my attentions. I remarked, that I was sorry to hear her say so, for her daughter's symptoms did not please me, as she was not just in the condition I would like to leave her in. She stated that they were not able to pay any further doctor bills. I answered, that if in the treatment of the patient my instructions were implicitly obeyed, I would attend the case until her final recovery without any additional charge from that date. In

her reply she repeated her decision, and expressing a hope that she would recover, I left the residence.

A few days afterwards, meeting the father of the girl on the street, I inquired after the health of his daughter, and asked if she was still in bed. He said she was. I then told him fully how anxious I was concerning the welfare of his daughter. I said to him that she was not as well when I left as she ought to have been for the doctor to leave her, and that now, after a time, I was afraid that she would fall into the hands of some other doctor, whose treatment of typhoid pneumonia would be entirely different from mine, and that I doubted whether under such treatment she would recover. I renewed my offer made to his wife, that I would attend her as long as necessary without any further charge.

Some ten or twelve days afterwards the grandfather of the young lady called upon me at my house in the evening, and begged of me to go again and see his granddaughter, as he feared that she was dying. He said to me that, a few days before, her mother had visited Eau Claire; called upon Dr. Henry Day, and obtained from him a number of doses of medicine (partly homeopathic). Of these she had given her some, and yesterday she had called two physicians of this place to attend her, Drs. French and Morgan, and now they had eight doses of medicine in the patient's stomach, but could not get any passage through the canal. I declined to go, on the grounds that I believed her to be beyond the reach of medical aid. He still insisted that I should return, and said it would be a personal favor to him if I would come and try to get an operation of the bowels. I said that I could do that, but I had now no hopes of her recovery. I very reluctantly went with him to the home of the girl; found the two eminent gentlemen confessing their sad plight. After a full examination of the case, as then presented, I was confirmed in my opinion that the girl would die, and that in a short time. I prescribed *Nux Vom.* 3x, as an antidote for some of their medicines (adapted to her symptoms), and also for the bowels, together with other remedies. I administered the doses myself, and awaited results. In a few hours I obtained a passage from the bowels, when suddenly the patient's heart failed to act, and she was dead.

TYPHOID PNEUMONIA.

CLINICAL CASE, No. 18.—While practicing at Winona, in 1873, I had a call to attend a young woman (daughter of a shoemaker) who was in very moderate circumstances, living in the upper portion of a large tenement. On my arrival the father informed me that the girl had been sick for several weeks, and was tormented with a very bad cough, exceedingly troublesome day and night. Inquiring for the patient, I found her in bed. She had a burning fever, pulse 120, temperature 110°, skin very dry, coated tongue, and excessive thirst. She complained of much pain in both lungs, particularly so when seized with fits of coughing. On close examination, I found the right lung hep- atized, and the left one badly congested. I could not perceive any headache, or much soreness in the extremities; her face, however, was very red and much swollen. I prescribed Acon. 3x, Phos. 3x, and Tart. Emet. 3x, in water, to be given in alterna- tion, a tea-spoonful every half hour. Left, promising to return in the evening; requested her mother to save some of her daugh- ter's urine, if she micturated before I got back. Called again at the appointed time, and made an examination of the urine; found that it contained an excessive amount of urates, and in- dicated a high state of fever. The patient appeared more lively, and showed considerable moisture of the extremities. The fever was not quite so high and the pulse more moderate. Continued the same medicinal treatment; ordered a warm-water bath; her diet to be scant (a little weak tea and toasted bread). When I left the house I was unable to make a satisfactory diagnosis of the case. Her lungs, as before stated, were in a bad condition, but the expectoration was free and not of a rusty color; therefore from this, there ought not to be the amount of disease under which she was apparently laboring. On my visit in the morning I was surprised to find that her body was covered with petecchiæ, or red spots. This at once satisfied me that I had a severe case of typhoid pneumonia on hand. I at once prescribed Bapt. 1x, Bry. 3x, and Tart. Em. 3x, to meet a stitch which she felt in her left side when drawing her breath. Ordered the medicine to be given an hour apart in alternation, and the patient to be fed

water-gruel, which I instructed the mother how to make. Left, to return in the evening. On visiting the patient again I found her covered with perspiration, pulse about the same, and she was resting quietly. Continued the same medicine; requested another warm-water bath to be given about bed-time, and her skin to be well rubbed with a dry towel before being put to bed; ordered medicines to be given regularly, except when she was sleeping, and no more than four table-spoonfuls of the gruel to be given at each meal. Called again in the morning; found that the patient had rested well during the latter part of the night, when she was free from fever. I found the pulse indicating an early return of the fever; but, on the whole, the patient was doing well. I continued the same medicines, excepting to change Phos. 3x for Bry. 3x, as the pain she formerly complained of in the left side was gone. I visited the patient again next morning; found she had slept the greater portion of the past night, and, on examination, perceived that the red spots had mostly disappeared. The cough, though not so troublesome to the patient, was still very hoarse, affecting the lower part of the lungs; the sputa were somewhat frothy and mixed with considerable albumen. I also noticed some tenderness over the iliac region, and rumbling of the bowels, which led me to remark to her mother that she might have two or three diuretic stools during the next twenty-four hours. Prescribed Rhus Tox. 3x, Phos. 3x, and Sulph. 200x; left, promising to call next day. Made my visit on the morrow late in the evening; found the patient progressing nicely, except that the cough seemed still severe and the sputa more thick and consolidated. I requested the mother to increase the quantity of the girl's food a little; continued the same medicines; promised to call again next day.

When I left the house I felt considerable anxiety about the state of her lungs and the peculiar condition of the sputa, fearing that tubercular consumption might be aroused, as is frequently the case in this disease. On arriving at my office I held a consultation over the case with Dr. A. Putsch, my partner at that time, to whom I am indebted for much that I know about homeopathic therapeutics. The principal feature and most important part of the case was the state of the patient's lungs, and the precise present character of the sputa. After

I had described all the symptoms of the case as I had just left it, he directed me to continue the medicines, Rhus and Phos., and also add Carb. Veg. 3x, which would improve her condition in a short period. On my next visit I did as requested by the doctor. Improvement rapidly set in, and I was enabled soon to discharge the patient convalescent. The father and mother were very profuse in their thanks for my kindness and professional attendance, but that was all I obtained for my services.

CLINICAL CASE, NO. 19.—In the winter of 1876, while practicing at Durand, Wis., I was called to attend Mrs. F., a widow lady. On examination, I found a well-marked case of typhoid pneumonia in an advanced stage. Her pulse showed 120, temperature 105°, coated tongue, severe frontal headache, with back-ache and pain in all the extremities; also tenderness over the iliac region. Judge Plummer's wife, whom I found there, expressed great anxiety about her sister's welfare, and intimated that she was afraid poor Mary would die. After a careful examination of the case, I remarked, that if she would be sure to carry out my instructions, I thought her sister would recover. I prescribed Bapt. 1x, Phos. 3x, and Bell. 3x, in water, to be given in alternation every hour; instructed the judge's lady how to prepare water-gruel, and requested her to give the patient four table-spoonfuls at each meal, and in the evening (about bed-time) to give her a warm-water bath, and left, to call again in the morning. On my return, I found the judge himself present, with his good lady, who had been very attentive to the requirements of the patient. On examining her pulse and all her symptoms, I could not but feel that the sick lady was in a very low condition. Her fever was somewhat less than on my former visit; her head symptoms much better; the cough was heavy; the sputa heavy and profuse, and extreme soreness in the upper lobe of the left lung. The judge's lady informed me that, some years previously, her sister had contracted inflammation of the lungs, and that since she had a constant cough and general debility, and during her illness was attended by Dr. E. O. Baker, now of Menomonee, Wis. I continued the same medicines, excepting to change Bry. 3x for Bell. 3x; requested the lady in charge of the patient

to give medicines promptly, to feed her as directed, and I would call again in the morning. I called in the morning; found my patient as well as could be expected under the circumstances. Her skin was quite moist. She had slept some during the night. The urine, which I inspected, seemed as usual in such cases. She appeared very weak, and complained much of the distress in her left lung. Calling me to the bedside, the patient whispered: "Doctor, I am going to die." I replied: "No; you will not die yet, with such excellent attendance as you are now receiving from your good sister and her husband. Besides, I will try and do my duty towards you." I carefully examined her sputa; continued the same medicines, and left, promising to make another visit on the following day. The next forenoon, on calling again, I found the minister in the room administering spiritual consolation. I asked the judge's lady to empty the tumblers, and passed into the next room to prepare the medicines. The elder followed me into the apartment, and said: "Doctor, Mrs. Fox is going to die, is she not?" I remarked: "No, I think not; I hope that she will pull through." On returning to the room where the patient was lying, I found that all her symptoms were better, except the state of the left lung, which was about the same. I prescribed *Rhus Tox.* 3x, *Phos.* 3x, and *Bich. Pot.* 6x, in water, to be given as usual; her food to be slightly increased. The only symptom in the case causing me any alarm was the peculiar state of the left lung. I inquired once more of the judge's lady all about her sister's former illness, and also if any of the family had died from consumption, as well as to what time in the twenty-four hours the cough was the most distressing. With the necessary facts in my possession, I went to my office to study my *Materia Medica*, and, if possible, find a remedy for the ulcer, which, I believed, was in her left lung, thereby causing much of the trouble. Soon after arriving home I learned that the elder had gone over to one of the village stores, and reported that Mrs. F. was dying; that he had talked with "that old fool, the doctor, who was mixing up some little medicines in water, who said he thought she would not die yet;" but he further remarked that he did not think I knew anything about it, as the woman was evidently now dying.

I returned again in the morning to my patient, and found her progressing nicely. With the assistance of the judge's lady, and at her request, I gave the sick woman an injection of warm water, containing a small quantity of glycerine; prescribed Rhus Tox. 3x, Phos. 3x, and Dros. 3x, to be given three times by itself, and then in alternation once an hour; the food to be given as usual; I had a pleasant chat with the judge, who seemed now to have some hope of the recovery of his wife's sister. I assured him that I thought she would come out all right, and took my departure to call again on the morrow. I went again next morning; found all the symptoms improving, and was shown a strange-looking substance which the patient had expectorated during the night. On examination I found it to be the entire ulcer, sloughed off from the parenchyma of the left lung. I assured the good folks that the worst was now over, and the lung would fully recover, and convalescence shortly ensue, which proved to be the case, as, after a few visits, I discharged her, and she is to this day a well woman.

CLINICAL CASE, No. 20.—On the eleventh day of October, 1888, I was called upon at my office, in Music Hall Block, Eau Claire, Wis., to visit a young man who was lying sick at the home of Mr. Clock, a resident of the Sixth Ward. On my arrival at the house I learned that the young man had been some ten days in town, coming here from the State of Illinois. He had been some time on the road, and was complaining when he came to the city. After I had carefully examined the patient, Mrs. Clock inquired after the ailment afflicting the patient. The lady observed that he was her sister's son and on a visit to his friends. I replied to the lady's question by stating that the patient had contracted typhoid fever, and the disease was in an advanced stage. Mrs. Clock said: "Doctor, must he have a run of the fever?" "No, madam, I do not have runs of typhoid fever. I shall be able to restore him to a normal state of health in a few days if you will fully carry out my orders and instructions. I am aware that he has a very fragile constitution, but notwithstanding the fact, I am satisfied he will pull through." I prescribed Bapt. 1x, Phos. 3x, and Bell. 3x, in water, to be given in alternation every hour; a warm compress to be applied to his temples,

and changed as often as it became cool, and to allow him to eat at each meal four table-spoonfuls of water-gruel, for which the lady had ample instructions given as to its preparation. After a friendly chat with Mrs. Clock I left, stating that I would call next day. On the following day I returned and found my patient as well as I could expect—pulse 110, temperature 96° F. I learned that the fever went down about daylight, and that he had slept several hours, which previously he had been unable to do. I renewed the same medicines, ordered them to be given the same as before, and said I would call again next day. Going to the patient's home late in the evening on the morrow, I found him very much improved. He had no fever, pulse almost normal, and temperature the same. I prescribed Rhus Tox. 3x, Phos. 3x, and Tart. Emet. 3x, in water, to be given in alternation as before. I found some tenderness over the iliac region, but could not detect any rumbling of the bowels. The lady said that the oatmeal-gruel was distasteful to the patient, who objected to use it. I told her that rice might be substituted, but it must be boiled very thin, and the young man must have the same quantity, namely, four table-spoonfuls. I promised to visit the patient in forty-eight hours. On my return at the appointed time I found the patient without any trace of fever, and was told that he had slept soundly the night previous. The only thing seeming to trouble him was a chronic nasal catarrh, which prevented him from breathing through his nose. I prescribed Rhus Tox. 3x, Kali Murc. 6x, in water, to be taken as usual; told the lady to increase his food a trifle, and said I would call within two days, when I hoped to be enabled to discharge him. I called at the expiration of the time, and said to the patient: "How are you? Can you breathe through your nose?" His remark was: "You bet I can." Then I observed that I could safely discharge him. I prescribed Nux Vom. 3x, Sulph. 3x, in two-drachm vials, in a solution of weak alcohol, to be taken every hour for twenty-four hours alternately, and then every two hours. I particularly warned the patient to abstain from partaking of a hearty meal; told him that if he obeyed injunctions and took medicines regularly, it would only be a short time before he would be enjoying his usual health. I repeated this con-

versation to Mrs. Clock, and endeavored to impress on her mind the necessity of the patient eating only a small quantity of food at a time, as I feared that bad consequences would in all probability ensue providing that he acted imprudently.

NOTE.—When discharging patients who have been laboring under typhoid fever I have invariably tried to impress upon them the great importance of abstaining from heavy food for some days, at least while convalescing. Relapses are of frequent occurrence, and are generally caused by gorging the stomach. They are always more to be dreaded than the original disease. For the benefit of my readers, I wish further to add that the medicines I generally use in discharging patients who are convalescing from typhoid fever are *Nux Vom.* 3x and *Sulph.* 3x. The former is a splendid stimulant for the spinal nerves, and the latter one of the best for healing the mucous membrane of the intestines.

CLINICAL CASE, NO. 21: A RELAPSE.—On the third day of November, 1888, I received a call at my office from Mr. Clock, who informed me that the young man whom I had been attending and discharged as well, had taken a relapse, and was in a very bad condition. Mr. Clock said that after I had left the patient some forty-eight hours, he started out, and, visiting a neighbor's house, there partook of a quantity of stimulating food, consisting of a dozen pancakes and a dish full of jelly, together with other victuals. He was now lying at the before-mentioned home of the gentleman, very sick. I was sorry to hear this news, having had in twenty years' practice only one case of the kind, and I feared fatal results from the one on hand, owing to the fact that the young man was of an anemic constitution, and was just the patient that typhoid fever would hang to. I repaired to the house with many misgivings; found the patient with an exceedingly high fever, tongue heavily coated, and much diarrhea, he having had

no less than six diuretic stools during the previous night. I prescribed Rhus Tox. 3, Bell. 3x, and Phos. 3x, to be taken alternately once an hour; directed his attendant to apply a warm compress to the head, changing the cloth as often as it became cool, and left, with a promise to return next day. On my return I found the fever high. The patient was not however so restless, and his skin was in a moist condition. He could not tell me the number of stools passed the previous night, his answers being given with a good deal of hesitancy, and he seemed inclined to slip down to the foot of the bed. Such symptoms are generally understood to be dangerous ones, and frequently presage a fatal termination. I prescribed Rhus Tox. 3x, Phos. 3x, Tart. Emet. 3x, in water, to be given as usual, and requested Mrs. Clock not to allow the stools to remain long in the room; and I would call the following day. Ordered medicines to be given every hour unless the patient slept, and the rice-gruel to be administered as usual. When I called on the afternoon of the following day, I was glad to find the youth better. He had had fewer stools, had slept a portion of the previous night; his tongue was clearing off, and he spoke more freely. I renewed the same medicines with the addition of Digt'l. 3x, in place of Tart. Emet. 3x, to be given in alternation with the others. Called again November 8th, and found my patient still improving. The diarrhea continued to hang to him, but the character and consistence of the stools showed marked improvement. I continued to attend him, prescribing the same remedies until the 13th of the month, when I gave him a sufficient quantity of the before-mentioned remedies to last him forty-eight hours. I also gave him two-drachm vials, one of Nux Vom. 3x, and the other one Sulph. 30x, to be touched to his tongue in alternation every two hours. Repeated my instructions very forcibly in regard to food, and left, leaving all the household in a general mood of rejoicing. Mr. and Mrs. Clock looked upon the young man's recovery as little short of a miracle, and they were profuse in thanks to me for my services and constant attention.

CLINICAL CASE No. 22.—On Saturday, the 14th of August, 1889, in the city of Eau Claire, Wisconsin, I was called on by Mr. Wm. T. Glossop at my office, who wished me to go at

once with him to see his son, who, he said, had been quite ill during the night. After passing a few blocks we found the young lad in Mr. Glossop's room at his hotel. The patient's pulse I found to be 110, and his temperature 96° ; his tongue was severely coated, and he complained of a very severe frontal headache, pain in the back, with chills running up the spine, and, indeed, soreness and stiffness all over his body. He remarked that he had not been well for several days, but still he had continued his work on the farm where employed. I prescribed Bapt. 1x, Phos. 3x, and Tart. Emet. 3x, in water, to be taken every hour alternately. I said to his father, in answer to his inquiries, that the lad had all the symptoms well-marked of typhoid fever, but if he would be careful and follow out my instructions I would have him out in a very few days. I requested to have some thin water-gruel made for him, and give him two to three table-spoonfuls at meal-time, and when the patient was thirsty allow him to drink a small quantity of good spring-water, take his medicines regularly, and I would call again in the evening. I called again at 6 P. M.; found the patient more comfortable, the skin more moist, pulse a little lower, and the headache not quite so severe. I continued the same medicines, except substituting Bell. 3x for the Tart. Emet. I told the lad that his fever would go down about midnight, and that he would then go to sleep. Called again at nine o'clock the next morning, and found the patient doing well. I renewed the medicines, and said that I would call again soon. I called at 4 P. M., and found the fever almost gone; pulse and temperature falling, and the patient otherwise progressing nicely. Prescribed Rhus Tox. 3x, Phos. 3x, and Tart. Emet. 3x, in water, to be taken as usual every hour; increased the quantity of gruel at meal-time; said to his father that the lad would sleep well during the coming night, and I hoped to be able to discharge him in the morning. At 11 A. M. on the 16th, I called again at the hotel; found the lad walking about without any symptom of fever; the pulse and temperature almost normal. I prescribed Rhus Tox. 3x, Phos. 3x, and Tart. Emet. 3x, in weak alcohol, in two-drachm vials, marked Nos. 1, 2, and 3, to be taken by touching each twice to the tongue in alternation every two

hours, to eat very sparingly for a few days, and said to his father that he might go back to his farm-work on Monday, the 19th inst., which he did, all being well-pleased.

Several complications are liable to occur in this disease, viz.: such as true meningitis, boils, and abscesses in the skin. Œdema is often seen about the feet and ankles. Scarlatina may co-exist, as well as temporary paralysis, usually in the form of paraplegia. There may be some other diseases, but as my treatment (shown by the clinical cases) has at all times cut short the fever and all symptoms of the disease, I have in every case in twenty years' practice saved the trouble of those frequently long lasting complications.

PATHOLOGICAL CHARACTERISTICS.

H. R. Arndt, M. D., states that early in the disease physical examination of the chest discloses the existence of a dry, sonorous or sibilant rhonchus, very often quite loud, and heard all over the thorax. Further on this is replaced by mucous rales, which, however, give rise to less cough and dyspnoea than might be expected. On auscultating the posterior aspect of the lungs, it will be found that respiration is weak, the result of a kind of hypostatic congestion.

In discussing the pathological anatomy of enteric fever, it must not be forgotten that, in the words of Trousseau, "the intestinal lesions, as well as the lesions in other parts of the body, are the effects, and not the cause." Typhoid fever differs from typhus and relapsing fevers in the invariable presence of specific lesions, which are so characteristic that they are found in no other disease whatever.

Following Hoffman's classification the lesions of enteric fever are naturally divided into two groups, the first including all changes essential to the disease, and consequently found in every well-developed case, while the lesions included in the second group are not necessary results of typhoid. Again, the essential lesions are subdivided into two groups, the first including the direct effects of the typhoid poison, such as the lesions of the intestinal canal, the spleen and the mesenteric glands, while the second group comprehends the degenerative changes in the heart, liver, kidneys, pancreas, and muscles which are the result of the general disease.

The second principal group is made up of the non-essential lesions, as bronchitis, pulmonary congestion, pneumonia, peritonitis, and so forth.

Of the primary local lesions the changes in the lymphatic of the intestinal canal are undoubtedly the chief. These changes, according to Liebermeister, consist essentially in a process of new growth, combined with intense inflammation, producing increase in the size of the glands spoken of, with subsequent partial destruction of them. At the commencement of the first week of the disease the mucous membrane adjacent to Peyer's glands becomes congested and swollen, and this hyperæmia gradually extends to the patches themselves, so that by the end of the week all are infiltrated that are likely to become the seat of the disease. The disease may be arrested at the end of the first stage, and such a result is not rare under homeopathic treatment. In the second week the affected Peyer's patches continue to increase in size,

while the surrounding mucous membrane becomes less hyperæmic, while in others a kind of retrograde process commences. In the third week the greater part of each affected patch is detached in the form of a slough, leaving an ulcerated surface behind, extending to the muscular coat, or even deeper. These ulcers are circular when they correspond to a solitary gland, and oval when they correspond to a Peyer's patch; when several ulcers unite, the form is irregular. They vary in size from a line to an inch and a half, and are chiefly found in the lower third of the small intestines.

The fourth week is marked by the cicatrization of these typhoid ulcers, though often the process is not completed till the fifth week. This infiltration of the intestinal glands is produced by an enormous multiplication of thin cells, so that each gland may be six times its natural size. These cells proliferate till each affected patch is changed into a mass of diseased gland-tissue, and even the neighboring mucous membrane is flooded with cells. When completely developed, an affected patch is a soft rose-colored mass, strongly resembling the medullary substance of the foetal brain.

The scars of these ulcers may readily be recognized years after they are healed, but they never diminish the caliber of the intestine. The mesenteric glands are always enlarged, and this hypertrophy seems, as a rule, to be in proportion to the severity of the intestinal lesion. This swelling begins with the fever, and reaches its height at the end of the second week, when an ordinary gland is often of the size of a pigeon's egg. They are firm in consistence, and of

a purplish-blue color during the continuance of the congestion. As soon as the affected Peyer's glands begin to slough off, the congested mesenteric diminish in size; but they are still abnormally large at the beginning of the fifth week. Occasionally other lymphatic glands participate in the congestion, especially the retro-peritoneal and bronchial. The spleen is almost invariably enlarged, the average weight in thirty cases being twelve and one-quarter ounces, as compared with a normal weight of four and one-half ounces. This enlargement, too, begins with the fever; continues to increase till the middle of the third week, and slowly diminishes during the fourth week. The capsule is dense and firm, purplish-blue in color, and brownish-red on section. Enlargement of this organ is more likely to be absent in the old than in the young.

The lesions which make up the second group of pathological changes are in the parenchyma of various organs. The liver is hyperæmic in about one-quarter of all the cases, and softening is not rare. The hepatic cells are enlarged, and, according to Liebermeister, they appear like a conglomeration of granules, which finally lose all cohesion and break down into a formless mass of granular detritus. The color is grayish-red, but in the advanced stage it is grayish-orange, and the tint is in exact proportion to the duration and severity of the fever. The secretion of bile is greatly diminished, and the mucous membrane of the gall-bladder is frequently inflamed. The pancreas is generally healthy, but occasionally it participates in the hyperæmia of the adjacent organs.

The degeneration of the parenchyma of the kidneys closely resembles that of the liver. The epithelium becomes granular; the nuclei of the cells disappear, while their contour is changed. These changes commence at the cortex, and gradually extend to the pyramids. Albumen is often present, but it is not necessarily dependent upon the degeneration of the kidneys.

A softening of the muscular tissue of the heart in severe cases is the rule, and this is the cause of the feebleness of this organ, so characteristic of the disease. Marked softening occurs in about one-third of all the cases, and Zenker affirms that it is due to similar changes to those which he discovered in the voluntary muscles. The organ is pale and flabby, and in extreme cases, when placed on the table, it settles down into a shapeless mass. Most of the great blood-vessels share in the same degenerative changes. The blood is dark in color, with a small, soft clot; the venous blood is especially dark in hue. If death has taken place at an advanced stage, the blood is thin and pale, while the vessels are almost empty.

Still another lesion is granular and waxy degeneration of the voluntary muscles. The granular variety differs little from ordinary fatty degeneration, while in the waxy form the muscular tissue is converted into a lustrous, wax-like mass, in which the striations completely disappear. This change, as its discoverer, Zenker, points out, is not peculiar to typhoid fever, and it has usually been attributed to the long-continued high temperature. This degeneration often extends to the muscles of the tongue, causing the often-noted trem-

bling of that organ, with stammering speech. The high temperature also causes a degeneration of the brain tissue, the effects of which are seen in the weakness of thought and memory, which often continues long after convalescence. At times congestion or inflammation of the meninges is noticed, and at a late stage œdema of the brain is not rare.

Of the non-essential lesions, the principal are found in the organs of respiration. The epiglottis is inflamed in about one-fifth of the cases, and it is sometimes ulcerated. The larynx is often ulcerated, and these ulcers have been erroneously looked upon as being analogous to the intestinal ulcers. The trachea is generally normal, while the bronchial tubes almost invariably show evidences of inflammation. Hypostatic congestion of the lungs is common, and pneumonia is present in about one-fourth of the cases. Pleurisy is often present. Ponfick also notes alterations in the medulla of the bones.

I am not prepared to vouch for the correctness in every particular of the following article on the temperature of typhoid fever, as my experience in its continued form has been small, owing to the character of my treatment, which, as it will be seen by the clinical cases, at all times shortens its duration (I would observe, however, that where this author suggests quinine I would suggest *Digt'l. 3x* or *Verat. Alb. 3x*, to sustain the heart's action, and *Carb. Veg.* or *Hep. Sul. 3x*, to prevent a collapse); but as it comes from a foreign source, it may be interesting to those who may have verified it in the treatment of typhoid fever in its normal course. I hereby insert it, taken

from the *American Homeopathic Journal* of September, 1886, by P. Joussett, M. D., of Paris :

“Typhoid fever presents three stages. During the first week the remission in the morning should be equal to half of the ascension in the evening; *e. g.*, morning $37^{\circ} 6'$ ($98^{\circ} 6'$ F.); evening, 38° ($100^{\circ} 4'$ F.); to-morrow, in the morning, 37° ($99^{\circ} 6'$ F.), evening, $38^{\circ} 5'$ ($101^{\circ} 5'$ F.); third day, morning 38° , evening $38^{\circ} 5'$ (103° F.); fourth day, morning, 38° ; and temperature ought to remain the same till the lenticular spots appear. A light remission now sets in, as in eruptive fevers; then it rises again, and constitutes states, so up to the fourteenth or fifteenth day; a gradual descent now follows, till the temperature becomes normal again.

“When the patient dies, during the middle of the second or at the beginning of the third week the thermometer may rise to 41° and 42° (105° to 107° F.) Some typhoid fever shows greater oscillations than others, and though the evening may register 40° and $41^{\circ} 5'$ (105° F.), if we only have large remissions in the morning, the patient rests during the time, and a favorable prognosis may be given.

“There is also another termination with great oscillations toward the end of typhoid fever. The period is very tenacious, and lasts a long time. The evening temperature is perhaps 40° , and the morning register 37° , for several weeks; otherwise the patient has good appetite, gains strength, but still convalescence will be very slow.

“There are circumstances which modify the normal teaching. Hemorrhages sometimes make it fall

even below the normal. Where the patient does not die from the loss of blood, the temperature may maintain itself at a moderate degree. Some hemorrhage even seems to have a favorable influence on typhoid fever. The temperature does not rise after the hemorrhage, and convalescence sets in. Vomiting or diarrhea may also cause a fall in the temperature.

“Dangerous symptoms may suddenly appear during stationary state, and without cause the temperature rises several degrees in the evening or in the morning, and with it we witness lividity of the face, considerable prostration, oppression, sunken features, very violent pains, which stand in no *rapport* with the disease. The prognosis is very bad, if not immediate relief granted. Quinine in large doses must be given, for we have no time to study out whether serabe, veratrum, or any other drug would suit. We must prevent death.

“The next day there may be another paroxysm; morning 38° , evening $39^{\circ} 5'$, and suddenly 40° the next morning. In such cases our only reliable medicine is quinine in large doses. What value can we put on the tracing of temperature in relation to diagnosis? In typhoid fever the temperature on the fourth day ought to be $39^{\circ} 5'$ (103° F.), and any disease which shows a temperature of $39^{\circ} 5'$ the fourth day is not typhoid fever. This is not absolute, but very true in a great many cases.

“Let us study other diseases which the thermometer registers—three sink periods; as febric, ephemera, synochus; pneumonia, pleurisy eruptions, fevers; but the error is soon detected. These diseases have a

rapid ascension, and register $39^{\circ} 5'$ a long time before the fourth day. In every case the rise is not gradual, but reaches its acme in the first or second day. If our English friends would have kept account of the thermometer-tracing, they would have found out that typhoid fever can not be dispelled at once by *Baptisia*. The perculent diathesis, puerperal or traumatic, shows in its thermometry a close similitude to that of typhoid fever; but in the former oscillation is usually greater; the fever is remittent. But we also have other signs to guide us; chills often repeated, hating to the puerperal—diatheric pale, icteric the puerperal state (in women before confinement).

“We must not forget that such patients may take the typhoid fever.

“In acute articular rheumatism the temperature is hardly ever so elevated, but still there is a great resemblance, and many a typhoid fever is complicated with arthritis, and we must consider the totality of the tracing; the arthritis is not much pronounced in typhoid fever, and the diarrhea and the lenticular spots assure the diagnosis.

“There is an acute phthisis of a typhoid form. (We have the observation of a young girl who was treated for typhoid fever. At the autopsy granulations were found in the lungs, liver, spleen, and none in the intestines.) In phthisis the fever is usually more remittent, the oscillations greater; the more frequent pulse is not in harmony with the temperature. We must take account of the antecedents of heredity; auscultation of the apices, tendency to sweating, etc., must also be accounted for. In fact, only the totality of the

symptoms can clear up the diagnosis, and still errors are possible and have happened to our best practitioners.

“The diagnosis of typhoid fever is usually not difficult, the age of the patient and totality of the symptoms assisting. It is more difficult in aged persons and in quite young infants from eight to fifteen months, where the prognosis is rather unfavorable. As a *resumé*, the characteristics of the temperature are:

“1. Progressive elevation of the temperature, a period of rise, one of stability, and a descending period of great oscillations.

“2. Intensity of the fiber heat from 39° to 41° , (103° to $105^{\circ} 5' F.$)

“3. The duration of the fever is at least seventeen days, and may last seventy to eighty days.

“The fibris ephemera, the synochus, pneumonia, have a rapid ascension and no directions.

“Only phthisis lasts so long, but its symptoms differ.

“In relation to the prognosis of typhoid fever, we might say that the danger is in proportion to a high thermality, especially if morning remissions are not very marked. A form which steadily shows 40° is rather dangerous, and when it remains under 40° a hopeful case. Whenever the temperature rises above $41^{\circ} 5'$ in the evening, and registers in the morning $40^{\circ} 8'$, death may be feared. When oscillations are small, but the temperature always high, the prognosis is ominous. Great oscillations are favorable, even when the evening temperature rises above 40° , and again falls below 39° in the morning; for the patient

secures some rest during the day. Great oscillation during the third week need not give any anxiety; for weeks we may have 37° in the morning and 40° in the evening, but the patient improves all the time, eats and sleeps well, and treatment is unnecessary; in fact, all interference is injudicious. When towards the end of the second week, instead of a decline a rise takes place, we may be sure of a complication, for this is against the regular course of the disease."

The old critical days are often too much neglected; they are the 4th, 7th, 11th, 14th, 17th, 20th, and 24th days, only it is often difficult to get them from our patients, for they hardly ever know when the fever began.

George W. Winterburn, M. D., fully indorses my views in regard to the use of Baptisia as a remedial agent in the treatment of typhoid fever during its early stages. The following well-timed remarks by Dr. Winterburn and others, at a meeting of the King's County, New York, Homeopathic Medical Society, held at Brooklyn September 1, 1885, will be read with profit:

"*Mr. President, Ladies and Gentlemen,*—I have not prepared a paper to present to you this evening, but simply propose to make a few remarks. Your secretary very kindly asked me a few days ago to come and speak on some subject, leaving me the choice of what that should be; and I recognized the difficulty of finding something practical which has not been so often debated as to be considered stale and beyond discussion.

"I am not aware that the subject I have selected, 'Baptisia in Typhoid,' can be considered a stale one;

it is a subject that has been widely discussed, and some members of the medical profession have very strong opinions in regard to it; but the opinions are not all on one side.

“Some think very strongly that typhoid, like all other specific or self-limiting diseases, must run its course, and can not be abated; that the disease once having taken hold of the man, or the man of the disease, they have to fight it out for a definite length of time. There are others who believe that typhoid pneumonia and other so-called specific diseases can be abated; and that some of our remedies, if given at the right time, will cut them short, and the patient will escape the second or third stages and their sequences. As there is this difference of opinion, it may be of some use to discuss the subject. There has also been a diversity of opinion as to what was meant by typhoid.

“When the use of *Baptisia* was first discussed, about twenty-five years ago, I think Dr. Richard Hughes, of England, was the first prominent man to bring it before the profession in its relation to typhoid, which he did, I believe, in a paper read before the British Homeopathic Association, in the presence of physicians from this country and England, and very many present spoke of the efficacy of the remedy in these cases. Dr. Hughes then believed it would not only modify the disease and prevent untoward sequelæ, but that it would go beyond this and prevent its further development. But presently a discordant note was struck; some physicians began to say that the disease that Dr. Hughes and these others were

talking about was not typhoid. If it was acted upon by the remedy, as they stated, it was not typhoid but something else. It is well, therefore, to fix in our minds what typhoid is.

“We limit the term to define a continuous fever, characterized by a certain definite thermometric range, that is followed later by a change in the patches of Peyer, with diarrhea generally in consequence; that we have about the seventh day lenticular spots of a rose color appearing upon the skin; that these last about three days, and are then followed by others.

“These are what are considered as characteristics of the disease, and it is not typhoid if these are not present.

“Prof. Kippax, of Chicago, lays special stress on the thermometric range during the first five days of the fever; that is, if the temperature is one hundred and one degrees (101°) Fahr. on the evening of the first day, and that it advances about one degree a day up to the sixth day to one hundred and five (105°), with a regular morning remission of about half a degree, we have the symptom that definitely settles the question whether it be the specific fever known as typhoid. It is certainly the best evidence, because it is the earliest; the diarrhea comes at a later stage; the spots on the skin do not appear till the seventh day; the tenderness of the bowels comes later, and all the peculiar diagnostic symptoms, except this, come in the second stage.

“I think we are quite right in saying that we have here a definite fever, with characteristics not existing in any other disease. If, therefore, any remedy will

alter its course, abridge it, or stop the disease before it has proceeded through its regular development, in so far it is abortive of the disease. The question is, does Baptisia do this? Some physicians assert that it will not do it; in fact, Dr. Hughes backs down from his former position, and says he has not discriminated between typhoid and ordinary gastric fever, and must admit that those cases in which he used Baptisia were simply gastric or ordinary continued fever.

“The reason, probably, why I selected this subject for to-night is that it has been uppermost in my mind in a case I have been treating lately. A young man, about twenty-six years of age, an artist by profession, had been failing in strength and losing weight, with other evidences of impending sickness, for some six weeks or more. He would lie down on a lounge and fall asleep easily during the day, something quite foreign to his habit, and complained of feeling tired all the time. He applied for treatment after an exposure to damp weather; and believing he was only suffering from a slight cold, I did not take everything into account, and only gave him some light remedy, thinking the symptoms would be overcome easily. The next morning I was sent for, and found his temperature a little over 100° ; in the evening it was $101\frac{1}{2}^{\circ}$, with a morning remission of half a degree; the next evening it was $103\frac{1}{2}^{\circ}$. In all these cases there is the daily rise in temperature of about a degree, and I think you will bear me out in asserting that we do not find it in any other disease.

“I put the patient on Baptisia, and on the day

after administering it the temperature went down to $102\frac{1}{2}^{\circ}$; the next day it was $100\frac{1}{2}^{\circ}$, and it was below 100° on the day after this, and I thought it was because the patient had been receiving Baptisia. In order to decide if it were so, I made the hazardous experiment of stopping the remedy, which I did on the fifth day; the temperature rose again on the sixth day to $102\frac{1}{2}^{\circ}$, and you can be sure he received the Baptisia again vigorously all that night; and the next day his temperature was down to $101\frac{1}{2}^{\circ}$, and the following day to 100° , when, after lingering for a few days, with a regular morning remission and evening rise, it sank to 99° .

“To make a long story short, on the fourteenth day the temperature dropped to normal; in the meantime, however, on the seventh day there developed the lenticular spots, which lasted about two and a half to three days. There were two or three crops of them. On the seventh day, although there was not very much fever, he had two offensive, mushy stools, this being all the diarrhea that occurred. They were certainly enough like typhoid stools to have been indicative of that disease, even if I had seen the case that day for the first.

“This case had developed all the characteristics of typhoid, and yet on the fourteenth day was discharged cured. He was at my office to-day, and is going on a vacation to recuperate. To-morrow will make the twenty-first day. He has lost twenty pounds, and has all the signs of weakness following such a condition. It is my opinion that had he not gone the twenty-four hours without medicine the sickness would have been shortened several days.

“Baptisia is a remedy which I am very strongly attached to, for the reason that it was through its influence I became convinced of the value of potentized drugs. It is one thing to accept and practice a principle, it is another thing to know it and feel it. I have no doubt many persons use potentized remedies without thoroughly believing in them.

“My experience with this remedy in typhoid dates from an epidemic which occurred in the winter of 1878 and 1879, on the west side of New York City, beginning in the neighborhood of Gansevoort Market and extending northward, embracing Ninth, Tenth, and Eleventh Avenues, and the adjoining streets.

“In that epidemic I treated thirty-seven cases; they were typical typhoid as well as typical Baptisia cases, and I gave Baptisia to all of them. I made up my mind I would learn something if I could from that epidemic, and I gave some of the sick fluid extract, some the sixth decimal, which I prepared myself, and to others the thirtieth centesimal, procured at Smith's pharmacy; and that there should be no favoritism, I gave the different preparations of the drug to the cases as I took them under treatment; that is, the first case received the fluid extract, the second the sixth decimal, and the third case the thirtieth, and the fourth received the fluid extract, and so on through them all. To those receiving the fluid extract I put fifteen drops in half a glass of water, and gave teaspoonful doses hourly. Most of the cases were tenement-house patients, and of course did not get the care and nursing they should have had.

“In all the cases treated with the fluid extract

the fever ended, on an average, on the nineteenth day; in those treated with the sixth decimal on the sixteenth day, and in the twelve who received the thirtieth potency, it ended on the fourteenth day. The remedy cut short the disease, and improved the condition in proportion to the potency received. This was the first absolute conviction I had in my practice of the value of potentized over crude and semi-crude drugs.

“Those cases which received the thirtieth convalesced more rapidly than the others, and got around to business quicker, so much so as to be exceedingly convincing to my mind.

“I will just mention another case which came into my hands, I think in 1880, or perhaps 1881. I was called in March of one of those years to see a young man about nineteen, who was an usher in Booth's Theater; he lived on Twenty-ninth Street, near Ninth Avenue. I found his evening temperature about 101° , a few tenths possibly over 101° ; the next morning it was a little lower; that evening it was a degree higher, and so it went on up to $104\frac{1}{2}^{\circ}$ on the fifth day. This boy had a very marked diarrhea, tenderness over the abdomen, the lenticular spots, and, in fact, all the indications characteristic of typhoid, with the exception that the fever was held down by the remedy, or by something, although the diarrhea persisted, as also did the tenderness of the abdomen. The fever went down from $104\frac{1}{2}^{\circ}$ to $103\frac{1}{2}^{\circ}$ gradually, and by the ninth day it was below 100° , and did not rise in the evening above 100° , although the diarrhea continued. There was a slow convalescence, probably because of poor nursing;

but the remedy certainly showed remarkable ability to control temperature in this case.

“I do not mean to say that Baptisia is the remedy for typhoid, or that in the treatment of this disease it takes any place but its own; nor do I wish to be understood as recommending it as a specific for typhoid. It can not cure cases wherein other remedies are indicated—as, for instance, Rhus or Arsenic or Muriatic Acid—and can not be said to be a remedy for typhoid except in cases where the symptoms call for its administration.”

TOXICOLOGY OF PHOSPHORUS.

In treating typhoid fever and pneumonia, I was in my early practice induced to use phosphorus at times in the 3x, 6x, 30x, and 200x, in alternation with other medicines, from its being approved by several eminent authors. In later years I have been confirmed in this judgment by my universal success, as the clinical cases will fully show, and also by its toxic effects on the system, producing and curing petecchia and purpuric spots, as collected from various sources and published in the *American Homeopathic Journal* of August, 1885, which, for the information of my readers, I insert here :

“1. Red patches upon the arms. Insensibility of the skin of the extremities. Ecchymoses on the peritoneum, with bloody serum in its cavity. The spleen enlarged, softened, and with ecchymoses under its serous coat. Ecchymoses on the mucous membrane of the bladder. Sub-peritoneal ecchymoses on the uterus and its appendages, and also between the

laminae of the mesentery. [Post-mortem on Marie Leblanc, who, on the evening of June 5, 1856, six hours after eating, swallowed the combustible matter of a box of matches dissolved in a cup of coffee, and died on 15th inst. Prof. Leudet, *Archives Generale de Medicine*, March, 1857.]

“ This case, says W. H. Holcombe, M. D. (*North American Journal of Homeopathy*, Vol. VII, p. 140), remarkably illustrates the power of phosphorus to produce those blood metamorphoses or those modifications of the capillary system, perhaps both at once, which result in hemorrhages, either by ecchymoses into the tissue, or by exudation into the cavities. Orfila, in his treatise on toxicology, says that the petecchial eruptions of phosphorus are red, whilst those of arsenic are black and blue.

“ 2. The skin was yellow; the subcutaneous veins of the abdomen and the upper part of thighs were protuberant and arborescent; the scrotum was completely covered with ecchymoses. About the cardiac and pyloric orifices there were black, or rather marbled spots, which were genuine ecchymoses. [Poisoning by two centigrammes of phosphorus, dissolved in hot water. Died six days subsequently. Orfila, ‘Treatise on Toxicology.’ Report of Dr. Worbe.]

“ 3. The cutaneous surface exhibited numerous patches of livid discoloration. There were numerous extravasations on the pleura, mesentery, and tissues. [Girl of thirteen, who took an unknown quantity of phosphorus paste. *British Journal of Homeopathy*, Vol. XXI, p. 460.]

“ 4. The lungs showed many patches of blood

extravasation; the sub-pleural cellular tissue of the mediastinum presented the same appearance; in the pleura was bloody serum; the sub-peritoneal cellular tissue presented patches of ecchymoses; the mucous membrane of the pelvis of the kidney was covered with spots of ecchymoses. [Soldier, aged twenty-one, who, in order to commit suicide, took the ends of six ordinary packets of phosphorus matches. *American Journal of Medical Sciences*, January, 1858.]

“5. Very large ecchymoses of extravasated blood under the serous membrane of the lungs, both costal and visceral. The lungs presented here and there small ecchymoses; the pericardium and endocardium also presented ecchymosed spots; and there were small ecchymoses in the substance of the liver. [A case of suicide accomplished by swallowing inflammable material of four boxes of lucifer matches, scraped off into a wine-glassful of brandy. Prof. Leudet, *Archives Generales de Medicine*, March, 1857.]

“6. The mucous membranes of the larynx and trachea were covered with patches of ecchymoses, as was also the pleura; beneath the capsule of Glisson there were numerous spots like petechiæ, and extravasations under the anterior surface of the capsule of the kidney. [Augustus K., aged thirty, March 14, 1865, put the ends of eight packs of phosphorus matches into a glass of hot water, let them lie a quarter of an hour, and drank about three-quarters of the solution. Dr. Von Pastaw, *Breslau Vich. Archives*, XXXIV, 3.]

“7. Erythematous and hemorrhagic patches occur in the skin, with a good deal of irritation and hyperæsthesia. This hemorrhagic infiltration of the skin is

accompanied by similar patches in the serous membranes and other tissues; ecchymoses and gangrenous spots are found in the intestinal tract. [Constitutional effects of poisonous doses of Phosphorus. Chas. D. F. Phillips, 'Materia Medica and Therapeutics,' Vol. I, pages 38 and 41.]

"8. The ecchymoses occur in all parts of the body, but are apt to be especially pronounced in the mediastinum and the serous membranes. [Horatio C. Wood, 'Treatise on Therapeutics,' 1883, p. 112.]

"9. It has been found that in dogs after death from phosphorus the blood does not pass into the veins, but remains in the arteries, showing that the capillaries are occluded, impervious, or disorganized. [Prof. Schiff, Archives für Exper. Path. und Ther. Bd., II, p. 347.]

POTENTIZED PHOSPHORUS.

"10. About thirty little red specks, not quite as large as the head of a pin, upon the anterior part of the back of the left hand, and upon the fingers of the same hand, especially the third and fourth, as if blood had settled under the skin, without sensation, coming out at 10 A. M., and lasting all day. [Observation of Dr. B. Fincke, from a dose of Phosphorus, 8 om.]"

Dr. William Arnold, an eminent German physician, says :

"In the last few years I was called upon to treat several marked and severe cases of the above disease in children, in which I observed such a rapid curative action of Phosphorus, that I have concluded to give in brief the result of my observations. In the course

of three years I treated six children, four boys and two girls, all of whom resided in the small community of Nauenheim, which lies on the right bank of the river Neckar. Some few houses are built near the banks, and are subject to inundations; but in none of these did any case appear. Most houses are quite a distance from the river; are dry, warm, and healthy, and are not subject to overflow. Besides this, there is no stagnant water; the current is quite rapid, and intermittents are among the rarities.

“Four of the children affected were children of well-to-do, two of poor parents. Some dwelt in airy and bright rooms on the first floor; the majority lived on the ground-floor, only one of which could be called damp; the others, however, not having as much light and air as is the rule in dwellings in the country. Some of the children had a tendency to scrofulosis, not in very high degree.

“The majority were hale and strong. The six cases occurred at different periods of the year. Two children, who were taken sick during the hot summer days, had for several days before their sickness been bathing for hours in the river. No connection between the several cases, nor any common cause could be discovered. The disease developed with some slowly; hemorrhages only occurred after purpuric spots had been present for several days. In others the attack was sudden and unexpected. In no cases was fever observed; in some pulse was accelerated, in others slowed.

“Strength was not diminished in any of the cases. Some were tired and complained of bodily weakness;

others made no complaint, but were kept in bed to keep them quiet, as movement brought on attacks of hemorrhage. The loss of blood was so small in the slowly developed cases, that I feared a sudden death. This occurred, however, in none of the cases, and under the use of Phosphorus a rapid return to health was secured.

“The son of cooper Q—— was attacked with purpura in August, 1852, having been ailing for several days previously. I had seen him eight days before, and found him a lively, strong, well-nourished boy, of good appearance, with no sign of any scrofulous or other diathesis, but whose appearance showed that he was accustomed to spend the greater part of the day in the open air. No cause could be assigned, except that in the warm days previous to his attack he had been a good part of the time playing in the river; and should we wish to assign this as the cause, it is strange that none of his companions, among whom were several weakly ones, were similarly affected.

“When I saw the patient for the first time, he was in bed; complained of weakness, and was covered with reddish spots and stripes, being most numerous on parts covered usually by the clothes. Face and hands were free; frequent epistaxis; occasionally some bleeding from the gums, although no spots could be discovered in the mouth. Aside from the feeling of weakness, no symptom of general disease.

“August 21st, I ordered: *R.* Solut. Phosph. dilut. 2x, 23 drops; aq. dist., four ounces. *S.* Every two hours one table-spoonful. The rooms to be well ventilated, and light, digestible food to be given. August

23d, condition decidedly improved. No hemorrhage in the last twelve hours, and the spots are lighter colored and lessened in number. At the same time the boy was out of bed, felt less tired, and, according to the parents, the boy was livelier, and appetite was returning. I repeated the medicine, a spoonful every three hours. August 26th, I found the boy playing in the garden; he felt well. No more epistaxis. The purpuric spots had partially disappeared; the balance were paler. No more medication and drugs, and in five days no trace of the disease could be discovered."

There has during the past summer and fall (1888) existed quite an epidemic of typhoid fever in several places in our North-western States, also in the Dominion of Canada; and although I tried, I have failed to obtain reliable statistics as to its fatal effects, for the reason that in none of the States is there any correct annual record kept of the diseases from which people die, except the States of Ohio and Massachusetts, which statistics I have received through the courtesy of S. W. Abbot, M. D., of Boston, Mass. They are compiled from the years 1877 to 1886, inclusive, showing the grand aggregate of the number of persons that have died in the ten years by the ravages of this disease, to be 8,437, of all ages. (For table, see page 97.)

