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Art. 1. *Introductory Essay.*

THE abundance of existing works on popular medicine proves that the world sanctions such publications. Indeed, it is rare to find a person who does not possess some treatise on domestic medicine, or does not eagerly read, when he meets with them, even the regular medical journals of the day.

Medical men, however, have always objected to the publication of books on domestic medicine; and in some degree their objections are valid. But, as it is easy to show, that much medical

knowledge is possessed by unprofessional persons, and that much must be possessed by them necessarily, it is clear, that by objecting to the promulgation of such knowledge, we only attempt to oppose the inevitable march of necessity; and therefore that whilst books on popular medicine are condemned, it is not, nor can it be, because they are improper, as books written on such a subject, but because they are written on an improper plan.

In fact, genuine medical information is spreading very fast amongst the public at large. A death-blow has been given to the mystery of physic; and whilst every one now knows, that medicine is, like all other things, resolvable into a plain matter of common sense, it is beginning to be seen, that its general principles are to be comprehended by any one whose mind has received a moderate share of cultivation.

As an illustration of these facts, it is only necessary to advert to the rational improvements which are now so generally adopted in the domestic management of children. Even the almost inveterate system of cramming children is falling before the increasing knowledge of the world on medical subjects.

Though this is the case, an attempt to teach the world how to distinguish and cure diseases would not only be futile but highly dangerous; and therefore, we, as well as the rest of our pro-

fessional brethren, think, that many of the books on popular medicine have done much harm. For what can be more absurd than to suppose, that an indifferent person can be taught, by vain descriptions in a book, what the best talents incessantly exerted during a long life, aye, and after being matured by the most liberal education, have failed to perform. The best physician is indeed but an ignorant man, if compared with one, if there could be such a one, to whom the multifarious forms of disease are really familiar: and therefore whilst no such man as the latter does, or can exist, and whilst we deplore that the labours and experience of ages have left us only as insufficiently informed on medical subjects, as we are, we can at once perceive, that it is in vain for the public to expect that they will ever dive deep enough into the mysteries of practice, to distinguish the numberless varieties of disease from one another and treat them successfully.

But though this is impossible, and therefore though the plan on which popular books on medicine have been generally written is an improper one, yet there is much respecting medicine, which unprofessional persons do know, and much more that they ought to know. For, though they cannot know and cure diseases as well educated medical men can do, they can easily be taught how to ward them off, and prevent their formation. The forms of disease are

complicated, and very various; the springs of disorder are few, and very easy to be recognized; and we feel pride in saying, that in our own immediate connexion, the health of our friends, and especially of their children, has been better preserved by our anxious endeavours to point out the paths which lead to health, as also the devious bye-ways, which, with equal certainty, lead to disease, than by exerting ourselves, however successfully, to cure diseases when present. It is needless to add, that our satisfaction, in seeing disorders thus avoided, has much more than counter-balanced any profit that might have accrued, from witnessing the distressful and often fatal scenes, which too frequently result, only from the want of such elementary knowledge as we have alluded to.

Nor has the promulgation of such knowledge been less gratifying in another point of view. When disease has arrived, and come it must, the power of curing it has been materially increased, by the efficient manner in which it has enabled the patient or his friends to co-operate with the medical attendant in his endeavours. For when the notions of the latter respecting the disease have been explained as intelligibly as the case admits of, the mode of treatment has appeared to arise so rationally out of the explanation, that the necessary directions have been certainly and promptly acted on. Confidence also has been

kept up; and thus, whilst the needless alarms, which, so generally accompany a profound ignorance of the patient's real state, are prevented, the case goes on satisfactorily to all parties: or at least, a much better chance of recovery is given to the patient, than where, as in other instances, his friends give food where the practitioner has requested that none may be given, and otherwise neglect or oppose his suggestions, on the false and often destructive idea, that weakness in a patient is always indicative of that species of debility, which is to be cured by the exhibition of tonic medicines and a nourishing diet.