NOTE.—I am now through with quotations and clinical cases of typhoid fever, and the statistics of deaths by the effects of the disease, but I can not leave the subject without some further remarks on the wisdom of using the medicines I do in the treat-

ment of the disease. Those of my readers who will carefully peruse the last few pages on the toxic and purpuric effects of Phosphorus by these very able men; also the observations of Winterburn and others on the use of Baptisia; then a good proving of Rhus Tox. in its effects upon the system; afterwards studying the hemorrhagic characteristics of typhoid fever—should, I think, be brought to the conclusion that these three remedies may be given in a potentized form and at the proper time, assisted by any remedy indicated by some peculiar or prominent symptom, such as Bell. 3x, etc., as adjuncts. He must further be convinced that these drugs form most important agents in the treatment of typhoid fever, capable of cutting it short or aborting it, unless it be continued by stimulation or overfeeding.

I am aware some gentlemen of a certain medical school will be likely to assert that the cases I have treated in the past twenty years could not have been really typhoid fever, as, in their opinion, the disease can not be aborted nor shortened. I am aware that this has been the theory, as I have before intimated, held out by almost all practitioners of either school of medicine, and hitherto, I believe, has been taught by the teachers occupying the chairs of materia medica and practice in the medical colleges of this country as well as all foreign countries; yet is it not impossible that some great improvement may take place in the treatment of this generally very serious disease. Great advances are being made in the treatment of other diseases, why not in this? The main features of this treatment have been in use by others, including myself,

almost for a period of fifty years with unqualified success. I certainly ought to know how to distinguish a case of typhoid fever from any other disease. I surely have had some opportunities to observe it in all its forms. I graduated at the Third Medical School as a student, which I attended (in the Allopathic ranks). During that time I was a visiting student in thirteen hospitals. I have now treated it and other diseases over twenty years; but beyond and above all this, let me ask the members of our noble profession to take a case of what they designate typhoid fever, and faithfully carry out my treatment, both as to the exact medicines and dietetical directions, and watch its effects on their patients; then, I think, they will be ready to appreciate anew the correctness of that common axiom, that "experience is the best schoolmaster.

DEATHS, BY COUNTIES, FROM TYPHOID FEVER, IN MASSACHUSETTS, 1877—1886.

COUNTIES.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	Totals.
Barnstable, . .	22	13	15	13	16	17	7	10	8	11	132
Berkshire, . .	63	42	31	19	62	44	56	47	24	47	435
Bristol, . . .	69	56	48	75	95	112	65	69	61	80	730
Dukes,	1	2	2	1	2	.....	.....	1	4	2	15
Essex,	102	113	96	138	148	149	117	103	101	125	1,192
Franklin, . .	21	12	15	18	22	22	19	17	14	14	174
Hampden, . .	56	50	49	75	110	118	83	74	60	57	732
Hampshire, .	29	26	28	26	44	42	23	25	24	19	286
Middlesex, . .	108	91	92	127	151	134	130	149	134	154	1,270
Nantucket, . .	1	2	.....	2	1	1	.....	2	1	1	11
Norfolk, . . .	30	27	28	33	38	58	44	47	45	36	366
Plymouth, . .	25	22	25	38	37	45	27	25	24	21	289
Suffolk, . . .	167	117	124	160	221	232	174	214	157	148	1,714
Worcester, . .	120	106	84	137	125	125	115	92	102	85	1,091
The State, . .	814	679	637	882	1,072	1,079	860	875	768	800	8,437

PNEUMONIA.

PNEUMONIA, or inflammation of the lungs, is a disease which persons of all ages and conditions in life are subject to have, all over this wide-spread continent, especially so at least in thirteen of the Eastern and Western States; also the entire Dominion of Canada, over which I have traveled; and, judging from my own experience, the medical literature, foreign and domestic, with which I am familiar, and the few annual statistics I have been able to obtain of its ravages in Massachusetts during the years 1885 and 1886, which I here insert, it seems to be one of the most fatal diseases in some of its forms that poor humanity is afflicted with.

It frequently occurs in a very sudden and unexpected manner in its acute form. Exposure to the influence of a cold wind, a few hours in a rain, wet feet, change of clothing, either a high or too low temperature in a room, or even a direct draught of air, especially when the person is perspiring, is at times quite sufficient to begin the attack. The first intimation we may feel of its approach is that we are somewhat uncomfortable, somehow "out of sorts," all stuffed up, as people are apt to say; a little shortness of breath is felt, especially when moving or walking about. These are some of the very early premonitory symptoms of the disease, which, if not properly attended to, will soon become very serious in their consequences.

DEATHS, BY COUNTIES, FROM PNEUMONIA, 1885 AND 1886.

COUNTIES.	Deaths.		COUNTIES.	Deaths.	
	1885.	1886.		1885.	1886.
Barnstable,	43	24	Middlesex,	643	501
Berkshire,	135	112	Nantucket,	5	3
Bristol,	274	192	Norfolk,	154	143
Dukes,	4	6	Plymouth,	104	87
Essex,	411	346	Suffolk,	938	764
Franklin,	64	55	Worcester,	423	363
Hampden,	213	175			
Hampshire,	57	65	The State,	3,468	2,836

In my reading of pneumonia I have latterly come across, in the *Medical Investigator*, a good description of acute croupous pneumonia, varieties and sequelæ, by J. T. Greenleaf, M. D., read before the C. N. Y. M. L., at Syracuse, New York State, December 16, 1880, which, from the excellence of the article, I have been induced to insert here, knowing that the article mentions the different stages and results of this frequently fatal disease in a more concise yet minute and particular form than perhaps I could put in myself. Therefore I trust that it will be acceptable, although I would here remark that all these sequelæ are avoided if taken in time with my treatment.

“Pneumonia is a disease of the lungs which is especially characterized by an exudation into the infundibula and terminal air-vesicles. We recognize the two acute varieties, croupous and catarrhal, and the chronic form, the interstitial. All other so-called forms are either varieties of these three, named from some prominent phase of a given case, or are not pneumonia at all. In this paper we will discuss only the two acute forms. In croupous pneumonia the exudation is of a fibrinous or croupous character similar to croupous laryngitis.

“While all ages, conditions, and classes are liable to an attack of pneumonia—speaking now of the croupous variety only—it has been noticed that males are more liable to its ravages than females, and that infants and young children are rarely attacked by it. One attack renders the subject more liable to a second one; the badly nourished and poorly housed convalescents from grave diseases, and feeble and broken-down organisms, are most frequently attacked.

“Besides direct irritants to the lungs, accidental or traumatic, the remote causes, as well as the immediate, are shrouded in obscurity. The fact that it appears epidemically sometimes, would argue strongly in favor of atmospheric conditions as the immediate cause. As it is marked by a very decided crisis, or critical change, it would be most natural and practical to examine it in two stages—the stage of increase and of decrease.

“In this examination we will try to notice, as we pass along, the pathological processes, the external symptoms of those changes, both in its normal and irregular appearances,—the peculiar malaise, general and shifting pains, headache, loss of appetite, unrecuperative sleep, etc., which are the premonition of any grave disease, and noticed for a day or two, followed by a severe rigor, which is not a chill, as the thermometer indicates no decrease of temperature. This rigor lasts from a few minutes to a few hours, and is always present, except in the asthenic cases of old people. Following the rigor we observe the characteristic pneumonia combination of symptoms—fever, cough, pain, and dyspnoea. The chill has been considered pathognomonic, and, with the sole exception noted

above, is correctly considered so. Its time of occurrence should be noticed, as some guide in prognosis, as well as its duration and violence.

“About the time of the chill the whole lung becomes engorged with blood, the capillaries swell up and encroach upon the space of the air vesicles, and as the reaction from the chill begins to appear, a peculiar sticky, gelatinous exudation is gradually being thrown into the vesicles. This is loaded with fibrin and mixed with liquor sanguinis, which gives it a reddish color. The presence of this produces more or less irritation, and a cough ensues, which is generally dry and racking, varied by occasional expectoration of this prune-juice or rusty sputum.

“The engorged condition of the lung produces more or less dyspnoea, from the lessening of the space permeable to air; yet the soreness of the lung has its effect to keep the patient on his guard about breathing; the insufficient supply of blood to the heart from the lung, while the increased combustion caused by the exudation and the fever requires an increased quantity of oxygenated blood to supply the demand, tends to increase the dyspnoea. The pain is of a sharp, sticking character, generally referred to the point where the engorged lung touches the thorax.

“The changes going on in the lung require an increased supply of blood, and produce a greater degree of heat, and the fever ensues. This may run as high as 107.7, though a very alarming symptom; generally it runs as high as 105.5 at its highest exacerbation in the twenty-four hours, which occurs at the time of the daily rise, beginning at 10 or 11 A. M., and reaching

its height about 3 or 4 P. M., gradually falling through the afternoon to reach its lowest point in the early morning.

“The pulse keeps pace with the fever and accelerated beating of the heart, at first full and strong, at a rate of from 90 to 120 per minute, though it may run higher, the prognosis becoming more grave as it runs above 120.

“Headache, quickened respiration, cyanosis obstruction of the portal circulation, may occur. The great combustion leaves much waste, which shows itself in the quantity of urea in the urine. Albumen is also found, though at present it can not be accounted for.

“Restlessness and anxiety mark the case, and a mild delirium may be present. During and after the rigor the exudation, being churned to and fro in the air-passages at each inspiration, gives rise to the ‘crackling sound’ which auscultation reveals. Later in the stage of increase we get only a dull sound; on percussion, examination of the thorax shows that the respiratory heaving is confined to the well side, as the patient makes a muscular effort to hold the affected side quiet. This train of symptoms continues until the end of the first week after the chill without much change, except the pulse grows softer and smaller, and the cough more racking and fatiguing, and the usual signs of sinking of strength obtain.

“The exudation becomes more and more solidified as the fibrine grows firmer in its composition, and the lumen is gradually filled by this red fibrinous matter, producing what is known as red hepatization. When the red hepatization has become complete, we are

unable to find that the parenchyma of the lung has entered into the complication at all; but after this the second anatomical stage has obtained. It progresses much like a catarrhal inflammation; for the connective tissue elements swell, and produce more or less pressure on the fibrinous clots in the lumen and vesicles; quantities of young cells are thrown off into the vesicles; the blood globules held by the fibrine die, and begin to become discolored; the whole clot, together with its immediate surroundings, begins to assume a grayish-yellow color. This is called the stage of yellow hepatisation close at the crisis.

“Where pneumonia attacks aged people, there may be no chill, no cough, no pain, no dyspnoea; but the low asthenic fever that is present overshadows all the other symptoms; auscultation and percussion only can reveal the condition. When habitual drunkards are attacked, the preliminary symptoms may simulate a case of mania-a-potu for a few days, when all the more characteristic pneumonic symptoms may show themselves in a very short time, the symptoms which might be expected in a case that had preceded from the chill as long as the mania-a-potu has lasted.

“Near the end of the first week after the chill, we may find a great change suddenly take place. The sputa change somewhat, being now more yellow and more copious; with this the temperature falls, the pulse abates in frequency, the pains and dyspnoea subside, the anxiety and restlessness depart, the patient sleeps quietly, calls for food, and seems suddenly better. This we call the crisis. The exudation clot begins now to break down, and becomes a soft,

yellow, gelatinous fluid which is partly absorbed and partly expectorated.

“Strength returns, and a complete resolution takes place, leaving the lung in a perfectly normal state in the mildest cases. If, however, the metamorphosis of the clot which is superinduced by the catarrhal infiltration is interfered with, because of a loss of vital power to supply the necessary strength for this change, or from any irregularity in the process, it will be indicated by a lack of the characteristic critical change, or a very short improvement. And now the fever runs higher than in the past week, and continues longer every day; the cough is more wearing, the dyspnoea is more marked; either a state of apathy and exhaustive somnolence is present, or the excitement of the past week is aggravated to a mild delirium; pulse becomes more frequent, smaller, and softer in the asthenic type, but small and wiry in the nervous variety; the tongue becomes dry and crusted, and all signs point to a fatal issue.

“In such cases the proper homeopathic remedy may bring about a benign issue in a very short time, and convalescence follows in the same manner as in the normal type, but more slowly in proportion to the degree of exhaustion of the strength of the patient. This process is wrongly called typhoid pneumonia.

“When the corrosive action of the catarrhal infiltration is too rapid and violent in its action, we also fail to detect a crisis. A rapid sinking of strength is noticed, repeated shivering and slight chills appear, the sputa contain fatty cells and pus cells, and the odor marks what is called purulent infiltration. This

condition spreads beyond the lobe which has been the seat of the pneumonia thus far, and in the most favorable cases recovery is extremely tedious. This is the stage of purulent infiltration of the books. We may add that gangrene of the lung may be met with, pulmonary abscess, or ulcerous phthisis as the sequelæ of this stage; yet resolution may take place even here.

“Death may take place in the stage of increase from apnoea, because of the extent of the involvement of the tissue; but it generally occurs from asthenia, because the system is unable to stand the drain from the increased destructive assimilation.

“The prognosis should be made up only from day to day from the condition of the patient before the attack, the extent of hepatization, and the manner of procedure after the crisis.

“The rate of mortality under the expectant method of treatment is from 40 to 50 per cent, while homeopathic statistics reduce this figure to from 16 to 25 per cent.”

AFFECTIONS OF THE PULMONARY PARENCHYMA.

According to the best pathologists, this disease consists in a hyperæmic state of the capillaries of the lungs, together with croupous, catarrhal, and serous discharge. And a division of these various products has been made according to their symptoms into croupous, catarrhal, and serous pneumonia. Catarrhal pneumonia may be considered in reality as bronchitis or bronchial pneumonia, extending into the very smallest of the capillary bronchi, and is consequently termed catarrhal capillary bronchitis.

It is generally found in children who have contracted hooping-cough, influenza, or croup, and it may be added that it is an aggravation and extension of these diseases.

CLINICAL CASE OF PNEUMONIA, No. 1.—Late in March, 1888, as I was crossing the Kelsey Street Bridge in the city of Eau Claire, Wisconsin, I met Mr. L. C. Pickett, who said to me: "Doctor, I want you to come to my house just as fast as you possibly can. I am much alarmed about the safety of my son, as I fear that he has contracted pneumonia." On my arrival at the house, I found a very sick child; pulse and temperature exceedingly high; in fact, I might say that he was choking to death. The mother said that he had taken several severe colds latterly, which occasioned a cough, but had no fever until a chill sat in on the previous night. On carefully examining the patient, I found the left lung completely hepatized and apparently solid; the right organ seemed to be approaching a similar condition, as a very small quantity of air exuded from it. The heart palpitated violently, and I became convinced that the child could not long survive unless a speedy change took place. I prescribed Acon. 3x, Phosph. 3x, Tart. Emet. 3x, in water, to be given the patient in alternation, a tea-spoonful every half hour; also prescribed for him Cactus. G. 3x, to be given every hour, without any reference to the other medicines. Directed that a flannel be dipped in hot water, wrung out, and applied to the chest at frequent intervals; to give the patient, in small quantities at a time, all the water he required. I called again late in the afternoon; found the little fellow progressing nicely; skin moist, pulse falling gradually; his breathing was also much easier. I continued the same medicines, but directed his mother to use the Cactus G. once in two hours, and omit wetting the flannel. Ordered the chest to be well rubbed, and then covered with dry flannel; and I would return again in the morning. Returned on the morrow, when I found the child sitting up, and the mother full of gratitude, the latter exclaiming: "Doctor, you have save my child's life." I replied: "I think now, madam, that the trouble is aborted, and the only thing to do is to get out the serum deposited in the lungs," which I proceeded to accomplish with the appropriate

remedies. The little fellow soon recovered, and to-day is the picture of health. He always greets me with a smile whenever I meet him, realizing full well that I was instrumental in saving his life.

N. B.—This was purely inflammation of the lungs, or, as it is commonly called, pneumonia. Had it been pleura-pneumonia, it could have been aborted in the patient with a change of the remedies called for by the existing symptoms, as will be found in the coming volume in a number of clinical cases.

CATARRHAL PNEUMONIA.

CLINICAL CASE, No. 2.—During the winter of 1880 I was called upon to attend a young child, some six months old, belonging to Mrs. N., a lady residing in the town of Durand, Wis. The infant had been seriously ill for several days with a violent cough. On examination I found the pulse and temperature high, skin hot and dry; the right lung hepatized, apparently solid; and the left lung rapidly advancing to the same stage; it was only with the utmost exertion that the child could get breath. After looking over the case carefully, I remarked to the lady: "Madam, your child is very ill and in a critical condition. I almost doubt my ability to restore it." She replied: "Doctor, I am afraid that I called you too late. Do the best you can and I will be satisfied, for I have great confidence in you." I prescribed Acon. 3x, Phos. 3x, Tart. Emet. 3x, to be given in water, in alternation from a glass-dropper, to be dropped slowly into the child's mouth, every half hour so as not to produce coughing.

I ordered a warm compress of steamed hops, as dry as possible, to be applied to the skin of the little sufferer's breast, as hot as it could be borne, and directed the mother to keep the child well covered; medicines to be given regularly and carefully; the room to be kept as quiet as possible, and not too warm. Left, with a promise to call again in the evening.

On my return visit I found the little patient breathing some easier, the skin somewhat moist, the pulse rapid and intermitting, and the heart fluttering violently. I administered an occasional dose of Cactus G. 3x with the other medicines, from my

own hands, and remained by the bedside, giving the remedies and changing the hot compress several times, until one o'clock A. M. At this period I thought I saw a decided improvement, the air coming more freely through the left lung, but the right one was still impervious. I left explicit directions with an attendant to administer the medicines carefully, replace the compress when necessary, and I would call again in the forenoon. Next day, on my arrival at the house, I found the little patient much better, the pulse and temperature being about the same. The child breathed easier, the heart's action was not so violent, and when I went up to the little fellow's cradle, and he opened his large blue eyes, the whole contour of his countenance had an expression indicating that he knew that I was relieving him, his mother standing ready to affirm the same. I continued the same course of medicines, only to be given every hour; the compresses to be supplanted with a dried warm flannel of several thicknesses. Called again in the evening; found the patient doing well, the child having nursed several times. I ordered the same course of treatment continued, and promised to call again the next forenoon. On going to the home about 12 A. M. I found my little patient still progressing. He coughed more violently, and seemed inclined to cry every time he coughed, which, of course, was occasioned by the tenderness of the lungs and bronchial tissue. I prescribed Bry. 3x, Cal. C. 3x, and Sulph. 30x, to be given in the same manner every hour. Left, to call again next day. Before taking my departure I said to the anxious mother that I thought, with the blessing of God, her child would now recover. She seemed at this to be highly pleased. On my return visit I found the patient still improving, the air traversing through both lungs, the sputa coming freely, although somewhat stringy, and the lung tissue apparently less sore. I prescribed Bry. 3x, Sulph. 30x, and Kali Bich. 30x, in water, to be given in alternation by the usual mode once an hour. I left, promising to call within the next forty-eight hours. On my succeeding visit I found the little one still on the mend. I could see but little difference save a few small specks of blood in the sputa, which I judged came from the engorged capillaries. I prescribed (on account of the child's increased thirst and restlessness) Arsn. 200x, Lyc. 200x,

and Kali Bich. 30x, in water, to be given as usual, once an hour. Left, and promised to visit the little patient some time early in the future. I called at the house within the next sixty hours, and found the child nursing freely, cough getting less often and not so severe; the sputa looking better; in fact, all the symptoms decidedly improved. I prescribed Phos. 3x, Sulph. 30x, and Kali Bich. 30x, in pellets, No. 25, put up in one-drachm vials, to be given in alternation once an hour, two to three pellets at each dose. I made a few more occasional visits to the patient, and discharged him well, to the great joy of his mother, who said that I had snatched her little one from the very jaws of death.

CATARRHAL PNEUMONIA.

CLINICAL CASE, No. 3.—In the month of April, 1881, I received a call at my office in Durand, Wis., to attend a young child, an infant, son of Mr. Bruce Wood, a gentleman who resided some three miles from town. The lady, his wife, had been attended during her confinement by a midwife. When I visited the babe it presented a most distressing appearance; in coming into the world, the frontal prominence of the head had caught against the pubes, and in consequence was terribly bruised. Its eyes were fearfully congested and filled with matter; its entire features were much swollen, and a thick mucous discharge run from the nasal organ. I found the bronchia congested, the right lung being involved also, and it was with the utmost difficulty that the child could breathe, the fever and temperature being high. The lady, who had experienced a hard time during her confinement, felt extremely anxious about the welfare of her infant, as well she might. She remarked: "Doctor, do you think that you can save it?" In reply, I said that the child was in a very critical condition, but that I would do all in my power to effect its recovery. I prescribed Aconite 3x, Phos. 3x, and Merc. Sol. 3x, in pellets, put up in one drachm-vials, marked Nos. 1, 2, and 3, to be given alternately, two pellets at a dose once an hour, and these I ordered to be placed in the child's mouth; also directed that the infant should be given a warm bath with a sponge, and the spine well rubbed down, and

I would call again next day. On my return I found the little patient much better, the tumefaction was subsiding, his breathing was improved, and the pulse and temperature much lower. I made some three or four visits, continuing the same medicines, but ordered them given at longer intervals; shortly afterwards I omitted Aconite, and prescribed Sulph. 200x, and later on supplanted the latter for Kali Bich. 30x. Under this treatment I was soon enabled to discharge the child well, which was a source of great pleasure to the mother, who had entertained many doubts of its recovery.

Serous pneumonia, or acute œdema of the lungs, is shown by a serous discharge, and very frequently comes on immediately after an attack of croupous pneumonia, heart diseases, bronchitis, typhus, formation of tubercles, scarlet fever, and measles, of which from the limited compass of this work it is not intended to speak.

Of the three affections usually termed pneumonia is the croupous pneumonia. Its discharge is of a croupous or fibrous description, and capable of being vitalized. Generally it attacks the interior lobes of the right lung, and occasionally the left one, but very rarely will both of those organs be affected at the same time. Seldom, indeed, it will be found to have affected the entire lung, but more frequently only certain portions, which the physician can not detect sometimes, even by percussion.

Inflammation rarely attacks only the central portion of a lobe, but almost always extends to the outside of the lobe which adheres to the pleura membrane. The posterior parts of the lungs (in persons well advanced in years as well as cachectic ones) are those generally affected.

In a normal state of progress, pneumonia shows three marked stages; so says C. G. Raue, M. D., in his "Therapeutic Hints:" 1. The inflammatory stage, or hyperæmia of the capillaries in the lung tissue, with exudation of coagulable lymph; 2. Hepatization, or infiltration of the lung tissue with coagulable lymph; and 3. Its resolution, or purulent infiltration—the development of the coagulated lymph into pus.

The characteristic signs of these different stages are as follows :

As a rule, the beginning of the disease is marked by a severe chill; then follows dry fever-heat, 90° to 100° F.; pulsation full and hard, 120; afterwards copious sweating, but this is of short duration. The face assumes a purplish-red hue; mostly, however, on that side where the lungs are affected. Fever-blisters show themselves on the lips, and frequently only on the affected side, but usually more prominently on that side.

The breathing is difficult, but there are some cases where the patient is not much troubled in this manner. Cough is invariably a feature of this disease, but at the same time it is not so prominent in some cases as in others. The pain is severe, and the patient tries to prevent the cough. At the commencement it is dry; but in a short period this gives way to an expectoration of a tough, jelly-like substance, very difficult to get rid of. It has generally to be wiped from the lips. The color of the sputa soon shows that of rust.

Should the patient complain of a stitching pain in the lungs, it may safely be set down that the pleura membrane is also attacked. Dull, heavy pains, however,

proceed from the bronchial tubes. Brain symptoms, as delirium, stupor, etc., are caused by a disturbed action of the circulation through the lungs, the vital fluid being either not properly oxygenized, or being retarded in its return from the brain. A case of the before-mentioned description may assume the characteristic features of typhoid fever, but the fever-spots on the lips, rarely found in that disease, readily distinguish it.

The micturation is small in quantity, and shows a heavy deposit when treated with nitrate of silver.

PLEURA-PNEUMONIA.

CLINICAL CASE, No. 4.—In the spring of 1882, while practicing at Durand, Wis., I was called upon by a gentleman who that morning (before day-light) had occasion to cross the Chippewa River in an open skiff. The means of propelling the boat was not very good. It occupied considerable time to gain the east side of the stream, and when he landed he had a thorough chill, owing to wet feet and exposure to the cold wind. When the gentleman reached my office he complained of a severe stitching pain in the left side on drawing his breath. His pulse was full and rising rapidly. He had a violent headache, and also suffered from cramps in the extremities. I prescribed Acon. 3x, Bry. 3x, and Tart. Emet. 3x, in two-drachm vials, marked Nos. 1, 2, and 3, to be taken in alternation every half hour, until better; afterwards every hour, by touching each vial twice to the tongue. I laid the patient on the lounge, placed a jug of hot water to his feet, applied a warm compress over the left lung, where the stitch occurred. After giving him a few doses of the medicine, he became more comfortable, and he soon became so well as to converse freely, without any pain from his left side. I ordered him a slight repast, consisting of tea and toast; to have his medicines given at regular intervals, and left, promising to visit him in the afternoon at half-past three. On coming back and entering the room, I found the gentleman walking the floor, entirely free from pain, and ready

to return home. I told him that I should change one of the medicines, substituting Phos. 3x, No. 4, for Bry. 3x, marked No. 2. I directed him to take from vials Nos. 1, 4, and 3 every hour while free from pain, for twenty-four hours, and then less often; but should the pain return, to take from vial No. 2 in lieu of No. 4. Told him to eat sparingly for a day or two; and if he required my attendance to inform me at once. He expressed himself as very much pleased with the rapid cure, and remarked that he believed he had been prevented from a violent fit of sickness; also exclaiming: "O, Doctor, what a fearful time I had after coming to you!" I saw the patient a few days afterwards in town, and he seemed hale and hearty. He observed to me that he intended to keep the medicines, as they might prove useful to him at some future time.

CLINICAL CASE, No. 5.—In the spring of 1886 I was called upon to attend a prominent business man residing at Eau Claire, Wis. When I entered his residence I found him suffering from inability to draw his breath. He complained of severe stitching pain in the left side whenever he attempted to breathe, and remarked that he had a severe chill previous to feeling the pain. His pulse was 105, temperature 95° F. I learned from his anxious wife (who was very busy attending to his wants) that he had been complaining for a week or more, and that the day previous he made a journey out into the country, a distance of some eight miles, and that about two hours before my arrival he had been brought home by an express team from the railroad depot, not being able to walk. I prescribed Acon. 3x, Bry. 3x, and Tart. Emet. 3x, in water, to be given alternately every half hour until his symptoms somewhat abated, and then every hour. I ordered warm compresses, to be repeated as often as they became cool, applied over the left pleura. I left, to call again in the evening. On my return I found the patient breathing a little freer, and in a state of perspiration; but the stitching pain still continued. I prescribed Cal. Carb. 3x in place of Bry. 3x; applied a Bry. plaster over the left pleura; directed his medicines to be given regularly when awake; and promised to call again in the morning.

On my arrival at the house next day I found the patient very much improved. His very anxious and attentive wife informed me that the severe pain had left him about two o'clock in the morning, and soon afterwards he dropped asleep. He now breathed easier, and had eaten quite a breakfast.

I put the medicines in two-drachm vials, in a weak solution of alcohol, requesting him to touch each vial to the tongue twice at each dose, to be taken two hours apart; to eat very sparingly for a few meals, and to send for me in case that he should require any further services. In the afternoon I was surprised to find him pursuing his business in the city, and said to him: "Are you not out too early?" "No," he remarked, "I feel pretty well, but somewhat weak. Doctor, I am sure you have saved me from a severe fit of sickness."

C. G. Raue, M. D., says: "Physical signs at this stage are the following: Inspection discovers decreased mobility of the diseased side of the thorax. In cases where both the lower lobes are engorged, the patient moves only the upper part of the thorax in breathing, while the abdomen remains quiet on account of the inability to retract the diaphragm.

"The impulse of the heart is also increased, but felt in its normal position. Percussion yields generally a short tympanitic sound over the parts involved as long as they still contain air. Auscultation reveals that fine crepitant sound which, according to Wintrich, seems to arise in consequence of the sticking together of the walls of the air-cells, and their separation by inspiration.

"Second stage, hepatization. The above mentioned symptoms—fever heat (40° C.)—dyspnoea, cough, pain, and brain symptoms continue without abatement. The urine no longer throws down a precipitate with nitrate of silver, but it contains albumen. The thorax

appears, on inspection, still less movable during respiration. The vocal fremitus is strong, provided there does not intervene a pleuritic effusion between the hepatized lung and the thoracic walls.

“Percussion gives forth a dull sound, and the resistance of the thoracic walls to the percussing finger is increased, provided the hepatized portions of the lung have the thickness of about one inch, and a superficial extent of several inches. A central location of the hepatization alters the percussion sound very little, if any, on account of the intervening portion of lung containing air.

“Auscultation yields neither the natural vesicular breathing, nor the crepitant sound of the first stage, but bronchial breathing, bronchophony, and pectoriloquy; provided the bronchial tubes, which are contained in the hepatized portion of the lung, be not stopped by mucus, blood-coagula, etc. There are also heard all sorts of rattling noises if mucus exists in the bronchial tubes.

“Third stage, resolution. This sets in, sometimes, with a sudden relaxation of all the violent symptoms. The fever-heat decreases some ten degrees in a few hours; the congested, even purplish face, becomes pale, the skin moist, the dyspnoea ceases, the sputa become copious, frothy, yellowish, easily expectorated; the urine becomes clear, copious, and again throws down a thick precipitation upon the addition of nitrate of silver.

“On inspection, we observe that the thoracic walls regain their natural mobility. The percussion sound becomes again tympanitic; and by means of auscultation we observe the bronchial breathing and bron-

chophony becoming weaker; the crepitation sound reappears, until at length the natural vesicular respiration is re-established."

This is the regular undisturbed progress of pneumonia, lasting, on an average, from fourteen to twenty-five days, of which two, three, or five days are consumed by its first development, five to eight days by exudation progressing to perfect hepatization, and seven to fourteen days by the resorption of the exudation and convalescence. But to the first invasion of inflammation new invasions often follow, so that it is not uncommon to find in one lung all three stages united; or the adjoining portion of the healthy lung œdematous; that is, infiltrated by a serous exudation; in which case the dyspnœa increases to suffocation. There is at the same time a frothy expectoration and fine rattling noises in the lung not affected with croupous pneumonia. The impossibility of breathing, on account of the serous infiltration, causes an accumulation of carbon in the blood, and, in consequence, death by suffocation, or the brain becomes hyperæmic in consequence of the disturbed action of circulation through the lungs in the second stage, the blood being either not sufficiently oxygenized, or being prevented from or retarded in its return from the brain, causing stagnation and death, with all the signs of apoplexy; or abscesses form in the third stage of the disease, which, if small or deep-seated, offer no physical signs, and may discharge and heal.

When large, and forming large cavities, we may hear pectoriloquy, and in some cases metallic tinkling; or the hepatization may change into tubercular

infiltration, which is especially the case when the seat of inflammation is in the upper regions of the lungs. In such cases the fever does not leave altogether, but shows some aggravation every night; cough, dyspnoea, and the dull percussion sound of hepatization continue, while auscultation reveals bronchial breathing and bronchophony; or the hepatized lung may become indurated or cirrlosed, the interstitial tissue growing tense and rendering the air-cells impervious to air. The patient is almost free from fever, but recovers very slowly in strength, and we observe for a long time the dull percussion sound and the bronchial breathing; whilst the thorax, in these places, gradually sinks in; or the whole morbid process may end in gangrene, which happens very seldom, and which is easily diagnosed by the sudden general collapse and the cadaverous smell of the breath and expectoration, which is dark-blackish and copious. The mean or average time which it takes for pneumonia to run its course, if it is not interfered with by medicines, is, as above stated, twenty-five days. But this average may, by judicious treatment, be considerably shortened; for pneumonia can be arrested in each of its stages. The most interesting data in this respect have been brought forth by Dr. Eideherr, of Vienna, who has collected all cases of pneumonia out of a large hospital practice, which had been recorded there for ten years.

From these data it appears that under the application of the sixth decimal attenuation of the appropriate remedies the average came down to nineteen under the application of the thirtieth potency to eleven days.

CATARRHAL PNEUMONIA.

This is a disease which is frequently found among women and children, and also adults, when they have been exposed to a sudden low state of temperature; and especially is this the case when accompanied by other catarrhal affections, such as nasal catarrh extending to the posterior nares.

George B. Wood, LL. D., says in his work on Medical Practice, Vol. II, sixth edition: "There is usually a slight chill or succession of chills, followed by a moderate fever, of a remittent character, with considerable oppression; a cough somewhat paroxysmal, and a mucous expectoration, scanty at first, but afterwards more copious, and only in the smaller number of cases stained with blood." The countenance has an expression of dejection, with some redness of the cheeks, but without the dark-red suffusion so often met with in pneumonia. The tongue is but slightly furred. The whole aspect of the case is that of mildness. Its duration also is short, except that convalescence is often protracted, and attended with a remarkable weakness, recalling one of the prominent characters of influenza. Percussion is dull, and the vocal vibration observable; but both in a less degree than in ordinary pneumonia. The rale heard in auscultation is rather finely subcrepitant than strictly crepitant, though, like the latter, generally confined to inspiration, and is usually heard over but a small portion of the lung.

It is, moreover, fugitive, occurring, as it were, in puffs, is rarely mixed with sibilant, and still more

rarely with mucous rales, and in the majority of cases continues to the end. Bronchial respiration is heard in less than half the cases; when it occurs is soft though high-toned, and very different from the tubal sound of common pneumonia, and is confined to a space scarcely exceeding that of the palm of the hand. It is usually of short duration, often lasting less than twenty-four hours, and is followed by the subcrepitant sound of resolution, though moister than this sound usually is. These rales are gradually exchanged for the mucous, or disappear altogether, though sometimes recalled at a later period in convalescence by efforts at coughing; and it is worthy of observation that, under the circumstances, tonics and a good diet will cause them to disappear.

For most of the statements in this brief account of catarrhal pneumonia I am indebted to a paper by M. Ferrand, in the *Archives Générales* (Juillet, 1862, p. 67). They are, I believe, of considerable value, and will probably be recognized by most practitioners as representing a mild pectoral disease which they have occasionally met with, especially during the prevalence of influenza.

This is certainly a good article on catarrhal pneumonia, but I can not quite agree with M. Ferrand on the subject of feeding. I think many practitioners and teachers often err in this respect. I have long thought, and certainly years of my practice have confirmed me in the opinion, that when a patient is sick his or her stomach is the weakest organ of the body; and as the spinal nerves permeate all the organs of digestion, when a patient is about convalescing to tone

up and invigorate these, and the secretions should especially engage the best efforts of the attending physician. But to crowd the stomach with much extra food until it is well prepared to digest it, often does an injury, and keeps back the patient in his recovery. When we are sick I think we should feed light and not stimulate, but allow nature to recuperate in all her forces.

CATARRHAL PNEUMONIA.

CLINICAL CASE, No. 6.—On the evening of the 26th of July, 1888, I was called upon at my house in Eau Claire, Wisconsin, about ten o'clock P. M. The messenger informed me that he requested my attendance on a patient who resides in the town of Albany, twenty-two miles from the city. He stated that two physicians, of the allopathic school had been visiting the sick man for a period of three weeks, and had given up the case, declaring that he was beyond their help; and now the family and friends were wishful of obtaining the services of a homeopathic physician. I told the messenger that I had practiced in that school for twenty years. He said he had a team ready to convey me to the home of the patient, and made inquiry how long it would be before I could go. I answered him, "Just as soon as I can go to the office and prepare my medicines." We were soon on the road, and traveled over very bad ground through the woods until four o'clock A. M., at which time we reached the house. I found the family to be Germans, and but little acquainted with the English language. The patient was sitting on the edge of the bed resting on a stack of pillows supported by a chair. He was gasping violently for breath, his voice almost inaudible, his pulse was 110, perspiration standing on his extremities, face badly swollen, portions of it being of a deep-blue color. The eyes were much congested. There came from the sick man's nose a thick, yellowish matter. He had a violent cough, also excessive tightness across the chest, with great dyspnoea, and a heavy albuminous expectoration. On the way with

the messenger I had learned many of his symptoms and the cause of his illness; that while engaged at work on his new farm he had drunk a large quantity of swamp-water, and afterwards partook liberally of cold spring-water, from which time his illness might be dated. My diagnosis of the case, when I noted the patient's symptoms, was capillary bronchitis, termed by some medical writers bronchial pneumonia, with a leaning towards typhoid.

My first prescription was Tart. Emet. 3x, Phos. 3x, Merc. 3x, in water, to be given in alternation every half hour, also an occasional dose of Cactus G., to control the violent action of the heart. I commenced to administer the medicines myself to the patient at half-past four A. M. Very soon afterwards I noticed that he breathed easier, being able to sit in an erect position and speak a little louder. The face did not present such a puffy appearance, and looked much better in color. The sputa became more profuse, and the tightness of the chest and dyspnoea in a measure subsided; indeed, at ten A. M. he was in every respect decidedly better, and I was only waiting to replace some of the remedies with Rhus Tox. 3x, and perhaps Hep. S., which were clearly indicated in the case as adjunctive remedies. I was sitting quietly by the side of the patient, and had just assured him that I thought before morning he would be able to lie down, if he would continue to take the medicines, which he had stated were "too weak to do any good."

Just at this juncture a man came into the room, went suddenly up to the patient, spoke to him, inquired as to his condition, felt his pulse, and placed his ear to the back of his lungs, when immediately he began to abuse the system of homeopathy in a very violent manner, saying that there was nothing in it and that I had unfairly taken possession of the patient. I assured him that I had not done so, and stated to him the facts of the case. In reply he said that if Dr. Day or Dr. Galloway had been sent for he should have been glad to have counseled with them, but to bring a "miserable homeopathist" to treat his patient, who would now get the credit of the cure, was wrong in the extreme. I said to him that I was satisfied with homeopathic treatment, properly administered to this patient, as it would do more for him

than either of the above gentlemen referred to. As for the skill of Drs. Day and Galloway, I believed that I had whipped both of them (in their practice) with homeopathy.

During the course of our brief conversation I asked him how many remedies he used in his allopathic practice. He stated over five hundred. I replied that he had not more than three hundred, and he must allow me to know, for I was at one period of my life an allopathic practitioner, but for twenty years I had practiced homeopathy, in which I could use over fifteen hundred remedies, and these were all proved on well tissue before they were administered. He replied that my diagnosis of the case was incorrect. I said, in our mode of treatment the diagnosis was not so essential, as the symptoms indicated the proper remedies to be used in order to bring about resolution of the lesion, now existing in the patient's system.

The doctor then went into an adjoining apartment, and engaged in conversation with the inmates for some time; but as they spoke in German I was unable to understand them. In a few moments afterwards the doctor drove away from the house. After this the patient renewed his objections to the strength of the medicines, and eventually declared that he would not take any more, and the attendants said that he preferred to retain the services of Dr. Miller, the medical gentleman referred to above.

I shook hands with the patient, and expressed sincere hopes that he would recover under the treatment he had chosen. His brother paid me my bill, and I left, wishing them all good morning, and took my departure homewards.

I have since learned that this man began to realize after I left that my medicines had already done him good, and he continued to take the remedies I prescribed for him. In a few days he was at work, hale and hearty, and now gives me the credit of saving his life.

NOTE.—Let me here remark in regard to the use of Phosphorus in the treatment of this disease, as I have not found it so frequently used by other practitioners, that I think it can be laid down as a safe principle in the pathology of all diseases of the human

body, that you can not have inflammation take place in any organ of the body until you first get a predisposition of blood to the part; and I have found in my experience, especially in pneumonia, that the exhibition of Acon. 3x, Phos. 3x, and Tart. Emet. 3x, given in alternation during the early stage, will abort this disease, by stopping (as I have conceived) the flow of blood to the part, leaving resolution to take place by the action of other remedies; and to the carrying out of this theory have I attributed my universal success in treating all cases of acute, croupous, and catarrhal pneumonia.

CATARRHAL PNEUMONIA.

CLINICAL CASE, No. 7.—In the winter of 1882, while practicing at Durand, Wis., I was called on one Sabbath forenoon to visit a child, about four months old, who had been sick from birth. The infant was a boy. He had been attended by an eminent allopathist for most of the time, who had said to the parent that he could do no more, and that the child would die.

On my arrival there, I found the little fellow lying in his crib, with a weak thready pulse, heart pulsating rapidly, the countenance pale and anæmic, also considerable dyspnœa, together with violent rattling of mucus in the bronchial tubes. On inquiry, I learned from the mother that the child caught cold during the time the nurse was dressing it after the birth; that the doctor said the infant had contracted pneumonia from the coldness of the apartment. These conclusions caused me to think that I had now a case of bronchial pneumonia to treat in a child not quite four months old. After weighing the apparent symptoms carefully, I prescribed Phos. 3x and Tart. Emet. 3x, in water, to be given with a dropper every half hour, until my return, which I said would be early in the afternoon.

Between two and three o'clock P. M. I called at the residence to find the entire family assembled in the room around the cradle, sobbing and crying, anticipating the little occupant's death. The child was lying with open mouth, arms extended

and cold, as also the face. I urged my way through the crowd, and knelt down beside the cradle to get the exact symptoms of the apparently dying infant. I found the pulse exceedingly low, with only an occasional flicker, and, for some seconds, twice had the child ceased to breathe, from its inability to raise the glutinous matter that was exuding from the mucous membrane of the bronchial tubes.

I called for a cup half full of water, and took from my pocket a one-drachm vial containing Bichromate of Potash 30x. After putting ten drops into the cup with water, I dropped into the open mouth of the child just ten drops, one drop at a time; waited ten minutes and then renewed the dose, and before the operation of another period of the same time I noticed that the child was breathing more regularly, which of course established the fact that the medicine had changed the character of the exuding serum. I waited ten minutes longer, then administered another dose in the same way, when, in a few moments, it closed its mouth; the blueness of the countenance disappeared, the child breathed easier, and the pulse quickened. The mother came to me with the tears rolling down her cheeks, and said: "Doctor, will mine child go dead?" "No," I answered, "I think that it will live." I called for another cup half full of water, into which I put Arsenicum 200x, alternating these medicines to the patient every half hour from the dropper, until half-past two in the morning, when the little patient dropped into a sweet sleep.

Before I left, I ordered the medicines to be given in alternation every hour (if the child was awake) until my return. With these two medicines and some attention to its covering, which the woman was inclined to make too heavy, and a few more visits, I discharged the child well, to the great joy of the parents and the rest of the family.

CROUPOUS PNEUMONIA.

In writing on pneumonia in its croupous or catarrhal form, I am not aiming to point out anything new in the etiology or pathology of either form of this disease. It is only my experience, and especially so

in the use of Acon. 3x, Phos. 3x, and Tart. Emet. 3x, given in alternation in the early stages of croupous pneumonia, that I am trying to illustrate in the clinical cases here given, which has proved so satisfactory to me and others in a practice of over thirty years. I therefore feel at liberty to insert in my book anything I have found from good authors bearing on the etiology or pathology of either forms of this disease.

In the doings at a regular meeting of the New York County Homeopathic Medical Society, held May 13, 1885, I find the following from Dr. Cowl, which I think will bear inspection, not out of place here :

“The subject which I desire to bring to your attention is that of the pathological character of pneumonia, and I have selected it because, within the past few years, the old and established view that it is a local inflammatory disease has been questioned, and the theory put forth with facts of two kinds to substantiate it, that it is on the contrary a specific disease; that the lesion of the lung is the anatomical expression of a constitutional affection; that pneumonia is an essential fever, an infectious disease. It has heretofore always been considered that pneumonia was typical as a visceral inflammation. The suddenness of the onset, the acuteness of its course, the severity of its symptoms, its rapid culmination in a crisis, and its early eventuation in death or full recovery, have led to its being pointed out as an example of local inflammatory disease; and this view, he thinks, is not as yet seriously to be questioned.

“There are various facts which are very strong to substantiate the old view of the pathological character

of pneumonia, and they principally relate to its occurrence at certain times of the year, and under certain conditions of the atmosphere, more particularly rapid lowerings of the temperature and changes in the barometrical pressure.

“We all know that after sudden changes of temperature we meet with more disease, and in winter, when there has been any great lowering of the temperature, pulmonary affections are particularly apt to occur, especially after extremely cold weather. This has been the general experience alike of the community and of the profession, and its import is re-enforced by a study of the tables of mortality and meteorological records, such as are furnished by the Register of Vital Statistics of the Health Department, and the Director of the New York Meteorological Observatory, wherein self-recording instruments continuously inscribe the various factors of the weather.

“On the other hand, it is claimed that a considerable number of facts relating to pneumonia—its clinical history and the lesion of the lung—substantiate the view that it is an essential fever, and this view has been chiefly set forth by Dr. Austin Flint, who read a paper in 1877 in which he took this ground. He has also included the matter in the last editions of his work on ‘Practice.’

“I believe, however, that it can be shown that these various considerations do not substantiate the view held, and the main fact upon which I would rely to refute it is that we have in pneumonia an inflammation of a peculiar organ, peculiar by reason of its anatomical structure, its functions, and by the fact

that with the exception of the heart, it is more vitally important than any other organ of the body, more immediately necessary to retain life within short periods of time.

“It is held by those who support the new statement that the quantity of exudation is out of all proportion to the amount of inflammation. This, I think, can be accounted for more simply by the fact that we have a thinner layer of tissue between the blood and the site of the exudation, namely, the tenuous walls of the air-vesicles, than anywhere else in the body, and that the exudation is into the air-vesicles and not within the lung tissue itself. Thus it may readily increase the weight of the lung two or threefold.

“It is maintained that, after recovery from pneumonia, the parenchyma of the lung is found to be intact and not altered, as after localized inflammations in other parts. Any person who makes a histological examination of the lungs will discover that the tissue is exceedingly tough; there is not much more than the blood-vessels and the epithelial lining of the air-vesicles, resting on a very small amount of elastic connective tissue; and the exudation being quite entirely confined to the air-vesicles, the change can not take place as where the inflammation is in simple connective tissue. Therefore, the connective tissue is not in any degree destroyed.

“That pneumonia almost always occurs in the lower lobe of the lung may be simply accounted for by the influence of gravity in causing greater congestion there.

“It is said that enlargement of the spleen, which occurs in pneumonia, makes the disease resemble

typhoid fever, yellow fever, etc.; but it is to be remembered that the function of the lung concerns the blood primarily, and the spleen, being a blood-making organ, would be affected by the derangement of the circulation and the impurity of the blood, due to the improper oxygenation consequent upon impaired action of the lungs.

“It is also said that pneumonia never becomes chronic in reality. This may be explained by the fact that the lesional changes are superficial and not deep, being principally the shedding of the epithelium of the air-vesicles. It is claimed that persons suffering from emphysema, asthma, chronic pleurisy, or cardiac disease, are not subject to pneumonia.

“A study of these diseases will show that there is an increase in the connective tissue of the lung, which is, therefore, less distensible and less likely to be greatly congested than the lung in a normal condition—less liable to the extreme congestion which constitutes the first stage of pneumonia.

“If it be held as an argument that pneumonia is likely to occur in other fevers (infectious diseases), I think we have equally good grounds for maintaining that it is due to the excessive elimination of poisonous matter by the lungs, which, it is well known, excrete a large amount of such substances again. As a rule, in infectious diseases the heart is weak, and the circulation impaired, which adds to the liability. A case has been reported in Glasgow, with considerable detail, of a man taking by mistake a large quantity of carbolic acid. Very little gastritis occurred, but within twenty-four hours he was attacked with a distinct

pneumonia, due undoubtedly to the elimination of the poison by the lungs, in which it acted as an irritating agent, and produced the disease.

“It is held that pneumonia is more fatal in the Southern than in the Northern States in this continent, and especially in that portion of the South where cold days, followed by warm ones, are frequent. In the North we are in winter subject usually to long periods of cold weather without a thaw, and the body becomes somewhat accustomed to the cold; but in the South, especially in that portion on and about Mason and Dixon’s line, there are apt to be continual changes from freezing and thawing.

“It is stated that pneumonia does not occur from the extension of inflammation from a bronchitis; and I believe there is small reason anatomically for considering that it should. The bronchia are nourished by the bronchial arteries, and their circulation is distinct from that of the air-vesicles and bronchioles, which is the actual seat of pneumonia. It is needless to add that inflammations rarely skip from regions nourished by one series of blood-vessels to another.

“It is asserted that the chill is out of proportion to the amount of inflammation which occurs in pneumonia. The chill may be abundantly accounted for by the fact that we have next to the most vital of all the organs affected in this disease; and on the other hand we have an organ which is governed not entirely by the cerebro-spinal system of nerves, but very considerably by the sympathetic system, which, it is well known, is largely concerned in the production of chill.

“Finally, it is maintained that the action of anti-

pyretic remedies, such as quinine in pneumonia, would lead to the view that it is allied to those fevers which are controlled by that class of remedies. On the other hand, it may be said that of all remedies which have a marked effect in controlling pneumonia, especially in its early stages, *Aconitum Napellus* is the most beneficent; and yet Aconite is generally acknowledged to be of little use in infectious diseases.

“With reference to the causation of pneumonia by a micrococcus, I think it may be held that micrococci may cause pneumonia in a large number or all cases, without militating against the verity of the view which holds its main cause to be meteorological changes. If pneumonia is shown to be caused by a certain bacterium, it is by no means the more important cause of the disease.

“As pneumonia is not contagious, the germ giving rise to it—if such shall be shown—must be subordinate to the other and more apparent causes, else pneumonia would be epidemic and not referable to exposure, as we know it to be.

“During the past week I have taken the statistics furnished by the New York Meteorological Observatory in Central Park, which give the registration of the temperature, barometric pressure, force of the wind, etc., together with the mortality reports of the past five months, and have compared the atmospheric changes and numbers of deaths from this disease, which we all know to have been so alarmingly prevalent. The only results I have been able to arrive at so far are (1) that a marked daily variation of temperature, lasting over a week, is peculiarly apt to be followed within two weeks by an increase in the number of deaths from

pneumonia; (2) a lowering of the temperature which lasts for a period will be followed by an increased death-rate from pneumonia; (3) marked barometrical changes have a causative influence."

Dr. Cowl exhibited a table of the variations in temperature, barometrical pressure, etc., and the death-rate during the past five months.

CROUPOUS PNEUMONIA.

CLINICAL CASE, No. 8.—Late in the month of March, 1881, I was called upon by a German to attend a patient (some six miles distant from Durand, Wisconsin,) whom he stated to be, to the best of his knowledge, beyond the skill of any physician to help; in fact, he thought that the young man must die; but as he had been sent for me, he wished me to go at once.

I stated to the messenger that I would visit the sick man, and if he was alive when I got there, I could save him. After traveling fully six miles on the Chippewa River bottoms, we arrived at a railroad shanty, in which I found the young man in a very critical situation. The tongue was heavily coated; his pulse high and temperature over 100° F.; cold, clammy sweat on his forehead; the left lung badly hepatized; violent cough, with much stringy sputa, accompanied with great dyspnoea; heart fluttering, and some irregularity of the pulse, with entire failure of the third beat.

I prescribed Acon. 3x, Phos. 3x, and Kali Bich. 6x, in water, to be given every half hour in tea-spoon doses; ordered him to be fed lightly on tea and toast; instructed the attendant to apply a jug of hot water to his feet, cover him up well, and give the medicines regularly, except during sleep, until my return in the morning.

On my return next day, I found the patient improving; his pulse was lower, breathing easier; his expectoration more free, but tinged with specks of blood; the heart also much more quiet. In fact, the case looked to be more hopeful in every respect. As the patient had exposed himself much in water previous to his illness, I prescribed Rhus. Tox. 3x, Phos. 3x,

and Tart. Emet. 3x, in water, as before, to be given in alternation every hour, with an occasional dose of Cactus G. 3x. Renewing my directions to the attendant, I left, to return next day. My great anxiety on the way home concerning the patient was how to meet the discharge of the blood, which I judged was coming from the engorged capillaries of the lungs and bronchial tubes. On going to my *Materia Medica* and *Raue on Practice*, I found the case accurately described, and Lyc. 200x described as a specific for this stage of inflammation of the lungs, with the sputa in that condition.

On my visit again in the morning, I found the pulse and temperature much lower, and the patient's general condition much improved, except that the cough was more frequent, and the sputa (really serum and blood) having spread all over his pillows and the side of the bed.

On examination, I found the air filling but a small portion of the left lung, and concluded that this villainous expectoration was exuding only from the hepatized lung. I said to myself: "Now for my Lyc. 200x; if this will stop the discharge, the patient will recover." I prescribed the above remedy, 200x potency, in water, to be given him a tea-spoonful every half hour, until he had taken three doses; then to alternate with Phos. 3x and Tart. Emet. 3x, a dose every hour until my return in the morning. On my visit again next day, I found the patient decidedly improved. The hectic appearance of the face had disappeared, the cough was much abated, the blood was not to be seen, and the sputum was a clear white albumen falling in a clot.

I prescribed Bry. 3x, Carb. Veg. 3x, and Lyc. 200x, in water, as usual, to be given every hour; left, to return next day. On my visit next day I found the patient up and dressed, walking about the shanty, and exulting at the prospect of being so soon well again. After a careful examination of all his symptoms, I concluded to discharge him.

I gave him two-drachm vials filled with weak alcohol, which contained Phos. 3x, Tart. Emet. 3x, and Carb. Veg. 3x; requested him to touch each one twice to his tongue as numbered, one, two, and three, in alternation every hour for the first forty-eight hours,

and then every two hours; eat sparingly, and let me know at my office if he required more of my assistance.

In a few days afterwards he called to my office, paid his bill, and expressed much gratitude to me for his recovery.

CROUPOUS PNEUMONIA.

CLINICAL CASE, No. 9.—In the spring of 1879 I was called to attend a female, who had been for some days exposed to the inclemency of the weather while on a journey to Durand, Wis. During the last day it snowed and sleeted, so that she got thoroughly wet, and in consequence when I called, she said that she had caught a violent cold. On examination of the case, I found the pulse over a hundred and rising, skin hot and dry, face very red, and great dyspnoea. I found the right lung apparently solid, and only a small circulation of air through the left lung. The patient complained of excessive soreness and much pain in the region of the lungs and bronchial tubes. I prescribed Acon. 3x, Phos. 3x, and Tart. Emet. 3x, in water, to be given every half hour, a tea-spoonful at each dose; ordered a warm compress to be applied as often as it became cool, and then renewed. Left, promising to call again in the evening.

On my return I found the patient's pulse 130 F., temperature very high, with only a little moisture about the face, and great difficulty of breathing; her face was some paler, and, in reality, I felt that every breath she gave would be the last. Her friends were very anxious, and several of them came to the conclusion that she would surely die before morning. I partook somewhat of the same feeling, but did not show in any manner alarm or uneasiness. I stood beside the patient until morning, giving the medicines at proper periods with my own hands, also attending to the compress. About midnight the sputa seemed to break loose from the bronchial tubes in a white, thin froth, which almost suffocated the patient. This peculiar symptom I met with Acon. 200x, given every half hour alone, for some three hours, when this white, gelatinous froth abated; the cough became severe, with a white, serum-like sputa, and accompanied with a severe pain over the left pleura. I then changed the medicines for Bry. 3x, Tart. Emet. 3x, and continued to admin-

ister it from my own hands every half hour. The patient soon became more comfortable, and was inclined to sleep. I left in the morning, directing that the medicines be given regularly at the appointed times, to return in the evening.

On visiting the patient again, I found less fever; but she had a heavy, hoarse cough, and the sputa was ejected with difficulty from the lower lobes of the lungs. The sputa, when I first came in, contained small specks of blood. I prescribed Phos. 3x, Tart. Emet. 3x, and Lyc. 3x; ordered it to be given in water every hour. While I was standing watching the patient (who certainly breathed freer, and was on the whole better, after she had had a severe spell of coughing), the sputa seemed all at once to break loose, and it came away quite thin, mixed with much blood. She almost suffocated while I was standing watching. I immediately changed my prescription to Lyc. 200x, which I gave myself to the patient every half hour until almost morning, when the excessive flow of sinous sputa ceased, it became much more consistent, of a light albuminous character, and dropped in a kind of clot.

I prescribed Phos. 3x, Tart. Emet. 3x, and Carb. Veg. 3x, to be given in water every hour; left, to return in the evening. When I called again, the patient was very much improved, the cough was not so severe, and all her symptoms had changed for the better. She was profuse in her expressions of gratitude for my constant attention, and declared that she believed I had saved her life.

I continued the same medicines, and after a few more visits discharged the patient as convalescent.

NOTE.—I esteem the above as a peculiar, well-marked case. The sudden flow of white, thin sputa, which almost suffocated the patient, could, in my opinion, have been controlled only by Acon. 200x, and the next symptom, marked by a profuse flow of sanguinous sputa, could only have been controlled by Lyc. 200x. This was the second occasion of my having a case of these peculiar, well-established symptoms in

pneumonia. The first one I had the misfortune to lose on account of the want of these two remedies now exhibited, and I was henceforth determined not to lose another patient in a similar manner, and since that time have always provided myself with those valuable adjuncts, and certainly with a successful issue. Furthermore, I may add, that I judge the first afflux of thin sputa came from the bronchial glands, and the second one from the engorged capillaries of the lungs.

CROUPOUS PNEUMONIA.

CLINICAL CASE, No. 10.—While practicing at Durand, Wis., in the spring of 1876, I was called to attend a Mrs. W., a very industrious lady, who had contracted a severe cold some days previous to my visit, caused by hanging out her washing during the prevalence of a cold storm from the North. On my arrival at her residence from my office I found the patient in bed, pulse and temperature high, her face highly colored, and of a reddish hue; severe short hacking cough, with no sputa. I prescribed Acon. 3x and Tart. Emet. 3x, to be given in water, alternately every half hour, until the symptoms improved, and then every hour. Ordered a warm bath, and also directed her to have her spine well rubbed down; to eat sparingly, and that I would visit her in the morning. On my return next day I made a careful examination of her symptoms, found her pulse and temperature lower, some perspiration on her person. Her right lung was apparently solid, and the left one seemed to be approaching the same condition. She was very restless and thirsty, and when she coughed she experienced sharp pains from the left lung, and, in fact, all over the chest, together with a rattling of mucus in the bronchial tubes. I prescribed Bry. 3x, Acon. 3x, and Ars. 3x, to be given in water, alternately every hour, and I would return next day. On my return visit I found but little difference in the patient, save and except that there was less rattling of mucus in the bronchial tubes; the perspiration still kept up, but the pain was quite as severe from the chest. During my absence from

the case I had examined numerous authors on the disease, as well as referred to various notes, taken by myself at the several hospitals which I attended when a student, and I had come to the conclusion that Phos. was what the patient required to bring about a rapid improvement. I prescribed Acon. 3x, Phos. 3x, and Kali Bich. 30x, in water, to be given in alternation until my return the next afternoon, and found my patient very much improved in all her symptoms. The cough was less severe, and the sputa quite loose. The pain from the lungs was very much abated, and the air was passing through the left organ, before mentioned, freely. During my future visits I did not prescribe Acon., but continued Phos., together with other indicated remedies, and soon had the satisfaction of discharging my patient convalescent.

CLINICAL CASE, No. 11.—In the year 1876, while engaged in practice at Durand, Wis., I was sent for to visit the home of John Simerson, where one of his children was very sick, and thought to be about to die. I got there in the afternoon about four o'clock, having to make a journey of some eight miles. On examination of the patient (a child of eighteen months) I found her in a state of high fever, active pulse, and temperature rising; both lungs were considerably congested, together with violent dyspnoea. Indeed, it was a case of pneumonia well advanced, which would assuredly end in death unless quickly aborted. The mother, who had been up with the child during the previous night, was very much excited about the welfare of her babe, and she was well-nigh exhausted. I prescribed Acon. 3x (in pellets); also Phos. 3x, and Tart. Emet. 3x; requested the mother to give the patient three or four of these pellets on the tongue every hour, alternating the medicines; apply a warm compress over the region of the lungs; change the same as often as it became cool; and I would return next day. On my arrival at the house in the afternoon of the following day I found the young child very much improved. The fever was almost gone, and she was perspiring freely. Her breathing was almost natural; the disease was broken, and all that remained to be done was to remove the foreign matter from the bronchial tubes and lung-tissue.

I remarked to the mother that her child was very much better, which she readily acknowledged; but she remarked: "I felt very bad towards you since you were here yesterday." "Well," I replied, "tell me all about it." She said: "I told you that I had remained all night by the child's bedside, and when you came here, finding my infant in such a low condition, I thought it was your duty as a physician to stay with me and watch the patient instead of leaving me nothing but those little pellets to give her. I did give them at the regular time all night, and walked the floor until morning, expecting every moment to witness the child breathing her last." I replied: "I am really glad to find that you were so diligent in giving the medicines, and by doing so the disease has been aborted, and the patient is now free from danger. My reasons for going home were that I knew my diagnosis to be correct; and with the proper administration of the three remedies it was impossible for the disease to make any progress. Therefore I felt perfectly safe in leaving the child, as the remedies left would work a cure." "Well," she said, "I have never given these medicines before, and I am astonished at their wonderful power."

With the administration of Sulph. 200x, Bry. 3x, Phos. 3x, Kali Bich. 3x, and Tart. Emet., in the course of two visits I was enabled to discharge the child as well.

PLEURO-PNEUMONIA.

CLINICAL CASE, No. 12.—In the spring of 1885, while boarding at the Bailey House, Eau Claire, Wis., West Side, I became acquainted with a Mr. Downs, an old resident of the city, who was formerly the founder of Downsville, in Dunn County. On one occasion he had been absent for some days at his old home, previously mentioned. On the evening of his arrival in the city he came to me, saying that he was very ill, and inquired if I could give him anything which would be beneficial. He said: "I feel that I have taken cold. I can hardly get breath, and am extremely miserable." I made a careful examination of his lungs, and found the left one in a very bad state. It was congested, with only a portion of the lung admitting air; the pulse and temperature high, and increasing. He

had a short, hacking cough, but could raise nothing. He retired to his room, and I prescribed Acon. 3x and Phos. 3x, in two-drachm vials, in weak alcohol solution, and requested him to touch each remedy to the tongue twice, alternating them every half hour while awake. When I handed the medicines to him he looked at the small vials, and said: "Doctor, what shall I pay?" I told him, "One dollar, if you please," when he observed: "Will this do me any good? The amount of medicine is so very small." I replied: "Take it as I request you, and if it does you no good I shall charge you nothing."

In the morning he came to see me with a dollar in his hand, and as he held it up, he said: "Doctor, I never had anything in my life do me as much good as the medicines, so minute in quantity, that you prescribed for me. I feel almost well, save and except a little stitch in my left side when I draw my breath." I took off the Acon., substituting Bry. 3x and Tart. Emet. 3x; and on the next day Mr. Downs was rejoicing as a well man. He frequently spoke of the rapid cure, and was always profuse in complimentary remarks, being fully persuaded that I saved his life.

CLINICAL CASE, NO. 13.—About three weeks after the last case described, a man came to me in the evening at the same house. He said: "Doctor, I have got cold, and am suffering much pain. I think my lungs are affected. Please to make an examination, and tell me what is the matter." I carefully examined his lung with a stethoscope. I found the left one perfectly solid, and hepatization going rapidly on in the right organ. His pulse was over a hundred, his temperature was high, and he was a very sick man. I recommended him to get a warm-water bath, and have his spine well rubbed down; to be sure that he was rubbed dry, and ordered him, on dressing, to remain indoors before going out; then to come to the hotel and see me. I prescribed for him Acon. 3x, Phos. 3x, and Cal. Carb. 3x, in water, alternately in tea-spoon doses every half hour until easier, and then every hour; advised him to go to his room, and I would see him in the morning.

When I went in the morning I found my patient decidedly

better. He was perspiring freely, his pulse and temperature lower, and he had slept the latter part of the night. The acute feature of the disease was aborted, but the serum from the blood was still in the lung. I prescribed Phos. 3x, Tart. Emet. 3x, and Kali Bich. 30x, to be taken in alternation every hour, to eat sparingly, to take his medicine regularly, and I would return next day in the morning. On the occasion of his visit I made inquiries in regard to the nature of the employment he was engaged at, and also the cause of the cold; to which he replied: "I have been working on a scow for pile-driving in the river. I have neglected myself, and when I came to you I felt that I was almost ready to die. I could not get my breath, and the pain in my left side was of the most excruciating description."

I called again next day, and found my patient quite comfortable. He was perspiring freely, and only complained of a slight stitch in the left side when drawing a long breath. I applied a Bry. plaster over the left lung; prescribed Bry. 30x, Tart. Emet. 3x, and Kali Bich. 30x. I put the medicine in two-drachm vials in a weak solution of alcohol; requested him to touch them twice alternately to his tongue every hour until he felt very much better, and then eat sparingly, and if he required more medicine, to call upon me.

The man staid two days, took his medicine regularly, and returned to his duties convalescent.

CROUPOUS PNEUMONIA.

CLINICAL CASE, No. 14.—On crossing the Kelsey Street bridge, some time in March, 1888, I met Mr. Pickett, who resided on Niagara Street. The gentleman requested me to visit his home immediately, as two of his children had been taken down seriously ill. When I drove to the house I found his little boy and an older girl quite ill; the latter was suffering from catarrhal pneumonia. She had headache, violent coryza, with copious discharge from the nose; pulse and temperature very high. The boy was much worse. His right lung was hepatized, and the left one severely congested. The poor little fellow was exceedingly pale, and could scarcely get breath. His mother had given the children a number of domestic remedies, causing them

to perspire, and this reduced the fever; but the parents were very much alarmed.

After carefully examining the condition of the little son, I said nothing, but thought it possible that the child might die within an hour. I prescribed for the girl Acon. 3x, Merc. Sol. 3x, Phos. 3x, and for the boy Acon. 3x, Phos. 3x, and Tart. Emet. 3x; to be given in water alternately, every half hour to the boy, and every hour to his sister. Before I left I recommended the mother to give the boy a warm-water bath, rub down the spine in a vigorous manner, dry him well and put him to bed, and I would return in the morning.

On my return next day I found the girl much improved. I prescribed for her Merc. Sol. 3x, Phos. 3x, and Tart. Emet. 3x; requested the mother to give the remedies every hour until better, and then every two hours, and added that I thought those medicines would be sufficient. I then turned my attention to the little boy, whom I found much easier and out of all danger, although the lungs were still loaded with much mucus. I prescribed for him Phos. 3x, Tart. Emet. 3x, and Bich. Pot. 30x, in pellets, to be taken every hour. Directed the two patients to be fed sparingly, and said that I would return next day. On my return the girl was almost in her usual health; the boy was progressing nicely. He had a severe cough, with a copious discharge of stringy mucus. I prescribed Phos. 3x, Sulph. 30x, and Bich. Pot. 30x, to be taken in pellets every hour.

I returned next day, and found the little patient very much better. The lungs were clearing out. I continued the same remedies, and discharged both the boy and the girl, with this condition, if their symptoms changed any to send for me at once. However, my services were not further required. Mr. Pickett promptly paid me my bill, and expressed his warmest thanks for my prompt attention and skill in treating his children.

NOTE.—It may be considered, by some of my readers, tautology in writing on pneumonia, to insert matter at this stage of my book which leads the reader over the same ground that he has perused in the earlier pages; but in this little work, I am not attempting to

produce anything new, as I have before remarked on the etiology, anatomy or pathology of this disease in any of its forms, but only to show definitely as possible by clinical cases the medicines I have used in treating it, which of course I have selected from various authors and confirmed by my experience. I here insert an article entire on pneumonia, from one of the most popular authors of the day, H. R. Arndt, M. D., taken from his late excellent work, "The System of Medicine," page 202, with indications for certain remedies which I think will be highly prized and carefully read by any close student:

DISEASES OF THE PARENCHYMA OF THE LUNGS.

PNEUMONIA. BY A. K. CRAWFORD, M. D.

Definition.—Inflammation of the pulmonary parenchyma, characterized by high fever, with a variable degree of pain in some part of the chest, hurried and oppressed breathing, cough, with viscid and rusty-colored expectoration, the crepitant rhonchus at first followed by bronchial respiration and bronchophony, and a greater or less extent of dullness on percussion. Its onset is sudden, its course definite, and its inflammatory products are removed by absorption. It is subject to marked modifications through the existence of constitutional or specific diseases.

Anatomical Characters.—From the stand-point of acute-pneumonic inflammation, the parenchyma of the lungs refers to the air-cells, vesicles, or alveoli, and does not include either the terminal bronchial branches or the connective tissue of the organ. The bronchial mucous membrane, lined with cylindrical and ciliated

epithelium and mucous follicles, is continuous through the subdivisions of the bronchial tree to the termination of the bronchioles. The air-vesicles are made up of a delicate membrane lined with squamous or tessellated epithelium, and totally devoid of mucous follicles, and it is demonstrable that the bronchial vessels do not reach the air-sacs, but are confined in their distribution to the bronchial tubes and areolar tissue. It is seen also that the vessels which ramify the air-sacs, come entirely from the pulmonary artery, and, consequently, this portion of the lung-tissue must derive its nourishment from the pulmonary vessels, so that, by reason of the difference in anatomical structure, as well as in function and blood supply, an acute pneumonitis is confined, as a rule, to the tissue of the air-vesicles. The rapidity with which the air-cells are filled with exudative material is circumstantially in favor of its being the work of the pulmonary, and not vessels of so small caliber as the bronchial.

“To claim that the cellular tissue is the seat of inflammation, in conjunction with the air-sacs, is still less tenable; for it is found that the group of air-cells at the termination of each bronchiole, forming a lobulette, has no cellular tissue in its composition. Even the groups of lobulettes which go to form a lobule, possess no connective tissue, or at most only an occasional trace of it. Between the lobules it does exist; but there it is separated from the pulmonary circulation, and by the pathological law that inflammation of a structure does not usually extend to another structure, the cellular tissue is not likely to be implicated

in an inflammation of the air-cells. Although usually considered a mucous inflammation, pneumonia is not strictly so, because of the difference in the anatomy of the tissue involved, and the consequent important differences in the products of the inflammation as compared with those of the bronchial and other mucous membranes.

“The amount of lung texture found diseased in the post-mortem examinations of pneumonic subjects has been so variable that numerous terms have been applied to correspond with these observations.

“The more ordinarily accepted divisions are lobar and lobular, although Andral added, with some reason, that of vesicular. The latter name is given to pneumonia which attacks individual air-vesicles. This marks the cut surface of the lung with minute red spots, often not larger than a pin's-head. Later in the disease, when the blood-tint is lost, the spots look not unlike tubercular deposits, but they are essentially different in their nature. It is considered quite probable that this is the mode of development of lobular pneumonia. The term ‘lobular’ applies to the confinement of the inflammatory process to a greater or less number of individual lobules. It is the form which is most common in children, as well as a sequence of major operations or accidents. It will be considered separately later on.

“By lobar pneumonia is meant that type which involves a considerable section or the whole of a lobe. It may extend until the whole lung is invaded, or even cross to the opposite side and subject some portion of that lung to the inflammation. This is the variety of

pneumonia most frequently met with, and which furnishes the truest type of pulmonary inflammation.

“The coincident inflammation of the pleura over the involved portions of the lung is so common that the terms pleuro-pneumonia or peri-pneumonia, designating the combination of the two affections and pneumonia, have often been used synonymously. But as the pleuritic inflammation is usually so slight as to have but little or no modifying influence on the course of the inflamed lung, the compound term does not deserve such prominence.

“In these cases the pleura presents small red patches, and on its surface is seen a thin, albuminous deposit; but only when the pneumonia is of long continuation does this exudation tend to become organized.

“If the pleurisy is sufficiently pronounced to go on to the development of a considerable amount of liquid effusion, and thereby exert a baneful influence on the existing pneumonia, the double term is certainly applicable. Laennec considered this rarely occurring condition, and no other, true pleuro-pneumonia.

“ACUTE LOBAR PNEUMONIA—CROUPOUS PNEUMONIA.

“*Pathology.*—The term croupous was first given to this form of pneumonitis by certain German authors, and it is now in general acceptance. They considered the inflammation of the air-cells to be precisely the same in its nature as that which invades the larynx in croup, because of the appearance of the coagulable fibrinous exudation which filled the vesicles.

“Three stages mark the progress of the disease, viz: First, engorgement; second, red hepatization; and

third, gray hepatization. Any other states which may result from the inflammation, such as abscess or gangrene, must be considered exceptions to the rule.

“The stage of engorgement is recognized by a darker color than normal of the lung surface, varying in degree according to the amount of extra blood the tissue contains, and according to the age of the patient. The color ranges from the blood-tint, seen in the lungs of children, to the dingy, almost black hue, produced by an excess of pigment, seen in the lungs of the aged. A certain pale, opaque condition of the pleura causes somewhat of a violet color. The impression conveyed to the touch is that of a doughy consistence, and pressure elicits only a slight amount of crepitation. It retains the impression of the fingers like a surface which is œdematous. When cut, the lung-tissue emits a frothy, bloody serum. This frothy appearance is due to the admixture of air-bubbles with the lighter or darker sanguinolent fluid. A section of the lung in this stage, if thrown into water, has sufficient air in it to keep it from sinking, and if lightly squeezed and washed it can be restored to almost its natural condition. The greater the quantity of fluid, and the less the proportion of air found in the tissue, the more intense has been the inflammation. Andral was the first to point out the friability of the lung texture in this stage of the disease. The engorgement of the tissue renders it more resistant, and at the same time diminishes its cohesive force, so that the fingers rupture it much more readily than they do the normal lung.

“The stage of red hepatization, so called from its

resemblance to the substance of the liver, is marked by a lighter color, a lessened quantity of fluid, a greater degree of solidity, and an increased friability, as compared with the characters of the first stage. To the touch it is both solid and elastic, and yields no sense of crepitation. Slight pressure causes a very little bloody fluid to exude from the cut surface without a trace of air-bubbles. Firm pressure not only discovers its greater friability, but reduces it to a red, pulpy mass.

“The bronchi with their vessels, as well as the tissue between the lobules, by escaping the inflammatory process, remain lighter colored, and give to a section of the lung a streaked and speckled appearance. By closer examination the cut surface is seen to be studded with small, ovoid bodies, which give it a granular aspect. These particles are composed of the exuded albuminous matter, coagulated into firm plugs, which completely fill, and are adherent to the air-vesicles. An overflow of the exudation causes the granules to project into the terminal bronchi, which has led to the belief that the latter structures had taken part in the inflammation.

“Laennec looked on the presence of these granulations as a necessary part of the stage of hepatization; but they are found to exist in variable degrees in different cases, or even to be entirely absent.

“When they are not present the lung presents a more uniform and darker appearance, to which the term splenization has been applied. Under the microscope the exudation material is seen to be composed of a granular form of albuminoid matter, with red and white blood-

corpuseles and an abundance of new cell-formations on the air-vesicles. The presence of fatty globules is no doubt due to the fatty metamorphosis which takes place prior to absorption of those products. The lung in this stage sometimes enlarges sufficiently to take the imprint of the ribs on its surface. It does not collapse on opening the thorax, and is found to have increased to over ten times its normal weight.

“The stage of gray hepatization retains many of the characters of its predecessor, red hepatization. The chief change is in the color passing by gradations from the red to a drab stone tint, by reason of the infiltration of pus-cells throughout the solidified mass. When in the process of changing, portions, which yet remain more or less red, dispersed among the gray, give the tissue the appearance of granite. It is still solid, granular, and, lacking air, it sinks when thrown into water. When cut, the tissue may not give forth any purulent matter until it is pressed between the fingers. Later in the process of suppuration the whole lung becomes very soft, assumes a sulphur tint, and a puncture made into its substance will be immediately replaced by a well of pus. The vesicular texture disintegrates; and little remains beyond a network of bronchial tubes and vessels and the lobular septa.

“*Clinical History.*—The chill which ushers in the attack lasts variably from half an hour to several hours. In its severity it is comparable to the chills of ague or pyæmia; but the latter repeat themselves, the former occurs but once. The temperature is found to have risen during the continuance of the rigor.

“The heat increases rapidly, and about the second

day reaches its maximum point. Only bad cases indicate higher than 105° F. The fever continues to range high up to the fifth day, at the end of which time, or early on the sixth day, it begins to decline, and soon falls rapidly. The thermometer shows certain variations during the twenty-four hours. Its lowest marking is in the early morning. During the forenoon it begins to rise again, and continues going up until the afternoon. The comparatively sudden termination of the fever, or crisis, does not occur until the process set up by the inflammation is complete; then it is accompanied by a profuse sweat, an inordinate flow of urine or diarrhea. The duration of the different stages may be generalized as follows: The stage of engorgement, only a few hours; the stage of red hepatization takes twenty-four to forty-eight hours for the exudative process, and two to four days for solidification to continue before absorption begins; the stage of gray hepatization is usually terminated in a few days by death.

“The first stage may not progress to the development of inflammatory products, but simply end by resolution. It more usually goes on to hepatization, however, and then, instead of ending in purulent infiltration, it gives way to the reparative process of resolution or absorption. This stage of resolution seldom takes less than three or four days to remove the solidified exudation, and more frequently occupies twice that time. Many cases do not entirely recover for some weeks. Sometimes thus the whole course of the malady may be compassed within the space of six or eight days, or it may continue with evening exacerbations for two or

three weeks, the symptoms remaining with this prolongation of time being confined to the rather rapid pulse and some dyspnœa, with, may be, a little of the cough. If the disease does not progress favorably, the addition of threatening symptoms usually takes place about the third or fourth day. The temperature rises, the pulse becomes smaller and more frequent, and the difficulty in breathing is very much increased. The patient requires to be propped up, and at the same time works laboriously in performing the act of respiration. The sputum is deeper tinted with blood, and becomes so viscid that inverting the vessel containing it does not displace it.

“All authors do not agree on the question of which side is the more frequently attacked, but the general testimony is in favor of the right lung being the one most often involved, and of the base more frequently than the apex. Of the comparative frequency of inflammation of the apices, Grisolle says that it occurs in the right two and a half times oftener than in the left.

“From the time of Hippocrates it has been known and noted that the disease has a decided tendency to ameliorate on certain days. Those critical days are commonly the seventh, eleventh, fourteenth, and twentieth, and but few cases turn toward recovery on days other than these.

“Unless the utmost care is taken, relapses are very apt to take place. They must be looked upon with apprehension; for much vitality has already been expended in the first attack, and consequently the renewal of the fever is more than likely to be adynamic

in form, and the increased sanguinolent secretion is much less readily coughed up, and the dangers are thereby increased. If the case tends to a fatal issue, there will be marked failure of the patient's strength, combined with increased dyspnoea from inability to expectorate all the sputa. The little that is expectorated is changed in hue and character. It may assume any opaque, dirty-greenish, drab, or yellowish tint, with blood and purulent matter mixed through it, and sometimes it emits a fetid odor. It was Andral who first noticed a dark-colored, sticky fluid, not unlike liquorice-water, expectorated by patients having pneumonia shortly before their death. Simultaneous with any of these threatening changes, the pulse will be thready and frequent, the face pale, cold and clammy with perspiration, the lips bluish, the respiration shallow and gasping, and it will be noted that nature kindly blunts and veils the senses so that the patient is unaware of the distressing terminal struggle with death.

“*Causation.*—The conditions which predispose to an attack of pneumonia may be set down to its previous occurrence in the individual, or to tuberculosis; but neither of these can be considered as common to the majority of cases seen. Chomel tells of a patient who had pneumonia ten times. Dezotoux followed one through seven attacks who had had the disease eight times previously. And Rush gives the history of a German who had passed through twenty-eight attacks.

“By all means the most frequent and most easily traceable of the exciting causes of pneumonia is exposure to rigorous weather. It is not merely the

severity of the weather itself which does the mischief, for individuals habitually exposed can withstand the greatest variations of the thermometer without apparent effect; but those who are either unused to outdoor life, or are given to drunkenness, debauchery, overwork, mental or physical, or anything which lowers the vitality and staying powers, will quite readily contract the inflammation when subjected to a chilling atmosphere, especially if after overexertion or overheating. The individuals most prone to be attacked are those who are most actively engaged in life's struggle, and consequently the majority of the cases occur between the years of twenty and forty; and it follows that men are more frequently the sufferers than women.

“The presence of bronchitis does not necessarily favor an attack of pneumonia, nor *vice versa*; for the affections, although so contiguous, are not related the one to the other. Nor does the condition of emphysema tend to favor the occurrence of pneumonia. It will, at times, be found to attack and run the ordinary acute course in a tuberculous subject, possibly confining itself to a portion of non-infiltrated tissue, and terminate without affecting the progress of the phthisis. And it will, too, complicate cases of typhus fever, as well as of rubeola, in which case it is termed “secondary pneumonia.” The inhalation of irritating fumes of toxic gases, the bite of the rattlesnake, or other forms of blood-poisoning, as well as pulmonary apoplexy, embolism, or wounds about or within the thorax, may give rise to acute pneumonia.

“The influence of season is quite marked in the

production of this inflammation, the late winter and early spring months being the most fertile in the year. Statistics from hospital practice in Edinburgh show that about twice as many cases occur during the first six months of the year as compared with the last six; while the records of both Paris and Philadelphia hospitals give the proportion of three cases between January to June to one case between July and December. That pneumonia is often epidemic seems to be beyond dispute, and that in certain localities it is endemic is equally true.

“In the careful study of seventy-nine consecutive cases by Chomel, fifty-six had no assignable cause, the remainder being traceable to the ordinary physical conditions producing it. Because of the obscurity of its source in so many cases, and because of the intensity of the fever, it has oftentimes been relegated to the list of contagious fevers. Its prevalence in the environs of Mount Vesuvius furnishes a good example of the endemic type, being due there to abundant noxious exhalations.

“*Symptoms and Signs.*—The first indications that acute pneumonia is setting in are well-pronounced chills or severe rigors, either of which soon give way to febrile reaction of considerable intensity.

[NOTE.—In my practice I have treated a number of cases of severe chill, which is always considered premonitory of some organic disease. In these cases I have administered Acon. 3x and Phos. 3x, given in alternation at times, every ten minutes, and lengthening the period as the chill subsided; if there seemed to be any pleuritic pains accompanying the symptoms

that would suggest them, Bry. 3x, or Cal. Carb. 3x, Tart. Emet. 3x. Added to these there should be warmth administered to the patient by means of more clothing, warm bricks, or, what is preferable, warm water in jugs, applied to the feet and spine. These appliances while the chill lasted, as in a case within the last forty-eight hours, have always brought my patient out without any serious results following.]

“The patient complains of pain in the chest, not always of a dull character, even when the pleura escapes being implicated. But this pain differs from the pleuritic, in that it is not diffused nor shifting, but generally deep, and localized about the region of the nipple. The cough, which begins early, has a peculiar metallic ring, which is of itself an almost pathognomonic sign of the disease. It is accompanied at first by a light frothy or glairy sort of sputum, which soon changes to a viscid quality; then follows the characteristic rust-colored expectoration. This rust-colored sputum is the result of the thorough admixture of the mucus secretion with some exuded blood and air-globules, and occurs in no state excepting the inflammatory involvement of the air-cells of the lungs. Sometimes the expectoration assumes a deep-colored appearance, resembling in some measure prune-juice, from the greater addition of dark blood; or it may become more or less purulent in character, either of which conditions portends evil; or it may be that throughout the whole course of the pneumonia there is an entire absence of expectoration when there is no doubt that the inflammation exists, and often without developing any more serious symptoms than if present.

“The fever ranges high in this affection, higher than in any other form of pulmonary inflammation. The thermometer indicates usually about 104° F., and is therefore an all-important aid in the diagnosis. The pulse is rapid and full, running from 100 to 120 beats per minute. The respirations are also increased; in fact, more so proportionately than the pulse. They will number from 40 to 80 to the minute, and, taken in connection with the number of pulsations in the same time, completely annul the normal pulse-respiratory ratio pointed out by Walshe.

“The physical signs attendant upon the first stage, or that of engorgement, are: Restrained movement of the affected side, observable both by inspection and palpation. The hand discovers no alteration from the normal in the transmission of vocal fremitus. Percussion elicits slight dullness over the involved portion of lung-tissue, and early in the engorgement the ear detects diminished respiration in the same locality, and augmented respiratory sounds in the remaining portions of the lung. Following this, we have the development of the crepitant rale, the only marked definite or certain auscultatory sign in the stage of pneumonic engorgement. This crepitant rale was wont to be considered a rhonchus or dry rale; but it is now believed to result from the expansion of the air-sacs when they are covered with a viscid secretion; and it is consequently classed as a moist rale of the finest quality. Stokes has drawn the attention of the profession to a physical sign in the initial period of an attack of pneumonia, which, if evidencing a condition common to the larger part of the cases having

this disease, should be counted one of the regular and reliable signs. He argues of dryness prior to either engorgement or exudation; therefore the air-cells of the lungs in assuming this state would present, if seen, intense arterial injection and a bright vermilion color. And the auscultatory sign corresponding with this condition, he says, is that of a "harsh, loud, puerile, respiratory murmur." In the cases in which he had the opportunity to examine them thus early, Waters was able to foretell by this sign the portion of the lung which eventually became the seat of the exudation, and thereby substantiated the clinical value of Stokes's sign.

"In the stage of red hepatization there is a modification of the pain if it existed in the first stage, but the cough and expectoration continue. The cough is less painful to the patient than it was, and the sputum is less hard to raise, is more abundant than before, and gradually loses its rusty appearance. The pulse is now small and more frequent, owing to the obstructed pulmonary circulation, and the breathing continues to be rapid. In this stage, too, the invasion of more lung tissue is apt to take place. If the primary attack involved only one lobe of the lung, it is likely to progress to another lobe; or if a whole lung is first inflamed, a lobe of the opposite side may be invaded. This increase of extent of the inflammation seldom exhibits the signs pertaining to the initial attack. There is little likelihood of a chill marking its commencement, or of the crepitant rale being heard in the newly inflamed part.

"In the second stage the physical signs are more definite and numerous than in the first. Inspection

shows the increased respiratory movement of the well side, as well as the restricted action of the affected side. The vocal fremitus is usually increased, although this is not invariably so, for in some cases palpation makes out a diminished thrill. A dull percussion note is found as certainly as there exists consolidation of the lung-tissue, and the solidified portion may be mapped out by this means. Auscultation furnishes the signs of loud tubular breathing or bronchial respiration, a total absence of vesicular murmur, and the transmission of the vocal sounds exaggerated to the degree of bronchophony. By means of the solidification the heart-sounds are also heard through the lung with peculiar clearness. The three most marked and significant of the physical signs in the stage of hepatization are therefore 'dullness on percussion, bronchial breathing, and bronchophony.'

"The stage of absorption shows gradual and progressive improvement in the condition of the patient. The fever no longer holds its reign, but diminishes until it ceases entirely. The cough is much less frequent and troublesome, and the breathing becomes more natural. With the return of the appetite, the strength of the patient increases apace.

"But if, instead of absorption of the exudative material, suppuration should set in in this third stage, the pulse will become more frequent and weak, the expectoration will assume a purulent quality and become more abundant, and the respirations will be more rapid. The already exhausted vitality of the patient will be further taxed and drained, and the chances are that it will end in death by asthenia. The physical

signs of the process of absorption will be found in a decreasing degree of dullness on percussion, although there is apt to be some dullness existing for a considerable time. The loud bronchial breathing heard in the previous stage gives place to a greater or less mixture of the bronchial with the vesicular murmur, termed the broncho-vesicular; and as resorption goes on, there is less and less of the tubular quality heard, until it is no longer present and the breathing assumes the normal vesicular. As the bronchial breathing diminishes, the crepitant and subcrepitant rales reappear, and die out again when healthy respiration is reached. These are the rales redux of pneumonia, indicative of the air-cells resuming their normal function.

“The sign of bronchophony, so prominent in the second stage, is no longer heard in the third stage, having given way to an exaggeration of vocal resonance, and soon the normal vocal sound only is transmitted.

“There are other conditions to be found in pneumonia than those already enumerated, all of which may not be common to every case; but they are sufficiently frequent and important to bear careful consideration. The examination of the urine detects an excess of urea, and very often there is a trace of albumen; but the most significant stage is that of the absence of chlorides. They remain absent during the height of the fever, and reappear when resolution begins; for it is in some way dependent upon the process of exudation that the chlorides are withheld from the kidneys. The urine is scant in quantity, high-colored by reason of the bile acids and the excess of

urates present, and it ranges in weight from 1,025 to 1,035 by the urinometer.

“Along with the general sense of aching in the back, the loins, and limbs, complained of by the patient, headache is also added to his list of pains. The latter is sharp, lancinating, and frontal, and usually increases in severity up to the fourth day, and then subsides.

“The delirium, which so often attends the course of pneumonic inflammation, is usually preceded by a period of sleeplessness, the patient exhibiting restlessness, vacant staring of the eyes, and some tremor of the muscles. It bears no relationship to the delirium of that rare affection ‘cerebral inflammation,’ but is seemingly due to either a condition of blood-poisoning, or to an altered state of the blood from the presence of some foreign material held in it. When the brain of a delirious patient has been examined after death, not only has there been no sign of congestion or inflammation, but it has presented, at times, some degree of anæmia. Thus, whether this delirium occurs in connection with one of the exanthems, with pneumonia, pericarditis, erysipelas, or alcoholism, it may be ascribed to a combination of these factors. There is another state wherein delirium frequently occurs, to which the delirium attending a local inflammation may very justly be compared, and that is in traumatism.

“The one by an accident, and the other by an acute disease, succeeds in arresting the normal function of a part of the system, and interfering with the patient’s mode of life.

“If to this be added a debilitated state prior to the

onset of the disease, a weakened heart, or some mechanical interference with its action and a depraved state of the blood, the resemblance between the surgical and the medical cases is strong, and it is possible that the consequent delirium may be identical. It is a grave complication in pneumonia, and should be obviated, if this can be accomplished, or checked in its course as soon as possible.

“The face usually assumes a circumscribed dark-red flush on one or both cheeks, corresponding in the choice of sides, usually, to the lung involved. The flush is more common to cases of inflammation of the apex than of the base, and so is the delirium more usual when the upper lobe is attacked. The eyes present a lustrous hue, and with the increase of respiratory embarrassment the *alæ nasi* work with a fan-like motion.

“Pneumonia may be complicated with malarial symptoms, from the presence in the system of a former or newly contracted ague, and it is not rare that typhoid symptoms should also develop in a case. A little care only is necessary to prevent confounding typhoid pneumonia with typhoid fever, having pneumonia added as a complication. The one is, primarily, inflammation of the lungs, with an adynamic state impeding its progress, just as any fever of local inflammatory origin may assume a typhoid condition. The other occurs when the pulmonary affection is secondary to, and superimposed upon, an otherwise ordinary case of typhoid fever.

“When pneumonia occurs in conjunction with cases of acute articular rheumatism, its attack is usually so

insidious that it is very apt to go undiscovered until the lungs are in full possession of the inflammation. First, because the patient may complain of no chest pain, and may have no cough or expectoration; and second, because the slight degree of dyspnoea that may be evident, is likely to be attributed to cardiac complications with the rheumatism. As the heart is so frequently in sympathy with articular inflammation, the chest should be subjected to frequent examinations in an acute rheumatic attack, and at such examinations the lungs should receive due attention to see that pneumonic consolidation does not creep in unawares. There is one feature about pneumonia and rheumatic fever combined which is encouraging, and that is its well-pronounced tendency toward recovery; for most of the cases get well whether the pulmonary involvement is discovered early or late. When there is any concurrent cardiac inflammation with pneumonia, the pulse does not resume its normal beat as soon as it does otherwise. Instead of the pulsations steadily lowering through the third stage of the disease, they keep up an unusual frequency for a longer or shorter time after convalescence is established.

“*Diagnosis.*—The onset, the nature, the course, the symptoms, and the physical signs, all combine to form so clearly defined a picture of pulmonary inflammation that its diagnosis is generally made without trouble. The sign of crepitation is found in œdema of the lungs as well as in pneumonia. The same portion of the lung texture is involved in both, and in both the air-vessels are subjected to a fluid exudation; hence the same morbid sound is emitted.

“This, with the dyspnœa present, gives œdema some resemblance to pneumonia. But in the former there is no fever; the rales, crepitant and coarse, are diffused and two-sided, and the sputum is frothy, but never bloody. The signs of hypostatic congestion are very insipid as compared with pneumonia.

“The fever is slight, and so is the expectoration; there is no dullness, but simply a lessened degree of percussion resonance over the bases of both lungs. The respiratory murmur is feeble, and there are, in addition, some few moist rales heard. From phthisis it is differentiated by the rapid development of the symptoms in pneumonia with previous good health, in opposition to the impaired health and progressive course of phthisis. In pneumonia the lower portions of the lung are usually the seat of disease; in phthisis, the upper. They may coexist, and acute phthisis may proclaim itself at the termination of an apparent acute pneumonia.

“If there is doubt about the nature of the affection in such instances, the after behavior, as well as the family and personal history, will distinguish them. Pulmonary hemorrhage is likely to give evidence of its occurrence by some bleeding from the mouth and nose. It exhibits its greatest degree of dyspnœa at the commencement, while the respiration in pneumonia increases in embarrassment during the first four days. The expectoration in the one is of pure blood; in the other, of frothy, bloody mucus, and fever is absent in hæmoptysis.

“Other conditions which give evidence of solidification of pulmonary tissue, and consequently have some

signs common with pneumonia, are alectasis, pulmonary collapse, pleuritic effusion, and the presence of coagulated lymph, blocking the pulmonary vesicles.

“*Prognosis.*—The favorable or unfavorable progress of a case of pneumonia is, as a rule, determined by the state of the pulse, the respiration, and the temperature. The greater the frequency of the pulse and breathing, and the higher the range of the thermometer, the more violent is the inflammation; and when these are excessive, the first danger to the life of the patient is from the intensity of the fever, and the second is from the extent of the exudation, which may destroy life later on by apnoea. Pneumonia in infants is a very fatal malady; but in children from five to fifteen years of age, it does not prove to be so. Barthez publishes a table of 212 cases of pneumonia occurring between the ages of two and fifteen, with only two deaths. The death-rate between the ages of fifteen and forty is also small if the disease runs an uncomplicated course. But if pneumonia is secondary to some acute dyscrasia, such as measles or typhoid fever, it is attended with many dangers, and may readily be fatal. After fifty years of age the mortality increases very much; and by adding drunkards to the list of the feeble, the deaths mount up to sixty or seventy per cent. Deaths are more frequent when the inflammation attacks the upper lobes or roots of the lungs, than when the bases are involved, possibly because of the pressure exerted on the larger vessels and tubes in the former case, thus cutting off the supply of air and blood from the non-inflamed parts.

“Much may be learned from the sputum to aid in

determining the prognosis of pneumonia. After being viscid and rusty, if it becomes more free in quantity and less tenacious and bloody, the inference is that resolution is established and recovery quite promising. But if it becomes over-profuse and of a thin, serous quality, or of a dark, brownish-red color, or if it disappear entirely, the prospect is the reverse of encouraging. The condition of the sputa, and their significance, are much altered and modified if catarrh bronchitis, or phthisis exists with the pneumonia. When the other symptoms are not correspondingly grave, the disappearance of expectoration does not signify; but if rattling of the secretion is heard with each respiration, along with absence of sputa, denoting paresis of the vagi, œdema may set in at any moment, and death will ensue.

“Should the urine, previously cloudy, become clear before the fourth day, while the inflammation is still active, the chances are against the patient, and so is the appearance of albumen in this stage a bad sign. If by the sputum or by the exhalations from the breath, there is evidence that gangrene has invaded the lung-tissue, the condition is full of peril, although several such cases are recorded as surviving the attack.”

LOBULAR PNEUMONIA, CATARRHAL OR BRONCHO PNEUMONIA.

This special form of the disease bears the imprint of inflammation simultaneously in both the bronchial tubes and in the air-cells of the lungs. The names do not apply to any true croupous pneumonia, where probably from the intensity of the inflammation, the bron-

chial tubes also appear reddened, and more or less inflamed, but to a pneumonia that follows a catarrhal or inflammatory condition of the bronchial tubes. It is therefore a secondary pneumonia, being preceded frequently by whooping-cough, measles, or capillary bronchitis, and, like the latter affection, is confined almost entirely to the extremes of life. It is probably never met with in adult life, unless in connection with pyæmia, the puerperal state,* or subsequent to the severe injuries of surgical operations and accidents. The terms "circumscribed," "patchy," and "lobular" refer to the limitation of the inflammation to isolated sections of lung-tissue scattered throughout the whole.

Viewed pathologically, the inflamed foci do not present the granular appearance of the consolidated tissue in croupous pneumonia, but a smooth, homogeneous look. The air-cells contain desquamated epithelium and leucocytes, but no exudation. The development of this malady in an infant may be first noticed by the augmented respiratory movements, or by the aggravation of the cough every time nursing is attempted.

The rales heard are more of the subcrepitant and coarser order than those found in the lobar variety of adults. Dullness on percussion is an unreliable sign, therefore does not help to distinguish lobular pneumonia from bronchitis; neither are the other ordinary signs of pneumonia to be depended upon. But if the fever suddenly rises several degrees, with increased embarrassment of respiration, lessened cough, probably signs of localized dry pleurisy, and the discovery of a few dull and inert spots over the chest wall, the

* See Jousset's Clinical Medicine, page 393.

inference is strong that the bronchial inflammation has extended into the air-cells of the lungs. The two diseases, capillary bronchitis and catarrhal pneumonia, differ much in their duration, the former running its course much more speedily than the latter.