As a further illustration of these points, let us look at the matter thus:

The friends of a patient say, "This is all very well,—the doctor said, that low diet was absolutely necessary for his recovery; but I knew he was wrong, and I gave him some meat and wine, and you see he has got well."—The error lies here; the disease was one which was conquered by the powers of the constitution, or by the treatment, *in spite of these improprieties of management.*

Every patient thinks that his disease is an important one; but, if a medical man's practice consisted entirely of cases of life and death, as they are called, the profession would be but scantily supplied with professors; and it may be added, that the success of the best of us would

not wear a very promising aspect, if the recovery of our patients depended in every case, on the clearness of our conceptions respecting the disease, and the critical propriety of our treatment: not to mention, that the kind of ignorance, the existence of which we have deplored in attendants, would probably in most cases, so effectually assist the practitioner's inevitable hesitation respecting the true nature of the disease, that very few patients would be saved.

But, not to carry this discussion further at present, enough has surely been said to show, that unprofessional persons should possess some knowledge of medicine; and, therefore, that if the common books on popular medicine be injurious, it is not because the object of their publication is a bad one, but because the plan adopted is improper, and the kind of information attempted to be taught is such, as never can be learned unless by a course of regular medical study. Indeed, the attempt to teach it has only led to more error and confusion than existed before.

It may now be said, for it is true, that the conviction which has arisen out of these considerations, has suggested the present publication. It is by no means intended to teach indifferent persons how to distinguish, and to cure diseases, (and that however not from any disinclination, or feeling, that it were wrong so to do, if it were

possible) but to lay before the public, in familiar language, as much of the principles of medical science as may enable them

1st. To understand and recognize the state of health when present;

2nd. To know the mode in which disorder of the healthy functions is produced, and consequently, the principles which lead to a rational system of diet, exercise, and clothing;

3d. To distinguish between the state of health and that of disease, and therefore to mark the approach of coming diseases;

4th. To become alive to the important truth, of how simple the remedial means are, which will remove a commencing disease, and lead a complaining patient back again to health; and lastly, when disease is actually present, to learn how they may understand the explanations given by their medical friend; and thus co-operate with him for the good of his patient, instead of counteracting his endeavours, by either not understanding his directions, or doubting their propriety.

There are many other collateral subjects, which will form an interesting part of such a publication. Amongst these we may enumerate, the general directions to be followed, before a practitioner arrives in cases of accidents of every kind, such as drowning, poisoning, broken bones, burns, &c.; discussions on diet, exercise, clothing, and

the general doctrines of the mode of preserving health; the physical treatment of children in particular; and, as the health of children is so materially dependent on their moral education being properly conducted, an occasional glance at that branch of the subject; the wandering occasionally amongst the beauties of the creation, in discussing some parts of the collateral branches of medicine, such as botany, natural history, chemistry, and mineralogy; and, above all, the advantage as well as pleasure, which must arise to all, from having their legitimate objects of study increased, by a knowledge, however small, of the boundless wonders of the human body in its construction and actions.

Surely these are proper subjects for discussion with the public; surely the teaching of any, the smallest part of the knowledge here hinted at, must be praiseworthy; for surely the possession of it to any great degree, would not only lead to an extension of the ordinary lives of men, but make their existence here more agreeable both to themselves and to their friends. For these reasons therefore, we have attempted the present work; and though it may fail in the execution, yet the intention will be duly estimated, and the desire to be useful will be allowed to the writer; even, although it may be felt, that his endeavours have not been crowned with all the success which he hoped would result from them.

Art. 2. *Observations on Colds.*

How common it is to hear a person say he has got a cold! No doubt he thinks he knows what he means when he uses these words; and yet, on examination, it will be found, that they convey no further meaning to his mind, than that he is affected by that kind of fever which is called a cold. Certainly he will tell you it is a cold in his head, or on his lungs, or in his throat; and he will be probably right: but he cannot tell you in what the disorder consists, nor why it is in the head, lungs, or throat.