With the predisposition of children to develop brain-symptoms in acute fevers, they prove to be specially liable to delirium in pneumonia, and they therefore suggest the possibility of the local inflammation being meningeal rather than pulmonary. But the thermometer will obviate any liability to confound them; for in pneumonia the record is high, and is continuously so, while in meningitis it has marked remissions. Infantile peritonitis also bears such resemblance to pneumonia in its continuous fever, rapid pulse, and quick breathing, that they require to be differentiated from each other at times. In peritoneal trouble, the development of abdominal tympanitis will be sufficient to direct the attention to the locality inflamed.

The catarrhal pneumonia of the aged is insidious in its attack, difficult of detection, and asthenic in its course. A complication that sometimes befalls pneumonia in advanced life is the occurrence of hemiplegia. It involves the same side of the body as the diseased lung, but does not signify any grave state, for it is not of central origin, and disappears with the abatement of the pulmonary inflammation.

Treatment.—The record made by homeopathy in the treatment of pneumonia is so exceptionally good that any and all other modes of practice and schools of medicine may be challenged to compare results, and

with perfect safety in so far as the laurels of homeopathy are concerned. Leaving out of the question the statement published by Dr. Hughes Bennett, that he lost only a little more than three per cent of his cases of pneumonia—because it has been shown that his affirmations are unreliable in several particulars—the nearest approach to the success attained by homeopathy is found in the Vienna test of the “expectant” method of treatment. During the first year of this trial, the mortality was only about seven and one-half per cent; but subsequent statistics of series of pneumonia cases, treated without, increased the average mortality to nearly nineteen per cent.

In the Sainte Marguerite Hospital of Paris, pneumonia was treated homeopathically by Tessier, and allopathically by Valleix and Marrotte, for a consecutive period of three years, with the result of three per cent less mortality under homeopathy. The losses by death from pneumonia in two hospitals there, conducted homeopathically, were five and six per cent respectively, while under old-school treatment the mortality ranges anywhere from twelve to thirty or thirty-five per cent.

Not only is the death-rate so greatly diminished by homeopathic treatment, but the duration of the disease and the severity of its course are lessened materially. For instance, in one of the tests just cited, with the same number of beds and in the same period of time, the homeopathic service cared for some three hundred cases of pneumonia over and above the number treated by the allopathic corps. And it has been definitely noted that under this modern-school system

of treatment, the febrile symptoms gradually decline instead of terminating abruptly with defervescence, as is the natural tendency of the malady.

There is even a greater difference than this in the persistence of the physical signs under the expectant treatment, as compared with their duration under homeopathy. In the former, although the fever may have subsided about the ninth or eleventh day, the physical signs continue up to the twenty-fifth or thirtieth day, while in the latter they are frequently non-discoverable after the eighth day.

Entering now upon the consideration of the remedies in use for the treatment of pneumonia, the number is found to be limited, and the specifications concerning each are, in the main, both definite and well agreed on. In speaking of this, the *British Journal of Homeopathy* once said that "we may say that our knowledge of the treatment of pneumonia is as perfect as our diagnosis of the disease."

Aconitum.—There is usually the utmost accord among homeopathic physicians as to the time and adaptation of this remedy to a disease; but there is a division in the ranks about the place Aconite should hold, and the value that should be attached to it in the therapeutics of pneumonia. Hafke says it has never given him any results when he has used it in croupous pneumonia. Jousset totally ignores the drug; and Hughes says that if you expect much from Aconite in pneumonia you will be disappointed. On the other hand, Baehr writes that no one who has watched the striking effects of Aconite will ever doubt its great virtues in this disease; and Carroll Dunham states

that Aconite may be employed in pneumonia and other pure inflammations, and may do a heroic work. He considers its time of administration to be during the stage of arterial excitement, prior to that stage which is characterized by local deposits; if promptly and judiciously used, it may cut short the entire disease. Again, S. H. Hayward says that if Aconite is given in the initiatory chill, in the early reactive fever, or in the stage of simple vascular engorgement, in a case of uncomplicated pneumonia, the morbid process will almost always be arrested within twenty-four hours. The universal testimony of physicians on this side of the water accords with the views last expressed.

The special symptoms calling for Aconite are: Great anguish of mind and body, restlessness, and disquiet that can not be allayed; high fever, preceded by a chill, with burning heat and dryness of the skin, full and bounding pulse, and a deep redness of the face; labored respiration, dull pressure and weight on the chest, or stitches in the chest during a deep inspiration and during motion; dry, racking cough, with some tenacious, blood-streaked expectoration; headache; intense thirst; scanty and high-colored urine; the recumbent posture on the back, and the physical signs pertaining to the first stage of the disease.

Veratrum Viride.—This remedy supplements Aconite, and, like Aconite, has the credit of being able to abort pneumonia when it is given early, and in the tincture or a low dilution. Its symptoms are: High temperature; very rapid, hard and strong, or intermitting pulse; flushed face; labored respiration; dry and hacking cough; abundant and bloody expectoration;

red streak through the center of the tongue, and sinking, faint feeling in the pit of the stomach. It lowers the pulse and the temperature with extraordinary rapidity, and although the respiration may not be so markedly affected, the dyspnœa is never distressing to the patient, even in bilateral cases of pneumonia.

Bryonia was considered by Tessier the remedy for pneumonia. He prescribed it in every case, and frequently gave no other, from the beginning to the end. Jousset is quite as warm a champion for *Bryonia*, and as the remedy for the benign form of pneumonia he claims that it fills all the indications.

The provings of the drug show that it is capable of producing exudations in the lungs of a thoroughly fibrinous nature, and in this wise it presents us with a better pathological picture of the disease than does any other remedy. The peculiar adaptability of *Bryonia* to the inflammation of serous membranes, and the stitch-like character of the chest-pains, so often occurring in its pathogenesis, places this remedy at the head of the list for the treatment of pleuro-pneumonia.

Baehr recommends its use after the fever has abated, and when red hepatization is fully established, but this is altogether too long delayed. To accomplish its greatest good, *Bryonia* must be given during the progress of exudation, for, even according to this author's own showing, if resolution is too tardy, or if gray hepatization sets in, *Bryonia* is of no further use; so that, unless the case tends toward speedy recovery, this remedy has but an indifferent position among his therapeutics of pneumonia.

Phosphorus.—This remedy is indicated when the patient exhibits something of a typhoid condition, and the tongue presents a dry appearance, with a dark-brown coating on it. It is well adapted also to cases of catarrhal pneumonia. But in true croupous pneumonia, when the sharp pleuritic pains of *Bryonia* are not present, when the attack has not been caused by exposure to dry, cold winds, and when the patient is of a tall and spare build, *Phosphorus* is usually even more efficacious than *Bryonia*. The peculiar use of these two remedies in the treatment of pneumonia as formulated by Tessier, is called by Jousset the "classic treatment" of that disease. If, after having given *Bryonia*, a progressive diminution of the frequency of the pulse is not noted within twenty-four to forty-eight hours, and other symptoms are increasing in gravity, *Phosphorus* is prescribed for the night, and the *Bryonia* continued through the day. Probably the finest hospital record ever made in the treatment of pneumonia was that of Fleischmann, of Vienna, who, by the use of *Phosphorus* alone, cured 95 per cent of his cases.

Tartar emetic is indicated in the stage of resolution when there is oppression of the chest and difficult breathing. The pulmonary inflammation is on the decline, and the vesicles, as well as the smaller bronchial tubes, seem to be filled with a viscid secretion, not tinged with blood, which the patient finds the greatest difficulty in raising. It is, therefore, particularly useful in broncho-pneumonia, the form of the malady so common in infancy and old age. The dyspnœa is accompanied with wheezing and rattling

of mucus in the air-passages. The expectoration may be completely suppressed, with fits of suffocation and a spasmodic cough; or if bronchial catarrh is present, and the hepatization persists, there may be a considerable amount expectorated, but only after much effort. It is the remedy for pneumonia supervening on whooping-cough or emphysema, or delirium tremens; and is only the more strongly indicated if gastric catarrh complicates the case. The attendant symptoms are: A livid or pallid countenance, a frequent pulse, a lowered temperature, a loose cough, with great anxiety; and a cool, moist skin.

Sulphur.—When high febrile symptoms persist after the completion of exudation, and the stage of resolution is delayed without the development of typhoid symptoms; when the pneumonic processes seem to be at a stand-still, and there appears to be danger of purulent infiltration setting in instead of terminating by resolution, Sulphur is the remedy called for. The time for its employment is about the fifth or sixth day, when there is a great lack of reactionary force. It quickens into life the reabsorption process in such cases. The face is frequently puffy in appearance, and there is a great tendency to sweat. Eidherr recommends its use from the beginning of the exudative process.

Mercurius is a remedy little used in the treatment of pneumonia; but both Müller and Baehr give it a definite place among the thereapeutics of pulmonary inflammation. In epidemic broncho-pneumonia, Baehr says it is a leading remedy, as well as in the catarrhal or lobular form, and Müller thinks it specially well

adapted to the third stage of pneumonia. The symptoms indicating Mercurius are: A continuous but not intense degree of fever; the skin is at times dry and hot, and again is covered with profuse perspiration; a dry, rough, irritating cough, worse at night; sometimes a slight amount of yellowish-green expectoration, streaked with blood; dyspnoea unchanged, or slightly increased; violent headache, stupor, and light delirium; the tongue is coated yellow, and soon becomes dry; the urine is cloudy and scant. In fact, the tendency is wholly in the direction of a typhoid condition. In children, when they have suffered from whooping-cough, bronchitis, or a severe influenza, and signs of pneumonic exudation set in, Mercurius proves to be a valuable remedial agent.

Hepar. Sulph. is a companion remedy to the foregoing, or rather is the one which best follows it when to the conditions found under Mercurius the suppurative process is added. There will be signs of hectic fever, with only limited portions of the lung infiltrated with pus. It is specially valuable also in pneumonia retarded by a concurrent bronchitis.

Iodine.—Instead of employing either Bryonia or Phosphorus in the first stage of pneumonia, Hofka prefers this agent. He claims that Iodine cuts the inflammation short, while other remedies only modify it.

Bromine resembles Iodine in its action, but is preferable if the hepatization becomes more extensive, and when the Iodine has not fulfilled its mission.

Arsenicum Album is never required in an ordinary case of pneumonia; but when the disease assumes more and more of a grave aspect its employment may

be demanded. It is indicated when there is extreme prostration, restlessness, pallor of the face, coolness of the surface, periodical exacerbations, considerable dyspnoea, and an irregular pulse.

Lycopodium.—When the inflammation assumes a low type, or if it has already reached a chronic condition before it is seen, and the characteristic symptoms of the remedy are present, then *Lycopodium* will prove beneficial. It is called for when the right side is most involved, when there is a fan-like motion of the alæ nasi, circumscribed redness of the cheeks, constant cough, with abundant mucus, or grayish and bloody expectoration, and a marked aggravation from 4 to 8 P. M.

Chelidonium.—Teste considers this remedy preferable to *Bryonia* when the subject is of a light complexion and placid temperament. He has also commended it very highly for catarrhal or capillary bronchitis in children. Ludlam says he has used it with the greatest success when these affections could not readily be distinguished at the bedside. The indications for its use resemble somewhat those of Tartar Emetic, there being an excess of secretion in the tubes, and an inability to raise the same. But the last-named authority does not think it adapted, like Tartar Emetic, to reopen the hepatized air-cells. Hughes looks on *Chelidonium* as being particularly valuable in pneumonia when the right lung is affected, with involvement of the liver.

Ammonium Carb. is another remedy which compares with Tartar Emetic when the symptoms point to a paretic condition of the vagi in the pneumonia of old people. The pneumonia is usually attended with a

copious expectoration, an incessant cough from a sense of irritation in the larynx, and the patient is always worse about 3 or 4 A. M.

Kali Carb. has proved efficacious in the stage of resolution, when both Tartar Emetic and Ipecac had failed to relieve. It has been used mostly in children, when considerable bubbling and rattling mucus rales are heard, with inability to raise the tough phlegm; a tormenting cough, great dyspnœa, preventing the child from sleeping or drinking; stitches in the chest, and puffiness and cyanosis of the hands and feet.

Sanguinaria ranks with Phosphorus and Lycopodium in the stage of gray hepatization and in pulmonary abscess. The general symptoms are those of hectic or of typhoid pneumonia.

Rhus Tox.—For pneumonia caused by exposure to wet and cold, for cases of an adynamic type from the beginning, for pneumonia attended with an eruption, or for the accompanying delirium due to deterioration of the blood, *Rhus Tox.* is the first and foremost remedy. Like Arsenicum, it bears no relation to uncomplicated pneumonia, and, like it, the well-known symptoms calling for its employment in other states, indicate its choice here. *Rhus* is most useful when the onset of the disease is so indefinite that to predict its development into typhus or into pneumonia is impossible. It is even preferable to Phosphorus in the typhoid form of lung inflammation, when the latter is preceded and accompanied by bronchitis.

The dyspnœa of *Rhus* is peculiar in that it is occasioned by distension of the pit of the stomach. Other symptoms are dry and hot skin, dry, raspy, and

dark tongue, with a triangular red tip; loss of strength, sopor, dull hearing, subsultus tendinum, and involuntary passages of urine and stool.

Belladonna, *Hyoscyamus*, and *Opium* are the chief remedies for the delirium which so frequently complicates pneumonia when it is due to arterial or venous congestion. They can be considered merely as intercurrent remedies. When the upper portion of the lung is involved, and the delirium is directly referable to circulatory disturbance, and not to blood change, and especially if the head symptoms are prominent from the start, *Belladonna* may be given at once, and with better effect than *Aconite*. *Hyoscyamus* is specially valuable in hypostatic pneumonia, with delirium, not so violent in form as that of *Belladonna*. There is less congestion, but more nervous excitement, with talkativeness and hallucination, under *Hyoscyamus*. Over the pneumonia of drunkards, and of the aged, but more particularly in children, when there is great cerebral depression from congestion and sudden threatening of dissolution, *Opium* exerts a wonderful spell. The patient does not complain of pain, the respiration is labored and slow, stertorous, or even entirely suspended, the face becomes rapidly cyanotic, the eyes are immovable, the lids half open; there is coldness of the surface; an irregular or almost imperceptible pulse and stupor.

Carbo Veg. holds a high place in the therapeutics of the third stage of pneumonia. Great prostration accompanying the suppurative process is its chief and constant symptom. The patient is listless, and is covered with a cold perspiration; the pulse is feeble and rapid;

the tongue is dry, without thirst; and the distressing cough is unattended by expectoration, although much rattling is heard in the chest. These conditions supervene mostly in pneumonia of the aged, and it is much needed if emphysema or right-heart troubles coexist with the pneumonia. The distinction made between the chest symptoms of Carbo Veg. and Tartar Emetic is that the former has but very slight expectoration, which affords no relief, while the latter has the ability to raise some sputa, and feels the better for it.

Digitalis.—This remedy is of great value when irregularity of the pulse exists in pneumonia. This is a very threatening symptom, and usually signifies a lesion of the heart or aorta. It is most commonly met with among old people, and presages a fatal termination. An irregular action of the heart is not uncommon to find in those of advanced years. And among them the irregularity may disappear during the height of the pneumatic fever. It again makes its appearance as the symptoms abate, and indicates then a return of the normal condition. But if the regularity reappears without an abatement of the general symptoms, the outlook is very unfavorable unless a remedy like *Digitalis* meets the case and affords speedy relief. *Cactus Grand* is recommended for a like condition in pneumonia when the sense of constriction characteristic of the drug is present also. But alcohol is commended even more highly when there is threatened failure of the heart, the circulation, and innervation. The patient usually can not take any kind of nourishment into the stomach, and his small stock of vitality is rapidly being exhausted. In such cases

stimulation is necessary. Not more than an ounce or two of whisky or brandy in the twenty-four hours is required to secure the desired effect.

The room in which the patient lies should be kept at an equable temperature of 70° F. The air should be renewed, so as to keep it fresh, and it should be moist as well as warm. It is not necessary to place heavy coverings on the sufferer. The use of hot, damp applications to the chest, especially when there is a complication of pleurisy, is frequently advisable. It is better to restrict the diet to the use of milk or some farinaceous substance during the height of the fever; and as the general symptoms abate and the pulse softens, beef-tea, broths, and soups may be substituted. Brown sugar dissolved in warm water has been found to be much relished by infants; but if they exhibit any gastric irritability, a tea made from parched corn will prove more suitable.

NOTE.—I can not refrain from stating here that I differ in many respects from this article written by a high authority, from whom I have extensively quoted on the subject of pneumonia, and I would especially make an objection to the directions on feeding and stimulating, and where a milk diet is ordered to be given patients suffering from the disease. I have invariably found in my practice, that in any and all instances, when milk has been administered, it most certainly increased the fever. Under disease, my rule is to feed sparingly. Should the patient be very ill, give, say, from two to four table-spoonfuls of water-gruel, made from oatmeal, corn-starch, rice, or tapioca, with a few currants added in order to take away the flat taste. This is, in my

opinion, the best diet possible for patients sick with pneumonia, or, in fact, any other organic disease.

CLINICAL CASE, No. 15.—On the 22d of November, 1888, I was suddenly called to attend a young child, whose parents reside in the Sixth Ward. When I arrived at the house I found the patient lying in the bed; pulse and temperature high. The child was suffering from difficulty of breathing; pulsations of the heart very violent; the left lung nearly solid, and the wheezing of the air from the right lung showed that it was fast approaching the same condition as the other organ. I prescribed Acon. 3x, Phos. 3x, and Tart. Emeticus 3x, in pills, to suit the patient's fancy, as he had said that he wanted me to attend him as he could take my medicine. I requested Mrs. J. C., his mother, to put the child in a warm bath just before bed-time, rub the spine vigorously, then dry him thoroughly, and put the patient to bed. For the first two hours I ordered the medicines given alternately, four or five pellets at a dose, every half hour; then once an hour as marked, Nos. 1, 2, and 3; the remedies to be given him regularly, except when asleep, and to feed him sparingly, and promised that I would return next day. I inquired of the lady as to the duration of the child's illness, and she replied: "Almost one week." She said: "Doctor, what is the matter with my child?" "Madam, he has at present severe congestion of the lungs." She inquired: "Is that what you call pneumonia?" "Yes, it is the premonitory symptoms in full." The lady became much alarmed; but I quieted her fears by the statement that, under the treatment I had given the patient, it was an impossibility for the disease to progress, but it would surely recede.

From press of business I did not see the patient for forty-eight hours. I found him, however, very much better. He had a slight cough; but the sputa were coming away freely and looked well. He had still some fever, and was quite thirsty. I prescribed Ars. 3x, Phos. 3x, and Tart. Emeticus 3x, in pellets, to be given in alternation every hour, and said I would return next day. On my entering the house, I found the child engaged at play. He looked a little pale in the countenance, but his mother said that she thought he would now soon be well. I ordered the

medicines to be given only once in two hours; that if any change took place in the character of the cough, to inform me at once; otherwise I thought that my services would not be required, to which they assented. The child soon recovered, and the mother and father expressed much satisfaction at the rapid cure.

QUINSY.

ANGINA, tonsilaris, tonsilitis, and amygdalitis, inflammation of the tonsils, generally called quinsy, is a disease of frequent occurrence, and is at times very severe in many of its symptoms. At times it occurs as an epidemic in perhaps a single family; at other times it occurs in single cases, having no apparent connection with any other case. It seldom terminates fatally. But I have known of cases in the hands of other physicians which lasted a long time, and ended with an anæmic condition of the system, which took a number of weeks to repair, under the best tonic treatment. I have in my library a fine article on this disease by a very much esteemed author, from whose volumes I have obtained many facts in practice, which, for the correct information of my readers on the subject, I will insert here, and then give several clinical cases that I have in the past year successfully treated. The author is Bernhard Baehr, M. D. His work is entitled "The Science of Therapeutics" (Vol. I, page 284).

"We designate by this name the parenchymatous inflammation of the throat, where the tonsils are generally most affected. This affection is really met with only to the age of forty or fifty years, very seldom at a later period; most frequently between the years of seven and fifteen. Here, too, we find a disposition

to pharyngeal inflammation, the same as in catarrhal angina, without any externally perceptible signs by which such a predisposition might be recognized; for, although we can always assert very positively that amygdalitis always arises from a cold, and we have, therefore, to believe in a certain predisposition to colds in those who are attacked with the disease, yet it is not clear why the same injurious influence makes some persons hoarse, causes a coryza in others, and an angina in a third party. What is certain is, that persons who have to use their voices a good deal are more liable to an attack of angina, and are more generally affected with the chronic form.

“One attack of amygdalitis predisposes in a striking manner to relapses. Such diseases are more frequent in spring and fall than in summer and winter. Their frequent appearance in the same locality at certain periods justifies the inference that this disorder is sometimes epidemic. Damp, gloomy, and badly ventilated dwellings are undoubtedly very frequent causes of amygdalitis. We attend families in whom the children are very frequently attacked with this disease, and where, in the absence of any other unfavorable circumstances, the frequency of these attacks can only be accounted for by the unwholesomeness of their habitations.

“The peculiar relation of syphilis and mercury to the tonsils, although as yet beyond the bounds of comprehension, is well-known; both these causes develop almost constantly a parenchymatous inflammation. In scarlatina we meet with amygdalitis as a characteristic symptom of the disease. In less frequent cases

amygdalitis likewise accompanies other exanthems, least frequently measles.

“*Symptoms.*—Acute amygdalitis generally commences, like all other acute affections, with a violent chill, which is speedily followed by an unusual rise of temperature and increased frequency of the pulse, with violent headache, and sometimes violent symptoms of cerebral hyperæmia, so that, in the absence of local symptoms which have not yet made their appearance, we are easily led, especially in the case of children, to suspect the invasion of some acute disease. Generally all the morbid symptoms which occur in catarrhal angina make their appearance in this disease, only they are more continuous. The fever especially is less remittent, on which account acute tonsillitis is, more readily than catarrhal angina, confounded with some violent acute disease, such as meningitis, even in the cases of adults. This is particularly owing to the fact that the local throat symptoms do not make their appearance at once, and not till the fever has lasted already a whole day, in consequence of which we neglect to examine the throat at the onset of the disease. The throat looks generally redder, more so on one side than on the other.

“The vascular engorgement is very soon followed by a swelling of the tonsils, at first only one tonsil being affected, the other tonsil remaining either unaffected, or being attacked subsequently to the former. The more rapidly the inflammatory swelling increases in intensity, and the higher the grade to which the inflammation is carried, the greater the danger of the inflammation terminating in suppuration. The swelling

sometimes enlarges to such an enormous size that it is no longer possible to see the posterior wall of the pharynx. As the local symptoms increase, the general condition of the patient becomes more and more unfavorable; the fever remains at its height; deglutition is almost entirely impeded, and yet there is a constant urging to swallow. Speech becomes guttural, sometimes quite impossible. The respiration is more or less impeded, according as the posterior nares are involved in the inflammatory process. During perfect rest the pain is not so great, but is excited or aggravated by every motion. The lassitude is continually on the increase, partly owing to the violence of the fever, and partly to the deficient supply of solid, and more particularly of liquid, nourishment. The tongue is lined with a thick, tenacious phlegm, which is exceedingly troublesome to the patient, and seems to cause the urging to swallow, which frequently results in an inclination to vomit. The bowels are constipated, the urinary secretions diminished, and the urine is very thick. In this manner the disease continues about nine days, and sometimes increases to such a degree of intensity that the patient, the day previous to the opening of the abscesses, seems to be like one near death.

“Very seldom the general condition improves during the formation of the pus. As soon as the abscess breaks, the threatening symptoms disappear almost immediately, so that it would seem as though the cerebral hyperæmia, at least towards the end of the process, were in many cases consequent upon the impeded respiration, the same as in croup. That perfect recovery can not take place at once must be self-evident

to any one who considers how much strength the body has lost by sleeplessness and deficient nourishment. Not in every case, but generally, this disease yields readily to treatment. Scarcely ever under the homeopathic treatment is the course of tonsilitis as acute as we have described. From the most violent fever, with sopor and delirium, to a scarcely perceptible disturbance of the general health, all sorts of degrees of constitutional malaise can be noticed, even though the local affections should be the same.

“If the inflammation is dispersed (this result does not take place very rapidly; on the contrary), in such a case the inflammation is very apt to pass into the chronic form, which is much more rarely met with when the inflammatory process terminates in suppuration. But even if the inflammation is dispersed, a febrile condition of the system, lassitude, and loss of appetite continue for some days; whereas the decrease in the inflammatory symptoms ought to lead one to infer that the general well-being was much improved. The prognosis is almost always favorable. Only in children the disorder may terminate fatally, either in consequence of cerebral difficulties, or by suffocation, or even, under certain unfavorable circumstances, by mortification of the parts.

“The chronic form of amygdalitis arises in most cases out of the acute form, in consequence of the reabsorption of the inflammatory exudation only taking place partially, and the swelling of the tonsil remaining. It seems as though, independently of all constitutional predisposition, such remaining infiltrations superinduce a tendency to relapses. Every new

attack increases the swelling, so that a hypertrophy may ensue, by which access to the pharynx may be almost entirely prevented. In the cases to which we have alluded, when speaking of the etiology of this disease, every child has such hypertrophied tonsils, even a girl of two years and a half; and every one of these children has twice a year a more or less violent attack of acute angina.

“After an abscess, hypertrophies of any size occur much less frequently without any previous acute attack. Chronic amygdalitis may develop itself almost imperceptibly in persons who have to exert their vocal organs a good deal, such as ministers, singers, actors. But acute cases arising from such causes are not nearly as violent or important as cases arising from the previous mentioned causes.”

CLINICAL CASE, No. 1.—In the winter, 1876, while practicing at Durand, Wis., I was called one very cold evening to visit a man some three and one-half miles from the village. The messenger said the man, who was a farmer, was very ill; that the friends thought that he could not live through the night unless he got relief. To all this I asked if he knew where the most trouble appeared to be in the patient's body. He replied, he thought that it was in the throat, as he could not swallow anything. After preparing myself with medicines on this basis, we left my office, which was then in the Cressler Hotel. On arriving at the farmstead, which looks as if occupied by an industrious man, I found the patient perched up on a chair, with blankets and pillows, suffering intensely with a prolonged dose of quinsy. His parotid and submaxillary glands were both swollen, as I observed from the outside; and when I came to look into the throat I found his tonsils quite enlarged and very red. The patient said to me while looking into his throat, “Now, Doctor, I will show you just where to put your lance;” and he pointed

his finger close to the swollen edge of the left tonsil. "Doctor Baker," he said, "was here some days since and lanced my throat; but he did not do it in the right place; therefore he did me no good." I replied to him that I certainly should not put my lance into his throat at that point that night, as just at that point there was quite a good-sized artery; that if I were to sever it, it would take me some time to tie it, as I had no tenaculum with me; and before I could send to my office, and a messenger return, he might leave us. Therefore, I thought it would be as well to do without lancing his throat to-night, especially as I felt that I could give him some medicines that would relieve him without lancing. His tongue was heavily coated; the fauces, indeed the entire mucous membrane of the throat, were all swollen and quite red with little white specks or pustules all over them, and the sclerotics of his eyes had a greenish-yellow tinge. The pulse was very full and the skin hot and dry. The man could hardly get his breath. I prescribed *Phyto. D.* 2x, *Bell.* 3x, *Rumex Cris.* 3x, in water. I instructed him to take a teaspoonful alternately of the medicines every hour until he felt some better, then every two hours. I gave for a gargle a solution of Chlorate of Potassa, and showed him how to use it three times in two hours. I said to him to take the remedies as directed, which I felt assured would bring him out all right; and if he wanted any more of my services to send for me at any future time. He paid my bill, and I left with the driver, in a severe storm, for my office. A few days afterwards I met my patient near his house: "Well, Doctor," he says, "let me tell you how I felt when you left me that night, especially when I looked at those little cups of what you called medicine. I really thought I was going to die, and I thought you had taken out of me the money I paid you for really nothing. I proceeded, however, to take the medicines just as you directed, and believe me I was sound asleep before eleven o'clock. In the morning I was able to do my chores and feed my cattle. Now, I want you to be sure that if you leave this place to leave me first some of those medicines, so that if I should have the attack again of the same disease I can have them to take; for, really, I do believe you saved my life."

NOTE.—The patient in the case above mentioned was certainly very ill when I reached him, and the remedy that relieved him so quickly was *Phyto. D. 2x*; or, to put it more plainly, it was our common poke-root, which grows so plentifully all over our country—a remedy I have found of first importance in this disease, or when the glands in any part of the body are prominently affected.

CLINICAL CASE, NO. 2.—About the tenth of May, 1878, I was called on while in practice in Durand, Wis., to visit a patient whose residence was on a farm eight miles from my office. The man was said by his son to be very sick. After considerable trouble, and crossing a number of lots, I got to the house, away down in the hollow. The man lay on his bed, and on examination I found the pulse and temperature well up. His throat was very much inflamed inside; the tongue heavily coated; the parotid and maxillary glands badly swollen. It was difficult for him to breathe, or to swallow even water indeed. In view of all his systems he was quite a sick man, and was much alarmed lest he should not get over it. I encouraged him, however, and in answer to his inquiry I diagnosed his case as a good attack of quinsy, with engorgement of the liver, the result of repeated colds and a peculiar state of the system. I prescribed *Merc. Rub. 3x*, in water, *Phyto. D. 2x*, and *Bell. 3x*, in two-drachm vials, in weak alcohol, to be each touched twice to the center of the tongue in alternation once each hour until better. With these he was to take a tea-spoonful at a dose of the solution. I also gave him in a tumbler a solution of Chlorate of Potassa, with which to gargle his throat occasionally. I said to him that I felt confident that if he took the medicines as directed he would soon be better; and he was then to take the medicines less often, and so to continue to take from the vials for some days after he got about, as the continuance of the medicines would tend to free him from the liability to a fresh attack of the same trouble. I also said, should he require my services, I should be pleased to

hear from him. After a few days I met his son, who said his father was all right again.

CLINICAL CASE, No. 3.—In the month of April, 1878, while practicing at Durand, Wis., I was requested to come as soon as possible to the house of T. G., a gentleman living in the village. The messenger said that the old lady of the house was very ill, and wanted me to come at once. I repaired without delay to the lady's bedside, and found her suffering intensely. After a careful examination of her symptoms I said to her husband, in answer to his anxious inquiries, that she had quinsy, with a crick in the back as a complication. The pulse and temperature were quite well up. The skin was hot and dry; her throat, especially on the inside, was much inflamed and swollen. She swallowed with great difficulty and pain. Her features were quite red and flushed. The sclerotic tissues had a dark-green tint; but the severe pain in the back was, of all, the most oppressive, as she could not move without crying out, and felt inclined to move frequently. The pain in her back was sharp, and continued straight across the small of the back, and felt at times as though the spinal cord had parted. In the course of my examination of her case I got quite a history of her feelings and experiences for a few days past. She told me of an accident she met with the day before, which was as follows: She said that she had not been feeling well for some days, and that while preparing dinner with her little girl she attempted to bring a dish of cold meat out of the cupboard, and before she reached the stove she fell down with the dish in her hand. She felt something give way in her back, and she said the trouble was still there, and it was terribly painful. I spoke encouragingly to the lady and her friends, and said I could, I thought, get her out of it after a few days, and that the trouble in her back was defined as a disease, and at times was rather troublesome to cure; but I had a remedy that would soon help it, I felt assured; and, with others that I would give her, she would be easier by to-morrow. I prescribed *Ac. 3x*, *Phyto. D. 3x*, and *Hepar Sulph. 3x*, in water, to be given in tea-spoonful doses every half hour, until she had taken two doses of each in alternation; then once every hour. I requested her friends to apply, and keep it up until my return,

two or three folds of flannel, well warmed at the stove, put next to her back as a compress, and to give her what spring-water she wanted in small quantities, and I would return again in the evening. On my calling at 5 P. M. I found the patient somewhat easier. The skin was moist, the pulse lower. I gave a gargle of a solution of Chlorate of Potassa, to be taken two or three times during the evening, and changed Ac. 3x for Merc. Sol. 3x, and requested the friends to give medicines every hour until she slept, and then commence again when she awoke, and give them until my return, which would be about 9 A. M. I requested them to save some of her urine when she made it first after she slept, and send a sample to me before I came. I received it in the morning, analyzed it, and found an abundance of urates—indeed, some of the pure crystals. I visited her about 10 A. M., found her much better. Thought she would be able to be up next day. I prescribed Phyto. D. 3x, Lyc. 2x, and Hep. Sulph. 3x, in water, to be taken as usual once each hour; and I said to her husband, who was much pleased, that I would not call until morning unless I heard from him, and then I thought I could put the medicines in vials and discharge her. I called again on the patient about 11 A. M. next day, and found her sitting up in the rocking-chair. “Well, how do you do this morning, madam?” I said. “O, I feel much relieved,” she replied. “Your back is not painful?” “O no; it is only a little weak,” she replied. Her pulse was nearly normal; also the temperature and features were certainly different. I prescribed Phyto. D. 3x, Lyc. 3x, and Hep. Sulph. 3x, in two-drachm vials, in weak alcohol, to be touched each twice to the center of the tongue in alternation every hour until night, then every two hours. I said to her: “You will observe that the vials are marked Nos. 1, 2, and 3. You would do well to remember that No. 3 is for the crick in the back,” and remarked that if she was attacked with it again she should take that medicine, as it would surely relieve her. I left the family, receiving many expressions of gratitude from them, and eventually my fee. During my stay in that town, some six years, that man came several times to me for supplies of that medicine for his wife’s back; indeed I know it to be almost a specific for crick in the back.

CLINICAL CASE, No. 4.—In the spring of 1883, while practicing in the city of Eau Claire, Wis., a man called at my office and requested me to go at once to the house of Mr. J. C., who was very sick. I at once left for the residence, which was up on Water Street. Found the gentleman in bed with a well-marked case of quinsy, brought on, I thought, from a late exposure and a peculiar state of the system; but from what he told me I soon concluded that it was rather chronic with him. His parotid and submaxillary glands on both sides were much swollen. The fauces and tonsils inside were swollen and very red, and the tongue coated and pulse well up. Indeed, he was a sick man, and could scarcely speak. I prescribed Phyto. D. 2x, Bell. 3x, and Merc. Iod. 3x, in water, to be taken alternately, a tea-spoonful at each dose every half hour, until he had taken two doses of each; then every hour; and said I would call again early next morning. I directed that a moderately warm compress be applied to his forehead, and renewed as often as it got cold, for awhile. I said to him and his attentive wife that I would soon bring him out of it, and, with the proper medicines to take, he would not be likely to have it again for some time. I called in the morning, and, after making some inquiries, was told by the lady that she thought my remedies were not strong enough to restore her husband, and she had sent for Dr. Day (an allopath). I assured her that they were, however. "That's all right, madam," and bowed myself out of the house. Some three months after this, while passing him at Bailey's livery stable, of which he was the boss, he was talking with a gentleman. I noticed that his chaps were muffled up. I said to him in a familiar way: "Your baby's got back again, I see," "Yes," he says, "and very bad too." "Well," I said, "if you will only take from me one-half of the contents of a half-ounce vial of liquid, which I will give you free, it will quiet that trouble in your throat, and you will not have it again for the next year or two. If you do, I will cure it for nothing." "I do not believe you," he replied. "Well," I answered, "I do know whereof I speak." The gentleman that he was talking with said to him: "You should take it; the Doctor makes a fair proposition to you." "Well," he said, "I will try it, Doctor." I retraced my steps to my office, put up a

half-drachm vial of Phyto. D. 2x in weak alcohol; took it to him; showed him how to touch the liquid twice to the center of his tongue, and told him to take it that way every hour until I called at the stable to-morrow. I called, and found him at the stable with a clear neck and chaps. I said: "How's the baby?" "O, I guess you have knocked it endwise. How much is your charge?" That man passed my office two years afterwards. I said to him: "Has your baby come again?" "No," said he; "and if it does I will abort it, sure."

WHOOPING-COUGH.

WHOOPING-COUGH—*tussis convulsiva pertussis*, as it is properly called—is, as will be found, generally epidemic, and frequently affects the children of whole neighborhoods, especially in the country or in crowded cities, at the same time. In giving the etiology and symptoms of this disease, I think I can not do better than quote again from one of our eminent authors, Baehr's "Science of Therapeutics," Volume II, page 193, who says :

"Whooping-cough is an epidemic disease, which sometimes occurs in the form of very extensive and sometimes circumscribed epidemics, in which latter case the few cases of whooping-cough might even be designated as sporadic. So far, the real cause of the epidemic has not yet been determined. It can not be the peculiar nature of the wind, for the reason that the disease breaks out without the least regularity in disconnected portions of country. All we know is that the outbreak of an epidemic occurs more frequently in the spring than in the fall, very rarely in the summer. A connection with other epidemic affections, especially measles, and likewise with variola and scarlatina, can not well be denied.

"Whooping-cough frequently precedes or succeeds epidemics of the last-named diseases, and in rare cases accompanies them. As regards the spread of the disease by contagion, opinions differ a great deal. A num-

ber of observers favor the doctrine of a contagion; on the other hand, we should not overlook the fact that during an epidemic all the individuals of one place and the inhabitants of one house are exposed to the same influences.

“As for ourselves, we have not yet been able to satisfy our minds that whooping-cough is contagious; yet we are willing to admit that in its highest stage of development, this cough may give rise to a product which, when grafted upon susceptible organisms, may in its turn reproduce the disease. This is no idle question, as might appear at first sight, since it may lead to the adoption of measures that may prove exceedingly oppressive to a family having a number of children and living in straitened circumstances. In spite of every isolation, we have seen all the children of a family attacked by the epidemic.

“The immediate causes which determine the outbreak of the disease during an epidemic are the same as those that occasion an ordinary catarrh of the respiratory mucous membrane. A special predisposition to the disease has not yet been traced; but it seems an established fact that girls are more liable to whooping-cough than boys. Every trifling catarrh may, under the influence of the epidemic, assume the form of whooping-cough.

“As regards age, children between the second and eighth year are more commonly liable. Children under one year are seldom attacked by whooping-cough, although we have seen a severe case of whooping-cough in a child of four weeks. Children upwards of eight years old are likewise seldom attacked, whereas, during

an epidemic, adults are frequently attacked by a spasmodic cough in the place of the light catarrhal cough.

“Symptoms and Course.—In the management of whooping-cough the fact must not be overlooked that the anatomical changes which it occasions are simply those of an ordinary catarrh, to which the changes which are determined by the not unfrequently occurring complications have, of course, to be added. The supposed changes in the vagus are altogether hypothetical, although certain changes have indeed been discovered in a few isolated cases, but not sufficiently numerous to enable us to build a reliable theory upon such post-mortem phenomena. In the majority of cases whooping-cough commences as an ordinary catarrh of the nose or of the larynx, trachea, and bronchial tubes. This introductory catarrh, which does not, properly speaking, form a component part of whooping-cough, may break out in all degrees of severity and extent without this circumstance justifying a conclusion regarding the approaching attack. Hence the most proper course would be to regard this preliminary catarrh, as connected with the epidemic, only in so far as it furnishes a soil or a susceptible spot upon which the whooping-cough miasm can be grafted, and in which it can germinate. This is shown by the cases where the whooping-cough breaks out without being ushered in by a simple catarrhal stage, or where a simple catarrh exists for weeks before it is converted into whooping-cough.

“At any one period of this first stage, in a few days, or even after the lapse of weeks, either a harmlessly sounding cough sets in, or else an actually exist-

ing cough becomes more severe, and sooner or later assumes a paroxysmal character, which constitutes it whooping-cough. After this form of cough has reached its full development, the simple cough ceases entirely; only in a few instances violent paroxysms and simple turns of cough occur mingled together.

“A single paroxysm has the following characteristic symptoms: The children who had hitherto been bright and cheerful, shortly before the setting in of a paroxysm become restless and anxious; or, if old enough, they complain of titillation in the larynx or under the sternum, or of oppression of breathing. It is very seldom the case that a violent cough sets in without any preliminary symptoms, which, after a short lapse of time, is succeeded by a wheezing and labored inspiration, taking turns with the single paroxysms without admitting of a full expiration, for the reason that all the respiratory muscles, and more particularly the glottis, are affected by the spasm. While the exertion to cough is constantly increasing, and the spasm of the glottis is gradually abating, the children finally succeed in raising or vomiting up a more or less considerable quantity of a tenacious, white mucus, which terminates the attack.

“During the attack the children express great anguish and restlessness; in consequence of the impeded respiration the face and tongue become blue-red, the eyes weep, a watery mucus is discharged from the nose; even blood is spit up sometimes, and flows from the nose, to the terror of the parents. The vomiting either brings up more mucus or the contents of the stomach.

“Involuntary discharge of stool and urine is a rare occurrence if the children are otherwise robust. After the termination of the paroxysm the children continue for some time in a state of confusion and languor, after which they play again as if nothing had happened. Only in the case of the feeble or very small children the paroxysms are succeeded by real attacks of eclampsia, or else by a state of sopor, or even complete catalepsy. In the above-mentioned case of the little infant only four weeks old, the cataleptic condition was so perfect and lasting that the patient lay for two minutes without pulse or breathing. Under such circumstances the intermissions are not free from morbid symptoms, whereas vigorous children seem perfectly sound between the paroxysms.

“These paroxysms sometimes set in quite frequently, and at other times at more protracted intervals. Generally their frequency increases up to a certain point, where the affection remains stationary for some time, after which it gradually increases in violence. In the space of twenty-four hours the children may have upwards of thirty paroxysms of cough; they occur more frequently in the night, and at this time likewise last longer, and are more intense. A paroxysm lasts seldom longer than three minutes. If the parents assert that the paroxysms last longer, they are deceived by the anxiety which the mother particularly experiences, to whom a minute may possibly seem a quarter of an hour. The paroxysm is excited by talking, eating, screaming, or by violent exercise, likewise by a violent fit of passion. The cough may likewise occur without any apparent cause; for instance, during sleep.

“The constitutional state of the little patients is variously affected by the cough, even if there are no complications. Strong children bear this cough for months without losing flesh, or without their general well-being being interfered with. It may, however, be accepted as a rule, that if whooping-cough lasts longer than four weeks, children begin to lose their strength and flesh, and that this loss goes on increasingly in proportion as the cough lasts longer. Sickly and very small children are speedily and threateningly affected by the cough, even if none of the foregoing complications are present. The children grow pale and languid; they lose their appetite, but are not often attacked with diarrhea. The course of the disease is generally for several months; but when we come to speak of the treatment, we shall show that this period is considerably abbreviated in homeopathic hands.

“Of particular importance are the complications and sequelæ of whooping-cough, which alone constitute the dangerous features of this disease. The most frequent of these complications are inflammatory affections of the lungs. The catarrh of the respiratory passages, which was inconsiderable at first, invades the more delicate ramifications of the air-passages, more and more, until a more or less intense bronchitis sets in, which easily assumes the capillary form, and becomes readily associated with pneumonia. This pneumonia almost always assumes the lobular form, and can scarcely ever be determined by auscultation and percussion. The presence of such a pneumonia is suspected if the bronchitis steadily increases in intensity,

and the intervals between the paroxysms are no longer free from a hacking cough and a constantly increasing dyspnœa.

“ Even if bronchitis sets in violently at the outset, it never changes all at once to capillary bronchitis and pneumonia, which may, at the same time, serve as a proof that an incipient catarrh, which happens to exist before the whooping-cough, does not necessarily constitute the preliminary stage of this disease; but the signs of this untoward change do not set in until the cough has lasted for days and even weeks. In such a case the little patient does not entirely recover from the attack; he grows languid and feverish, has a short and dry cough; he does not wish to rise from bed; the pulse is hurried; the respiration becomes more and more incomplete, more hurried; he feels drowsy, and tosses about.

“ If these symptoms manifest themselves in the later course of the disease, they always augur danger, and very commonly lead to a fatal termination.

“ A severe bronchitis as well as lobular pneumonia very commonly lead to a more or less extensive deterioration of the pulmonary cells. If this deterioration is quite considerable, percussion yields an unmistakably dull sound, and auscultation yields bronchial respiration. But these symptoms must not be attributed to pneumonia, for in such a case their importance would be much less.

“ Cerebral diseases are scarcely ever caused by the direct action of whooping-cough; existing diseases of this kind may become fatally aggravated by the cough.

The convulsions which often attack little children during the course of whooping-cough are more correctly attributed to the influence of whooping-cough over the whole nervous system, and on this account may become lasting.

“The apparently violent congestion of the head during the paroxysms are of very little importance to the brain of a perfectly healthy child, but they prognosticate trouble if the brain was diseased before the cough set in.”

CLINICAL CASE, No. 1.—On the morning of February 20, 1889, I was called to visit a child, on the north side of this city, of some eighteen months old, that had been troubled with whooping-cough for the space of a week or more. I found the young child with some fever; a very severe cough, with a perfect whoop, until it almost choked; then a violent vomit set in, when it became completely exhausted for a time; so much so, indeed, that the parents feared that it would die in one of those spasms. I encouraged the parents, and told them that although the chest symptoms were severe, still I could not observe any dangerous symptoms about it, and I thought that after a time, with the appropriate remedies which I could give it, the most distressing of the symptoms would abate; but that, of course, it might even be weeks before the main features of the disease would entirely leave, as we were now having quite an epidemic of the trouble in this part of the city. I prescribed Bell. 3x, Cuprum Met. 30x, and Cicuta Ver. 3x, in water, to be given in tea-spoonful doses to the child every hour in alternation, and promised that I would return about the same hour to-morrow. I called next day at 11 A. M.; found the child somewhat improved; the choking spasms and vomiting was not so severe of late, the parent said, but the cough was still very severe.

I came back to my office, determined to see if I could not find some medicine that would promise some relief for the poor little thing, having left the same medicines to be given as usual when it

was awake. After a good look over my notes, I found Naphthaline recommended from some hospital reported in the *Clinique* issue for July, 1888.

I went to my patient next morning at about the hour, and found the child doing as well perhaps as I could expect; but that awful cough was still there. I prescribed Cup. Met. 30x, Naph. 3x, and Cicut. Ver. 3x, to be given as before, promising to call next day in the afternoon. I called again. O, what a change in all the symptoms! The little child looked up at me with an apparent smile. I put up its medicine in pellets, and said to the parent, as it improved, to lengthen the periods of giving the medicine; and if it did not continue to improve, let me know. In a few days she sent me word that the child was about well.

CLINICAL CASE, No. 2.—On the 7th of September, 1889, I was called to visit J. H.'s little child, some thirteen months old. It appeared a weakly child at best; and now it was teething; had taken a cold; had a severe cough, and very profuse and frequent discharges from the bowels; and the mother said she was afraid her infant was taking the whooping-cough from its sister, who had been enjoying a good measure of that for two weeks. I found the little fellow's pulse and temperature well up; lungs much oppressed and rather anæmic; and on the whole it looked doubtful to me whether the little one would live long under the circumstances. I prescribed Acon. 3x, Phos. 3x, and Ars. 3x, in water, to be given every hour until my return in the morning, unless when sleeping. I particularly requested the mother, who was anxious about him, to give him only one-third of the nourishment she had been giving him, and in place of nursing to give him a little cold water from a tea-spoon, which should slake his thirst, and be really better for him until his stomach was in better condition. While carefully examining the child, I observed his little sister whoop and cough until she was purple in the face, and then vomit. The parent asked me if I could do anything to relieve her from those severe symptoms. I told her I thought I could, but whooping-cough was one of those affections which we were unable to cut short. It generally had to have its

run; and at times this lasted for weeks, and at other times some of its symptoms even for months. I prescribed Bell. 3x, Cup. 30x, and Naph. 3x, in pellets, to be given every hour. I found the little child, especially as to his bowels, improved; but his cough had changed to a regular whoop. I prescribed Cal. Phos. 3x, Ars. 3x, in water, to be given in alternation with Naph. in pills, 3x, every hour until my return. The little girl's cough was much better. I ordered the same medicines to be continued every hour until my next visit.

I visited the family next day at 3 P. M. I found the little boy not much improved except as to the cough; pulse and temperature were up. Prescribed Crot. Tig. 3x, and Cal. Phos. 3x, in water, with Naph. 3x in pellets, to be taken every hour in alternation. The girl's whooping-cough was much better, the cough shorter, less severe, and vomiting almost gone. I ordered the medicines now given in alternation every two hours, and left, to return next day.

In the afternoon of the next day I again called to see my little patient, for whom I felt so anxious. I found him much improved as to the diarrhea, and especially the whooping-cough. Indeed, I felt now assured that of the latter he was much better, and that the little fellow would recover. I prescribed Cal. Phos. 3x, Ars. 3x, in water, and Naph., in pellets, 3x, to be given in alternation every hour, unless when he slept. Learned that the girl was almost over the whooping-cough, and was taking the medicines every two hours. Left, to return in forty-eight hours. I returned to see my little patients about the time promised; found them progressing nicely. Left a supply of medicine to be given at longer periods, and discharged them until further notice.

NOTE.—I would here remark that I do think, from my experience in some cases that I have of late, in which I have exhibited Naph. in the 3x, that it will form a valuable remedy in whooping-cough; not perhaps sufficient of itself to meet all the symptoms of the disease; but as an accompaniment of either of the following remedies, such as Bell. 3x, Phos. 3x, Cuprum

Met. 30x, indicated by the peculiar symptoms, it will, I feel certain, shorten the existence of this annoying trouble in any patient so afflicted; that I shall ever feel assured I should have lost the above-mentioned little boy had I not been able, just at the proper period of time, to remove the severity of the whooping-cough from him with Naph. 3x.

CEREBRO-MENINGITIS.

DURING my preparatory and collegiate years, while studying medicine, I always had almost a dread when brought in connection in any way with cases of cerebro-meningitis, or any inflammation of the brain and spinal cord—the symptoms are so various, its effects often so fatal, and its character most often epidemical. Also I believe it is more prevalent in our Northern latitudes, and indeed I think in adults it is becoming more prevalent in this country, where we have almost always so much hurry and constant drive among our business men of all classes; and I am of opinion that many of our sudden deaths arise solely from this cause. Therefore I trust that I may be excused for again quoting from the eminent author, Geo. B. Wood, M. D., who makes the following well-timed remarks in volume 2, page 704, “Treatise on the Practice of Medicine:”

“This disease, as it occurs in children, is still frequently classed with acute hydrocephalus, though by far the greater number of the cases, usually called by that very inappropriate name, belong to tuberculous-meningitis.

“*Symptoms, Course, Etc.*—The attack may be quite sudden, or it may be preceded by various preliminary symptoms, such as vague uneasiness, depression of

spirits, wakefulness, vertigo, tinnitus aurium, and defective appetite. Along with the usual febrile phenomena which usher in acute inflammation are conjoined intense headache, redness of the face, suffusion of the eyes, an excited or wild expression, giddiness, buzzing or roaring in the ears, and painful sensitiveness to light and sound—especially the former—so that often the patient closes his eyes forcibly, and the pupils, when they are open, are seen to be contracted, sometimes almost to the size of a pin-hole.

“Extreme restlessness, jactitation, and want of sleep are not uncommon symptoms; convulsive and spasmodic movements frequently occur, and sooner or later delirium generally sets in, sometimes calm, but in the greater number of instances more or less wild or violent. The pulse is frequent, hard; occasionally irregular or tumultuous; the respiration hurried, the skin hot, but often moist, and the tongue covered with a whitish fur, and sometimes clammy. Vomiting very often attends the complaint from the commencement, and is among its most characteristic symptoms. The bowels are usually constipated, though not invariably so.

“After a length of time, differing greatly in different cases, unless the disease is interrupted, a new set of phenomena appear. The disease yields gradually to drowsiness or stupor, from which the patient can at first be roused, giving vague and imperfectly articulated replies, but which deepens at length into coma. The pupils become dilated, sight and hearing are impaired, liquids often lie in the mouth without being swallowed, or are permitted to run out of it; strong irri-

tants make little impression on the nostrils; and the sensibility of the skin is much diminished. Convulsions, though less violent than in the early stage, are still not unfrequently experienced. But rigidity of the muscles and contraction of one or more of the limbs are apt to take the place of the general convulsive movements; and subsultus tendinum, with picking at the bed-clothes or at supposed objects in the air, is not uncommon. The pulse, instead of being frequent as at first, often becomes slower and intermittent, and the respiration is interrupted with deep sighs. The urine is sometimes retained, and sometimes dribbles away without the consciousness of the patient; but even in the latter case it may accumulate so as greatly to distend the bladder.

“At length signs of great exhaustion are added to those of cerebral oppression; the spasmodic contractions often give way to partial palsy, or are mingled with it; the pulse becomes feeble, frequent, and thread-like; the skin cool, pale, and bathed in sweat; the features sunken and haggard; the sphincters relaxed; and the patient dies in a state of profound insensibility.

“This is the more common course of the disease; but many of the symptoms are often absent, and diversities in the mode of their succession are not unfrequent. In many instances the attack is ushered in with convulsions, upon the suspension of which the patient may either remain comatose or reacquire consciousness; and these convulsions may be frequently repeated. In others stupor or coma is the prominent symptom from the commencement. Occasionally the

case begins with delirium, which may be at first moderate, and gradually increase in intensity, the patient walking about for some days before being confined, or may be violent or even furious from the outset. Sometimes severe pain is the only cerebral phenomenon connected with the fever during the greater part of its continuance; and there are now and then cases in which it precedes the general symptoms for a considerable time. In some rare instances the disease has been known to commence with a sudden loss of speech. Finally, there have been cases so entirely destitute of the peculiar cerebral symptoms that examination after death has given the first evidence of their nature.

“ Before leaving the subject of the symptomatology of the disease, it will be proper to make a few observations on some of the prominent phenomena. Perhaps the most constant of all the symptoms is pain in the head. It is seldom entirely absent from the commencement to the close, except when the brain becomes insensible from coma. Even when the patient is in a state of stupor, he will often, if aroused, evince signs of cerebral uneasiness. In infants, it is indicated by their moans and cries, the contraction of their brow, the putting of the hand to the head, the rubbing or pressing of the head against the breast of the mother, the rolling of it from side to side, etc. It sometimes seems to occupy the whole head; sometimes is seated more especially in a particular part, as the forehead, the parietal region, or the occiput; and occasionally shoots from one part to another, or seems to come deeply from the interior of the brain. It is not

unfrequently paroxysmal, being more acutely violent at certain times, and probably coming on like the darting pains of neuralgia, as evinced by the quick, sharp screams sent forth by children, though immediately before quite tranquil."

NOTE.—*Pain in the knee.* Attention has been called by Dr. Lund, of Norway, to pain in the knee, occurring in children as a diagnostic symptom of meningitis. It is said to occur in one-tenth of the cases. The pain is severe, persistent, increased by movement, and without swelling of the joint. It may attack both knees or only one. It occurs sometimes several days before the cerebral affection, and in that case may cease when the meningitis comes on, or may continue until the state of intelligence renders a determination upon this point impossible. In some instances it does not manifest itself until the cerebral symptoms have begun. Though occurring as well in chronic as in acute cases, it is severe in the latter. In the case seen by Dr. Lund, the cases were of both sexes, and between the sixth and fourteenth year. I have not myself witnessed this phenomenon in meningitis, and it is probably less common in this country than in the higher latitudes of Norway. But for the occasional postponement of the affection until after the commencement of the cerebral symptoms, I should be disposed to consider the knee disease as an attack of subacute rheumatism, and the meningitis as a translation of this to the brain; and, even with this difficulty in the way of such a diagnosis, it still seems to me the most rational. (See *Am. Jour. of Med. Sci.*, October, 1864, p. 512.)

Vomiting is also a frequent and highly characteristic

symptom, beginning often with the disease, and continuing more or less till the brain becomes torpid. It is wholly independent of disease existing in the stomach itself, and is, undoubtedly, in most instances, cerebral. It is distinguished from mere gastric irritability by the obstinacy with which it often resists all the means usually found effectual in allaying vomiting. It sometimes alternates with the pain in the head, and appears to relieve them.

Delirium does not generally come on until some time after the development of the disease, though occasionally it begins along with it, and even precedes all the other symptoms. In adults it is apt to be violent in the early stage, and is sometimes even furious, so that force is necessary to restrain the patient. Not only the intellect, but the senses also are frequently perverted, and the patient perceives unreal sights, sounds, and odors. He flies rapidly from thought to thought, talks almost incessantly, raves and screams, throws about the objects near him, and often attempts to rise from his bed, so as to require constant watching. In other instances the delirium is more tranquil; but in almost all cases it is strikingly distinguished from the delirium of drunkards by the absence of fear.

In the advanced stage it is superseded by coma, but still frequently exhibits itself, though in a more depressed form, when the patient is roused. The convulsions which occur at an early period are usually general, affecting all the limbs, and the muscles of the face. But in the more advanced stages, when the substance of the brain may be supposed to be more especially involved, they show frequently a partial

tendency, affecting one-half of the body, one limb or particular muscles, as those of the face, those which move the tongue, or those concerned in deglutition. Hence the grinding of the teeth, the stammering, the thrusting of the tongue out of the mouth, and the occasional difficulty of swallowing, which attend the complaint. Not unfrequently there is a persistent spasm or rigidity of the muscles in this stage, and a tendency to contraction or flexion of the limbs. Towards the close, the involuntary movements take the form of subsultus and carphologia, and complete relaxation or palsy of particular portions of the body not unfrequently occurs before death.

The course and duration of the disease are very uncertain. Death sometimes takes place within the first twenty-four hours, more frequently between the fourth and seventh days, but still more frequently at a period varying from one to three weeks.

The disease very seldom passes the seventh week. In the speedily fatal cases, death is usually preceded by convulsions. In these it has been observed that the brain is much less altered than often in old cases in which the symptoms have become comparatively mild. The brain, like most other organs, has the power of accommodating itself to considerable change in its structure; but each increment of the new condition must be small, in order to be made with impunity. A strong, sudden impression often completely paralyzes the organ, though the amount of physical effect may be very small, compared with that which the brain bears well, when made by a great number of successive slight impressions.

The disease may often be arrested in the first stage, or that of excitement, which sometimes runs on for ten days, two weeks, or more; but, in general, begins to give way to symptoms of collapse at the end of a week. In the second stage, marked by stupor, with rigidity of the muscles and diminished frequency of pulse, the chances of safety are much lessened. In the last stage, or that of profound coma, with or without paralytic affection, there is still less ground for hope. Recoveries are said to take place more frequently from secondary meningitis, occurring as an attendant upon other diseases, than when the complaint is original. It is a singular fact, noticed by several authors, that the disease sometimes assumes a regular intermittent form, having paroxysms daily, or every other day, and ending at last like the ordinary form in coma. This may easily be accounted for when the patient resides in a miasmatic region; but it is said to occur in situations where there is no reason to suspect the existence of such a cause. The explanation, under the latter circumstances, must be sought for in the general law which governs the production of intermittent diseases.

Anatomical Characters.—The dura mater is very seldom found to participate in the inflammation, unless the result of violence, or propagated from disease in some portion of the bony parietes. In such cases it is detached from the cranium, which is whiter than natural; is reddened, thickened, ulcerated, or gangrenous, and is sometimes covered with a layer of coagulable lymph or pus. The same products are also found between it and the arachnoid, sometimes extending

for a great distance. Dr. Samuel Wilkes, of Guy's Hospital, London, has noticed, as a distinguishing mark of inflammation of the dura mater, at least as he has seen it in children, and proceeding generally from disease or injury of the cranium, that the exudation is found on the free surface of the arachnoid; whereas, in ordinary meningitis, in which the pia mater is the seat of the inflammation, the fibrinous or puruloid matter is almost always beneath the arachnoid, between it and the pia mater, or in the meshes of the latter membrane. (Guy's Hosp. Rep., 1860, p. 119.)

The arachnoid itself in acute inflammation undergoes singularly little change. Only here and there does it exhibit signs of a fine sanguineous injection. It is not unfrequently opaque or opalescent, and is said to be sometimes thickened, and to present numerous projecting points, which render it rough to the finger. But Rilliet and Barthez state that in several cases which they examined, this membrane retained its smoothness, gloss, and transparency, even when bathed with pus upon both sides. If the patient has died rather early, liquid pus is sometimes found spread over the surface of the membrane, which, at a later period of the disease, becomes concrete, resembling false membrane. (Rilliet et Barthez.) It can scarcely be doubted that layers of coagulable lymph are sometimes found in the same situation. But more frequently the effusion is observed beneath the arachnoid, in the tissue of the pia mater, which is infiltrated with serum or pus, in the former case appearing as though covered with a coating of gelatinous matter. The serum, however, escapes when the transparent arachnoid is punctured,

and thus betrays the true nature of the phenomenon. The pus in the pia mater is sometimes liquid and sometimes concrete; in the latter case appearing like yellow bands or patches. When freed from these liquids, the tissue of the pia mater is seen to be reddened. The membrane often adheres with considerable firmness to the brain, so that even portions of the cortical substance are torn away with it.

The ventricles generally contain more or less fluid, which, when the inflammation has been slight, is usually perfectly limpid, but when the lining membrane of the cavity has been much inflamed is apt to be turbid with albuminous or fibrinous flocculi, or opaque and greenish from an admixture of pus. Sometimes blood is effused into the ventricles, and in the meshes of the pia mater varies from a few drachms to six or eight ounces or more. It is this phenomenon that has caused the disease occurring in children to be ranked with hydrocephalus. But the liquid is not unfrequently wanting.

In some instances the brain appears to be perfectly sound, but much more frequently it exhibits signs of having participated in the inflammation. Occasionally it appears as if swollen, the convolutions being enlarged and flattened, and, when cut into, is found to be congested with blood. The cortical portion is reddened, and sometimes much softened, so that parts of it are removed with the pia mater, and the cut surface of the medullary portion is thickly dotted with red spots, or diversified with small streaks or stains of blood. Parts of the medulla are also softened, though in some instances this tissue is said to be reddened more than

in health. The cerebellum exhibits phenomena altogether analogous to those presented by the brain.

Attempts have been made to point out the symptoms which indicate especially inflammation of the membranes in this affection, and those which depend upon lesions of the brain. Pain, fever, delirium, and general convulsions are supposed to be meningeal symptoms, arising from irritation propagated to the cerebral substance, and the coma and diminished or abolished sensibility of the advanced stages have been ascribed to the pressure of the effused products; while muscular rigidity, contraction of the limbs, and partial palsy have been referred to inflammation of the brain. There can be no doubt that the meningeal symptoms above referred to may be the result of inflammation of the membrane alone; but they may also proceed from the same disease in the brain; and, though the contractions and palsy are often cerebral, there can be no reason, that I can understand, why they may not also spring from a partial pressure by the effused fluid, or a partial irritation extended to particular portions of the cerebral mass, without any positive inflammation of the latter structure.

Causes.—The predisposing causes of meningitis are numerous. One of them, common to this and other inflammations, is a rich plethoric state of the blood. Persons of a sanguine temperament, and those of a short neck and choleric temper, are said to be more liable to it than others of a different constitution.

There is every reason to believe that a tendency to the disease is sometimes inherited. Age has considerable influence over the predisposition. Early infancy

and vigorous manhood are supposed to promote it. The disease is not uncommon in new-born infants, and in those under two years. After that age the susceptibility appears to diminish until about the period of puberty, when it again increases, not to decline until the commencement of the decline of life. Acute meningitis is asserted to be most frequent between fifteen and forty-five. It is singular that the tendencies to tuberculous meningitis are exactly the reverse, being greatest between two and fifteen. Guersent states, as the result of his own observation, that the proportion of cases of ordinary meningitis to the tuberculous, at this period of life, is as two to twelve. (Dict. de Med. XIX, 411.)

Males are much more liable to the disease than females. MM. Parent and Martinet give the proportion of males to that of females as four to one. This is a greater disparity than can be accounted for from accidental causes, and must have its foundation in some inherent difference between the sexes.

The occupation and habits of the individual contribute much to modify the susceptibility to cerebral inflammation. Professions which demand excessive mental exertion, or occasion great mental anxiety, or necessarily expose much to the sun, act as predisposing causes. The same may be said of intemperance in drinking and eating. Hot climates have a similar effect. Hypertrophy of the left ventricle of the heart, especially when dependent on obstruction in the aorta below the origin of the carotids, necessarily keeps up an active congestion of the brain. The disease has sometimes occurred epidemically.

Exciting causes are blows, falls, etc., upon the head, especially among children; exposure of the head unprotected to the direct rays of the sun, or to an intense artificial heat; a habitually dependent position of the head; violent mental excitement or disturbance of any kind, excessive bodily exertion, abuse of alcoholic drinks, venereal excesses, the irritation of teething, the transultation of gout or rheumatism, the suppression of accustomed discharges, the retrocession of cutaneous eruptions, and various febrile diseases, especially typhoid fever, erysipelas, and scarlatina. Meningitis is a not very unfrequent sequela of the last-mentioned disease. Erysipelas may produce it by a direct propagation of irritation through the skull, or up the auditory or nasal passages. Among the frequent causes of it deserving of a particular attention, are caries of the bones of the ear, of the ethmoidal bone, and of the cranium itself. It is not uncommon for disease of the ear to be extended to the brain with fatal effects. Even ordinary otitis, without any affection of the bones, has been propagated to the cerebellum. (Med. T. and Gaz., August, 1863, p. 126.)

A case of death from cerebral inflammation occurred to me, which depended on caries of the interior bones of the nose. In all these cases an irritation is extended to the dura mater by the diseased bone in its vicinity, and from that membrane is propagated to the other membranes, and to the brain.

The meningeal seizure may generally be known by the occurrence of a chill, followed by fever, vomiting, delirium, convulsions, and ultimately coma; and I have

known more than one instance in which repeated chills, with trembling, occurring irregularly, have marked the early stage of the cerebral affection. These symptoms are usually preceded by severe and sometimes excruciating headache. Lebert states that in cases of extension of disease from the bones of the ear to the brain, the cerebral sinuses are the first to suffer; and after death these are seen filled with pus, especially the transverse and petrosal sinuses. (Virchow's *Archive für Pathol. Anat.*, IX, 381.)

Diagnosis.—The disease most liable to be confounded with simple meningitis is tuberculous meningitis. The diagnosis between them will be given when the latter disease is considered. Many fevers, also, in their early stages bear considerable resemblance to the complaint under consideration. This is especially the case with enteric or typhoid fever and small-pox. Fever, headache, and delirium are sometimes for a period the only striking symptoms of meningitis; and they are all frequently present in the diseases just alluded to. In some instances it is impossible for a time to discriminate accurately between them. But generally speaking, in such affections these common phenomena are mingled with peculiar symptoms which serve as the basis of a probable diagnosis; and when this is not the case, such symptoms soon become developed in the progress of the disease. It would be repetition to detail these diagnostic symptoms of the peculiar phenomena of other febrile affections; the severity and persistence of the headache, the obstinate vomiting, the not unfrequent convulsive movements, the contracted pupil, and exag-

gerated sensibility will generally serve to distinguish meningitis in its early stages. In the advanced stage the symptoms are so characteristic as scarcely to admit of mistake. But there is another condition of the brain which it is still more important to distinguish from acute meningitis. I allude to a state of delirium which sometimes shows itself in debilitated conditions of the system; and so far from being essentially connected with inflammation, is in fact dependent upon the want of due energy in the cerebral functions. Such a condition occurs in the delirium of drunkards. (See Delirium Tremens.) It comes on sometimes also in individuals exhausted by the loss of blood, by starvation by long-continued diarrhea, or by other debilitating diseases. I have seen it occur in the course of exanthematous affections, in which it is attended with a disappearance of the eruption, and might readily be mistaken for cerebral inflammation consequent upon a retrocession of the cutaneous affection; whereas this subsides in such cases solely in consequence of the prostrated state of the circulation. The delirium may have the appearance of greater or less violence, or it may be of a low character. It may be followed by symptoms of coma, with dilated pupil, insensibility to light, etc.; or this may be the original form which the cerebral affection may assume. It is important not to mistake this condition for acute meningitis, because it demands an exactly opposite treatment, and often yields readily to stimulants which would prove fatal in that complaint. It may generally be distinguished in connection with the previous state of the patient's health by the paleness of face, the frequent

collapse of the features, the coolness and inactivity of the surface, the feebleness of pulse, the tremors of debility, and the want of that fearlessness so characteristic of the delirium in acute meningitis.

CLINICAL CASE, No. 1.—In the spring of 1881, while practicing at Durand, Wis., I was called in great haste to see a little son of the Rev. Mr. Bradley, then the resident Methodist Episcopal minister of that charge. When I got to the house I found the parents and family mostly weeping over the apparent demise of the son, who lay, to all appearance, quite unconscious of all their tears and sobs. I examined carefully his condition, and said to the family that his pulse was still somewhat active, and that I thought I could relieve his present symptoms after a time. The pulse was considerably below normal and quite thready, with an occasional pause, the temperature of the body decidedly low, the pupil of the eye quite contracted, and the features pale. I prescribed Bell. 3x, and Veratrum Vir. 1x, in water; requested the parents to give child three tea-spoonfuls of the Verat. Vir. half an hour apart by itself, and then give the medicines in alternation every half hour until my return in the afternoon.

On a little further inquiry about the child's previous health, I learned that it was apparently well and quite full of play up to its being put to bed on the previous evening; but during the night it became restless, and moaned in its sleep considerably during the latter part of the night, and when they went to wake him, found him in a comatose condition.

A little before night I called at the house again. There did not appear to be much improvement in the child, except that the pulse was more full and more regular, and the temperature of the body was better. I prescribed Acon. 3x, and Ver. Vir. 1x; in water, to be given in alternation once each hour, until he became more lively or slept soundly; but unless he did so, to keep the medicines up all night.

I returned to the house the next day at an early hour, to find my patient much better. The family said that before midnight he apparently awoke as from a slumber, and asked for a

drink, and then went into a sound sleep, when the body soon began to perspire. Now he appeared pretty lively, but looked pale, and the pulse was somewhat excited. They had saved his urine at my request, which was almost as dark as ink, and scant. An analysis proved it to contain some albumen. I prescribed Hepar Sulph. 3x, and Ver. Vir. 2x, in water, to be given in alternation every hour. The patient's tongue was some coated, and he complained of soreness in back and legs, and was not disposed to eat much.

I returned to see my patient in the evening, to find him improving. The parents said that his extremities, especially the arms, jerked at times, and it seemed as though it arose from pains in his head; for this symptom I prescribed Apis 3x, and for the urine Hepar Sulph. 3x, in water, to be given in alternation every hour when he did not sleep. I visited my little patient the next afternoon, and found him very much improved; indeed, his pulse and temperature were nearly normal. He looked pale, however, and I found still a little albumen in his urine. I put his medicines in pellets, to be given for awhile every hour, and then every two hours. I directed them to feed him rather sparingly for a few days, and let me know if they required more of my services. The parents were profuse in the expression of thanks to me for my services, attention, and success. I soon learned that the child was in perfect health.

NOTE.—The state of coma the above patient was in when I came to the house first, I think, clearly indicated the use of Veratrum Vir. 1x, in pretty rapid doses for a time. This, in my opinion, depressed the heart's action, depleted the brain of its surplus blood, freed the capillaries of their congested state, and prevented the extravasation into the surrounding tissue, and really aided very much in shortening the patient's critical situation.

CLINICAL CASE, No. 2.—The next severe case of this disease I had to treat was a little son of Mr. Clock, living in the Sixth

Ward of this city, Eau Claire, Wis. I was called to visit the child, which was about eighteen months old, and a very pretty, intelligent little fellow. On the morning of the 10th of March, 1889, I found the child lying on the bed almost unconscious. The mother, who is a very intelligent woman, said that she had tried to give him several remedies, but they did not seem to do him any good. She said further, that he had been well until a few nights since, and had been very much taken up playing with his rocking-horse that his father had lately brought him. Indeed, she remarked, the night before he was taken he played unusually long and apparently hard with his toy-horse, and was anxious about its safety, and she could not but think that had something to do with his present illness. I went over to the bed where he was lying, and said to him in a rather loud voice: "What is the matter with you?" He partly turned over and said, with a drawn-up face, "I am sick." His pulse was over 100, and his temperature well up; skin hot and dry; face quite red, and he would not allow his mother to lift him. He complained of pain over the stomach, and had vomited several times violently. His mother said he had passed but little urine for the past twenty-four hours, and it was quite high colored. I prescribed *Veratrum Vir.* 2x, *Apis* 3x, in water, to be given alternately every half hour, until he had taken two doses of each, then to be given every hour. I said I would return in the afternoon. On my return, late in the afternoon, I learned he had not vomited since I left. The surface of his body was more moist, and he seemed more comfortable. I requested the lady to give him a good bath in blood-warm water before retiring, and to be sure to sponge his spine down well, then to dry the body thoroughly before putting him to bed, and to keep his medicines up, unless he slept soundly all night.

The next forenoon I returned to find the little patient more lively; the pulse was lower, and the eyes brighter, although the pupil was still some contracted. He had passed urine which looked less red, she thought, and more of it than usual. He had rested well part of the night. I prescribed *Acon.* 3x, *Veratrum Vir.* 2x, in water, to be taken as usual. The father said to me, just as I was about to leave: "Doctor, what is the matter with

Earle? I hesitated a moment before giving an answer, and the mother who does a good deal of doctoring with her children at times, said: "I will tell you what is the matter with Earle; he has typhoid fever. I am sure of that." I replied to the lady; "I think you are mistaken, madam. It certainly is not typhoid fever. Indeed, I wish it was, as there is no disease I like to treat so well as that. But Earle's trouble now is, I think, cerebro-meningitis, brought on, I suspected, by pure overexertion with his play-horse. Were it typhoid fever, as he has been sick now a week, his pulse would have been much higher, especially at times, and his bowels would have shown some symptoms, at least of tenderness. I think I am sure of my diagnosis." "Do you think you can bring him out of it, Doctor?" said the father. "Yes, I think so. He is doing well now. This is a vital disease, and will take some days to overcome it. I have had good luck with it generally, and hope to have with this case." I again visited the patient on the forenoon of the 12th inst., and found him much better. I thought he had but little fever. He had rested well during the past night, and was inclined to talk more. He still complained, however, when moved, of pain in the back, and expressed fears lest his mother would let him fall. His features were quite pale, but his pupils were more open. I prescribed *Veratrum Vir.* 2x, and *Bell.* 3x, in water, to be given as usual, and directed that he be fed sparingly of fluid food, if convenient. Told the lady I would not call again until morning. Called again on the 13th, A. M. Found the little fellow doing well, I thought. I learned he had perspired during the night, especially about the head and shoulders. He was quite lively, however, and appeared in every respect almost well. I prescribed *Cal. Carb.* 3x, and *Veratrum Vir.* 3x, in pills, to be given in alternation each hour, and then, if he continued to improve, once in two hours. I said I thought I need not call again, unless they sent for me. I called at the house a few days afterwards, as I was passing, and as soon as I entered the little patient ran towards me, holding his hands up, and said: "I like those little pills." His mother, and later his father, expressed themselves much pleased with my treatment, and my success in curing their son.

CLINICAL CASE, No. 3.—The next case of the above disease I was called to attend was on the 14th of May, 1889. About daylight in the morning the man, Mr. Blasdell, came to my house, telling me that his youngest child, a beautiful little girl, had been ill all night, and was now vomiting every few moments. I went with him to his residence in the Sixth Ward of this city; and, sure enough, the child I found quite ill. It had vomited until it was quite exhausted. The pulse was then not exceedingly rapid, but small and thready, and its heart was pulsating very fast, and the little thing could hardly speak. Its head was hot and its pupils contracted. The mother informed me that it was well until last evening, and that it was very lively, and played and romped all the previous afternoon. I prescribed Verat. Vir. 1x, Bell 3x, and Iris Ver. 3x. in water, to be given every hour alternately, and promised to call again some time before night. At 3 P. M. I called again, to find the patient pretty comfortable. The pulse was full and the temperature well up. She was still weak and wanted to lie still, and had not vomited since I left. I continued the same medicines, and said that I would call again about bed-time. Late in the evening I found her progressing, I thought, well. She was, however, inclined to drink more, and was somewhat fretful. I prescribed Veratrum Vir. 1x, Ars. 3x, in water, to be given as usual, saying I would call again in the morning. Requested the mother to give her a bath before they retired, and to be sure and sponge her spine well, and rub it gently down with a coarse towel, and then perhaps she would go to sleep. I called next day about 10 A. M., and found the little patient, I thought, doing well. The pulse was better, the temperature not so much above normal, and she had slept a part of the night. I continued the same medicines, and said I would call again in the evening. I called early in the evening. She was to all appearances doing well. I renewed the same medicines, and left to return next day, when I hoped to be able to discharge her. The parent called again to my house very early in the morning, much excited, saying that his little daughter had been vomiting almost constantly for three hours, and wished me to come at once. I prescribed Iris Ver. again, which had done so well before, and remained several hours; but she did not stop

the vomiting in the least. She would between the vomiting spells lie quite prostrate, and at times jerked her extremities. After seeing the symptoms so plain I prescribed Apis 3x, the powder in water alone for a while, every half hour, which checked the vomiting at once. I then, after a while, put her on the Verat. Vir. 1x, with the Apis to be alternated after one hour, and came to my office to look over remedies to suit the case. As I came down Basstow Street I dropped into my friend Dr. Parker's, and consulted with him over the case that was puzzling me. He approved of my treatment so far, but suggested now Gelsemium 3x in place of Verat. Vir. I came to my office and examined the pathogenesis of the drug, and resolved to adopt it. Went to the house again in the afternoon, and found the child much better; but she had vomited two or three times since I left. Prescribed Gel. 3x, and Apis 3x, in water, to be given every hour, and called again in the forenoon of next day. Found the child so well that I discharged her on the two medicines, to the great satisfaction of the family. The next time I called at the house the charming little girl met me with both arms extended to me, and said: "Doctor, I am not sick now."

CLINICAL CASES, NOS. 4 AND 5.—On April 16, 1889, I was called by Mr. P——, to his house on Menomonee Street, in this city, to attend his little son, about three and a half years old. I found the little one quite ill. The pulse not much excited but very thready. The pupils were contracted, the eyes heavy and dull-looking. He complained of pains all over, and did not want to be moved. His mother said that he had been complaining for several days, and had vomited frequently. But he rose and went about until this morning, when she really became alarmed about him. I inquired about the quantity of urine he had passed lately, and learned that the quantity had been quite small, especially the last twenty-four hours. I prescribed Veratrum Vir. 1x and Apis 3x, in water, to be given in alternation every hour, until my return in the early morning, and I remarked before I left, that it would be well to give him a bath in blood-warm water. At 10 A. M., I found the little fellow not much improved. The pulse, however, was more full, and his pupils larger. I

continued the same medicines. The father had staid at home from his usual work, and felt quite uneasy about the child, and requested that I come again before night. I called at the residence in the evening, and learned that during the day he had urinated more freely. The discharge was of a better color. The lad looked pale, and complained of pain over the stomach, and had drunk considerable water, and was some more restless. I prescribed *Veratrum Vir.* 1x and *Ars.* 3x, in water, to be given as usual. Called again in the morning at 10 A. M., to find the little fellow quite comfortable. I learned that he had slept pretty well the latter part of the night, and this A. M. asked for some food, but ate only a mouthful or two when it was given him. His pulse was nearly normal but still some thready, and he was disposed to lie quiet in bed. His tongue was a little coated, and he had drunk much water, but the urine was still scant. I prescribed *Veratrum Vir.* 2x, and *Apis* 3x, and *Bell.* 3x, in water, to be given in alternation. I left, to return again in the evening. During the day, while in my office, I looked the case over carefully in all its bearings. I felt anxious about the little fellow, as well as his parents, but still I could not see any really dangerous symptoms in the case, so far. I returned to the patient at 10½ A. M., the next morning, to find him much better. His pulse was almost normal; his pupils were dilated; he had slept well the most part of the past night, and was now more lively, and really appeared to be recovering from the attack. I prescribed *Veratrum Vir.* 2x, *Apis* 3x, and *Bell.* 3x, in water, to be given in alternation for twenty-four hours, one each hour, and after that every two hours, and to send for me if they required more of my services. I was called again a few days afterwards by the parent to attend his next little son, who had a violent attack of the same trouble, but with much more vomiting. By following about the same treatment, with the addition of *Gelsemium* 3x, with *Apis* 3x, to check the severe vomitings, I was enabled, after a few professional visits, to bring him out all right, much to the satisfaction of both of the parents.

CROUP.

CROUP is a disease of very frequent occurrence, especially among young children between the ages of one to three years, to which class it is almost confined, and these generally of a rather faulty constitution. Its immediate origin in the great majority of cases is a change of temperature, although at times it appears as an epidemic. It is really a very insidious disease, as perhaps the parent's first intimation of its presence in a little one is to notice a short, hacking cough, and then a whistling or wheezing; also difficulty of breathing.

For the following well-timed remarks concerning this troublesome and annoying disease we are indebted to the "Therapeutic Guide," a very able medical work written and published by Dr. G. M. G. Jahr in the year 1869:

"If I am sent for at the commencement of the attack I give Acon. 3x to 30x, three globules in a few tea-spoonfuls of water, of which solution I give a tea-spoonful every three hours, until the fever and the croupy, ringing sound of the cough have disappeared, and it is evident from the resonance that the cough has assumed a catarrhal form. But since experience has taught me that nothing is more insidious than the first or inflammatory stage of croup, and it often happens that, after the cough has almost entirely disap-

peared, and not a sign of fever is any longer perceptible, and the children play about on the floor and seem quite bright and cheerful, the disease sometimes breaks out again all of a sudden in the dead of night with every symptom of exudation, I continue the Acon.—3x to 30x—even if the croupy sound of the cough has been removed, at longer intervals, until the cough is quite loose and has been transformed into a loose mucous cough, or a free catarrhal discharge from the nose has made its appearance.

“In pursuing this course I have seen these two last-mentioned changes, with whose appearance every danger may be positively considered removed, set in on the second, third, and fourth day; and in other cases, where I was sent for at the commencement of the attack, only on the eighth day of the disease, without having had to use any other remedy than Acon. 3x to 30x until no more suffocation paroxysms occur, and, if they cease, continuing the same medicine until the disease becomes a catarrhal form, as previously described.

“If, in spite of the use of Acon. 3x to 30x, the suffocative paroxysms break out again, but chiefly at night—and we may infer from this fact, not that the exudative process is making full headway, but simply as Hering very properly observes, that the mucous lining swells up evening and night in the form of nettle-rash, returning again to a more normal condition in the day-time—I give Spong. 3x to 30x, in the same manner as I had given Acon., more especially if the cough is dry and ringing, and the inspirations have a crowing sound; and continue the Spong. 3x

to 30x, as long as it seems to have a good effect; but if it does not effect any improvement within twenty-four hours, and the cough has a rattling, sawing sound, I change to Hep. 3x, which I administer in the same manner as Spong. 3 to 30x, continuing it as long as it acts favorably.

“If Hep. 3x does not improve the case, I then give Ars. 3x; not only if the children have been affected with nettle-rash shortly before, but likewise if the weakness and anxiety during the paroxysms reach a very high degree. After giving Ars. 3x, the disease sometimes remains stationary, so that Hep. 3x, Bell. 3x, or Phos. 3x will now complete the cure.

“If the patient does not come under my treatment until the third stage has set in, and exudation is under full headway, patches of false membrane are raised, the patient looks pallid as in death, and the face assumes a livid appearance during a coughing fit, I resort either to Spong. 3x to 30x, or Hep 3x, according as the symptoms (in note at foot) prevail; and if neither of these remedies effects the least sign of improvement in twenty-four hours, I have recourse to Phos. 3x, which has produced splendid effects in my hands in this stage of croup. I can not sufficiently warn against the use of large doses in this stage of the disease. Large doses, instead of promoting the cure by absorption, as our small doses generally do, cause most generally a detachment of the false membranes, which may not be a very bad result as long as the disease is confined to the larynx, trachea, and the large bronchi, from which the detached patches can easily be expelled by cough.”

NOTE.—I have had but a limited experience in my whole practice with the above disease, for the reason that I have been able always (with the exception of two or three cases) to control it with the exhibition of a few doses of Acon. 3x to 30x; indeed I have been in the habit, while attending families where I found children subject to it, to supply the mother with a vial of Acon. 3x, in pellets, or in a weak solution of alcohol, to be given the children in doses to suit their ages, when the symptoms appeared, at intervals a half to one hour each; and that would be the last I would hear of it, except that the parent would at times say to me: “O, Doctor, I gave my little girl your remedy as directed when she was wheezing so bad that I felt much alarmed, as the child could not get her breath. Just two doses of those small pellets, taken half an hour apart, stopped the difficulty, and she dropped right to sleep, and that was the last of it.” In the other cases I gave Spong. 30x and Hep. Sulph. 3x, in accordance with the above directions, and the threatening symptoms soon passed away.

DIPHTHERIA.

DIPHTHERIA in its different forms as a disease is, I think, the most insidious as well as the most alarming, and also the one taxing the skill of the best practitioner to his very utmost, especially when it takes on its croupal symptoms.

It is eminently a blood disease; or rather, I might say, it enters the system through the blood as an avenue. It is found at times alarmingly epidemic in large districts of country; in some instances it will attack a few families in a place, and in other instances single individuals, just as though it arose from some especial cause that might be easily discovered and eradicated; yet with reference to its real cause, there has been among our most able medical scholars very much written, and various opinions have been held since its first appearance, which, I think, was at Tours in France. It is also said that it originated in Egypt, some time early in the last century.

The disease is more generally confined to the young of both sexes, although at times its effect on adults is very severe. In some of the densely populated districts and cities of this and other countries, it has at times been fearfully fatal, especially at the hands of the so-called regular school. The early premonitory symptoms of this disease are at times quite peculiar. They simulate, to a certain extent, the early symp-

toms of some other troubles, such, especially, as certain eruptive diseases; namely, measles, scarlet fever, scarlet rash, and, at times, mumps and typhoid fever. For a short time it is, even with the general practitioner, difficult to say, with perfect safety, which of these diseases is approaching. To the acute observer the pulse and temperature are always the first to give a note of warning. The patient becomes restless, complains of headache and not feeling well; the features appear full, although at times pale, and he is apt to vomit often. He very soon complains of his throat, the surface of which, if examined inside, will be found irritated, and quite red. The uvula, or soft palate, and tonsils are swollen, and, if the disease is sufficiently advanced, well-set with whitish-gray patches of various sizes, from a speck to quite a patch. This latter symptom, to me, has always been a test of the sure approach of diphtheria.

CLINICAL CASE, No. 1.—In the spring of 1876, while practicing at Durand, Wis., I was called one morning to go some ten miles in the country to visit S. D.'s eldest daughter, who, the messenger said, was very sick with diphtheria. When I arrived at the house, I found the patient very ill; indeed, so much so that the parents, who had been giving her a number of domestic remedies, had really given her up to die. Her pulse and temperature were very high, the skin very hot; the parotid and the submaxillary glands were swollen; also the entire surface inside, especially the uvula, was terribly swollen and red, and all the posterior of the throat covered with thickly set gray patches, with a profuse, acrid, thick discharge from the nose.

After careful examination of the case, I expressed my fears to the parents that it was doubtful whether I could save the girl, as the disease was very far advanced. The patient was from eleven to twelve years of age, and I promised to do my best for

her restoration to health. I prescribed Bapt. 1x, Merc. Cy. 30x, Phyto. D. 2x, in water, to be given alternately every half hour for awhile, then every hour. I left a tumbler of alcohol and water, half and half, with which to touch the patches every two or three hours; also a gargle of Chlorate of Potassa, with which to gargle her throat occasionally; ordered a warm compress to the head, to be kept up until my return next day.

I called the following day, and found the patient more comfortable, and the parents feeling better. The pulse and temperature were lower; the swelling of the glands was reduced; quite a number of patches were gone, though the surface was quite red, but not so much swollen, especially the uvula, which yesterday was simply enormous. I prescribed Phyto. D. 3x, Merc. Cy. 30x, Aur. Try. 3x, in water, to be given in alternation every hour; requested that the gargle and the alcohol solution be used as before, but not quite so often. The parents and friends, who were all anxious about the patient, wanted to know what they should give her to eat and drink. I said I knew that good water in small quantities was the most suitable drink; and, as for food, I should advise a light liquid food as always, since the organs of digestion in a patient so ill were the sickest part of the body.

In the family I found three other children. One of them was especially a nervous, pretty, little girl, whom I really dreaded to have take the disease. I prescribed for these, as a prophylactic, in two-drachm vials, in weak alcohol, Bell. 200x, and Acon. 200x, to be given in alternation, at first every two hours, then every three hours; and I left, to call again next day.

I went to the house again next afternoon, and found my patient doing well in every respect. Prescribed Bell. 3x, Merc. Cy. 30x, Aur. Try. 3x, in water, to be given as usual. I received a sample of the urine, which they had saved for me, and promised that I would call on the succeeding day. On my return visit in the afternoon, I found the patient doing well in every respect, except that an analysis of the urine showed quite a trace of albumen. I prescribed Hep. Sul. 3x, Merc. Cy. 30x, and Aur. Try. 3x. The parents became quite talkative, and said that they felt assured now that the child would soon be restored to her normal state of health. In a few more visits, and changing

the remedies to suit the symptoms more perfectly, also giving the medicines at longer intervals, I soon had the satisfaction of discharging the patient, to the great joy of her relatives and friends.

NOTE.—On my first coming to this case, as is my invariable practice in all cases of infectious diseases, I had saucers set on the floor of the sick-room, and perhaps one or two others, in which I had put a strong solution of carbolic acid, which I have ever esteemed an excellent disinfectant.

CLINICAL CASE, No. 2.—About the 10th of March, 1876, while practicing at Durand, Wis., I was called to visit a child of D.'s, belonging to a farmer who lived some eight miles from my office. I found a case of well-advanced diphtheria. The glands of the neck were well swollen, especially the parotids, and inside the tonsils and fauces showed much inflammation. They were well set with the usual whitish-gray patches, and the uvula was much enlarged; the pulse and temperature well up, skin hot and dry, with an almost constant thirst, and tossing about of the patient in the bed. I prescribed Bapt. 1x, Ars. 3x, and Merc. Cy. 30x, in water, to be given once each hour in alternation. I also left a gargle of Chlorate of Potassa, and a mixture of alcohol and water, as well as a camel's-hair brush, with which to touch the patches occasionally, and said I would see the patient next day. I called again on the afternoon next day; found the patient easier and apparently doing well. Prescribed Phyto. D. 2x, Merc. Cy. 30x, and Aur. Try. (for the coryza), in water, to be taken as usual. Got some of the urine to test for albumen, and said I would call some time during the forenoon of the following day. The glands of the throat were much less swollen, and inside the entire surface looked better, and the patient was sitting up. I learned that little urine had been passed for forty-eight hours, about which the parents felt quite anxious. I quieted their fears, however, and said that I would now give a remedy that would alter the situation. I prescribed Merc. Cy. 30x and Hep. Sulph. 3x, also Bell. 3x. I made a few more professional

visits to this patient, continuing, I think, the above remedies, whom I was enabled soon to discharge, to the great satisfaction of the parents. In a few days, however, I was sent for to prescribe for another member of the same family; but through a misunderstanding of my directions, or an anxiety to save the expense, with a want of proper confidence in me or my treatment, they in consequence lost two children.

NOTE.—The disease in the above case, as it has done in my experience at times in both sexes, appears predisposed to the kidneys, when it is generally called Bright's disease. In this stage, in such patients, it frequently proves fatal; but I have always been able to control it perfectly with the exhibition of Hep. Sulph. 3x, which I consider a very valuable remedy in my practice, not only for this trouble, but wherever I find any cavity or muscle of the body likely to suppurate or that requires an absorbent to enable it to heal. I exhibit Hepar Sulph. 3x to 30x, and it will affect it favorably every time.

The best article, in my opinion, of late, in regard to the causes and prevention of this terrible malady, I found in the *American Homeopath* for April, 1884, contributed by George M. Ockford, M. D., Vincennes, Indiana, and I think it would be well for the general reader to peruse the following details of that much-dreaded and malignant disease:

“The spirit of the age prompts to the study of the ultimate causes of disease, and no affection demands our attention more than the domestic scourge known as diphtheria. The developments of the germ theory have proven that the septicæmia present in diphtheritis is due to micrococci, and hence it is argued that the disease is wholly caused by bacteria. Other

investigations, however, have shown that these micrococci may be developed from inert germs, which are always present in the mouth. The experiments carried on by Drs. Wood and Fonnad, under the National Board of Health, showed not only that the inert organisms were present in the mouth at all times, but that in malignant cases of the eruptive fevers of children similar organisms are present, and that the secondary septicæmia of these diseases are due to the diphtheritic micrococci.

“If these are facts, we are not justified in stating that bacteria are the cause of the disease, but its cause must be found in those conditions under which the inert organisms are developed into an active state; for there must be present a previous diseased condition as a suitable soil for the growth and development of the organisms. The presence of intestinal worms in children affords an illustration of the operation of parasites. At times children so affected suffer no inconvenience from their presence; but as soon as indigestion occurs from other causes, the worms become a prominent feature in the diseased condition. ‘Worm fever,’ so called, depends more upon a previous gastric affection than upon the vermicular organisms which are present, and it may be truly said that its causes are to be found in derangements of the digestive tract.

“In diphtheria the process is a similar one. In comparatively healthy conditions of the system the micrococci are inert and void of danger, until, by conditions favoring it, they are awakened into activity. What are these conditions? To speak in the abstract, we may say that they lie in conditions of mal- or per-

verted nutrition. It is essentially a gangrenous inflammation, and gangrene fever occurs in a perfectly nourished tissue. Apparently it is an excessive fibrinous exudation that causes the gangrenous inflammation; but this peculiar fibrinous exudation never occurs until the nutrition of the system has been impaired.

“If we study the history of the disease, we will find that the children most liable to the malignant form of the disorder are those who have frequent catarrhal affections of the naso-pharyngeal mucous membrane, producing a local impairment of nutrition, or who from a bad system of early dietetics are affected with frequent gastric derangements. It may be that they have an abundance of food, but we all know that only a small percentage of American children have an abundance of proper food; and that the ordinary diet of such children is not that adapted to the perfect nutrition of the body. Other cases occur as a secondary septicæmia, following the severe impairment of nutrition incident to the eruptive fevers. Among adults similar causes usually exist before the development of the disease. Physicians appear to be peculiarly liable to diphtheria, but we can easily account for it.

“No class of persons have more mental strain thrown upon them than physicians who are battling with diphtheria in its virulent forms, and the history of those who succumb to the disease will disclose the fact that, in addition to the worry and fatigue, they suffered from loss of appetite, or, as we have often heard them express it, ‘so anxious and worried that I can not

eat.' This loss of food and sleep, combined with intense exertion, seriously affects the nutritive powers of the system, and mal-nutrition becomes the potent cause of the malady. True, the micrococci are the exciting cause of the affection, but we have yet to see a physician contract diphtheria whose head is cool and digestion and appetite in a normal condition.

“There must be, previous to the development of the disorder, a lessening of the vital forces, an approaching pernicious anæmia, as it were, with its accompanying perversion or failure of nutrition. The cause of diphtheria is in conditions favoring imperfect nutrition. How do we account for those severe cases in which the seal of death is present with the initial appearance of the diphtheritic process? It is the continued impairment of the nutritive forces of the body, until there is a sudden breaking down in a condition of profound anæmia, which causes the sudden development of the septicæmia with its attendant micrococci. And in these malignant cases the failure of the digestive organs is always a prominent feature. Even before the angina presents itself the appetite fails, and finally is entirely lost.

“Nearly all fatal cases have this failure of nutrition powers, and it is rare for a diphtheritic patient to succumb to the disease, no matter how severe the seizure may apparently be, whose digestion and appetite remains intact. We can, with greater safety, make a favorable prognosis in a markedly severe case when food is taken readily than we can in an apparently mild case, in which a total loss of appetite manifests itself early in the disease.

“Even if we succeed in carrying such patients over the more urgent stages of the disease, by means of rectal or other forced systems of alimentation, the chances are that a fatal result will be reached through some secondary complication. We have often heard it stated that a diphtheritic patient died because food was persistently refused, and the opinion expressed that food or nutriment would have prevented a fatal issue. The only time that food could have prevented death in these cases was in the time when mal-nutrition was slowly undermining the system and preparing it for a diphtheritic outbreak. If we would eradicate this terrible domestic scourge, our efforts must not be directed solely against the bacteria, but they must extend back to the dietetic management of infants and children, to the proper ventilation and sanitary conditions of houses and surroundings, and, in fact, the correction of everything tending to lessen the vitality and to interfere with the proper nutrition of the body.”

CLINICAL CASE, No. 3.—In March, 1885, I was called to visit the family of the Rev. Mr. Pilcher, in charge of the Lake Street Church, in the city of Eau Claire, Wis. On my arrival at the house I found a beautiful little girl complaining to her mother of a sore throat. The lady proceeded to tell me that she had been complaining since early morning. There was very little, if any, fever; indeed, I could not observe any rise in the temperature of the body or pulse, and she only complained of her throat and head, and in the latter I could not observe much irritation. I prescribed Bell. 3x, Merc. Cy. 30x, in water, to be given in alternation every hour, with a gargle of Chlorate of Potassa, and said I would call again in the morning. At my visit at 10 A. M. next day, I found the little girl still in bed. I took her up in my arms to the window, where I could look well into her throat, and was much surprised to find it much swollen and flamingly red,

and the uvula and posterior surface well covered with patches of grayish white. I could not observe that either of the glands of the throat was at all affected; indeed, the whole trouble seemed to be inside. The pulse and temperature of the child seemed about the same. I prescribed Merc. Cy. 30x, Bell. 3x, and Apis. 3x, in water, to be given as usual every hour. I left a gargle of Chlorate of Potassa, to be applied with a brush to the throat once in three hours, and a vial of the Cream of Pharmacy, to be used with a swab for awhile every two hours, and then less often. I requested her mother to see that the medicines were given at the proper time, and also the gargle applied; to feed her sparingly with liquid food, if convenient, and I would call in the morning. When I reached my office I tested the little girl's urine, from a sample that I had procured, and found it well supplied with albumen.