All this, however, may be learned and very usefully too; for as neglected colds frequently lead to destructive complaints, or rather, are misunderstood, they being in reality not colds, but the dangerous complaints in question, it must be very useful for every one to know, with something like certainty, when his cold is a dangerous one, and when it is one of that common kind which occurs every day, and is cured by a day or two's abstinence, a dose of medicine, and staying within doors.

A cold then is a fever—a regular fever—as much a fever as typhus is, though not so dangerous. It is caught usually by an improper exposure of the body to the common causes of fever,

at a time when the actions of the constitution are from accident, or from disorder, in a susceptible or weakened state. A cold fit is produced as in other fevers; a hot fit follows, and the complaint runs through its stages like any other fever. But it will be said, whence arises the stuffing of the head, the sneezing, the watering eyes, the sore throat, the loss of voice, the rattling breathing, the collection of phlegm, the cough, or the pain in the chest? Why, it is thus—the nose, the back of the throat, the windpipe, and the air tubes of the lungs, are all lined by one continuous membrane; which, because it is covered by mucus, to defend its delicate surface from injury by extraneous substances, is called a mucous membrane. Now, there is an extraordinary sympathetic connexion, as it is called, between the actions of the skin and the actions of this membrane; and it is found by experience, that when a cold is taken, the actions of the skin are first interfered with; then a sympathetic affection of some portion of this mucous membrane takes place; inflammation follows, and thus the whole is accounted for.

If the portion of membrane which lines the nose be affected, the complaint is a sneezing cold; and as there are certain cavities connected with the nose, and lined by the same mucous membrane, called sinusses, pain is felt also in the region of these sinusses; hence the heaviness

over the eyes, the frontal sinus being situated over the eye-brow, &c. Or, if the throat be affected, then the complaint is called a sore throat. Or, if the membrane which lines the larynx, or organ of voice, which is situated at the entrance from the throat into the windpipe, and forms the projection in the middle of the neck, then the voice is lost. Or, if the inflammation attack the membrane which lines the windpipe, or the air tubes (bronchial tubes as they are called) which lead from it, then cough takes place, and the rattling of phlegm is heard when the person breathes.

It is easy to understand all this: and it will now be equally easy to see, that the danger of the complaint varies much, according as it is situated in one part of this mucous membrane, or in another. So, a sneezing cold is not dangerous; a sore throat is not dangerous; hoarseness and loss of voice, however show more danger; as do also the signs that the bronchial membrane is inflamed. This arises from the two latter parts being much more essential to life than the two former.

But, it will be said, that colds with cough and loss of voice, are not always dangerous. Certainly not; but this depends solely on the violence of the inflammation. Let such complaints be neglected, or let the inflammation be once firmly

established, and they become very dangerous disorders.

Moreover, even in catarrh and sore throat, the irritation which produces the symptoms, may very easily slip along the mucous membrane into the larynx, and down the windpipe into the lungs; and thus give rise to danger. In fact, this generally takes place in some degree; for cough and spitting, if not hoarseness, commonly occur in the progress of such complaints; but here, as in the other case, if the inflammation be not violent, no harm arises. However, sometimes the reverse takes place. A gentleman had a sore throat, attended by a little tickling cough, with some disposition to hoarseness. His fever ran high; and therefore he was directed to inform his medical attendant, if the cough increased. It did increase, and became incessant. In fact, the inflammation had spread to the larynx; and thus, a very unimportant fever was changed, at once, into one of imminent hazard. But, as the probability of this had been foreseen, immediate relief was given, and the danger was speedily averted. Had this gentleman gone on for some hours longer, which he would have probably done, if not apprised of the circumstance, he would almost certainly have died; and indeed many persons are thus suddenly cut off by what are called colds, to the great surprise of their friends, and often even of their medical attendants.

It is always right therefore, to take care of a cold. But so long as the symptoms are moderate, the fever not high, the cough not troublesome, and the whole constitution free from any great oppression, no danger is to be apprehended. In such cases, attention to the bowels, *taking great care to keep the skin warm* by staying in the house, warm clothing, &c.; the warm bath, if possible, or putting the feet into warm water, and abstinence, will be all the treatment that is required. But if the reverse of these symptoms should occur; if the cough be very troublesome, if the breathing be difficult, the fever high, and the powers of the constitution be much oppressed, then the case puts on a serious aspect, and requires immediate attention.