On my next visit to the residence, which was late next day, I found my little patient much improved. When I looked into her throat I found it entirely free from the patches, and the whole surface looked well. I said to the mother: "Have you at all examined your little daughter's throat?" "Yes," she replied, "I have looked into it before. Yesterday, previous to your arrival, I found it studded with those little white patches, which really alarmed me; but this morning when I looked again I could not see one. That vial application you gave me for it seems to have done as you told me it would do. When I first saw those patches I feared lest it was diphtheria, but did not ask you for your opinion." I said to the lady: "She certainly has most of the symptoms of diphtheria, but in a very mild form so far, and especially in reference to the state of her kidneys, as she is now passing a large quantity of albumen for the amount of urine she has passed for the twenty-four hours, which, if you examine, you will find precipitated at the bottom of the vessel." After her examination, she came to me and said: "Doctor, is that an unfailing symptom of diphtheria?" "I have found it so, madam, in my experience, when accompanied by symptoms which your little girl has. It almost always occurs also in scarlet fever and rothlin, which latter disease is said to be a cross between measles and diphtheria." I prescribed Bell. 3x, Merc. Cy. 30x, and Hepar

Sulph. 3x, in water, to be given as usual, every hour, taking off the Apis, which I thought was unnecessary.

There were then five children in the same family, all of whom had the same disease in rapid succession, in a very mild form. I attended each of them, and, with about the same medicines, brought them all out well, to the great pleasure of the parents and friends.

CLINICAL CASE, NO. 4.—In May, 1878, while practicing at Durand, Wis., I was called to attend a Mr. B——, a school-teacher, who had been complaining for some days. I found his pulse and temperature well up. His skin, however, was moist. He complained of feeling trembly and weak. On examination of his throat, the laryngoscope revealed the fauces swollen and red, with the uvula and surrounding tissue covered with whitish patches; the glands of the throat, especially the parotid, were considerably enlarged, but the most peculiar feature was weakness. Indeed, he seemed perfectly prostrated. I prescribed Apis 3x, Bell. 3x, and Merc. Cy. 30x, in water, to be taken in alternation every hour; a solution, alcohol and water, half of each, to be applied with a small brush to the white patches, and a gargle of Chlorate of Potassa for the throat, to be used every two hours for awhile, and promised to call again in the evening.

I called on the gentleman about half past five o'clock P. M. Found him more comfortable. He had less fever, and felt more encouraged. I advised some light food, such as oatmeal or rice-gruel, and, for a drink, what water he wanted, in small quantities. Continued the same medicines, except to change Phyto. Dec. 3x for Bell. 3x, in water, to be taken as usual all night, unless he slept. The throat medicines were to be used at longer periods. In the morning I called. He seemed perfectly comfortable, although he still complained of being weak, and his pulse, while regular, was quite weak; indeed, its beat was below sixty a minute. His throat was decidedly better, and the glands outside were less tumified. He had scarcely any difficulty in breathing, and I was at a loss to account for his great weakness. After turning his case all over in my mind, I came to the conclusion that it was really fright that caused his apparent weak

state. I spoke encouragingly to him, and assured him that I could see no very severe symptoms in his case, and that, although the disease was frequently a dangerous one, his, so far, was certainly a mild type of it. I prescribed Merc. Cy. 30x, Phyto. D. 3x, and Apis 3x, to which I added Digit. 3x, to be given in place of one of the other medicines every three hours. They were all in water, to be given, as usual, once each hour. I requested that some of his urine be sent me before my visit in the morning, and that some time after the receipt of it I would call. When I came to analyze the urine, I found a good quantity of albumen in it, which accounted for his extreme weakness in a great measure. I visited the young man in the forenoon of the next day, and found all his visible symptoms decidedly better. The patches in the throat were less; indeed, it was almost normal inside and outside; but the discharge of urine during the night was quite small, and the bottom of the vessel was well-covered with albumen. I prescribed Hepar Sulph. 3x, and Merc. Cy. 3x and Apis 3x. I made a few more professional calls to this patient, and, with the exhibition of the appropriate remedies, discharged him cured, to his entire satisfaction.

Diphtheritic micrococci are harmless without previous impairment of the vital forces; and if we would prevent their activity, it must be done by keeping the system at par, and by allowing nothing to interfere with the proper nutrition of the body.

During the past eleven years, there have been about seventeen thousand deaths from diphtheria in the city of New York; an average of over fifteen hundred per annum. It is gratifying to notice that during the past three years the deaths each year have only been about one thousand, and, taking into consideration the increase of population, the death-rate from this cause is steadily decreasing. The whole number of cases reported were about thirty-seven thousand, and the ratio of death nearly fifty per cent. Had all these cases

been treated on strictly homeopathic principles, how many of these little patients would have been saved!

To show something of the fatal character, in addition to the foregoing statement taken from an editorial found in the *American Homeopathist* of February, 1885, I give a report published by the Board of Health, Massachusetts, for the years 1885 and 1886:

DEATHS FROM DIPHTHERIA AND CROUP, BY COUNTIES,
1885 AND 1886.

COUNTIES.	Deaths from Diphtheria and Croup		COUNTIES.	Deaths from Diphtheria and Croup.	
	1885.	1886.		1885.	1886.
Barnstable, .	2	11	Middlesex, .	267	299
Berkshire, .	118	89	Nantucket, .	6	23
Bristol, . . .	111	79	Norfolk, . . .	31	64
Dukes,	1	.....	Plymouth, . .	53	37
Essex,	162	160	Suffolk, . . .	480	461
Franklin, . . .	3	17	Worcester, . .	200	206
Hampden, . . .	75	83			
Hampshire, . .	14	29	The State, . .	1,523	1,558

By the term diphtheria is to be understood a specific disease, which should be classified among the zymoses, and is locally classed by the formation of a false membrane upon the mucous surfaces, and upon abraded surfaces of the skin. For the sake of a better understanding of the nature of the disease, we shall consider it under the head of simple diphtheria and the malignant diphtheria.

These two grades are essentially the same in their nature, although they may become complicated with other diseases. There is a resemblance in this respect to many other diseases; as, for instance, the general features of cholera morbus may resemble those of the malignant cholera.

There are many resemblances between fevers, the

different grades and forms of scarlatina. It is not to be presumed that diphtheria is an entirely new disease, but rather a modification of a disease long known, and the two types under which it now appears "differ in proportion as they are modified by season, climate, septic influences in the atmosphere, and other sources of propagation and development of a specific zymotic cause, as well as in the individual organic susceptibilities of persons who are seized."

Allow me here to insert some remarks of that eminent man, Professor Ludlam, of Hahnemann College and Hospital, Chicago, Ill., as to its general features; also his synopsis of the nature of the disease:

"These contingencies make the types convertible, and cases of each may appear in the same house. Some practitioners find nearly all their cases curable, while others find many malignant ones. Or, in a family of children in the same house, one may have the disease severely, and the others in the milder form. When any epidemic first makes its appearance, it is more malignant, and hence those who take the disease at a later period may escape its malignity. In this particular it resembles other endemic diseases.

"There may be several causes for its origin, among which may be enumerated the following:

"1. Diphtheria arises from a specific invisible cause, which, in order to produce the legitimate pathological points, must first be introduced into the blood.

"2. The means for the introduction of this virus into the blood are two in number; viz., through the respiration, and by inoculation.

"3. We can not conceive of an epidemic cause

which fails to occasion more or less contamination of the atmosphere. Local circumstances may concentrate such a taint, and thus render susceptible persons in a community more liable to contract the disease from breathing this atmosphere.

“4. In exceptional cases the diphtheria may spread in this manner by a thorough poisoning of the air which is breathed; but, as a rule, it is much more feebly contagious than either of the eruptive fevers. There is no evidence that it is ever conveyed by fomites.

“5. The only known method of successful inoculation is that a portion of the vitiated secretions from either the mucous membranes or the skin of a diphtheritic subject, be applied to an absorbent surface.

“6. But these methods of communicating the disease will fail unless the individual constitution and local habits and surroundings of the subject afford a congenial soil, in which the specific cause may develop its specific effects. All of these symptoms and sequelæ point to the constitutional character of diphtheria. There is no question but that it is a systemic and not merely a local disorder, which owes its essential character to the presence of a species of parasitic growth, whether it be algous or fungous. It is zymotic in its origin, its characteristics, and its sequelæ. It is a disease *per se*, and not alone a dyscrasia. Like the typhoid fever, it has its general and special lesions—the one systemic and the other local.

“The prognosis of diphtheria is always doubtful, for the disease may terminate fatally, no matter what

course it may take. If the disease sets in, accompanied by symptoms of violent constitutional disturbance, the danger of a fatal termination is very great, since we may almost be sure of a more general spread of the poison.

“The more rapid the prostration, the more unfavorable the constitutional and domestic conditions of the patient, the more considerable the gangrenous disorganization; and the sooner it takes place, the less the chances of recovery. The extension of the diphtheritic process to the larynx and lungs is almost always fatal. Nor should the protracted and mild course of the disease superinduce a feeling of security, for even then a malignant aspect may supervene. One of the most threatening symptoms is an albuminous deposit in the urine, especially if it is very copious.

“As sequelæ of the disease, we notice more particularly symptoms of paralysis, which may affect the extremities or the cervical muscles, or even the pharynx, and is very obstinate. Deafness and amaurosis have likewise been noticed as sequelæ of diphtheria. The cicatrization of the ulcers not unfrequently causes impediments in swallowing, talking, and masticating. An unusual constitutional debility, which does not correspond to the grade of intensity of the morbid symptoms, and has the appearance of a general paralysis, sometimes remains for months, even if the appetite is completely restored and the waste of tissue has been repaired. Owing to the shortness of time that has as yet been vouchsafed to practitioners in observing the course of the disease and investigating its causes and nature, we have not yet

been able to determine the remedies that hold a positive and specifically homeopathic relationship to the disease. For the present at least, it seems an established fact that the selection of remedial agents in this disease can not be strictly conducted in accordance with the law of symptomatic similarity, for the reason that we are not yet in possession of any proving embodying a full counterpart of this pathological series. All we can do is to mention all the remedies that have been recommended for diphtheria, and leave it to time and more extensive observation to determine which of these remedies are in specific curative rapport with this disease.

“DIPHTHERIA CROUP.

“We have to point out in a few words the difference between croup and diphtheria. So far as treatment is concerned this difference is of the utmost importance. In croup the membrane is apparently of the same character as in diphtheria. The assertion that in croup the exudation is fibrinous, and in diphtheria albuminous, is certainly unsupported. But it is an essential characteristic of the diphtheritic exudation to be constantly tending to a gangrenous decomposition, and to involve the subjacent mucous membrane in the gangrenous process, which is never the case with croup. So far there can be no question of transition forms between the two processes. Where such transition-forms have been supposed to exist, the diagnosis, which in isolated cases can only be established with certainty in the further course of the malady, has undoubtedly been premature.

“Besides all this, the constitutional symptoms are opposed to the croupy character of diphtheria, more particularly the extraordinary, unusually rapid prostration, which mostly terminates fatally; whereas in croup death is caused by the mechanical obstruction of the respiration, with its subsequent influences on the composition of the blood.

“Lastly, croup is almost exclusively a disease of childhood, and has never yet been suspected of being a contagious disease; whereas diphtheria, though it prevails more especially among children, spares no age in particular, and is a plague whose contagiousness can not well be denied. Genuine croup has its seat in the trachea and lower portions of the larynx. It commences there, and seldom, if ever, implicates the larynx or any part of the fauces.

“There is no vomiting or diarrhea. Croup is essentially an asthenic disease. It is highly inflammatory in its nature, generally traceable to exposure to cold and damp air. It is seldom epidemic, and never contagious. The symptomatic fever is inflammatory throughout its course. It has been caused by some known exposure, as sudden suppression of perspiration, wet feet, or a current of cold, damp air. Exposure to cold, bleak winds and chilling blasts and large bodies of water, has a tendency to check perspiration and produce chilliness of the surface, the perspiration being driven inwards towards the mucous membrane. The false membrane in laryngeal croup is strong, dense, fibrinous, often organized, and it often exhibits a well-marked vascular derangement. In croup there is a hard, hoarse cough, which is afterwards stifled.

‘Spasms of the larynx are followed at least by asphasia and suffocation. The agitation and extreme agony which distinguish the last stage of croup contrast strongly with the livid pallor of the surface, the delirium, profound depression, somnolent tranquillity, and adynamia, which belong to this stage of diphtheria. The dyspnœa is paroxysmal.’

CLINICAL CASE, No. 1.—In the spring of 1878, while in practice at Durand, Wis., I was sent for to visit two children that were said to have diphtheria, some ten miles from my office. When I arrived at the house I found it quite a newly settled place, and, as a whole, rather a rough country. The family were apparently poor and their house small. From all I could learn about the two little girls, their disease seemed to be a well-marked case of diphtheria, now well advanced. The pulse and temperature in both of them were well up; the skin was hot and dry; their glands were somewhat enlarged, and their throats inside were much inflamed, especially the uvula, and well set with whitish gray patches. After carefully examining both the cases, I had quite a chat with the parents, who were very anxious about their children. I inquired—as is my usual custom—if they had ever seen or were acquainted with the homeopathic practice, etc. In reply to their inquiries, I said to them that I could not promise to cure their children. The only thing I could say was that I thought I was acquainted with the disease, and that if they employed me I would do the very best I could for their recovery. That seemed satisfactory, and I prescribed Bell. 3x, Merc. Cy. 30x, and Phyto. D. 2x, in water, to be given in alternation once each hour. I prepared my usual gargle of Chlorate of Potassa, also a vial of the Cream of Pharmacy, with a small brush, and showed the parent how to use them, and left, to return next day.

I got back to the farmstead next afternoon. Found the little girls not much improved; on the whole, the pulse and temperature in both of them were still well up. The children’s throats were almost free from the patches, and not so much swollen. But they

both were alarmingly restless, with an increasing hoarse dyspnoea, which soon became a crowing, shrill cough. I changed the medicines somewhat, and soon made up my mind that I had on hand two severe cases of diphtheritic croup, and that I must remain for the night. I exhibited for a time Acon. 3x, Spongia 3x, with Phos. 3x, in alternation every half hour. I gave the medicines, and applied Cream of Pharmacy to the throat, till they began to perspire freely. I then took the Acon. off, replaced it with Tart. Emet. 3x, and kept up this treatment until after 11 P. M., when their dyspnoea was excessive, and a tough, stringy saliva would escape from their mouths after a severe cough. I called the parent, who was sound asleep, and told him I must go or send some person to my office for some medicine, in the exhibition of which lay my only hope for the safety of his children. He soon found a neighbor, who carried a note from me to my wife for Lachesis 6c, and Bichromate Potash 30x. For some time before this I had become satisfied that the croupous membrane had formed in their trachea, and I now fancied that with Lachesis 6c, and the Kali Bich. 30x, in alternation each hour, and keeping up the swabbing with the Cream of Pharmacy, I could save the little ones. The man finally came, and I carried out my plan of treatment till long after daylight, when I was much fatigued, and the little ones were, I thought, fighting the battle well. I heard the mother expressing her fears about her darlings, and declaring that the medicines I was giving them were too weak to do any good, and that she would like another doctor. I called the man, and stated to him, in brief, my treatment and its propriety, and that now, as I was tired, he could take my place, and if he wished to send for another doctor, I would go home, but to be sure to keep up the treatment until the other came. I said that I had done all I could for the recovery of his children. Some days afterwards I learned from a friend of mine (a lady), who told me she got to the house just after I left that morning, and when the "regular" doctor came and prepared medicine for both the patients, it was so extremely strong and nauseating they could not be prevailed upon to take it. The lady insisted that they should continue to take the medicines I had left. They did so, and both got well.

NOTE.—It will be noticed in the above case that, from the beginning, I used a liquid preparation called “Cream of Pharmacy.” I have placed the prescription for this remedy at the commencement of my book, with the names of other medicines. I may here observe that I have used the liniment for this purpose for the past six years, and it certainly is the best application for the trouble mentioned, or wherever there is irritation on any part of the epidermis or mucous membrane of the body, even for burn, frost-bite, or strain of any joint in the body, that I ever used. It is painless, but leaves a stain on the linen. It may be said, That is not homeopathy, or, perhaps, in accordance with our “law of cure;” still it seems to fit cases of which we can not get the proper proving.

INFLUENZA, OR LA GRIPPE.

As an epidemic, this disease is spreading in Eau Claire at present; and, in fact, over the whole country, from Maine to California, thousands are sufferers from la grippe, enhancing the death-rate. It is just the same influenza that we have always had, but in many of its symptoms, I think it much more severe; indeed, in some cities of our Union its ravages have been fearful. It is a very ancient disease, and has frequently appeared as an epidemic in almost all portions of the globe. I find, from well-accredited authors, that it was noticed as an epidemic in the years 1850 and 1851, also in 1847 and 1848, when it proved so fatal to horses. Influenza is not by any means a simple catarrh of the respiratory organs, though the anatomical changes indicate such a condition; but a peculiar, complicated, and combined catarrh, which, in point of importance and treatment, differs essentially from simple bronchitis. This instance shows most conclusively that it is wrong to undertake to determine the character of a disease by the anatomical lesions it occasions.

“The etiology of influenza is completely enveloped in obscurity. It is an epidemic which may prevail in any season, and is frequently associated with other epidemic affections. Most commonly it spreads over a large extent of country, and attacks anybody, although individuals who are affected with pulmonary

diseases, more particularly tuberculous individuals, are most liable to its visitations. The most extensive influenza epidemics have spread from east to west. We again call attention to the connection between influenza and the amount of ozone in the atmosphere."

Symptoms.—If, latterly, every bronchial catarrh with typhoid symptoms has been designated as influenza, this appellation is no more proper than it is proper to refuse this name to larger or smaller epidemics, for no better reason than because they do not come up, either in extent or fatality, to the epidemic of 1833. We apply the name grippe, or influenza, to every bronchitis invading a large surface of country, and involving with marked symptoms of illness the whole organism, more especially the nervous system, attacking a number of individuals in the same epidemic with very similar symptoms, although these may differ ever so much in different epidemics.

Influenza is generally preceded by a preliminary stage where the local symptoms of catarrh of the respiratory organs are still wanting, or are but imperfectly developed; whereas the patient complains already very much of an extreme languor, with nervous excitement, sleeplessness and loss of appetite, without or with only slight fever. As the fever increases, the local symptoms become generally more marked and more intense. At times a coryza is the only prominent symptom; at other times, the mucous lining from the nose to the finest bronchial ramifications is inflamed. At the same time a violent and constant headache is complained of, which is commonly located in the forehead, through the head from the ears and eyes, but

extends to the back of the neck, and especially to that portion of the back immediately over the region of the kidneys. The headache is marked by many of the characteristics commonly displayed in an incipient typhoid. This headache is accompanied with rheumatic pains in many portions of the muscular system, with debility to such a degree that it almost amounts to paralysis. Just at this stage of the trouble, and especially if either organ of the body is to be affected, the patient complains of an occasional chill passing all over him.

The disease reaches its height gradually, and very seldom the climax is reached suddenly. The catarrh is at times violent, at other times very slight. The fever is intense, but so plainly remittent that the remissions sometimes appear like intermissions. The debility is excessive. The headache is agonizing, and is either complicated with sopor or with violent delirium. The digestion is entirely prostrated; the tongue is thickly coated white or yellow; at times it exhibits a sickly redness, with disposition to dryness; nausea and even diarrhea are often present; the bowels are confined, and diarrhea is less frequent.

“The symptoms exacerbate in the evening and at night, the patient being very much distressed by the cough, which aggravates the headache a great deal. Thus the more violent attacks of influenza simulate an acute typhoid, milder cases a so-called nervous gastric fever.

“The disease often leaves very threatening results. If the patient had tubercles, their suppuration is an almost sure consequence of the bronchial affection, although we do not choose to hold to the opinion of

many, that influenza is itself capable of causing tubercular deposits. In opposition to this doctrine, we might say that scattered tubercular deposits very often escape our notice. Influenza is very apt to leave in its track various affections of the respiratory organs, such as an obstinate hoarseness, or even loss of voice, and a long-lasting bronchial catarrh. The stomach likewise frequently remains disturbed, nor is a disturbance of the hepatic functions an uncommon event.

“Thus we see that the prognosis in influenza is uncertain, even if the disease sets in favorably at first, and the patient had been in the habitual enjoyment of good health. If the individual had pulmonary disease, or in the case of decrepit subjects, a fatal termination is by no means uncommon.”

The peculiar nature of the actually existing epidemic may likewise exert a great influence. Whereas one epidemic scarcely destroys a single life, another epidemic, on the contrary, claims a great many victims. It is conceded by the best of authors that a description of the treatment of influenza is a difficult task, on account of the diversity of forms under which the epidemic appears. In influenza, as in other epidemics, remedies, whose practical value had been tested by abundant experience, often have to be abandoned as unreliable, and other remedies have to be substituted in their stead.

CLINICAL CASE, No. 1.—On the evening of the 27th January, 1890, I was called in great haste to visit a young man, who was temporarily stopping at the home of a Mr. Peterman, a barber, doing business in the city of Eau Claire, Wis. The young man had been attended by another physician for some

days, and was not, as his friends thought, progressing in a very satisfactory manner. On my arrival at the residence, I found the patient's pulse 110; temperature high; but he seemed to be perspiring freely. He complained of a severe stitching pain immediately over the right pleura; also a severe pain over the small of the back, with a strong desire to micturate, but unable to do so. In getting the history of his symptoms for a few days past, I found that he had all the peculiar characteristics common to la grippe, and now the disease was involving both lungs and kidneys. His former physician had, of late, prescribed Turpentine and Sweet Spirits of Nitre; also hot applications over the right lung and kidneys, which the nurse was diligently using at the time of my visit. I prescribed Acon. 3x, Bry. 3x, and Rhus Aro. 1x, to be given in water, in alternation every hour, promising to call again in the morning. In reply to an inquiry, I said that hot applications would do, I thought, but little good; but if they made the patient more comfortable, they might be continued for a season.

On the morning of the 28th I called again; found the patient much improved. He had fallen asleep during the latter part of the night, and rested fairly well. I learned that he had passed a copious stool, with much urine, which latter contained large quantities of urates.

I prescribed Bry. 3x, Ars. 3x, and Rhus. Aro. 2x, to be given in alternation as usual, and left, to call again in the evening. Called in the evening, and found the patient doing nicely. He had had another passage of urine, which I discovered to be still thick. Prescribed Ars. 3x, Lyc. 2x, and Rhus Aro. 2x. On visiting my patient at ten A. M. the next day, I found him in a much better condition. Continued the same remedies. Made a visit on the 30th, and found the patient still improving; the urine almost in a normal condition, and he about to get up.

I prescribed Ars. 3x, Tart. Emet. 3x, and Rhus. Aro. 2x. Said I was glad to see him doing so well, and thought that on the morrow I should be enabled to discharge him. Called next afternoon; found my patient up and going around the house. He complained of some weakness, but thought that he could dispense with my services, with the aid of some necessary medicines.

I prescribed Ars. 3x, Tart. Emet. 3x, and Rhus. Aro. 3x, in two-drachm vials, in weak alcohol; asked him to take them in alternation every hour, touching each twice to the tongue, and then, as he felt better, every two hours. Requested him to call upon me, providing that he needed any thing more.

After some little search, he found his pocket-book in his aunt's case of drawers, and very gentlemanly remunerated me for my attendance.

NOTE.—I consider the state in which I found this patient the real crisis or dangerous stage of the disease la grippe. He had been for some time complaining of chills running up and down the back, which showed conclusively, to my mind, that the disease was slowly but surely permeating almost all the organs of the body, but especially was this the case with the pleura and kidneys. Hence my prescription Acon. as a constitutional remedy, Bry. for the pleura, and Rhus. Aro. for the kidneys. In these organs the patient was suffering acutely; had it been other organs that were affected, my prescription would have been different.

CLINICAL CASE, No. 2.—On Thursday, the 19th of January, 1890, I was called upon to visit a gentleman, who is daily engaged in active business in this city (Eau Claire, Wis.) He said, on my arrival: "Doctor, I am afraid that I have contracted the grippe. Allow me to give you my symptoms. Up to last night at bed-time, I felt quite well, but, on lying down, I was oppressed with dreams, causing me to have terrible nervous sensations during the night, which startled my wife, who would exclaim: 'What is the reason, my dear, that you make so much noise?' I went to sleep again, and, as the day advanced, I felt a sharp pain in the back of my neck; afterwards severe pains all over the body, so much so that I experienced much trouble in moving about. Again I felt local pains and disturbances in the head, which seemed light and dizzy." The patient's pulse was quite

full and well-advanced, as also was the temperature. I prescribed Lye. 3x, Causticum 3x, and Tart. Emet. 3x. This was for a slight hacking cough, which I noticed he had. I placed these remedies in two-drachm vials in weak alcohol, and requested that he use them in alternation, touching each vial twice to the tongue; ordered him to report progress as often as necessary. On the following Sabbath, at night, I was called again to the bedside of the patient. He remarked to me: "Well, Doctor, I have followed your instructions, taking the medicines in a regular manner, and a part of the time I have felt pretty well. Up to to-night the sharp pains in my bones or muscles have decreased. I have dreams, however, every night, more than usual, which has a tendency to make me more nervous. This evening, after lying down, I experienced a very singular sensation in my bronchial tubes. They became numb, and sharp pains darted across my lungs, and I felt, at times, quite chilly when in bed, although well covered with quilts, blankets, etc. Will you tell me," he added, "what does all this mean?" I said to him: "I think that you are threatened with inflammation in some of your organs." His pulse was 110; skin hot and dry; temperature well up, although he had very cold feet. I prescribed Acon. 3x, and Phos. 3x; ordered him to take in alternation each half hour, until he had taken three doses of each, and then alternate with the Tart. Emet. (which he had) every hour. Ordered him to keep in the house, and I would see him again in the afternoon. Called again at four P. M. Found the patient perspiring freely, and much more comfortable. He said he felt entirely free from pain, and had slept a portion of the afternoon. I requested him to continue the use of the medicines, but at longer intervals, and I would call again in the morning. Before leaving, however, I advised his wife to give him a sponge-bath of blood-warm water, and dry the skin well before retiring to bed.

I called again in the morning at nine A. M., and found my patient up and dressed. He had partaken of breakfast, but complained of having no appetite, his meal consisting of a little dry toast and tea. He remarked that he could not bear to look at victuals; it seemed as though the very sight of them would turn his stomach; but he complained of an intense thirst for cold water.

I prescribed Ars. 3x, Phos. 3x, and Tart. Emet. 3x, in two-drachm vials, in weak alcohol, to be taken in alternation every two hours. Directed him to eat very sparingly, and take as much rest as possible. Said to him, that la grippe was not a disease which could be aborted in a short time, but the patient must wear it out, although every symptom needs closely watching.

I saw him again in the latter part of the following week. I said to him: "How do you get on, my friend?" He remarked: "Pretty well, on the whole. The medicines you gave me seemed to afford relief, and, I think, the disease is decreasing. I committed an error in eating too many oysters, and since that I do not feel quite as well." I remarked: "You have disobeyed nature's laws. This disease affects the digestive organs in a wonderful manner. I have had several patients, of late, who, in the commencement of the trouble, vomited for hours. If you are careful you will not need much more of my attention; and, in case you do, let me hear from you."

NOTE.—Since the above case, I have had quite a number of others; in fact, have some on hand at the present writing—one old lady, eighty-three years of age; another of sixty-five, and one of thirty. The disease in each differs but little in the first or early stages. At times, in its early stage, I prescribe Rhus. Tox. 3x, and Nux Vom. 3x. I give, however, Lyc. and Causticum, and occasionally Bry., if the pains at the back of the head are severe; but the great desideratum in treating the disease is to watch its pointing to some vital organ of the body, which might bring on a fatal termination if not speedily aborted. To relieve the stomach from gas, I recommend the use of Antimonium Crud., and, at times, Iris Ver.

ANIMAL TREATMENT.

INTRODUCTORY.

DURING a medical practice of over twenty years I have learned, by observation, some things about the treatment of animals under various diseases, which I thought might prove beneficial to those keeping and having to do with stock; therefore I purpose to give a short description of some of those acute diseases, with remarks about stabling and feeding, together with a few clinical cases of each disease, and their appropriate remedies. This will, perhaps, render the present volume more valuable to those living where they can not readily obtain medical aid for their animals when ill.

I am not, neither have I ever been, a professional horse-doctor, although I have owned about one hundred horses, and some of them very fine ones too. I am aware that there is a principle in therapeutics that the same remedies curing disease in the human system will cure a similar disease in any other animal if the symptoms are the same. I am inclined further to add that from my experience in the treatment of a few cases of disease in the horse, cow, etc., about the same quantity of a drug, when properly indicated, will as soon and as favorably affect the one class of animals as the other under disease.

The horse is a noble animal, and is, with other

domestic animals, a great gift to man by a kind providence; but notwithstanding his many excellent qualities, so well fitted for our use, pleasure, and profit, in this country he is frequently very badly used, being overworked, wrongly fed, and at times poorly housed. His ailments, which are numerous, are generally imperfectly understood, and the remedies given for his restoration to health are very crude, and often poorly suited for his recovery.

Pneumonia or inflammation of the lungs is quite a common disease in the horse, also in the ox or cow. I have treated several cases of these with success, and insert a few clinical cases of each treated, with the appropriate remedies. Indeed I am much inclined to think that pleuro-pneumonia, that pest of our country, frequently so prevalent among cattle, could be readily cured and controlled by the prompt use and exhibition of our remedies.

Errors in feeding animals, and especially horses, are frequently very disastrous to their welfare. I have treated quite a number of horses, oxen, and cows with such troubles successfully, and have inserted in this book some clinical cases of each class, with the appropriate remedies, together with some other items about animals, which I trust will prove useful and interesting to all those having the care of stock.

THE HORSE.

The following chapters, devoted to the care of the horse, are in the main taken from a well-written work published by Mr. D. Magner, at Battle Creek, Mich., in the year 1886.

STABLING.

The stable should be built on a dry, airy location, facing the south when possible. It should be warm, well ventilated and lighted, and so constructed as to prevent the exposure of the horse to sudden changes of temperature. The stall should be sufficiently large to allow the horse to turn around or lie down, with conveniences for feeding. The width should be not less than six feet; but when practicable, it would be better to allow ten or twelve feet, to admit of a reasonable degree of exercise. This is not merely a great convenience to the horse, but it has considerable influence in preventing swelled legs, getting cast, etc. It is also important in that it permits a safer approach to a doubtful or vicious horse. It is the common custom to make the floor inclining backward; but this practice is unnatural, as shown by the fact that the horse, when left to choose his own position in a field, will almost invariably stand with his fore feet the lowest.

The floor should be level, and to permit this, and at the same time keep it dry, it should be constructed as follows: Incline the floor backward about two inches, making it water-tight, with an opening or drain at the back end for the water to pass off. Arrange upon this an extra floor of slats, about an inch to an inch and a quarter thick, and five-eighths to three-fourths of an inch apart. The back ends should be two inches thicker than the front, to compensate for the slope of the floor underneath, and thus give a level surface for the animal to stand upon, while the water can pass between the slats and drain

off. This upper floor should be made in two parts, so as to open from the center upward, and stand upon edge, while the lower floor is washed or cleansed as desired. This is the method of construction in the country, to an examination of which the author is indebted for the idea.

The door should be large, with an extra one of slats, which can be used during warm weather, exclusively for light and ventilation. It would also be well to have screens or mosquito-netting over the door and windows, to protect the horse from flies—a great annoyance to sensitive animals.

One of the most serious objections to stables, as they are usually constructed throughout the country, is the lack of proper ventilation. Usually they are nothing but close boxes, and entirely too small for the number of horses kept in them. The doors and windows are closed, and the bedding, saturated with ammonia, is tucked away under the manger. If there is an upper flooring, it is made the receptacle for hay, so that it not only obstructs any possible ventilation through the stable, but by becoming impregnated with the poisoned air below, it is rendered unfit for food. Any one going into such a stable, especially during warm weather, will have the eyes immediately affected by the escape of ammonia, which, with the contamination of the air caused by being breathed over and over, makes it even sickening to breathe any length of time.

It is evident that to supply the wear and tear of bodily structure, the food must not only be good, but of sufficient quantity to supply nourishment to the

body. Now a horse can live days, and even weeks, without food, while he can not live five minutes without air.

It is needless to enter into details as to the quantity of air a horse breathes in any given time, as every intelligent reader has a good idea of this; but the fact that a horse will quickly die when deprived of air, is not so forcibly impressed upon the mind. Now, it is evident that if the blood is not oxygenated by means of pure air passing to the lungs, the system will soon be poisoned; thus it is seen how necessary it is that there should be plenty of air in the stable, and as pure and free from contamination as possible. If it becomes impure in consequence of there being too many horses in the stable, and also loaded with ammonia from the bedding, it can not properly purify or carry away through the proper channels the broken-down, worn-out particles of matter, and thus permit a proper nutrition of the body. Instead of this, all the various conditions of disease are engendered. This is particularly noticeable as the source of ophthalmia, grease, glandular swellings, etc. Now, if pure air were obtained at a great expense, it might be a reasonable excuse for not furnishing it in necessary abundance; but the fact that it is obtainable in all cases with a very little trouble and care, renders this neglect little less than a crime, for which there should be no excuse or apology.

Now, an abundance of ventilation in the stables may be supplied in various ways, but the simplest and best is substantially as follows: A chimney, or opening through the ceiling may be made in the form of a

dome or cupola. The top should be roofed over and have lateral openings by means of weather-boards. The most convenient or comfortable stable the writer has ever seen had such a ventilation, which was so regulated that it could be partly or wholly closed, as desired. This was accomplished by means of two cords attached to opposite edges of a revolving door, and adjusted in the lower part of this opening or chimney.

Another special convenience was a contrivance for obtaining and measuring grain to be fed, which was so ingenious that I give a description of it. The grain was conducted from the loft to the feeding-floor by a spout, in which were two slides. Pulling out one of these slides a few inches permitted the escape of two quarts, and the other one of four quarts of grain, which was deposited in a drawer beneath. In the bottom of the drawer was a screw, with a handle projecting from the side of the spout. Moving this handle right and left a few times shook the bottom like a sieve, and thus removed all the dust and dirt, and leaving the grain clean, fresh, and ready for use. I have found two features about the stables as usually constructed through the country, which are so faulty that I would urge the necessity of having them corrected.

I can not agree with the lately quoted author in reference to the situation of the manger. He says it should be placed close to the ground, which, in my estimation, should be made fully as high as the horse's breast, and his hay should come down from the mow in an inclosed spout, and a space left at the bottom of the spout in the manger, so that the animal can get a

mouthful at a time. This arrangement will prevent the horse getting the dust from the hay into his eyes, and the manger being well up (especially this should be the case for colts), it will incline them to hold up their heads, throw out the chest, and save checking up the animal when in harness, increase the beauty of the animal, and at the same time his financial value. To illustrate my view of the matter I will use the following facts :

In the year 1856 I became acquainted with an extensive farmer, who, some years ago, engaged largely in raising horses for sale. He purchased some very fine blooded mares, and from these he soon had a number of very fine, showy horses. I saw him last, I think, in 1859 and 1860, in the city of Ottawa, Canada, where he was offering several of his young horses for sale. I got into his sleigh, and rode behind several of his animals, and certainly they looked almost perfection. He drove them without a check ; their chests appeared broad and deep, and each of them carried their heads well up. I asked him how he managed to have them do so, and he said in reply that he was raising horses to make money, and then described to me minutely his stables and the manger, and showed me one horse that he said now usually ate out of a manger nine feet from the floor. This is perhaps excessive, but I am satisfied that it is a good plan. I hate to see a horse severely checked up when he is traveling. I believe it is injurious to him. But equally do I dislike to see an animal travel with his head almost down to his knees, which, in my opinion, is all the fault of improper training when young.

FEEDING AND WATERING.

Hay, corn-fodder, oats, and corn constitute the principal food of horses in this country—hay and oats in the Northern States, fodder and corn in the South. The food should be of the quality and quantity to impart strength, vitality, and elasticity; and this requires some discrimination and care, as the food should be harmonized, both to the condition of the horse and the severity of the labor to which he is subjected. As a rule, the stomach should not be distended with food when prolonged, energetic effort is required. This is to be especially guarded against in the feeding of hay. Greedy eaters can, and often will eat so much hay as to unfit themselves for active labor, and it usually results in heaves, or broken wind. Heaves are always found in the teamster's or carter's stables, where there is no care in feeding. This disease is never found among racing horses, from the fact that the utmost care is used in selecting the food, and feeding in small quantities, or in adapting it more perfectly to the wants of the system.

It has been demonstrated, beyond doubt, that the reason horses improve so much in wind eating prairie-hay is, that it is so coarse that they can not eat it fast enough to overload the stomach. The quantity of hay should be carefully regulated, and never as much given as the horse will eat, if at all voracious. The majority of owners pack a large rack full, either allowing liberty to eat too much, or making it unpalatable and unhealthful by being breathed upon. From eight to ten pounds is about the average quantity for

an ordinary roadster to be allowed in twenty-four hours, more or less, according to size, the kind of work, and the quantity of grain given. Dusty or moldy hay should never be fed, as it is liable to produce various forms of disease.

The food should be clean, and in quality perfect. Hay is most perfect when it is about a year old. Horses would perhaps prefer it earlier, but it is neither so wholesome nor so nutritious, and may cause purging. When it is a year old it should retain much of its green color and agreeable smell.*

The blades of corn pulled and cured in the summer are unquestionably much better than hay for fine horses. It is strange that it is not prized more highly in the North.

Oats make more muscle than corn; corn makes fat and warmth. Hence, the colder the weather the more corn may be given; and the harder the work, the more oats. Oats should be a year old, heavy, dry, and sweet. New oats will weigh from ten to fifteen per cent more than old ones; but the difference is principally water. New oats are said to be more difficult to digest; and when eaten in considerable quantity are apt to cause flatulency or colic, and derangement of the stomach and bowels. The same may be said of corn.

CLINICAL CASE, No. 1.—An old man living in the village of Durand was the owner of two horses, which he kept for the

*In packing or stacking hay, salt should be slightly sprinkled through it, so as to destroy insects. It also aids in preserving it bright and clean, and makes it more palatable and healthy for the horse.

purpose of trucking. They were both taken down sick. After applying a number of domestic remedies without avail, the man applied to me, and in a pitiful manner stated that the horses had been fed on mill-sweepings for some three weeks, and they appeared to thrive on that diet. I prescribed *Ars.* 2x and *Nux Vom.* 3x, in two half-ounce vials, and requested the owner to give to each horse, on the tongue, ten drops of the two medicines alternately, one hour apart, until he had given to each horse three doses of each kind, and afterwards to lessen the dose to five drops, giving the same two hours apart.

At the expiration of twenty-four hours he returned to my office with a doleful expression on his face, telling me to come and see the animals, as they were still lying down, and he had followed out my instructions in regard to the medicines. I went with him. On examining the pulse I found it much more regular, showing an improvement of the stomach; but both animals were yet badly bloated, and suffering from inward distress. I directed the man to procure a large syringe, and give each one of the horses an injection of soap and water, and keep it in the fundament for some time, using a cloth for that purpose, the horse having had a sufficient quantity of medicine. I told him to call in the afternoon and report.

As requested, he came to my office with a pitiful countenance, stating that the remedies had been given according to instructions by injection; but notwithstanding this, the bowels of the two animals remained obstinately closed. The animals were still lying down, but did not seem to be in as much distress. I said to him to wait about two hours, and then repeat the injection to each animal; and along towards evening I would call around and see them.

I proceeded to the stable about dark, and found both horses standing up. Scarcely had I entered the door when I witnessed a scene which I shall certainly never forget. The owner of the animals was standing immediately behind them, when suddenly one of the horses discharged the contents of the bowels, covering him from head to foot, and the other animal soon followed suit. I directed the man to give them warm, dry bedding, and a little bran mash, should they desire food. Prescribed a few more doses

of medicine, five drops each, and ordered the same dose in the morning. It was only a short time before the animals regained their usual health.

CLINICAL CASE, No. 2.—In the summer of 1876, while practicing at Durand, Wis., I was called upon by a polite gentleman, who came to my office and made inquiries in regard to treating a horse. I informed him that I had had some experience in treating horses, and at his earnest request I went with him to his stable. I there found a very fine animal, evidently in great distress. The horse was unable to get up. His hind quarters and legs seemed to be paralyzed. I examined carefully his pulse, and found it very small and intermitting, and the body covered with perspiration.

On inquiry, the gentleman said that the animal had been driven some fourteen miles, and when he came home he directed his attendant to feed him hay, and afterwards oats. The man, who was present at the time of my visit, described to me how and when he had fed the animal; and from what he said I thought that he had fed the horse a large quantity of grain. I came to the conclusion at once that the quadruped's trouble was in the stomach, and said that if he was taken out and allowed to roll it might prove beneficial. With a great deal of difficulty, the animal was finally got out, and he began to roll violently; but whenever he attempted to rise he could not get his hind legs under him. I prescribed *Ars.* 2x and *Nux Vom.* 3x, in two half-ounce vials, to be given in alternation, ten drops of each to be dropped on the tongue with a glass dropper. These remedies were to be given every half hour until he had taken three doses of each; then to be administered two hours apart. In six hours time the owner had the satisfaction of seeing the animal as well as ever.

NOTE.—The animal's stomach was crowded with hay and oats when he was too warm to feed. Under the circumstance the gastric glands could not act; consequently the wrongly digested food occasioned severe pain and dyspnœa, and through the consequent paralysis

of the spinal nerves supplying the stomach, he could not use his legs. The two medicines given strengthened the gastric glands, and they poured out a better juice, and the digestion of the food commenced; the peculiar train of symptoms exhibited by the animal were abated, and the horse at the next meal-time whinnied for more food.

CLINICAL CASE, No. 3.—In the month of July, 1880, while living at Durand, Wis., I observed one day, as I was walking down the street, a very fine mare, getting up and lying down. This she did repeatedly. Just as I was about to come up to the animal, the owner, a Mr. Shaw, called to me and said: "Doctor, come and tell me what is the trouble with my mare." I went up to the animal, and, placing my hand on her pulse, found it very strong, but intermitting. She was much bloated, and breathed violently. In answer to my inquiry as to what the mare had eaten, Mr. Shaw replied that he had given her a heavy feed of old oats, and now he thought that her water was the trouble. I remarked that she had what is vulgarly termed wind colic. I inquired if he had any Aconite, and, just as I spoke, his man came from the drug-store with an ounce of Aconite, together with an ounce of Sweet Spirits of Nitre, which he said he was about to give the mare. I replied, that if he did so I feared the consequences; all the animal required was a few doses of Aconite. While we were thus engaged in conversation, the mare lay down for about the tenth time. I told the man to open her mouth and put ten drops of Aconite on her tongue; he did so, and then allowed her to rise; she got up slowly, lifting her head very leisurely, until she carried it as usual; at the same time she lifted her tail, broke wind violently, and the trouble was all over.

NOTE.—In the above case, digestion was slowly taking place, but accompanied with much gas, which showed that it was imperfect, and caused much pain

in the intestines, called wind-colic. Aconite in one dose cured. Colocynthis or Asafoetida in like doses would probably have cured.

CLINICAL CASE, No. 4.—While practicing at Durand, Wis., in the year 1876, I was called upon by a gentleman about the hour of midnight. The party in question was the sheriff of Pepin County, and the owner of a valuable generating horse, which he supposed would shortly die. He inquired of me if I could do anything for him. He said, moreover, that he had tried everybody professing to understand horse diseases, and none of them as yet had relieved the animal. I asked him as to the horse's food, also the quantity and quality of his rations, and how he had driven him latterly. The man said he had made a trip that forenoon of some seven miles, afterwards feeding the animal a bait of soft corn, his usual feed being oats. I prescribed Ars. 2x, Nux Vom. 3x, to be injected with a dropper on the tongue every half hour, giving the horse ten drops at each dose, until he had administered six doses, and as soon as convenient I would come and see him.

When I arrived at the stable, I saw fully a half dozen old horse-doctors assembled around the animal, while the man was administering my medicines. One of the attendants proposed to the owner to give the horse an official dose of Barbadoes aloes. This I heard when in the act of entering the place. I said: "Do not give him any medicines as long as you are using mine. If these gentlemen are going to treat him I will at once retire, and leave the case in their hands." On examination, I found the horse's pulse intermitting; at times there would be no perceptible pulsation, then again it would beat occasionally. The body of the animal sweat in a profuse manner, yet the extremities were icy-cold, and the horse had frequent spasms. I prescribed Acon. 2x to my former prescription, and requested them to alternate the medicines until relieved; after that every hour; and I would return soon. I told him particularly that he need not expect any decided change short of three hours. The doctors all made fun of my medicines being taken in such miniature doses; but in

a polite manner I requested them to withhold their sarcastic remarks until they had been given a fair trial.

In less than the time previously mentioned the horse was better, and I received a visit from the owner, who said: "Doctor, a short time ago, when I was here, I would have taken ten dollars for the animal, but now I consider him worth the sum of fifteen hundred dollars." I went again shortly to the stable, and found the horse doing well, the stomach digesting the food in a regular manner. I omitted Acon. and prescribed Nux Vom. 3x and Ars. 3x, to be given in alternation every hour until further improvement took place, and then every two hours. As the doctors were leaving the place, the man who suggested giving Barbadoes aloes observed that my remedies must be very powerful, to have such an effect in so short a space of time. The result was that before nine o'clock the horse was eating his usual food, and was shortly entirely well. The owner was extremely gratified to think that I had saved such a valuable animal from death, which appeared at the onset to be absolutely certain.

CLINICAL CASE, No. 5.—On the first of November, 1888, I was summoned to go to Augusta, Wis., there to consult with a physician of that place in regard to a complicated case some eighteen miles distant from the village. My friend went in the evening previous and ordered a livery team to convey us to the home of the patient. The team was driven up in the morning to my friend's residence. When we got ready to start on our journey, one of the animals was found lying down and attempting to roll. After considerable difficulty, my friend and his wife succeeded in getting the animal on his feet; but even then the horse was no better, and seemed to be suffering from agonizing pain. I came out and felt the horse's pulse, which was very irregular; hence I came to the conclusion that the trouble was in the stomach, gas escaping from that organ into the bowels causing distressing pain. I inquired for a thimble, which the lady immediately brought. I filled it with Aconite 3x, and turned it upon the animal's tongue. He seemed for a few moments to hold his head quite steady, and in ten minutes' time the spasms were entirely over, and the pulse had resumed its normal condi-

tion. The harness was put on, and the horse attached to the rig. We started on our journey without any further trouble from the horse, who seemed to have in no wise suffered from the attack, although it was an exceedingly severe one.

NOTE.—Colocynthis, Asafoetida, or Ipecac, in the same potency, would in all probability have answered equally well.

Corn should be sound and dry; otherwise it may be regarded even much more dangerous than oats, and should not be fed. Doing so will be at the hazard of the consequences above mentioned. The quantity of oats given daily may vary from eight to sixteen quarts. If the horse is large, and the work is severe, a little more may be given. Corn should be fed in the ear, and, like oats, must be regulated in quantity to the size and labor of the animal. From five to twelve good-sized ears are a feed. I give a larger proportion of feed at night, and less in the morning and noon. There is ample time for digestion during the night; there is not during the day, if the labor is severe. Experience proves that some mildly cooling laxative food should be occasionally given. A bran-mash, made by pouring boiling water on eight or ten quarts of wheat-bran, covered over until cool, and fed at night from one to three times a week, is the finest and best.

Carrots are a good laxative and alterative before frost, but are too cold and constipating during cold weather. They may be fed in October, November, and December, but in the Northern States not later. I feed Irish potatoes, from one to three quarts, with the usual quantity of grain, from two to three or four times a week, and would recommend their use.

Feeding a small quantity of roots, and giving bran-mashes, keeps the bowels open and the system in a healthy condition. Without them, constipation is probable, and this is one of the primary causes of diarrhea, colic, or inflammation of the bowels. Rutabagas are an excellent feed for horses, either young or old. Indeed, I have seen many farmers in Canada winter their colts on straw and turnips. They should, however, be well washed, and then cut up, before feeding them to the animal. They are easily digested, and render the hair and skin smooth and clear. They are a sure crop, and easily grown on new breaking.

If it is desired to make a horse fat in a short time, feed corn-meal and shorts, with cut straw, to which add a pint of cheap molasses. There is nothing like this for recruiting and filling up a horse that is out of sorts and poor. If the horse is exhausted, or when sufficient time can not be allowed for him to eat and partially digest a full meal, he may be greatly refreshed by a draught of warm gruel, or, in summer, of cold water containing a small quantity of meal.

COOKING THE FOOD.

My attention was some time ago called to the advantage of cooking food for horses. Those who have given the most careful study to the principles and best methods of alimentation, state, first, that well-crushed grain is not only more readily masticated, but more easily digested; second, that cooking the food enables the animal to assimilate a far larger percentage of the nutrition than from the same amount of grain fed in its raw state. The amount of grain is

claimed to be from twenty to thirty per cent. According to report, the Germans have long used cooked food for their army horses, and found it to excel all other kinds of food in giving greater strength to the horse and increasing his power of endurance. It is also claimed by the most successful stock-breeders in England and on the Continent, that horses and cattle thrive better, and are far healthier, when fed on cooked food than when fed on any kind of raw food. I copy from a circular published by the Chicago Steam Cooking Feed Company some of the advantages of cooked food for horses :

“1st. Many horses are so voracious and eat so rapidly that they do not properly masticate their food; and, in other cases, the grain is too hard to be properly masticated.

“2d. It is estimated that more than one-half of the diseases which afflict horses are induced by the use of uncooked food, and its bad effects upon the digestive apparatus.

“3d. The hard, flinty covering of raw grain can neither be properly ground by the teeth, nor is it soluble in the stomach, and most of it passes from the stomach undigested.

“4th. All energy expended in attempts to assimilate certain parts of raw food is just so much waste and positive loss.

“Among the advantages of using properly cooked food for domestic animals are the following :

“1st. Cooked and ground food is much more palatable for the animal, and is very easily masticated.

“2d. The hard, dry covering of grain, when it has

been steamed and ground, becomes as nutritious as any part of the grain, and adds just so much to its food properties.

“3d. The entire grain is digested, and no portion of it wasted; nor is there any loss in efforts of the stomach to do the work of the cook and the grist-mill.

“4th. The loss in feeding raw grain is changed to gain in the cooked food, a smaller quantity of the cooked grain giving a larger proportion of animal strength.

“5th. The primary cause of much illness and derangement of digestion in animals is removed by the use of properly cooked food.”

It seems to the writer that cooked food is especially important to horses having weak digestion, and for old, enfeebled horses. When a horse is off his feed by overheating or want of proper exercise, the better way is to reduce his usual quantity of grain one-half for three or four days, or a week, when he will eat again as well as ever.

I here give Mr. Bonner's system of feeding:

“In the morning, at five o'clock in summer, and six o'clock in winter, each horse is given two quarts of oats. At nine o'clock two quarts more are given, and the same quantity is given again at one o'clock. Before feeding, each horse is given all the water he will take, unless he is to be driven, in which case the allowance is cut short a little. At five o'clock in the afternoon the allowance of hay is given, usually about ten pounds to each horse; and none is given at any other time during the twenty-four hours.

“At nine o'clock in the evening each horse is given

a warm supper, prepared as follows: For the ten horses twenty quarts of oats are put into a large kettle, and boiled, after which is added about the same quantity of wheat-bran by measurement, with the proportion of a tea-spoonful of salt to each horse. The whole is thoroughly mixed, and when sufficiently cool, each is given his share.

“If not driven, each horse is walked from half an hour to an hour daily, and the greatest care is taken not to expose them needlessly without blankets.”

The following is the routine pursued with Dexter:

At six every morning Dexter has all the water he wants and two quarts of oats. After eating, he is “walked” for half an hour or more, then cleaned off, and at nine has two quarts more of oats. If no drive is on the card for afternoon, he is given a half to three-quarters of an hour of gentle exercise. At one o’clock he has oats again, as before, limited to two quarts. From three to four he is driven twelve to fifteen miles, after which he is cleaned off and rubbed thoroughly dry. He has a bare swallow of water on returning from the drive, but is allowed free access to his only feed of hay, of which he consumes from five to six pounds. If the drive has been a particularly sharp one, he is treated, as soon as he gets in, to a quart or two of oat-meal gruel; and when thoroughly cooled has half a pail of water and three quarts of oats, with two quarts of bran, moistened with hot water. Before any specially hard day’s work or trial of his speed, his allowance of water is still more reduced.

It is a very bad practice and one that should never

on any condition be permitted, for grooms or teamsters to give any kind of medicine, either for tonic or diuretic purposes. Many a fine horse is completely ruined by ignorant grooms and owners, who think they can help nature by giving Nitre and other strong medicines, that are never admissible except in certain emergencies, and then should be given only very cautiously. I am satisfied that many veterinary practitioners give not only too much but too strong medicine, which, though of apparent advantage for the present, must ultimately result in serious harm to the health of the horse. Clean, good food, properly prepared, and given in quantities according to the needs of the animal, is safer and better than to be giving medicine for every little change of condition.

If the horse is out of sorts, overfed in proportion to his work, becomes dainty, or the depurative processes are obstructed by the feeding of too much or of too highly concentrated food, let up on the grain, and feed more bran-mashes or green food.

Old horses that are not feeding well, or are running down without apparent cause, should have the teeth carefully examined, as sometimes the horse can not grind his feed. The simplest way of making an examination, is to catch the tongue, and, with the hand closed, let its under part rest upon the lower jaw with the end of the thumb forced upward against the roof of the mouth. This will compel the horse to keep his mouth open, so as to enable looking into it, or passing the hand far enough back to examine the teeth. If they are found to be the cause of the trouble, they should be filed down.

WATERING.

If a large quantity of cold water is taken into the stomach while the system is agitated, by the circulation being so increased as to open the pores of the skin freely, it is liable to chill the stomach and close the pores of the skin, and thus excite some one of the common alimentary derangements, as colic, or inflammation of the bowels, etc. Hard water, especially cold well-water, is more liable to cause mischief in this way than soft water. Hard water will affect some horses so much as almost immediately to cause the hair to look rough, and derange the appetite.

Horses that are raised and worked in a country where the water is strongly impregnated with lime, are troubled with intestinal calculi; *i. e.*, stone in the bladder. Hence soft water should be given if convenient; but if well-water be given, especially during warm weather, it should either have the chill taken off or be given very sparingly.

The best time to water a horse is about half an hour before feeding. While driving, the rule should be, little and often. None, or only a swallow or two, should be given at the close of a drive, until cool. If very warm, the horse should be walked moderately, where there is not a current of air to strike him, from ten to thirty minutes. If any danger is then apprehended, the chill should be taken off the water if very cold, and given sparingly, or only a few swallows at a time. The common custom is to give about a half bucketful. The safer course would be to give less, and repeat.

The rule for ordinary use should be, to give a small quantity often during the day, and let the animal pursue his journey or labor immediately after. If allowed to stand, the system is liable to be chilled, and the absorbents closed, which is the common cause of laminitis or founder, although this disease may not develop itself until twelve or twenty-four hours afterwards. Any cause which will chill the horse—either cold winds or cold water—will be almost sure to produce this disease.

DISEASES AND THEIR TREATMENT.

INFLAMMATION.

Inflammation is an increased action of the blood-vessels. The consequence is an increased amount of blood to the part.

1. The Heat. This is an invariable symptom, being always present to a greater or less degree. It is produced by the more rapid oxidation going on, consequent on the increased quantity of blood circulating in the parts immediately surrounding.

2. Redness is due to the increased determination of the blood to the part, the distension of the hitherto invisible capillaries with red blood, and sometimes, when extensive, to the extravasation of blood from the bursting of the thin walls of the vessels.

3. Pain. The pain in an inflamed part is almost the first and most characteristic symptom. It is due to the tension of the tissues, and implication of the nerves and nerve-centers. The degree of pain varies according to the seat of the inflammation and

the degree of its intensity. The more sensitive the part, the more painful will it be under inflammation. Thus, it is sharp and cutting in inflammation of serous membranes, dull and gnawing in diseases of bones, and burning in inflammation of the skin. When matter is forming, the pain becomes throbbing and intense.

4. The swelling is due to the vascular engorgement and the exudation of serum in the first place, and afterwards the formation of fibrine; and in the latter stages to the development of matter. The other concomitant symptoms of inflammation will be noticed when we come to treat of local inflammations or inflammation of particular organs.

Inflammation, though regarded as a disease, is the principal agent which nature employs in repairing or rebuilding parts which have been injured by accidents or disease. Thus, when a fracture has taken place the ends of the bones have to be united, inflammation is set up, lymph is thrown out around the fractured ends, small capillary vessels soon shoot into the coagula, from which bony particles are deposited, and thus, by a process of inflammation, the continuity of the parts is restored.

Inflammation is often made use of to cure diseases and remove callous enlargements. Thus, when a thin, opaque film is left on the eye, from a blow or otherwise, a stimulating wash is injected to set up inflammation, to cause blood-vessels to shoot into it, and remove it by absorption. We blister callous enlargements for the same purpose. It will thus be seen that inflammation in many cases becomes a remedy instead

of a disease, and is in all cases a necessary and natural process for the repair of an injury.

When a part presents the appearance of inflammation, becoming red, hot, tender, and swollen, and after a time these appearances subside, without producing any alteration in the structure or functions of a part, it is said to have terminated in resolution. When two cut surfaces are brought together, and exudation takes place, and the surfaces are united, as in the healing of a wound by the first intention, it is called adhesion. When an inflammatory tumor, as that of strangles, or "horse distemper," at first hard, hot, and painful, goes on, softens in the middle, points, and bursts, discharging a thin, irritating pus, mixed up with the *débris* of the tissues in which it is formed, floating in serum, and bursts, discharging a yellowish, creamy fluid, called pus, it is said to terminate in ulceration.

Gangrene or mortification—that is, the entire death of the whole or part of a tissue—is apt to occur when the inflammation has been sudden and violent. When this has occurred, no recovery can take place, as the blood-vessels and tissues are destroyed. The part generally becomes cold, the color becomes blue or purple, a fetid moisture covers the surface, and noxious gases are evolved. There is always a red line of demarkation between the dead and living tissues; and if the constitutional depression which generally accompanies it does not produce death, this red line becomes converted into pus, and the dead part is removed by a process called sloughing.

General Treatment.—We will now merely notice the general principles to be observed in the treatment of

inflammation, leaving the treatment of different parts till we take them up in their proper place. Our first thought must be to inquire into the cause of the inflammation. That being found and removed, the effects will soon cease, without which a cure can not be established. Matter may be forming in the foot, indicated by intense heat, pain, and great lameness. We may foment or poultice, or do what we may, the removal of the faulty nail must be the first step in the cure; and that done, we will be able to attain our object by comparatively slight means.

The remedial treatment may be divided into local and constitutional.

Local Treatment.—Our object is to produce resolution if possible. This will be best done by placing the patient in a cool, comfortable box. He must be secured, so as to give the inflamed part complete rest; and then the constant and copious application of cold water, cooling lotions, and freezing mixtures will retard and often arrest the inflammatory process. Cold, to be of any service, must be kept up for several hours; otherwise the reaction it produces will do more harm than good. Should this not arrest its progress, and the inflammation becomes accompanied by pain and throbbing, heat must be substituted. Hot fomentations and poultices soften and relax the tissues, thus encouraging the formation of matter, which, when matured, must be opened and allowed to escape.*

* This is the course adopted by practitioners in general, but in my practice I use a different method. If I find inflammation located in any limb, or portion of a limb, if it comes from a bruise I give Acon. 2x, in alternation with Arnica 3x; or if it comes from a sprain, Rhus Tox. 3x, say ten drops of each, once an hour until better, then less often.

CONGESTION OF THE LUNGS—PLEURISY—INFLAMMATION OF THE LUNGS.

When a horse is exposed to cold, or to conditions which derange the circulation, such as changes of temperature, especially after severe exertion or exhaustion, standing in a current of cold air, etc., by forcing the blood from the surface of the body to the internal organs, it will in most cases go to the lungs and surrounding parts, when it would be termed pleurisy, pneumonia, or congestion of the lungs, with possible complications with other parts.

This is so common and fatal in its effect, if neglected or not treated properly, that it is very important to have the nature and treatment made so simple and plain to owners and stable-keepers that, in the absence of competent professional aid, they may easily understand and combat it successfully during its incipency, when it can as a general thing be easily managed. We will first briefly consider the structures involved in pulmonary affections. The wind-pipe (trachea), after entering the chest, divides into the bronchia or bronchial tubes. These divide and subdivide into smaller tubes, finally terminating in the air-cells. The lungs are made up of clusters of these cells, of a large mass of pulmonary texture, called the parenchymatous structure or substance of the lungs; of blood-vessels, both functional and for the nutrition of the organ; of

If the swelling refuses to subside, apply a slippery-elm poultice, with two-thirds coarse flour, and give internally Hepar Sulph. 3x every hour. When it points, lance the swelling, and continue the poultice until it is ready for a healing salve. Where inflammation exists, in no case do I ever use a cold application, but instead heat and the application of Cream of Pharmacy.

nerves and lymphatics; and the whole inclosed in a serous membrane called the pleura, which is made up of two portions—one portion being reflected over the lungs (pleuro-pulmonalis), while the other lines the inside of the ribs and diaphragm (pleuro-costalis). The lungs are exceedingly light in proportion to their size, and are vascular organs; consequently they are very liable to diseases of an inflammatory character, and the precursor of inflammation is congestion. A good idea of the circulation in these parts can be obtained by an examination of Magner's excellent work on the horse, published at Battle Creek, Mich.

Bronchitis is inflammation of the lining membrane of the tubes of the lungs and lung-cells, and is frequently connected with lung difficulties. Pleurisy is inflammation of the pleura or serous membrane which covers the lungs and thoracic cavity. Pneumonia is an inflammation of the lung-tissues, or parenchyma of the lungs. If we had bronchial pneumonia, we would have an inflammation of the lining membrane of the tubes and the parenchyma of the lungs. If we had pleuro-pneumonia, we would have an inflammation of the pleura, or membrane, and the parenchyma, or tissue, of the lungs. Congestion of the lungs consists in an increased determination of blood to the capillaries of the air-cells. When one or the other (right or left) lobe of the lungs is so engorged with blood forced into them that they are unable either to receive or discharge blood in proper quantities, it thereby interferes materially with the process of respiration, and consequently, if allowed to go too far, it will cause direct suffocation and death. It may exist as an independent

disease, or accompanying other affections of the chest. The distinguishing symptoms of each, with treatment, will be given farther on, in order to simplify the treatment. I refer, next, to the nature and effect of inflammation. It is first an increased action of the blood-vessels. The consequence is an increased amount of blood to the part. The next change to take place is a collapsed condition of the walls of the vessels. Now there follows an enlargement of the blood-vessels; then the blood passes the walls of the vessels through the tissues outside of the vessels. The next change is the breaking down of the cellular tissues—normal cells; next a rapid growth or proliferation of abnormal cells. To go through: If an external injury, for example, there would be, first, pain caused by the pressure upon the nerves. The heat following would be caused by the chemical changes that are going on within the part. The redness is due to the passing of the blood from the vessels into the tissues; the swelling is due to the breaking down of normal cells and the rapid formation of abnormal cells. The object in all cases, whether internally or externally, is to equalize the circulation as quickly as possible.

There are two methods of treatment. If we know the cause—as, for example, the animal having stood in a draught of air or been exposed to cold, chilling weather—alcoholic stimulants would be the best treatment, not only giving alcohol internally, but rubbing it on the legs and over the body with warm blankets.

Rub elbows and hocks to feet, by hand-rubbing or brushes, rubbing quickly, and cover with warm flannels. If not successful, or if inflammation, before

explained, sets in, there will be now a rapid rise in temperature, when there may be a strong, rapid pulse, nothing but the proper medicine would be required, and keeping the animal warm. Aconite has stood the test for years with Phosphorus in this disease, given in alternation, 2 to 3x of each; after this, Tart Emet. 3x, and Kali Bich. 6x, will be in place. In the early stage of the disease, external means of irritation may be freely used with good results; but are not admissible when the disease has thoroughly set in, as they only aggravate the trouble. If the pulse is weak, and the animal spreads out his legs to enable him to stand steady, and if it is difficult for him to breathe, Apis 3x, Ars. 3x, also Sulph. 30x, given singly, or the two latter in alternation, would at this stage do good service. The termination of inflammation will be either resolution—that is, a clearing of the lungs, or what is known as a hepatized state—or a breaking down of the lung-tissue, which may develop into an abscess, or tubercles, or gangrene, or death of the lung-tissue. Great care should be taken of the animal at this stage of the disease.

If ammonia arises from bedding in stable, it should be neutralized by sprinkling on a little chloride of lime; too much of it would have an aggravating effect upon the mucous membrane.

CONGESTION OF THE LUNGS.

Symptoms.—It is first noticeable by the horse having a severe chill or shivering fit. He refuses his food, hangs his head between the fore legs or upon the manger, will not move or lie down; breathing quick,

panting-like. The nostrils are expanded, the head thrown forward; the countenance expresses pain and great prostration. The pulse is sometimes full and quick, but generally quick and weak, scarcely perceptible; the membrane of the nose and eyes bright red, tending to purple; ears and legs are very cold, with a cold, clammy sweat at the extremities.

CLINICAL CASE, No. 6.—In the winter of 1878, while practicing at Durand, Wis., a man rushed into my office, laboring under terrible excitement, exclaiming: "Doctor, I have a very sick horse. Can you do any thing for him?" I said: "Yes, I can do something—either cut off his head or set his leg, should it be necessary. What is the matter with the animal?" He replied: "I live south of the village about seven miles. Yesterday I drove my team to Wabasha, and on my return home I discovered that the horse needed much urging to get him through. The horse did not eat anything last night nor this morning. I arrived here with a small load of potatoes. Come to the stable and examine the horse. The hotel-keeper has just informed me that you are first-class in understanding horse diseases. I had forgotten to tell you that when in Wabasha I failed to blanket him, and he stood exposed to a keen, biting wind for some time."

On making an examination of the sick quadruped, I found him with a high, thready pulse, temperature in the extremities low. He had sweat some, and now had violent pulsations of the heart, and difficulty of breathing; also rattling of serum in the lungs. I prescribed Acon. 2x, Phos. 3x, and Tart. Emeticus 3x; put them each in half-ounce vials (in a weak solution of alcohol), numbering them one, two, and three; gave the owner a glass dropper, and told him to give it two-thirds full of the remedies, beginning at No. 1, and administer a dose every half hour, until he had given two doses of each; then the doses an hour apart. Ordered the animal to be well covered up with blankets, and to have his legs rubbed down until the circulation of the blood was discernible, and promised I would call again and see

him in the afternoon. Called at the appointed time; found the patient doing well; ordered him to have a warm bran-mash. Making a further examination, I found his pleura affected, and a sudden jerk in the breathing. Prescribed Bry. 3x, in lieu of Phos., and requested that the medicines be given as before; viz., once an hour. Called late in the evening, and found that the horse had eaten his mash and was doing well. Ordered the medicines continued all night, and the horse kept warmly blanketed. Also recommended that he be given a good straw bed. I visited the animal in the morning. He had lain down about daylight, and, when feeding time came round, he seemed anxious for food. Indeed, the disease which threatened (inflammation of the lungs) was entirely aborted, leaving only a little huskiness in the bronchial tubes, which the medicines would relieve. The man was very much pleased, and when the team had been fed he was ready to start for home. I told him to give the first three medicines alternately every three hours for a few days, to be careful of him, and he would not be troubled with cough in the slightest.

CLINICAL CASE, No. 7.—In the spring of 1877, while practicing at Durand, Pepin County, Wis., I was called upon by the father of a family, whom I was in the habit of treating, who informed me that one of his best horses had been taken down sick, and he feared the animal's death. The gentleman was extremely anxious, and inquired of me if I could render any medical aid. He was a small farmer, residing about two miles from the village. I went with him, at his earnest request, to see the horse. I found the animal in a high state of fever, pulse high, great difficulty of breathing, and hanging his head low. He had engorgement of the lungs, together with a short, hacking cough. I found that the day previous he had been driven over a wet, sloppy road to Eau Claire, a distance of thirty miles; on his return home, he had not been properly attended to. I ordered the horse to be well blanketed, and prescribed Acon. 2x, ten drops to be given (which was administered from a thimble turned up on the tongue); Phos. 2x, ten drops given the same way; and Tart. Emet. 3x, also ten drops. These medicines were to be given in alternation every half hour, until four doses of each had been

administered; afterwards the same medicines were ordered, all of the third potency, and five drops of each taken in alternation every hour. I left, with a promise to call in the morning.

On the forenoon of the next day I visited the farm again, and found a decided improvement in the animal's condition. He held his head higher, breathed much better, and was perspiring freely under his cover. He had eaten a half pailful of bran-mash, and drank considerable warm water. I prescribed Phos. 3x, Tart. Emet. 3x, and Bich. Potas., to be given in alternation every hour for six hours, and afterwards every two hours; of the above I ordered five drops of each to be given from a thimble. I requested, when leaving, that some one of the family inform me the next day as to the animal's condition.

On the morrow the gentleman came to my office, and said that the horse was much improved. He had eaten another bran-mash, had drunk largely of tepid water, and was apparently doing well, only he thought that the animal had more cough. I prescribed Phos. 3x, Arsenicum 3x, and Sulph. 12x, five drops of each, to be given, as usual, in alternation every two hours. This course speedily wound up the disease, and the horse was saved from death, much to the gratification of his owner.

CLINICAL CASE, NO. 8.—In the winter of 1878, while practicing at Durand, Wis., a young man from the hotel (accompanied by a farmer) rushed into my office. The young man said: "Doctor, do you know anything about horses?" "Yes," I exclaimed, "I do know a good horse when I see him; but, really, I am not in want of an animal at present." He then said: "Do you doctor horses?" "Yes," I replied, "occasionally." He at once inquired if I would go and visit a sick animal belonging to the farmer, who was from Mondovi, and stopping at the hotel. I went with the man, and found the horse standing on the barn floor, his head drooping low, pulse high and wiry, accompanied with great difficulty of breathing. The owner said that he had driven him from Mondovi with a heavy load. He stopped along the way at a farm-house, watered the animals, and then went in and had a chat with the people. When he got back to the team he discovered that there was something the matter with one

horse. I prescribed Acon. 2x, and Phos. 3x; put the medicines in two half-ounce bottles, in a weak solution of alcohol, numbering them one and two; gave him a glass dropper, and told him to give it nearly full every half hour, until he had given three doses of each; then, once an hour, one-half of the above quantity; to administer the remedies until the animal improved or commenced to eat; then he might not give the medicine until I called in the morning. I went about eight o'clock the following day, and found the horse very much better; but, on examination, his bronchial tubes proved to be husky. I prescribed Phos. 3x, Tart. Emet. 3x, putting them in half-ounce bottles the same as before, and ordered them to be given, as previously mentioned, for twenty-four hours, once in two hours alternately; afterwards two or three times per day; and if he did not recover, to let me know. I stated to the owner that the animal would probably have some cough. The horse recovered in a short time, and the farmer was much elated, and unbounded in his thanks for the rapid cure which I so successfully made.

PNEUMONIA—INFLAMMATION OF THE LUNGS,

As before explained, is inflammation of the substance of the lungs.

Causes.—It is often a sequel of neglected or improperly treated catarrh. It may also, as stated, be accompanied by pleurisy. A frequent and, we may say, the most common cause, is exposing the horse, while warm, to a sudden change of temperature, by allowing him to stand in a cold draught of air, etc.; getting chilled or wet; washing the belly and legs in cold water immediately after exercise; removing from a warm to a cold, or from a cold to a warm stable; or cold applied to the surface of a heated animal, by which the blood is driven from the skin and extremities to the internal organs. Any slight cold or sore throat may run into pneumonia. Driving rapidly against a cold

wind, especially after being confined to the stable for some time, is a common cause, and a horse should be watched carefully after such an exposure; also breathing impure air in overcrowded, badly ventilated stables, or standing in an open, draughty stable.

“Horses kept in ill-ventilated stables are undoubtedly rendered susceptible to many diseases, and to pneumonia among the rest; but they will bear impure air even better than cold draughts blowing directly upon them. I have repeatedly observed that the slightest cold contracted by a horse kept in a draughty stable has almost invariably been succeeded by pneumonia, and that if the animal was not removed to a more comfortable situation, the disease tended to a fatal termination.” (Williams.)

Symptoms.—Pneumonia is almost invariably ushered in by shivering, and coldness of the surface of the body. The breathing becomes hard and full—panting like. The pulse is full and oppressed, running up from sixty to eighty beats per minute, differing in its character from the pulse of pleurisy, which is hard and wiry. The ears and legs are cold; the membranes of the eyes and nose are reddened; the animal stands persistently with his elbows turned out, to give more freedom to the lungs. He stands with his nose towards the window or door, where he can get fresh air. A healthy horse breathes at an average of ten times in a minute—viz., ten inspirations and ten expirations—and the time occupied by the inspiratory movement is longer than the expiratory. In pneumonia the expiration is as long as, if not longer than, the inspiration, and these movements are very

much quickened, being an effort of nature to compensate for the impaired action of the lungs. When a cough is present it is freer and less painful than the cough of pleurisy. By applying the ear to the sides of the chest, in the early stage, a crepitating sound is heard, which becomes altered as the disease progresses; but in a general sense, it is easily distinguished by the horse standing with the legs spread, the head thrown forward, breathing quick and hard, and ears and legs cold.

CLINICAL CASE, No. 9.—In the year 1878, while practicing at Durand, Wisconsin, I was called upon at my office by Mr. R. F., a well-to-do farmer. When he came in he said: "Doctor, I understand that you sometimes doctor horses. I have a valuable generating horse; I do not know what ails him. He has been given various kinds of medicines, but, with all that, he gets no better. Would you have the kindness to go and see him?" I told him I would, just as soon as I was through with my morning calls. I had to travel some two miles and a half. When I arrived at the barn, I found a very fine-looking animal, and, I readily supposed, one that was very valuable. I noticed at once that it was a case of pure inflammation of the lungs, and very far advanced. The pulse was not very high, but weak; the horse was standing with his fore legs spread out; his heart was beating violently, and he was also laboring under great difficulty of breathing. I could hear mucous rales from the bronchial tubes and lungs, with a violent cough, causing him to expectorate large quantities of mucus. I prescribed Phos. 3x, Ars. 3x, and Digit. 3x; put them in half-ounce bottles in weak alcohol, to be given in alternation every hour; ordered him to be fed sparingly, and given a warm bran-mash; also warm drinking-water, and to have the treatment kept up regularly until my return next day. I returned next day in company with a friend. The pulse was stronger and more of a normal condition. The extremities under the bandages (which had previously been applied) were

much warmer; but, notwithstanding the great improvement visible in the animal's condition, the man seemed much discouraged, declaring that my medicines were not strong enough. I tried to assure him that the horse was doing well, and if he would obey instructions would come out all right. I prescribed Kali Bich. 3x, in lieu of Ars., and promised to return next day. However, about an hour or so before the time arrived to go out to the farm, I received information that the man had given away the animal to his brother, who gave the horse powerful doses of medicine, and in forty-eight hours' time his newly acquired property lay cold in death.

CLINICAL CASE, No. 10.—In March, 1880, while practicing at Durand, Wis., I was called upon by a farmer residing at Modena, Buffalo County. He said that his horse, several weeks ago, had contracted a violent cough, but he concluded yesterday that, there being nothing to prevent him, he would drive to Durand with a load of grain. However, before he got to the village he noticed that the animal's cough became more violent, and when ascending a steep hill, he found him unable to pull with the other horse. He placed him in a hotel barn last night, and he was given his customary feed; but he only partook of a portion of it, and this morning he seemed very bad. The hotel-keeper, he said, had urged him to come and see me. I went with the man to the stable; found the pulse high, indicating a great deal of fever, and the left lung nearly solid; his head low down; an occasional spasmodic, hoarse cough, but no discharge. I prescribed Acon. 2x, Phos. 3x, and Tart. Emet. 2x; put them in half-ounce bottles, in a weak solution of alcohol; gave the farmer a dropper, and requested him to fill it half full and turn on the tongue every half hour, until he had given three doses of each, and then once an hour. Told him to see me in the afternoon and report progress. I said to him that he had better blanket the animal, and give him warm drinks.

In the middle of the afternoon he came to my office and stated that the horse breathed freer, but some mucus followed the cough. He asked me if I thought he could take the animal home that night. I remarked, "No," that he would do well if he

drove the horse in forty-eight hours; then, again, he would have to exercise great care or he would certainly lose him. I went to see him late in the evening. The fever was down, the pulse more normal, and the heart's action much stronger. I took off the Acon. and gave Kali Bich. 3x, and Sulph. 6x, in place of Tart. Emet. Ordered him a small bran-mash (if he would eat it), and to have his three medicines given every hour, alternately, during the night, unless he lay down; when he got up on his feet, to commence the medicines again. I called again in the morning to see the horse, and he was much improved; his cough was not so bad, but there was more expectoration of a stringy mucus, which looked bad. I noticed considerable air passing through the left lung. He breathed easier, and had slowly eaten his entire bran-mash. I requested the man to continue the same medicines until noon, and give him warm water to drink; then offer him at noon a small bran-mash, and in the afternoon give his medicine once in two hours.

I visited the horse at nine in the evening. Took him out of his stall, when he coughed, and passed a large amount of mucus after the violent spell was over. The left lung was clearing out nicely, but the horse seemed very weak. The farmer inquired if I supposed he could get away on the morrow with his horse. I said: "It is possible, if the animal still continues to improve in the future as rapidly as he has in the past." I asked him if he had any load to take back, and he said: "No, nothing but a few groceries." I told him, then, I supposed that he could go, but advised him not to start too early. In the morning about nine o'clock he called at my office, and I went with him to the stable, and made a thorough examination of the sick animal. His eyes seemed bright, pulse and breathing about normal, and the cough much easier, but he discharged considerable mucus. However, on the whole, I judged that he was almost convalescent. I told the farmer that in removing the horse he ran considerable risk, but advised him to lash the whipple-tree of the other horse and drive carefully; should he notice the animal getting fagged out, to stop at once, else he would be sure to lose him. The farmer paid my charge, and went away much satisfied. I saw him some time afterwards, and he said the horse was well and hearty. The

farmer used highly complimentary words, awarding me much praise for my skill in curing the quadruped.

CLINICAL CASE, No. 11.—While practicing at Durand, Wis., in the year 1877, my attention was one morning directed to a horse coughing in a very violent manner. I went up to the owner of the animal and said to him: "Your horse seems to be affected with an exceedingly bad cough." "Yes," the man replied, "I wish that was all the ailment. I have had considerable difficulty to get him to town. I should like you to examine the animal, and if you know of any remedies suitable to his condition, let me have them." I carefully examined the horse, and found him to have a weak, thready pulse; he seemed very much exhausted, with great difficulty of breathing, and the left lung showed itself to be in a state of ulceration. I said to the man, after duly making the examination: "You must observe due caution and care, or you will, without a doubt, lose the animal. I can give you remedies that will prove efficacious, and certainly cure him, if you will follow out my instructions to the letter." He promised to do so. I prescribed Ars. 3x, Kali Bich. 3x, and Tart. Emet. 3x, put up in half-ounce vials, and provided him with a dropper. He was instructed to give the dropper from a half to two-thirds full every hour, and afterwards every two hours. I advised him to get the animal home as soon as possible without driving him very hard, and, when he had him stabled, to feed sparingly, giving warm bran-mashes; not forgetting a good warm bed at night. I told the owner to call upon me at the expiration of three days and report progress. At the close of the time before mentioned he made his appearance, reporting the horse as doing well under the treatment. I prescribed Phos. 3x, Sulph. 6x, and Kali Bich. 3x. I directed the man to continue careful treatment, giving the animal medicines every two hours, and report in three or four days. However, he did not call until some ten days afterwards. He said he had followed instructions minutely, with marked benefit to the horse; in fact, he considered the animal almost well. Some three days previously he said that he had traded him away to a neighbor, who worked the animal very hard, hauling railroad ties through

deep snow, and from such rough usage he died. I lectured him soundly, and remarked that he deserved punishment for cheating his neighbor in such a gross manner; he had done very wrong; that if he had taken care of the horse he would have been all right.

CLINICAL CASE, NO. 12.—During my practice at Durand, Wis., in 1880, a man came to my office and said that he had a valuable mare very sick. He wanted to know if I could do her any good. I observed to him: "If you can describe the symptoms, I think the animal may be helped." He replied: "The first symptoms noticed were yesterday; she seemed stupid and disinclined to perform her share of the work; she seemed to breathe very hard." Arriving at the conclusion that she had taken cold while in the stable, he began searching for openings, and finding several, he naturally supposed that the trouble arose in that manner. He said he observed some bloating behind her fore legs. He wished me to see the animal at once. I replied, to do so at the present was an impossibility, but I would endeavor to make a visit next day in the afternoon, and in the meantime would supply him with necessary medicines. The sick animal was a very fine one, and he was very anxious to save her life. I prescribed Acon. 2x, Phos. 3x, and Tart. Emet. 3x, in half-ounce vials, put up in a weak solution of alcohol. I gave him a dropper; told him to get back to the mare as soon as he could; give her the dropper nearly full of each remedy alternately every half hour, until he had given her two doses of each, then half the full of the dropper would be sufficient, once an hour; cover the animal with a blanket; furnish her with good bedding, and as soon as she showed a disposition to eat to give her a warm bran-mash, and I would come and visit her next day, some time during the afternoon. I arrived about four o'clock. As soon as I saw the owner he exclaimed: "Doctor, I am glad to see you." I said: "How is the patient?" He replied: "She is much better; her breathing is not so hard, and the swelling has subsided." Stepping up to the animal I made a thorough examination, and found that her symptoms had been properly stated. I did not observe any enlargement of the sides,

but she had a short catch in her breath, which I judged came from the pleura on the left side. Her pulse was full and somewhat soft; her eyes looked by no means bad; her head hung down, and she had a severe cough, with but trifling expectoration. I prescribed Bry. 3x, Tart. Emet. 3x, and Sulph. 6x, to be given two hours apart with a dropper, as before. I drew his attention to the catch in the animal's breathing, and told him to report in forty-eight hours, and let me know if that symptom still continued, and, if it did, I would change the remedies.

When the time had expired he came into my office and said the trouble still remained, but otherwise the animal's condition had much improved. I prescribed Cal. Carb. 3x, Phos. 3x, and Sulph. 6x; ordered him at the expiration of two days to substitute Tart. Emet. for the Sulph. (which he had at his home); warned him to be very careful of the mare; give her light feed; and should her symptoms grow worse, to come immediately to my office and report. Some ten days afterwards he came to see me, stating that the animal was entirely well. He was much pleased to know that I had saved the life of a very valuable animal. The owner spoke in high terms of the treatment I adopted, remarking that I had exhibited marked skill in the case, and his gratitude was unbounded. Before leaving, he remunerated me for my services, and left the office, well pleased with the system of homeopathy.

NOTE.—From an extended experience for the last twenty years, I am convinced that in the early stages of pneumonia or inflammation of the lungs either in the horse or any other animal, Acon. Nap. 2x to 3x, and Phos. 2 to 3x, in solutions of alcohol, given in the proper doses, are remedies of the greatest importance. Indeed, as I have previously remarked, they will invariably arrest the progress of disease in the lungs and bronchial tubes. These two medicines did so in the above case. Then the next thing to be done was to clear the before-mentioned membranes with the

pleura on the left side of the deposits, left there by the progress of the inflammation, or, more properly speaking, the separation of the blood. It is principally, I judge in the air-cells and engorged capillaries. These deposits in the above case thickened the air-passages, thus causing the animal to cough. The inflammation being stopped, Acon. Nap. was not in place; then I gave Bry., Cal. Carb., and Tart. Emet. The two former are strong absorbents, and the latter softens the tissue involved and prevents paralysis of the lungs. Phos., Sulph., and Kali Bich. were then exhibited, as indicated by the state of the cough and expectoration. The animal became well when the membranes referred to above became clear of the deposits. It should always be borne in mind that nature in all diseased systems is constantly endeavoring to restore to health, and if we can but understand her calls for help, with the proper remedy at command, we will invariably succeed.

CLINICAL CASE, NO. 13.—In the year 1876, being then engaged in practice at the town of Durand, Pepin County, Wis., I received a call from a man, who claimed to be well skilled in treating diseases of the horse. He said that he was attending a young animal, which he described as very sick, and gave the following symptoms: Pulse high, stands with head down and legs placed well out. He observed that the stable was a very poor one, being open and consequently cold; therefore he feared that inflammation existed. At length he said: "Doctor, I wish you to assist me with the case; please to inform me of the remedies required." I replied: "From the symptoms you have described I should say that the animal is suffering from inflammation of the lungs; but in order positively to ascertain this condition, when you again see the animal make an examination of the chest immediately behind the fore legs, and find out if there is any

enlargement; also pulsation when breathing; place your ear on the lower portion of the chest, and listen if you can detect air passing through the lungs. Notice the lower part of the throat opposite the front of the chest, and find out if wind is passing through the bronchial tubes; also if it has a screechy, rattling sound. These symptoms, in conjunction with the other ones previously mentioned, indicate, beyond the shadow of a doubt, that the animal has contracted inflammation of the lungs. You will, in all probability, find the pulse very irregular in its movements; if so, the disease is well advanced. This being the fact, you should give Acon. 2x, together with Phos. 3x; dose, half to two-thirds of a dropper full in a weak solution of alcohol every half hour, until you have administered two or three doses of each; then afterward give the same quantity once an hour. I would advise, after the expiration of four or five hours, to add Tart. Emet. 3x, giving the medicines alternately every hour. Should you find violent action of the heart, give an occasional dose of Digit. 3x." He went away with these directions, and had he followed them implicitly, the animal would have regained its usual health. Some two or three days afterwards he returned and said: "Doctor, I went to visit the horse immediately after leaving your office. I thought there was some enlargement of the sides of the chest, but could not hear air passing either through the lungs or bronchial tubes. I gave him the medicines as directed for about three hours, then I found the animal lying down, his heart beating in a violent manner." I told the owner that the horse had heart disease, and would surely die. I said to him: "I fear you are mistaken. Why did you not continue the remedies? For, if you had done so, I feel assured that you would have saved the animal." Some ten days afterwards I met the owner of the horse on the street. I said to him: "Well, my friend, how is that sick animal?" The man replied: "He is dead. Mr. X., who was attending him, said he had disease of the heart; but, wishing to satisfy myself, I made a post-mortem examination, when I found both lungs in a solidified condition, and filled with serum." I told the man I felt exceedingly sorry for the loss he had sustained, and advised him in the future, should he require medical aid, to employ some one who understood animal treatment.

NOTE.—In the above case, if the man had properly understood the circulation of the blood, and the fact that both lungs were hepatized or solid (as the post-mortem revealed), he ought to have discovered the heart was unable to force the blood through the pulmonary artery into the lungs, there to be oxygenized by those organs; he should have vigorously sustained the heart's action by giving *Digit. 3x*, or *Cact. G. 3x*, until he could have had time to free the lungs from some of their deposits. With the indicated remedies, he would have saved the animal and the owner from a severe loss. I have frequently known men and women to die under precisely similar circumstances, owing to the ignorance of the practitioner in attendance.

TYPHOID PNEUMONIA.

Symptoms.—Typhoid fever in the horse is precisely the same as in the human body, and its symptoms are all the same, with this difference, that the membranes of the nose and eyes, after the disease is really established in the system, become markedly of a bright-red color, hence by some authorities called "Pink Eye" in the horse. The animal does not want to eat, is not inclined to lie down; he breathes quick, and occasionally draws a long breath as if oppressed; pulse generally full, from 65 to 75; holds his head down; fauces are hard and dry, and soon become coated with mucus. He appears stupid, and is not inclined to move. The arteries in the forehead will be found to pulsate strong, and after some days there will be discharges from the nose, and the legs soon begin to swell.

Young horses are more liable to be affected with the disease than old ones. After carefully examining an animal in the condition referred to, you will be ready to exclaim, "Really a fine horse; but now he is terribly sick!" The treatment of this disease in the horse ought to be, I am satisfied, just the same as with the human, and would be just as successful if equally attended to. I have had but little experience with it, however, in the horse, and have only one clinical case to give, and with that one, the owner, after the fourth day, took the horse out of my hands, by the advice of a druggist, and, of course, his horse died.

CLINICAL CASE, No. 14.—While practicing at Durand, Wis., in the year 1878, I received a call at my office from a man who resided some two and a half miles from town. He came to me stating that his horse was in a low condition, and therefore he wished my attendance. I told him that it was impossible for me to go at once on account of a press of business, but if he would inform me of his symptoms I would prescribe for him. He said that the horse was apparently very sick, holding his head down, eyes red, and swollen legs; his breathing hard and laborious. I prescribed Bapt. 1x, Phos. 3x, in three half-ounce bottles, in weak alcohol, given alternately every hour, and administered by means of the dropper; ordered the man to squirt the medicines on the tongue, using the dropper for that purpose, about one half full of the remedies. I went to see the man the next day, and the horse seemed to be doing well, therefore I continued the same medicines; the only discernible difference was that the legs were badly swollen, and his water showed an exceedingly red color. I told the man to call upon me the next day, and, should he perceive any change in the symptoms, to let me know. He came on the following day, and I prescribed Rhus Tox. 3x, Phos. 3x, and Tart. Emet. 3x, put up in vials as before, to be given in alternation every hour. Next day I learned that the owner of the animal had called upon a druggist in the village, who

formed him that I knew nothing about medicine, but said that he understood animal treatment, and was well versed in all their various ailments. He gave him a large bottle of medicine, which the man duly administered, and in a short time the animal had turned up his toes, and the poor man was without a horse.

HORSE DISTEMPER, OR SNIFFLES.

This is another form of sore throat, occurring mostly in young horses from two to five years old, and which is familiar to every one. Its design seems to be to throw some poisonous matter from the system, and the object should be to keep the strength of the animal up, and hasten suppuration. The exciting causes are similar to catarrh, transition from cold to heat—as from the pasture to the stable—change of stable from the country to the city. It occurs most commonly in spring, and is usually seen in cold, damp weather. It is, however, a really contagious disease, and if an animal is put in a stall or stable where the disease has been of late, he will be very liable to be soon affected with it; and if one horse of a drove takes the disease the balance of the entire number, and especially if some of them are young, will be almost sure to have it. At times it is awfully severe on young colts, and often proves fatal if not well attended to. The general symptoms are very much the same as explained as follows: Symptoms of “sore throat” are well marked. The horse holds his head stiff, with his nose poked out, showing the muscles of the neck prominently; he has considerable difficulty in swallowing; if he attempts to drink, part of the water is returned through his nostrils; the throat is painful to the touch, and the least pressure excites a

violet fit of coughing. At the commencement of the disease it is difficult to distinguish it from "distemper" (strangles). By the third or fourth day the difference can be easily seen; the usual tumor of distemper does not appear; the pulse varies—in some cases but little altered, in others very quick and weak. The coat is also staring, and the function of the kidneys partially arrested. In severe cases the breathing becomes heavy and laborious. By the third or fourth day from the beginning of the attack a greenish-yellow matter is discharged from the nostrils.

CLINICAL CASE, No. 15.—On the 18th of October, 1883, I received a call from Rev. Mr. Biggar, who said: "Doctor, both my horses are down with distemper, and I fear very much that I am going to lose them." I said to him: "O no, you won't; I will give you medicines that will surely effect a cure." I gave him two half-ounce bottles, marked Nos. 1 and 2; No. 1 filled with Bell. 3x, and the other Phy. Dec., or, as it is commonly termed, poke-root, in the second potency; also gave him a small glass dropper, and requested him to administer the full of the dropper every hour alternately on the tongue. Next day I saw the gentleman, and he said that the animals showed marked improvement; this was especially the case with one of them. I told him to give the same remedies alternately every two hours, including an occasional warm bran-mash. In two days' time he came to me and reported one of the horses as well; the other animal, he said, had a bad swelling under the throat, and it discharged at the nostrils. He inquired if it would not be best to open the swelling. I told him no; that it was not yet sufficiently ready. I prescribed Hep. Sulph. 3x, and Aurum Trifolium 3x, in half-ounce bottles, to be given the mare every hour, until the enlargement had pointed, and then I would lance it. On the Sunday following I called at his residence, but he was away on his circuit. I lanced the mare's throat, which ran in a very profuse manner. She now recovered rapidly, ate heartily, and was in excellent

spirits. The reverend gentleman was extremely well pleased with my treatment of the animals, and he is fully under the impression that I saved their lives.

NOTE.—I believe from my experience that Phy. Dec. (tincture of poke-root) is almost a specific for any disease in the animal or human frame, where any of the glands are involved.

CLINICAL CASE, No. 16.—In the fall of 1887 I placed my horse in a sale-stable at Eau Claire, Wis.; but accidentally learning from one of the employees that several animals in the building were badly affected with horse distemper, I removed him from the contagious disease. I told the man to inform the proprietor that I had remedies which would surely cure the ailment. In a few days afterwards one of the proprietors of the sale-stable called at my office and said: "Doctor, did you not tell our man Philip that you could cure horse distemper. We have just lost a valuable horse from distemper, and I fear for the safety of the rest." I told him that I thought I could, when he replied: "We have nine sick animals, but none of them are as yet swollen about the throat, but they run at the nostrils. Let me have some of your remedies." I put up two half-pint bottles, one containing a weak solution of Phy. Dec. 3x, also another one containing Aur. Tri. 3x; gave him a dropper, and instructed him to give the full of the dropper once an hour, alternately, until they were better, and then once in two hours; and should any of the horses have tumors under the throat, told him to come back and I would give other medicines. In a few days he came into my office, rejoicing that the animals all got entirely well, and he stated also that he had sold the entire lot. He further remarked: "Doctor, I never saw anything like it; and I am glad to say that you have been the means of getting me out of a very bad scrape."

SHOEING—CONTRACTION.

I am now entering upon what must be considered as practically new ground. There is nothing published

by any author of whom the writer has any knowledge explaining reliably how to cure contraction and quarter-crack. Indeed, the leading veterinary surgeons of the country seem to be so much at sea in relation to accomplishing this, that they do not pretend to give practical treatment. The treatment herein given is published for the first time, and will be found as reliable and effective as it is simple.

About twenty years ago, a smith, named Toviél, in Batavia, N. Y., devised a shoe for the cure of contraction, with clips turned up at the inner side of each heel, with the forward part weakened on each side of the toe. The foot was simply beveled down; the shoe fitted to it closely, so that the clips rested against the quarters at the point of the heels. It was firmly nailed on, well back upon the quarters on each side, and the quarters recklessly spread with the tongs. He had very strong indorsements from leading horsemen, claiming its effectiveness for curing contraction, etc., and doubtless it was successful in curing many cases; but in spite of the utmost efforts made to introduce it, it went into disuse.

When contraction of the foot occurs in extreme cases, the points inside the heels are found to be crowded together as well as upward, and they press severely against the great tendon where it passes over the navicular bone. This, in connection with the strong upward pressure of the sole against the bottom of the coffin-bone, forces the whole internal structure upward, as it were, out of the hoof, thereby seriously interfering with or obstructing the circulation, as well as locking the whole machinery of the foot. Consequently the whole

foot is tied and cramped by such unnatural pressure upon the soft parts, so that walking, or even standing, becomes painful. In this condition the horse will stand, first upon one foot then upon the other, or put the worst one forward to ease the pain and pressure upon it. In traveling, he will try to shield the feet all he can from concussion.

Perhaps there is not a more troublesome disease, and one that is more annoying to the horse and his owner, than contraction of the hoof. The animal suffers much while traveling or standing still. Go to your blacksmith and remove the shoe, pare the hoof nicely, and put it on again, and, ten to one, he will tell you that the foot is all right, and the trouble is in the shoulder. You may take your horse to a dozen of men well skilled in the same business, and you will be lucky if you find one that knows any more about the trouble with your horse than the first one you went to see.

I learn, from my reading a late work on the horse by D. Magner, that a most striking innovation in shoeing was made by a man named Dunbar, whose method consisted in cutting away the bars, opening the heels, and cutting out the sole almost to the quick, then fitting the shoes larger, and nailing back to the quarters. The principle was that the removal of this horn which tied the heels together, enabled the quarters to spread and grow wider. While this seemed but a crude idea, it was, however, so successful in many cases as to attract considerable attention, and proved an additional step toward the key of curing contraction. The government gave the man twenty-five thousand dollars for teaching the secret to the veteri-

nary surgeons of the army. His instructions in explaining his system were as follows :

“ If the foot is healthy and of a natural shape, and has been shod regularly, no alteration is required, but simply to pare out the sole of the foot, removing the bors (bars) entirely, and opening out the heels back. The surface of the frog should be trimmed out very little, but the sides should never be touched. By removing the bors (bars), and opening out the heels, contraction is prevented, and the frog retains its natural shape, because all pressure is removed from each side. The shoe is now to be fitted, and nailed on moderately tight.

“ The treatment for contraction, briefly speaking, is expansion. If the horse is lame, the farrier should shorten the toe, lower the foot all around, and open the heels back, until the blood is drawn. The sole of the foot should be pared as closely as possible on each side of the frog. The frog should be lowered, but the sides should not be cut. A groove should be made with the rasp, just under and parallel with the coronet on each side, deep enough to draw blood. This will relieve the pressure caused by contraction of the cartilages on both sides, and allow them to resume their proper shape.

“ The shoe must be very carefully fitted, and have eight nail-holes, for the reason that it is the heel-nails that relieve a foot while in contraction.”