Pain in the side and chest often occurs in colds; and especially in those which take place during the dry winds of spring; and it is for this reason, that the present article is written at this time. It arises thus. As we have said above, the inside of the lungs is lined by a mucous membrane; now the outside of the lungs is covered by another membrane, called the pleura, which, by preventing the lungs from adhering to the inside of the ribs, allows them to have the necessary play during respiration. This membrane from being smooth, and covered merely by a slippery limpid fluid, is called a serous membrane.

In cold and damp weather, it would seem, that

the mucous membranes are the most commonly affected, when the patient takes cold; in cold and dry weather, on the contrary, the serous membranes are affected the oftenest. It will now be understood, that whenever a pain or stitch in the side or chest takes place in a cold, and this at any season of the year, especially if there is also much difficulty of breathing, it may be apprehended, that inflammation of the pleura or of the substance of the lungs has taken place, and this complaint is a very dangerous one.

With such directions as these, it is hoped, that an indifferent person may know what colds he may safely treat himself, and what he ought to lose no time in submitting to more experienced care.

In the next number a few remarks will be made on other consequences of neglecting colds, besides those above-mentioned.

ART. 3 *Observations on the Health of Children; principally intended to point out how Disorder first, and then Disease steals on their Constitutions, and therefore how the Causes of Ill Health may be averted*

THE following observations on the signs of health and disease in children, form the first portion of a connected series of remarks on the health of children, and on their diseases.

The proper management of children is confessedly of the first importance. "Train up a child in the way it is to go, and it will not depart therefrom," is as true in the physical history of the human species as it is in a moral point of view. The health of the child, as a general principle, may be said to form the health of the man; for the exceptions to this observation are so few, and so many even of those are only apparent exceptions, that the observation is unquestionably true in the great majority of instances.

On this account, the care of the health of children has ever been an object of the author's most anxious but agreeable solicitude; and therefore, whilst he thinks he has verified the following observations, by reiterated and unvarying experience, he hopes that there may be found in them something that is useful; although probably he only flatters himself, when he believes that they contain any new views of the subject.

The general plan which has been followed in these observations is as follows.

The signs of health and disease in children are first pointed out; the subject of early moral management is then discussed, from a conviction that the good or bad health of children is much influenced by the early moral habits which they have learned; then follows a general account of how disorder arises in a child's constitution, thus leading to a discussion on the causes of diseases

being more prevalent amongst the children of the poor than amongst those of the rich; and to a statement of the difference which exists between the diseases of children as they belong to one or other of these classes: the whole suggesting, it is hoped, the best plan for avoiding the causes of disorder in all classes of children when practicable, and for observing and remedying diseases in their incipient state; which, as they may be easily recognized are generally capable of being removed by very simple means.

ESSAY THE FIRST.

On the Signs of Health and Disease in Children.

It is an error to suppose, that a great mystery hangs over the diseases of children. We are taught, that it is difficult to recognize disease in children, because they cannot point out, in words, the seat of their complaints; but the observation is not a sound one. Children speak a much more plain language by their actions than adults do by their words. But this is not all; there are other circumstances, peculiar to children, which greatly facilitate the investigation of their diseases. An infant instantly and decidedly gives expression to the pain which he feels; an adult is so accustomed to bear pain, that unless the

irritation, which is present in his constitution, produces well marked symptoms, he disregards his feelings; and thus diseases run on, until complicated, or even irreparable mischief is often the result.

An infant's diseases too, are simple; for his constitution is sound; whilst the complaints of adults are generally more or less complex, on account of the weak parts, which Celsus says, with the best observers, are to be found in every person's constitution. Moreover, an infant has no guile; its actions tell right on what it feels; for it is regardless of consequences; whilst an adult is often led to conceal a part of his complaint and be deceitful.