CLINICAL CASE, No. 17.—In the summer of 1883 I was driving a valuable horse, entirely free, so far as I knew, from any blemish. All at once the animal became lame in the nigh fore foot or leg. I had him examined by several eminent horse-

men, some claiming the ailment was in the foot, others again that it was in the shoulder. I interviewed a man in the city who is the owner of several horses, and found him to be well posted in their various ailments. The gentleman was from the State of New York, and a man of good judgment. He told me at once that my animal was suffering from contraction of the foot—or, in other words, the heel was contracting on the frog—and recommended me to have the hoof at the heel stretched wider before finally nailing a shoe at the heel. I took the horse to a Mr. Allen, who is quite an expert in shoeing horses, he having tried his hand on the same animal some time before. I told him what I had learned, and asked him to adopt this course of treatment. He objected to it on the ground that it would ruin the horse's foot; but I told him to follow out my instructions, and I would risk the consequences. He took off the shoe, and carefully examined the foot, trying, as he said, to find some other cause for the lameness. He again replaced the shoe, nailing it on the toe, and also on one side of the heel. Then he showed me how to hold the tongs so as to spread the heel away from the frog, while he finally nailed the shoe on the remaining side of the heel. After he had polished the foot in his usual nice manner, I harnessed my horse and started for a drive some four miles in extent, which the horse traveled without any apparent lameness. With care in further shoeing, the animal suffered no more trouble.

PARTURITION OR FOALING.

The period of gestation in the mare varies from eleven to thirteen months. Usually about ten days before foaling she begins to "make bag," the udder enlarges, and a thin, milky fluid can be drawn from the teats, and a glairy discharge escapes from the vagina, giving warning that the foal is about to be dropped. When the time more nearly approaches, she becomes uneasy, getting up and down frequently. Presently the true labor pains begin; the womb contracts on its

contents, assisted by the diaphragm and abdominal muscles; the whole body is convulsed with the effort; the mouth of the womb becomes dilated; the water-bag appears and bursts; and when the presentation is natural, a few efforts force it out—sometimes inclosed in the membranes, which must be immediately removed; and if the cord does not give way itself, it being sometimes thick and strong, a ligature should be put on it about four inches from the belly, and the remainder cut away. In general, mares are best left to themselves at this important period, but care should be taken that they do not get into awkward positions, as against a wall or the sides of the box.

Abnormal Presentations.—The natural position of the foal at birth is with the head resting on the two fore legs. When in this position, and the parts natural, it soon comes away without very much exertion. In many cases, however, the foal is found in such positions as to prevent its escape without assistance. In all cases of protracted labor, where the pains continue without effect, assistance may be required. The hand, being raised in temperature by washing in warm water, should be introduced to ascertain the cause. In some cases the neck of the womb will be found not sufficiently dilated, but the foal is found in its natural position. In such cases it may be gently dilated with the hand, though nature will often overcome it herself.

In cases of natural presentation we must not be in too much hurry to deliver. Harm is often done by injudicious interference. One or both fore legs may be doubled back, with the head presenting. In this case push it back, and pass the hand down the leg, if pos-

sible; get them up into the passage, either by the hand or looped cords passed round the fetlock, when, by slight traction, it will generally be brought away. The legs may be presented in the passage, and the head either doubled down under the brim of the pelvis, or turned over the shoulder down on the flank. In this case it should be pushed bodily back, and the head sought for, when a loop must be placed, if possible, on the lower jaw; it must now be pushed back, while the head is to be pulled forward and brought into the passage. This case is often very troublesome, from the difficulty sometimes experienced in reaching the head. It is sometimes necessary to remove one of the legs by cutting the skin round the fetlock, and with the embryotomy knife dividing the skin of the leg as far as the shoulder, and separating it with the fingers, when it can be removed. A cord should be attached to the loose skin, to aid in traction, when the head can in most cases be reached. We have had occasion to remove both legs in the same manner before delivery could be effected.

Sometimes the buttocks and tail are only to be felt. This is often a troublesome case, especially when the legs dip under the pelvis. It must be pushed well in, and the hind feet, if possible, secured and brought into the passage. Often, however, it is very difficult to do, when, as recommended by Prof. Dick, "the contents of the abdomen must be removed at the rectum, the pelvis divided at the symphysis, when, a cord being attached, and force used, the hind legs will get into the place of the viscera, and the quarters collapse so as to allow of extraction."

The whole four feet may be presented in the passage. The simplest way of delivery in this case is to feel for the hocks, and slip loops on the feet; and by pushing back the fore ones, it may be removed by the hind legs.

It is impossible to describe minutely the details of procedure in these cases, as, from difference in collateral circumstances—such as size, age, length of time she has been in labor, swelling of the parts, etc.—different plans of treatment must suggest themselves to the operator.

The principles to be observed are these: Endeavor to get into its natural position, in which position it is easiest delivered; failing in that, to get into the next easiest, viz., the hind legs first; that impracticable, to remove those parts of the foal which offer most resistance, care being taken in so doing not to bruise or lacerate the mare. In no circumstances are tact, coolness, and steady perseverance more required than in a protracted case of labor. However, the dictates of humanity, no less than professional duty, demand that we shrink not from the most difficult.

Mares with foal are very apt to abort, or, in other words, lose their foals before the proper time has arrived for delivery. This is frequently a great disappointment and loss to the poor farmer. It is at times, perhaps, congenital, but mostly brought about by either rapid driving or overwork, when the animal is in a condition of pregnancy. This should never be done; it shows a great want of good judgment in the driver or owner, if not downright cruelty. It is much better when a mare is with foal to give her gentle

exercise—working her moderately—than it is to allow her to be kept confined in the stable; but at the same time she should not be compelled to haul heavy loads, especially up steep hills, or on bad roads, as this will frequently cause the animal to “slink” her colt.

CLINICAL CASE, No. 18.—In the fall of 1878, while practicing at Durand, Wis., about eight miles from my office I was overhauled by Mr. Hooker, a farmer in that vicinity. He said: “Doctor, do you know anything about horses?” I replied: “Yes, I know a good animal when I see it, having owned somewhere near one hundred.” He said: “I do not mean that. Do you know how to doctor a horse?” “Yes, I consider myself posted in that direction. What seems to be the trouble with your animal?” He replied: “Well, doctor, my folks live in Illinois, and last spring I went down to see them. On leaving my friends, they presented me with a very fine mare, entirely faultless, save in one respect, and that was, she never carried her foal the full term, but would invariably slink it. I thought I would take her and try her. She is now with colt, and if you can give me something to prevent abortion, and that soon, as the time is near at hand when she is said to abort, I would be willing to pay you almost anything for your services.” I told him to call upon me the first opportunity he had, and I would give him medicines, also with full directions to stop the difficulty. In due time he arrived at my office, and I prescribed appropriate remedies. I gave him twelve powders containing two grains each of *Viburnum Prun.* 2x trit.; and told him, when he saw any signs of abortion, to give the mare (on her tongue) one powder every half hour, until he perceived a change for the better, and then the same dose at a longer interval once an hour. I informed him that it would not require many powders to restore the animal to her usual health. A few weeks afterwards I met Mr. Hooker on the road, and he said: “Doctor, your medicine acted like a charm; I followed your advice, and my mare was soon well.” I advised him to be very careful about overworking the animal, and she would carry her colt the full term.

Two years after this occurrence, in a druggist's store, the proprietor was advocating to a man looking for a doctor, that I, a homeopathic physician, did not know anything. Mr. Hooker told the drug-man what I had done for him, in detail, in reference to his mare, and said through my aid he had raised two colts, and he thought if I could do that I must surely know something about animal treatment. This nonplused the drug-man, and he had nothing further to say. Mr. Hooker has always been a staunch friend. I have frequently since that attended his family in sickness.

CLINICAL CASE, No. 19.—In the month of March, 1879, while practicing at Durand, Wis., I received a call from a Mr. K., who resided several miles south of the village. He said: "Doctor, I have a valuable mare, and I am afraid that she will lose her colt. On last Saturday I drove her and another animal to Wabasha, hauling a heavy load of railroad-ties. The going was bad, and I had to pull through heavy roads. I got home late. On getting up this morning I found the mare in a bloated condition and suffering much pain; came to the drug-store in order to obtain medicine, but meeting Mr. Barton, he referred me to you for assistance. Can you give me anything applicable to the case? for I should like to save the foal." I gave him a half-ounce bottle containing *Viburnum Prun.* (Black Haw) in 1x; requested him to give her ten drops on the tongue every twenty minutes until well. I directed him to get home as fast as possible, and give the mare the medicine. A few days afterwards I saw the gentleman on the street, when he informed me that the remedy had acted like a charm. The mare in the short space of time, an hour and a half afterwards, began eating her feed the same as usual.

NOTE.—This is one case out of a dozen or more where this remedy, given under similar circumstances to horses and cows, also many patients of the human family, has acted equally efficacious. The case last mentioned was really pleuro-pneumonia. From a pretty large treatment of diseases of the lungs, in animals as well

as same diseases in the human system, I feel assured that were the properly indicated remedies, in accordance with our law of cure, given in appropriate doses to those animals afflicted with pleuro-pneumonia many cases at least would be cured, and, indeed, the disease, which is now a terrible pest to our country, be shorn of its fatal character, and thus save a large expense to our government, and disappointment to many stock-raisers. The above statements to some may appear very strong; but I have for years felt, while reading the accounts of the large herds of cattle that have been destroyed, that I would really like to see it thoroughly tested.

POLL-EVIL.

Dr. F. E. Boericke, of Philadelphia, Pa., in his, late book on veterinary practice, gives the following description of this troublesome disease in the horse:

“Poll-evil, as its name imports, occurs on the top of the head, just posterior to the ears. In its earliest stage it is simply a swelling, caused usually by the pressure of the head-collar, or sometimes by an accidental blow, such as that which a horse may give himself, especially if frightened, on entering or quitting a stable through a low doorway.

“If the cause, whether it be pressure or a blow, be continued or repeated, inflammation will probably set in. As a result of the inflammatory action, the wound or injury frequently suppurates, and after a time abscesses will form around the attachments of the cervical ligaments which support the head. Among these it is apt to form large and deep sinuses and

fistulas. These sinuses often extend down to the bone. The offensive smell of the matter contained in them will indicate this extension. If the matter is suffered to remain long in contact with the bone, it will probably cause caries in that tissue."

I am satisfied, indeed pleased, that I can direct the reader's attention to the clinical case given below, which has been the means of saving the lives of many valuable horses, and its insertion here certainly adds to the value of this work, particularly to a man owning or having horses under his care. This remedy has been extremely successful in Eau Claire County, and also those counties adjacent to it.

The late Joseph Hadley, known in this vicinity (an acquaintance of mine), some years since gave me what he assured me is a perfect cure for this disease in the horse, which the most of the veterinary works I have read pronounce almost incurable. I rather doubted his story at the time, and insisted that he should relate to me the particulars of a case that he had treated and cured with the medicine, or application, with which he cured the case, and he gave the following description in the spring of 1874:

"I met Mr. J. C. Bush, a farmer from Truax Prairie, on Water Street, in the city of Eau Claire, Wis., who showed me that one of his horses—the one on the off side—had the poll-evil, from which the animal was apparently suffering much, although otherwise a pretty good horse. I took a full pound of a green herb from my garden, the rue, or *Ruta graveolens* (as it is called in our materia medica), cut it up fine, and put it in a pot with two quarts of

water; boiled it well, being closely covered, for over three hours; then strained the liquid out carefully, and boiled it again until the liquid was reduced to about a pint. Then I added nearly a pint of fresh lard, let it boil a few moments, then set it back on the stove to simmer slowly, until it was freed from all the water. It was somewhat thick and curdy. I then gave Mr. Bush a quantity of it, and requested him to put a tea-spoonful of it, when melted, into the opening of the sore every morning; told him to keep it well covered; also to put the horse in the stable and feed scantily, and that in about six days he would find the pipe in the sore protruding. After it was up pretty well, I directed him to bring the horse to me, which he did. I severed the pipe, and sent him back to continue the treatment. In a few days' time the balance of the pipe dropped off. The application was continued a short time longer, and the sore, pain, and swelling was all gone, and the animal apparently well."

NOTE.—If the remedy is at all scorched in preparing, it will be useless. I have been assured by several persons that this treatment was equally good for a sinus in any part of the human body, or any old sore or fistula.

WORMS.

Horses, with, I believe, all other animals, are frequently troubled with a superabundance of worms of various kinds in the digestive canal. I recollect, while a student, one of the first cadavers I dissected had in her stomach, and all along the digestive canal, fully a pint of worms, and some of them were scarcely

three-eighths of an inch in length. Worms in the horse are at times (with many farmers) hard to get rid of, and I have noticed while they remain in such quantities in the animal that he is generally thin in flesh and logy in driving.

In my experience I have found that the Tr. of Tobaccum, in ten-drop doses, three times a day, given on the tongue, or a pinch of fine-cut tobacco mixed in his food for a number of days, will soon rid the animal of the large worms, and Apis (bee poison) given in the 2x, in ten-drop doses, three times each day on the tongue, will soon banish all the small (or pin-worms) from the horse; and I may here add that the latter remedy, given in the 3x on the tongue, in three to five drop doses, two to three times a day, will, in a short time rid the human system of these pin-worms, which, at times in children and grown-up people, are a great pest.

THE COW.

Cows, as well as all young stock, are subject to various diseases; and one of the most frequent troubles comes from overfeeding; then again at times from their own apparent ingenuity, or from some neglect omission, such as not shutting a door or failing to put up a pair of bars, by those that attend them; and because of these circumstances I have been called frequently in the past. In most instances, some of my patrons sent for me to help them save their only cow; therefore I have felt it my duty in this portion of the work to give a few clinical cases, which

will show, I think, clearly the effect of a small quantity of the proper selected remedy on the animals I have treated, and in that way help some of my readers to treat their cow or other stock.

CLINICAL CASE, No. 20.—In the fall of 1878, while engaged in practice at Durand, Wis., I drove into a man's yard whose family I had attended some time before, in order to make an inquiry concerning the road. The man came out and said: "Doctor, I am glad to see you this morning. I suppose you are not a horse or a cow doctor. I have a valuable yearling calf which I fear I am going to lose. Can you help me out of the trouble? Last evening, when my cattle came home from the stock-field, the calf did not make its appearance. I went in search of the animal this morning, and found it lying in a fence-corner, unable to get up. Its head appears too heavy for the body, and I am afraid that it will die; can you do anything for it? I hate very much to lose such a fine animal." I told him that I would see the calf, and in all probability could help it. We went to the barn, and I found the animal well covered with buffalo-ropes; its extremities were exceedingly cold, and its pulse was not discernible; the stomach was much bloated. I went to my case in the buggy, and prepared two one-drachm vials, one with *Ars.* 2x, and the other with *Nux Vom.* 3x. I asked the man who would administer the medicines, and he brought to my attention an intelligent-looking young female, of whom I asked for a thimble. I requested her to come with me, and I would instruct her how to give the remedies. I dropped ten drops from vial No. 1 of the *Ars.* into the thimble in her presence, passed my leg over the calf's body, with one hand opening its mouth, keeping the tongue close to the lower jaw, then emptied the contents of the thimble upon the tongue. I directed the girl, in one hour, from vial No. 2 to give the same quantity—viz., ten drops, and in like manner—and to administer the medicines alternately every hour until she had given three doses of each, and then continue to give the remedies at intervals of two hours apart, and five drops at each dose, until all the medicines contained in the vials had been used. A few weeks afterwards I saw the farmer and made

inquiries concerning the calf. He said: "Doctor, the calf is all right; I am astonished at the cure. I consider you a very skillful man in the treatment of animals."

NOTE.—The indigestible character of the corn-stalks had so crowded the stomach and the gastric glands as to prevent the generation of the gastric juice necessary to digest the contents; paralyzed the spinal nerves which invade the stomach; hence the condition of the animal. The Nux and Ars. stimulated the gastric juice, and the animal was restored to its normal condition.

CLINICAL CASE, No. 21.—While practicing at Durand, in the year 1876, my neighbor, Mr. John Simpkins, came to me one morning in a bad state of despondency. He said: "Doctor, I am about to lose my cow." I replied: "What seems to be the matter with her?" He answered: "She got into Mr. W.'s barn yesterday, and ate from a peck to a half-bushel of horse-feed. When I went to milk the cow this morning I could not get any from her; she is considerably bloated, and can not hold her head steady. Doctor, do come to the barn and see her." I went, and found her symptoms about the same as he described. She seemed to have no pulse; would suddenly drop her head and shoulders, and could hardly stand on her feet. I observed to Mr. Simpkins: "John, you need not worry. If you will follow my directions in the case, the animal will come out all right." I gave him two half-ounce vials filled with a solution of Ars. 2x, and Nux Vom. 3x, requesting him to give the cow ten drops of each every half hour, until he had given her three doses; afterwards five drops every hour, until recovery.

NOTE.—The food had been crowded into the animal's stomach; consequently the gastric glands could not act, and some of the cervical spinal nerves were so paralyzed that the cow was unable to steady her head and shoulders. The medicines given stimulated

the gastric glands, and in a short time the trouble was at an end, much to the satisfaction of Mr. Simpkins, who retained his valuable cow for several years afterwards.

BLOATING.

CLINICAL CASE, No. 22.—While practicing at Winona, Minn., in the year 1873, a gentleman, living about four miles from the city, came to my office in great haste. He inquired if I could do any thing for two valuable cows, which he reported as being in a very bad condition. He stated to me that two days before he had turned the animals into a piece of good after-feed; it was a rank growth of clover, some six inches in height. The cows soon filled themselves, and lay down, when they got up again in a short time, and commenced feeding once more. Towards night he drove them into an inclosure near the barn; they seemed very full, and the best cow walked exceedingly slow. The animals were milked as usual, but nothing out of the way was observed. However, in the morning, when he reached the inclosure, he found that his best cow could not rise to her feet, and the other one was trembling like a leaf. Their abdomens were badly distended.

I prescribed *Ars.* 2x, *Nux Vom.* 3x, in ounce-vials; gave the gentleman a glass dropper; told him to go home as fast as he could, and give to each animal the dropper half full of the medicine every half hour, and, when improvement took place, once an hour, using the same quantity of the remedy. I also handed him a fountain syringe, and instructed him to fill the same with soapy-water, and give each of the animals an injection, about one hour after administering the medicine; told the gentleman to repeat the injection in about two hours afterwards, when the bowels were emptied of their contents. Should the animals improve, the medicine was to be taken once in two hours; ordered him to report in the morning. When he came back the next day, his countenance showed a pleased expression, and he observed that, under my treatment, the animals had steadily improved, and he believed that they would entirely recover from their bloated condition. He said the small cow was much better,

and had attempted to eat, but the other one still remained bloated, notwithstanding they both had passed a quantity of manure; she seemed unable to hold up her head. I inquired how many times he had filled the syringe with the warm, soapy water. He said about four times. "Did I understand you to say that the small cow is not so much bloated?" He said: "No, her abdomen is almost normal." I told him to keep the animals well-bedded, and give the medicines alternately to the large cow every hour, until better, and the little one the same remedies every two hours. I directed the gentleman to give the large cow another injection should she continue to bloat; in the meantime, if the animals wanted food, to give them warm bran-mashes well salted. Ordered him to report in the morning. He came to my office the next day with a smiling face. He said: "Doctor, I believe you have saved my cows. The little one ate the warm food you prescribed, and seems well; the other one has also vastly improved. I am of the opinion that you have saved the lives of the two animals. I have brought back your syringe. I don't think it will be required again. I had no idea that such a small dose of medicine put on the tongue could produce such happy results. I am certainly indebted to your valuable services for the good results; for the loss of my cows would have been irreparable—in fact, would have almost ruined me."

NOTE.—As I have said before in this book, Nux and Ars. form two-thirds of the gastric juice of the stomach, and I believe that there are no two remedies in the one thousand five hundred used by our practitioners that would have produced such a favorable termination as the above two drugs, properly administered.

I really think that there is no part of a farmer's pursuits more remunerative than the one of keeping cows, and, in fact, I might add the raising of stock generally; but, in order that this can be successfully carried out, several very important points should be considered. Care must be exercised in feeding, both as

regards quantity and quality, also giving them food at regular periods. It is poor policy to stint animals, especially so when they are young; it is far better to have them come out in the spring looking sleek and thrifty, than to have them poverty-stricken and stagger as they walk, almost reduced to skeletons; yet I am aware that it is a practice among many short-sighted farmers to curtail the daily supply of provender, under the erroneous idea of economy.

Stock should be provided, winter and summer, with salt, and they should have free access to this important article whenever required. A wooden box containing salt might be nailed in a secure manner to a post in the barn-yard; it would only take a few moments to fasten it, and would more than repay for the slight trouble.

Under no condition should cows be permitted to eat filthy food, or drink from impure pools or streams; for it must be borne in mind that it will have a deleterious effect, not only on the milk, but also the butter; in fact, all animals should be provided with an abundance of pure spring or well water.

Housing is another important item, especially in the North, where the temperature in winter frequently marks forty degrees below zero. Warm, comfortable, cleanly stables should by no means be forgotten, with plenty of dry straw or marsh-hay for bedding.

In regard to breeding, my advice to farmers is that you raise your young stock from the very best breeders you can find. Remember the axiom, that "like begets like." By pursuing the course as laid down in these rules you will find that you possess thrifty

animals, which will most assuredly, when marketed, bring the highest possible price attainable.

CLINICAL CASE, No. 23.—In the spring of 1876, while practicing at Durand, Wis., one of my patrons came to me in a great hurry, and said: "Doctor, I think that I am about to lose a real good cow. Can you do anything for her?" I made inquiries as to her symptoms and troubles. To my interrogations he replied: "The animal went away yesterday morning, and when night arrived, I searched for but could obtain no clew to the missing cow. Soon after night-fall she came up on the run with two dogs chasing at her heels, when I put her in the barn. She seemed all tired out, and she soon lay down, evidently in a very exhausted condition. In a short time afterwards I went and milked her, and then supplied the animal with water, of which she drank a considerable quantity. This morning I found her badly bloated and very uneasy. I fear that she will lose her calf. Now, Doctor, if you think you can help her I wish you would try it." I took my medicine case and went with the poor man to see the cow. I arrived just in time to save the calf, for had I been a few moments later she would undoubtedly have lost it. I turned out a half ounce of *Viburnum Prun.* 1x, and with the aid of a dropper squirted it on her tongue. After waiting about ten minutes a second dose was administered the same way. After a few moments I detected a decided change for the better. I waited a further term of twenty minutes, and then gave the cow a third dose of the remedy. Very soon after the latter had been given she still seemed on the mend. I ordered the man to give the remedy every half hour, and subsequently every hour, and report to me in the evening. He came and said: "Doctor, my cow is almost well; she has already partaken of some food." I ordered two more doses, two hours apart, and that, I concluded, would be sufficient; directed that the cow have warm bran-mashes; told him he need not expect much milk for a few days. He made inquiries as to my charges. I told him nothing, but would charge it on the next case he brought to me.

CLINICAL CASE, No. 24.—In the month of March, 1876, when I was residing at Durand, Wis., I received a visit from a

horse-doctor, who said that he had been employed by M. D. Prindle, of that village, to attend a cow which was then in a bad situation. He said that within a few days she had calved, and at that time appeared all right, but now she is in great distress and very much bloated; she is lying down, and unable to get upon her feet. Mr. Prindle says that the animal is a very fine one, and he hates to lose her, but as he was unacquainted with her ailment he was at a loss what to prescribe. "You will oblige me," he said, "and also Mr. Prindle, if you will go and see the cow, and help me with the case." As an act of kindness to the owner, I accompanied the man, and found the animal in a bad condition; pulse high, much fever, and apparently suffering great pain. After I had made a close examination, the doctor inquired the trouble. I said inflammation of the calf sac, which has never contracted since the calf came away. I prescribed Acon. 2x, and Secale Cor. 2x, in half-ounce vials, in a weak solution of alcohol, to be given with a dropper every half hour, on the tongue, using the remedies alternately, until she showed symptoms for the better; then, in that case, to administer the dose once an hour. Ordered the man to report progress in the afternoon. He came to my office about five o'clock; said the animal was standing on her feet, smelling the hay. I told him to continue the medicines until nine o'clock, and then give her a warm bran-mash, with plenty of salt added to it; offer her some water, see that she had a good bed, and he could leave her for the night, and report in the morning. He inquired how much I charged for my trouble and attendance. I told him not anything, but directed the doctor to charge Mr. Prindle ten dollars. He went away much pleased. Before, leaving, however, he said that the cow had partaken of the bran-mash, drank a little warm water, and had also eaten some of the hay, and seemed apparently almost well. I advised him to continue the medicines, giving them once in two hours, and in the afternoon to feed her another bran-mash, and more warm water if she required it.

CLINICAL CASE, No. 25.—In the fall of 1880, while practicing at Durand, Wis., I went to the farm of Mr. C. Fox, selecting and purchasing from his herd a fine-looking young cow,

which he recommended. He thought it would suit me in every particular. On my getting the animal home, I soon discovered that her lungs were seriously affected. She had a slight hacking cough, with apparently no discharge. On examination, I found the right lung almost solid, and irritation of the pleura over the left lung. I prescribed Acon. 3x and Phos. 3x, to be given in alternation, about four doses per day, dropped on the tongue. After the third day I prescribed Bry. 3x, Sulph. 6x, given also on the tongue. The cow soon began to improve under this treatment, and in a few days I changed Phos. 3x for Bry., retaining the Sulphur. She was then given a dose night and morning, which brought on expectoration, and she soon became a perfectly sound animal. In a few months afterwards I sold the cow for beef to a brother of the man I purchased her from.

THE FIG.

It will be readily acknowledged that hogs, in this country—in fact, almost anywhere—are valuable animals to the farmer, and that they are subject, with other animals, to sundry diseases. I have treated a few cases for several of my patrons, and therefore insert two clinical cases, which will show that our medicines act as favorably with them as with other animals; that is to say, when they are properly selected.

CLINICAL CASE, No. 26.—While I was practicing at Durand, Wis., in the year 1876, two ladies came to see me. They were in a very excited condition. They informed me that a sow, owned by them, had, during the past night, farrowed a litter of pigs; but she had disowned them, and driven the young sucklings from the pen. The ladies had picked up one or two of the porkers apparently dead. They inquired if I could do anything to resuscitate them. From a friendly feeling towards the family, I went with them to see my patients in the pig line. Of the two they had already secured, one at least seemed to be breath-

ing its last. I administered five or six drops of Acon. 3x to each of them, dropping it on the tongue. Very shortly one of the progeny, which seemed almost gone, began to kick violently. I continued my treatment, while the ladies went to look up the balance of the litter. As time advanced, I found the two improving, getting warmer, and presently one attempted to rise. At this stage the ladies returned with four more, all apparently prostrate with cold. I continued my treatment, but gave the medicine at longer intervals, and by the hour of noon they were all quite smart. The women folks wanted to know how they should be fed, as the sow would not recognize them. I suggested that they be put in the wooden box, and kept there as warm as possible, until the sow claimed them. In about thirty hours afterwards, the young lady, who was very intelligent, placed the young pigs with their mother, who was lying down, and they began to nurse. There was no more trouble with them. They grew up thrifty, and in due course of time were marketed, bringing their owners a nice, round sum of money.

HOG CHOLERA.

CLINICAL CASE, NO. 27.—In 1884 I was called upon during a visit made to Durand, Wis., by a gentleman having a large drove of hogs affected with cholera. Two of the lot were particularly bad with the disease. I prescribed Ars. 2x, Crotalis Tig. (Croton oil) 2x, and Cantharides (commonly termed tincture of Spanish fly) 3x. I put the remedies in three four-ounce vials, gave him a glass dropper, and ordered him to administer to the animals two-thirds of a dropper full, to those that were very bad, every half hour, and to give the medicines alternately; and to those that were not so bad with the disease, every hour. When improvement took place, to give the medicines at longer intervals. Ordered the animals to be supplied with water, but only a little at a time. I learned that the man diligently followed my instructions, and by so doing he only lost one porker out of the lot. The gentleman was much pleased with results, and I was the recipient of profuse compliments.

NOTE.—I have had considerable experience in treating cholera-morbus among my patients, and have had

many cases approximating to Asiatic cholera, which I have treated with success; and I believe with a proper selection of our homeopathic remedies, hog cholera, as well as Asiatic cholera, can be successfully treated. The above given remedies are most often selected for that purpose.

PRESCRIPTIONS.

PRESCRIPTION No. 1.—For Medicines in an Early Stage of Typhoid Fever.

- ℞ Bapt. one-half ounce vial in a solution of alcohol, 3x dilution.
Phos. one-half ounce vial in a solution of alcohol, 3x dilution.
Bell. one-half ounce vial in a solution of alcohol, 3x dilution.

The above medicines are in place if the fever is high and the patient is restless and talks incoherently. Ten to twelve drops from each vial may be dropped into three separate one-half tumblers of water, or three cups two-thirds full of water, and the patient given a tea-spoonful of each one, an hour apart in alternation. If the patient has but little fever, and the brain symptoms are not prominent, he will not require the Bell. These medicines may be taken with equally as good effect by touching them twice each to the tongue.

PRESCRIPTION No. 2.—For Typhoid Fever, to be given in place of No. 1, thirty to forty-eight hours after.

- ℞ Rhus Tox, 1x dilution.
Phos., 3x dilution.
Tart. Emet., 3x dilution.

Put up in half-ounce vials, as the others were, or given in water, as best suits the patient, once each hour in alternation. The above three medicines should be continued to be given to the patient once each hour alternately while the fever lasts, and then every two hours. The use of these remedies, with the proper feeding and bathing, and the use of any adjunctive, such as Bell. or Apis, etc., as shown by my clinical cases, will break up the disease in the patient in from ten to twelve days at the longest, and if these means are employed before the disease is really established in the patient, they will end it in from sixty to eighty hours without fail. Tartar Emeticus is not always necessary, but generally there is more or less irritation in the bronchial tubes, and I think that this remedy is the best in use.

PRESCRIPTION No. 3.—For the Acute Stage of Croupous Pneumonia.

℞ Acon., put up in one-half ounce vial, in a
 solution of alcohol, 3x dilution.
 Phos., put up in one-half ounce vial, in a
 solution of alcohol, 3x dilution.
 Tart. Emet., put up in one-half ounce vial, in
 a solution of alcohol, 3x dilution.

These medicines should be given the patient in alternation, if the fever is high and the patient is ill, every half hour; if otherwise, every hour until better, when it will do to give them once every two hours. From an extended experience I am quite certain that by giving the above remedies as directed, promptly, with the proper feeding and hygienic measures, the disease can not possibly progress. After the medicines, in Prescription No. 3, have been given the patient, for say from thirty to forty-eight hours, the acute character of the disease will have been aborted, and recourse should be had to Prescription No. 4.

PRESCRIPTION No. 4.—For Croupous Pneumonia in its Secondary Stage.

℞ Phos., 3x dilution.
 Sulph., 30x dilution.

If the pleura is at all involved with the trouble, Bry. 3x or Cal. Carb. 3x should be used in place of Phos. until relieved, and if the cough is severe, and the sputa profuse and stringy, Kali Bich. 6x ought to be given in place of Sulph. These medicines should be given in alternation, say once each hour, or two hours, according to the severity of the disease; at the same time all hygienic measures should be faithfully carried out.

PRESCRIPTION No. 5.—For Acute Catarrhal, or, as it is sometimes called, Bronchial Pneumonia.

℞ Acon., 3x dilution.
 Phos., 3x dilution.
 Merc. Sol., 3x dilution.

To be given in alternation, if a very severe case, every half hour, until a few doses of each are given, and then once an hour until

better, or at the end of thirty to forty-eight hours, when the medicines should be changed for Prescription No. 6.

PRESCRIPTION No. 6.—For Catarrhal or Bronchial Pneumonia, in its Secondary Stage.

℞ Merc. Sol.,	3x dilution.
Phos.,	3x dilution.
Tart. Emet.,	3x dilution.

These medicines should be given the patient alternately every hour until much better, and then every two hours; if the case is a severe one, Sulph. 30x may be given for a time in place of Tart. Emet. The correctness of prescribing these medicines in typhoid fever and pneumonia, in their various forms, will be found verified in the clinical cases in this work.

Method of Making Water-Gruel.

Take four table-spoonfuls of fine crushed oatmeal, put to soak in one quart of cold water. After it is well soaked, put a pint of boiling water into it, and let it boil slowly for three or four hours, keeping up the quantity of water, and putting in a few currants, to take off the flat taste. Then strain or let it settle, and pour off the liquid, and season it to suit the patient, and it is fit for use.

Corn-meal may be used (although the oatmeal is much better); but it requires to be boiled longer, until thoroughly cooked.

A gruel may be made of rice-water, thickened slightly with fine cracker-crumbs.

Corn-starch may be used in the same way, but in very much less quantity, as at all times the gruel requires to be thin, so as to give the stomach little to do in digesting.

INDEX.

CEREBRO-MENINGITIS.	PAGE.	DIPHTHERIA (Continued).	PAGE.
How Prevalent,	203	Symptoms,	229
Extract from Geo. B. Wood,	203	Pulse and Temperature,	230
Symptoms, Course, etc.,	203	Use of Hepar Sulphur,	233
Progress of Disease,	204	Article in the <i>American Homeo-</i>	
Observations,	206	<i>path</i> , by Dr. Ockford:	
Pain in the Knee, as noticed by		Germ Theory,	233
Dr. Lund,	207	Bacteria,	234
Vomiting,	207	Conditions of Disease,	234
Delirium,	208	History,	235
Duration,	209	Fatal Cases,	235
When Arrested,	210	Alimentation,	236
Anatomical Characters,	210	Diphtheritic Micrococci,	240
Inflammation of Dura Mater,	211	Mortality in New York,	240
Arachnoid,	211	Mortality in Massachusetts,	241
Ventricles,	212	A Specific Zymotic Disease,	241
Brain,	212	Simple and Malignant,	241
Causes,	213	Observations by Professor Lud-	
Who most Subject to Attack,	214	lam,	242
How Known,	215	Causes,	242
Diagnosis,	216	How the Poison Intro-	
Delirium,	217	duced,	242
<i>Clinical Cases :</i>		Epidemic,	242
Clinical Case, No. 1,	218	Atmospheric Contagion,	243
Note,	219	Inoculation,	243
Clinical Case, No. 2,	219	Bodily Conditions,	243
Clinical Case, No. 3,	222	Progress,	243
Clinical Cases, Nos. 4 and 5,	223	Sequelæ,	244
		Diphtheritic Croup,	245
		Croup Differentiated from	
		Diphtheria,	246
		Spasms,	247
		<i>Clinical Cases :</i>	
		Clinical Case, No. 1,	230
		Note,	232
		Clinical Case, No. 2,	232
		Note,	223
		Clinical Case, No. 3,	237
		Clinical Case, No. 4,	239

DIPHTHERIA CROUP.		PNEUMONIA (Continued).	
	PAGE.		PAGE.
Clinical Case, No. 1,	247	Pneumonia—Its Duration from Fourteen to Twenty-five Days,	116
INFLUENZA, OR LA GRIPPE.		The Disease Characterized by a Frothy Expectoration and Difficulty of Breathing,	116
Epidemic in the Country,	250	Observations on the Time under Homeopathic Treatment by Dr. Eidherr,	117
Etiology,	250	Catarrhal Pneumonia,	118
Symptoms,	251	Geo. B. Wood's Observations,	118
How Preceded,	251	Remarks on Catarrhal Pneu- monia by M. Ferrand,	119
Progress of Disease,	252	Remarks by the Author,	119
Complications,	252	Good Effects of Aconite and Phosphorus in Croupous Pneumonia,	123
Difficulty of Prognosis,	252	Lecture on the Pathology of Pneumonia by Dr. Cowl,	125
<i>Clinical Cases :</i>		Effects of Carbolic Acid on the Lungs,	128
Clinical Case, No. 1,	253	Changes of Temperature,	130
Note,	255	Benefits of Aconite,	130
Clinical Case, No. 2,	255	Meteorological Observations taken at New York City,	130
Note,	257	Diseases of the Parenchyma of the Lungs by A. K. Craw- ford, M. D.,	141
PNEUMONIA.		Anatomical Characters,	141
Premonitory Symptoms of the Disease,	98	Post-mortem Examinations,	143
Statistics of Deaths from Pneu- monia,	99	Lobular Pneumonia,	143
Observations on Pneumonia by Greenleaf,	99	Peripneumonia, and also Pleura Acute Lobar Pneu- monia,	144
Those who are liable to its Attack,	100	Pathological Conditions,	144
Chills,	100	The Friability of the Lung's Tissue in its Sanguinolent State,	145
Remarks on Prognosis and Temperature of the Dis- ease,	100	Microscopic Showings,	146
Remarks on Red Hepatiza- tion of the Lungs,	101	Clinical History of the Disease, its Different Stages,	147
Asthenic Symptoms and Yel- low Hepatization,	103	Red and Gray Hepatization,	148
Crisis of the Disease, and High Temperature,	103	The Sputum Tinged with Blood,	149
Remarks on the Progress of the Disease,	104		
Prognosis on its Fatal Termi- nation,	105		
Affections of the Pulmonary Parenchyma,	105		
Serous Pneumonia,	110		
Croupous Pneumonia,	110		
Remarks by Raue,	111, 114		
Wintrick on Auscultation,	114		

PNEUMONIA (Continued).	PAGE.	PNEUMONIA (Continued).	PAGE.
Parts most Liable to be At- tacked,	149	Homeopathic Treatment of Pneumonia,	165
Critical Days Seventh, Eleventh, Fourteenth, and Twentieth,	149	Test Cases, their Advantages under Homeopathic Treat- ment,	166
Causation,	149	Remedies Employed in Treat- ing Pneumonia,	167
Secondary Pneumonia, with its Causes,	150	Carrol, Dunham, and Others on the Action of Aconite in the Disease,	167
Its Epidemic and Endemic Character, by Chomel,	152	Symptoms for the Use of Vera- trum and Bryonia,	168
Acute Premonitory Indica- tions, Temperature,	152	Indications for the Use of Phos- phorus,	170
Peculiarities of Palpitation and Engorgement of the Lung-tissue pointed out by Walshe,	153	Fleischmann on Phosphorus and Tartar Emetic,	170
The same Discussed by Stokes and Waters,	154	Prominent Indications of Tartar Emetic,	170
Physical Signs further Dis- cussed,	154	Indications for Sulphur and Mercury,	171
Emphysema Discussed,	155	Indications for Hepar Sulphu- ris, Arsenicum, and Other Remedies,	172
Exhausted Vitality of the Pa- tient,	156	Indications for Lycopodium,	173
Excess of Urea in the Urine,	157	Indications for Chelidonium and Ammonium Carbonate,	173
Discussion of the Causes of Delirium,	158	Indications for Sanguinaria and Rhus Tox.,	174
On Heart Complications in Pneumonia,	159	Rhus very Prominent Remedy,	174
Typhoid Pneumonia Some- times Taken for Typhoid Fever,	159	Indications for Bell., Hyos. and Opium,	175
Cardiac Complication with Rheumatism,	159	Indications for Carbo Veg.,	175
Diagnosis,	160	Indications for Digitalis,	176
The Lower Portion of the Lungs in Pneumonia is Gen- erally the Seat of Disease,	161	When Alcoholic Stimulation is Necessary,	176
Prognosis,	162	Hints about Feeding,	177
Barthez on the Mortality of Disease,	162	<i>Clinical Cases :</i>	
Prognosis by Barthez,	162	Clinical Case, No. 1,	106
Lobular Pneumonia, Catarrhal, or Bronchial Pneumonia,	163	Treatment of a Young Child with the Disease,	106
Complications with Meningitis and Hemiplegia,	165	Patient's Recovery,	106
		Clinical Case, No. 2,	107
		An Infant with Catarrhal Pneumonia,	107
		Croupous Pneumonia,	108

TYPHOID FEVER (Continued).		TYPHOID FEVER (Continued).	
	PAGE.		PAGE.
Symptoms,	13	Mesenteric and Spleen En-	
Diagnosis,	20	largement, by Leibermeis-	
Anatomical Changes,	21	ter,	75
Objective Symptoms,	23	Pathological Changes of Liver	
Its Action on the System, by		and Capsule of Spleen, by	
Prof. Wood,	31	Leibermeister,	75
The Same Subject Continued, by		Pathological Changes in the	
Behr,	32	Kidneys and Heart,	76
Hemorrhage,	44	Waxy Pathological Changes, by	
Remarks by Arndt,	45	Zenker,	76
Observations on Typhoid Fever		Pathological Changes of the	
and Death Symptoms, by		Tongue, Lungs, and Brain,	77
Dr. Nichol,	45	Remarks on Temperature by	
Relapses, by Murchison,	47	the Author,	77
Relapses, by Trousseau, Won-		Temperature, by Joussett,	78
derlich, and Murchison,	48	Temperature Compared with	
Remarks on Delirium Cases by		the Same in Other Fevers,	80
Murchison,	48	Remarks on Differential Diag-	
Temperature, by Murchison,	50	nosis,	80
Typhoid Fever in Different		Progressive Elevation of the	
Types, by Leibermeister,	51	Temperature,	81
Complications, by Murchison,	52	Great Oscillation in the Temper-	
Remarks on Perforation of the		ature,	81
Intestines, by Murchison		Lecture on the Use of Baptisia	
and Arndt,	52	in Typhoid Fever, by Win-	
Perforation, by Rokitansky and		terburn,	82
others,	53	Dr. Hughes, of England, In-	
Recoveries, by Todd and Gries-		dorses Baptisia,	83
singer,	53	Prof. Kippax on Tempera-	
The Fatality of Hemorrhage,		ture,	84
by Murchison and Leiber-		Baptisia Causing a Fall of	
meister,	54	Temperature,	86
Complications with Laryngitis		Shows his Partiality for	
and Croup, by Griesinger,	55	Potentized Baptisia,	87
Complications with Pneumonia,		Its Value Proved in the Epi-	
by Louis,	56	demic in New York City in	
Pathological Characteristics, by		1878 and 1879, Given in	
H. R. Arndt,	72	Fluid Extracts in Decimals,	87
Classifications, by Trousseau and		Six x and Thirty Centesi-	
Hoffman,	73	mals,	88
Various Changes of Typhoid		The Great Value of Potent-	
Fever,	73	ized Drugs Over Crude	
Pathological Changes of Peyer's		Ones,	88
Glands, by Leibermeister,	73	Case of Typhoid Fever Held	
Observations by Leibermeister,	73	Down by Baptisia,	88

TYPHOID FEVER (Continued).		TYPHOID FEVER (Continued).	
	PAGE.		PAGE.
Its Wonderful Ability to Control Temperature,	88	Clinical Case, No. 11,	39
Toxology of Phosphorus, . . .		Hemorrhage of the Bowels, .	39
Case of Marie Le Blanc, . . .	89	Clinical Case, No. 12,	41
Observations on the Toxic Effects of Phosphorus as Witnessed by Post-mortem Examinations by Orfila, .	90	Typhoid Fever Complicated with Diphtheria,	41
Prof. Leudet and Others on the Post-mortem Effect of Phosphorus,	90	Clinical Case, No. 13,	41
Toxic Effects of Phosphorus on Dogs,	92	Typhoid Fever Complicated with Heart Disease, . . .	42
Dr. William Arnold and Others on the Effects of Phosphorus—Observations Continued,	92	Clinical Case, No. 14,	46
Concluding Remarks by the Author on Treatment of Typhoid Fever,	95	Clinical Case, No. 15,	48
Statistics Showing the Number of Deaths from Typhoid Fever During Ten Years in the State of Mass., from 1877 to 1886,	97	Exposure in a Cold Room, .	49
<i>Clinical Cases :</i>		Relapse of all the Symptoms by Overfeeding and Stimulation,	49
Clinical Case, No. 1,	14	Partaking of Indigestible Food,	50
Clinical Case, No. 2,	16	Reprimand to the Husband, .	50
Clinical Case, No. 3,	17	Discharged as Convalescent, .	50
Clinical Case, No. 4,	24	Clinical Case, No. 16,	56
Clinical Case, No. 5,	26	The Patient's Husband Complaining that the Medicines Had no Strength,	57
Clinical Case, No. 6,	28	His Morose Conduct Causing Alarm to the Attending Physician,	58
Clinical Case, No. 7,	30	The Patient Reported as Dead,	58
Clinical Case, No. 8,	33	A Woman Poisoned,	58
A Peculiar Case of Typhoid Fever Where Phosphorus was Omitted,	34	Note by the Author,	59
Clinical Case, No. 9,	34	Clinical Case, No. 17 (Typhoid Pneumonia),	59
Overfeeding and Stimulation, .	36	Patient Walking the Floor, .	61
Note on Feeding and Use of Mercury,	37	Fatal Results from Feeding and too Much Medicine, .	62
Clinical Case, No. 10,	37	Clinical Case, No. 18,	63
Typhoid Fever Complicated with Catarrhal Inflammation of the Bladder,	38	The Typhoid Symptoms Discovered on the Third Day, .	63
		Subsidence of the Petechiæ, .	64
		Suspicion that the Case Would End in Tuberculosis of the Lungs,	64
		Clinical Case, No. 19,	65
		Minister's Influence in the Case, and Abuse of the Physician,	66

TYPHOID FEVER (Continued).		WHOOPING-COUGH (Continued)	
	PAGE.		PAGE.
Clinical Case, No. 20,	67	Causes of Whooping-cough, . . .	192
Chronic Nasal Catarrh Complicated with Typhoid Fever,	68	Contagiousness,	192
The Patient Warned Not to Eat Much Food,	68	Who are Liable to be Attacked by the Disease?	193
Note by the Author,	69	Symptoms and Course,	194
Clinical Case, No. 21,	69	Paroxysms,	195
Relapse Caused by Disobeying Physician's Orders,	69	Constitutional Condition of Patient,	197
Clinical Case, No. 22,	70	Complications,	197
WHOOPING-COUGH.		Bronchitis,	198
Extract from Article by Baehr,	192	Cerebral Diseases,	198
		<i>Clinical Cases :</i>	
		Clinical Case, No. 1,	199
		Clinical Case, No. 2,	200
		Note,	201

ANIMAL TREATMENT.

THE HORSE.		THE HORSE (Continued).	
	PAGE.		PAGE.
Introductory Remarks by Author,	258	Watering Animals,	278
Remarks on Stabling,	260	Cause of Founder,	279
The Proper Mode of Constructing a Stable,	260	Pathological Inflammation and Pathological Conditions,	279
Filthy Stables,	261	Strangles, or Horse Distemper,	281
Light,	261	General Treatment of Inflammation,	281
Ventilation,	261	Local Treatment,	282
A Good Contrivance for Feeding,	263	Pneumonia or Congestion of the Lungs,	283
Construction of Mangers,	263	Pathology of Bronchial Diseases,	283
Raising Horses for Market,	264	Methods of Treatment,	285
Feeding and Watering,	265	Congestion of the Lungs,	286
Feeding Prairie Hay,	265	Pneumonia,	290
The Proper Quantity of Hay for a Horse,	265	Causes,	290
The Value of Corn-fodder,	266	Observations on, by Williams,	291
Bran-mashes and Roots,	272	Symptoms,	291
Remarks by the Author,	272	Typhoid Pneumonia, or "Pink Eye,"	300
Cooking the Food,	273	Sniffles, or Horse Distemper,	302
The Use of Steam-cooked Feed Recommended,	274	Shoeing—Contraction,	304
Bonner's Method of Feeding Dexter,	275	Treatment for Contraction,	307
Examining the Teeth,	277	Parturition, or Foaling,	308
		Abnormal Presentations,	309

THE HORSE (Continued).		THE COW (Continued).	
	PAGE.		PAGE.
Treatment,	311	Clinical Case, No. 17,	307
Poll Evil,	314	Clinical Case, No. 18,	312
Remedy for,	315	Clinical Case, No. 19,	313
Worms in Horses,	316	Note by the Author,	313
<i>Clinical Cases :</i>		THE COW.	
Clinical Case, No. 1,	266	Subject to Diseases,	317
A Singular Scene,	267	Treatment,	317
Clinical Case, No. 2,	268	Salting,	321
Note on Bad Effects Caused		Food,	322
by Eating too Much Hay, 268		Stabling,	322
Clinical Case, No. 3,	269	<i>Clinical Cases:</i>	
Note on Illness Caused by		Clinical Case, No. 20,	318
Eating Green Corn,	269	Note by the Author,	319
Clinical Case, No. 4,	270	Clinical Case, No. 21,	319
Clinical Case, No. 5,	271	Note by the Author,	319
Note by the Author,	272	Clinical Case, No. 22,	320
Clinical Case, No. 6 (Severe Con-		Note by the Author,	321
gestion of the Lungs),	287	Clinical Case, No. 23,	323
Clinical Case, No. 7,	288	Clinical Case, No. 24,	323
Clinical Case, No. 8,	289	Clinical Case, No. 25,	324
Clinical Case, No. 9,	292	THE PIG.	
Clinical Case, No. 10,	293	Treatment in Disease,	325
Clinical Case, No. 11,	295	Cholera,	326
Clinical Case, No. 12,	296	<i>Clinical Cases:</i>	
Note by the Author,	297	Clinical Case, No. 26,	325
Clinical Case, No. 13,	298	A Sow Disowning Her Pigs, 325	
Note by the Author,	300	Clinical Case, No. 27,	326
Clinical Case, No. 14,	301	Hog Cholera,	326
Clinical Case, No. 15,	303	Note by the Author,	326
Note by the Author,	304		
Clinical Case, No. 16,	304		



✓



Riley Dunn & Wilson Ltd

EXPERT CONSULTANCY & ACCOUNTANCY