Many more circumstances might be adduced to show, that it is at least as practicable to discover the complaints of children as those of adults; but as these facts will naturally offer themselves for consideration in many other parts of these pages, it will not be necessary to enlarge further upon them here.

Ask an attentive mother whether she finds any difficulty in deciding when her child is ill: "Oh no," she will say, "his temper, his complexion, his every look shows it, even when the cause of illness is slight:"—and it is very true. The constitutions of children are highly susceptible of impressions, and the younger a child is, the

more readily will his system be affected by the irritations which produce disease.

Let a child's bowels be disordered for the first time, and he will become paler than usual; heat perhaps will follow; his tongue will be white; he will be heavy, and his temper will be changed for the worse. These are circumstances not to be overlooked, if even common attention be paid to a child's actions.

Let his bowels be habitually deranged, and the increase of symptoms will keep pace with the increase of irritation: the skin will be constantly paler and of a dirty hue; the eye will be sunken, and surrounded by a dark line; the breath will have an unpleasant smell; the tongue will be white and dry; fever will occur at intervals; the child will become emaciated, and his nights will be restless and his days fretful.

If a child be affected by symptoms like these, it will be apparent that some irritating cause is acting on his system; and by a little closer attention, the part on which that cause is producing its effect, may in general, be decided on with sufficient accuracy.

His stomach will be found to be more projecting than it ought to be, his evacuations will be unnatural; and further enquiry will generally show, that an improper diet has occasioned the

illness in the first instance, and is still active in aggravating the existing symptoms.

The intensity of these deranged actions will mark, to a practised eye, the degree of the irritation; and the treatment necessarily grows out of a clear conception, first, of the degree of the illness, and secondly, of the part on which the irritation is acting with the greatest violence.

But it will be necessary now to revert to the first periods of infancy, and it will become apparent, how disorders arise from very slight and simple causes; how this disorder is aggravated, and leads slowly but certainly to the most dangerous diseases of children; how easily its very first and slightest symptoms may be detected, and it is hoped, how readily it may, in the majority of cases be cured, and the consequent train of evils be averted.

And here too, the simplicity of character, which marks the diseases of children will appear very plainly.

Little indeed can be learned from the appearance of a child during the first few weeks of its existence. Its complexion is not settled; neither is the round form of its limbs established: but, then infants of that age are so seldom ill, except under very defective management, that this becomes of little importance.

After some time, however, the child improves;

its limbs take on the rounded form, and its whole appearance announces that it is happy and in health. It sleeps soundly and almost constantly, and with its eyes lighty and accurately closed; it seldom cries; its limbs and body are convex, and become firm; it is not too fat, neither is it lean; its gestures are easy; its hands are very seldom raised above the mouth; it does not start nor smile in its sleep; its eyes are moderately bright; its skin is not wrinkled; its respiration is nearly imperceptible; its secretions are natural; its bowels are moved two or three times in the day, the excretion having the appearance of custard, and being discharged slowly as through a syringe; it has a vacant look of content; and lastly, it is easily pleased by the attentions which are bestowed on it. Symptoms like these sufficiently show that a child's sensations are agreeable, and the actions of its system going on in a healthy manner.

Any deviation from this state is a prelude to disease. Moral treatment, however, has some influence on the infant, even at this early period of existence. Infants under some nurses will lie down quietly when awake, and go to sleep without further interference; whilst under other nurses the same infants would probably require rocking, or at least would cry, if it were attempted to lay them down awake.

This crying is not from disease, and may be easily distinguished from that which is. Infants cry too on being washed, but, even here, much may be done to prevent it by proper management; as may be seen very frequently, where children are attended by mothers or by observing nurses.

The cry of disease is very different from all this; and is moreover accompanied by other symptoms of illness, which are in general sufficiently unequivocal.

It is not necessary to give the reverse of the signs of health alluded to above, and say, this is disease; but it is of more importance to press on the reader, that any deviation from these signs should be strictly attended to, and that the welfare of children, both mental and bodily, mainly depends on that anxious and constant attention to their wants and feelings, which nothing but affection can give; and which therefore can seldom be found except in the breast of a mother. When mothers, indeed do attend to their children with the same perseverance as the parents of the brute tribes watch over their young, it will behove the medical man to come to the charge of a child's health with a skilful eye, and a well-stored mind: for the constant concentration of a mother's powers of observation on her child's actions, will often point out

to her that disorder is present, long before it is perceived by him; or in more severe cases, he will probably lose her confidence, by over-looking symptoms which are but too apparent to her. An instance of this kind occurred the other day. An only daughter was affected by the hooping-cough. She went on well for sometime; but at last, the mother said she was ill. The medical attendant, a man of experience and observation, could not perceive it; but having a high opinion of the mother's powers of observation, he saw the child every day, and sedulously attended to its symptoms; but in vain—he could not perceive that any bad symptoms were present. After the lapse of about a fortnight, however, decided indications of hydrocephalus occurred, and the child died in two days from that time. This practitioner blamed himself, and with good reason, for his want of discrimination in this case; as the slight symptoms which preceded the fatal attack, and which probably precede the attack of almost all diseases, had undoubtedly existed from the time of the mother's fears being first excited; and he could not but feel, that she had seen what he had omitted to observe.

A medical friend of the author's relates that he once witnessed a similar mistake. A lady said that her child was threatened with water in the head; the medical man overlooked it; but, as in the former case, the mother founded her

opinion, on an observance of some small deviations from healthy action, which hourly attention had enabled her to perceive; and she was right. She said, that the child was fretful and yet so sleepy.

From these two symptoms she deduced that the impending disease was hydrocephalus; and it was a most acute observation; for, as Dr. Armstrong says, nothing marks the threatening of hydrocephalus more than a combination of fretfulness and heaviness.

No deviation from the signs of health in children should, as is said above, be allowed to pass unnoticed. Even an infant, does nothing without a reason, or rather without a cause: if he cry, it is either because he is irritated, or because he is ill; if he move his limbs or open his eyes, it is to make observations, or to obey some internal impulse, which is supplied by the wants of the body; and, therefore, if his actions express pain, or such a degree of increased irritation as may be considered to be leading on towards disease, the warning should not be unattended to; for infants, as has been hinted above, invariably tell the truth.*

* Infants may, as a friend remarks, but children do not; indeed, as he says, they often lie most abominably; concealing their pains, and saying they are well, when they are evidently ill, only because they dislike physic. But at present, infancy, and not childhood, is the subject for discussion.

It is hoped that enough has been said to shew how interesting it is to observe the actions of children even during the early period of infancy. Infants, however, are equally interesting in a moral point of view; and as in the course of these essays an explanation will be offered of the great influence which a proper moral treatment of children has in preserving their health, a few remarks on the early education of infants will form the subject of the next essay.

Art. 4. *On the Measles.*

The measles were exceedingly prevalent during the open weather of last autumn; and, on the whole, the disease put on a violent character.

Every body is acquainted with the appearance of the measles; therefore, no general description of symptoms is required here; but there is still much information respecting this disease, which may be very advantageously given.

It may perhaps be as well to remark, that parents often take alarm when their children are affected by slight eruptions; and especially when those eruptions occur on the body, on the supposition that it is measles. Now, the eruption of measles does not usually show itself first on the body; it is more commonly to be found on the

thin skin behind the ears, and just below them on the neck, and also round the child's mouth. Whenever, therefore, a *speckled* state of the skin occurs in those parts, if cough, sneezing, watering eyes, and a swollen appearance of the features, and other symptoms of catarrh be also present, the measles may be anticipated; but not if these parts be unaffected; and especially not, if the eruption have the character of pimples. The eruption of measles never shows a head; it is very slightly raised from the skin, and is not, like pimples, &c. of a round form; but its appearance is that of irregular red spots.

In the generality of cases the measles is not attended by danger; at least moderate care will carry most children safely through the disease. In many cases, however, it is a very dangerous disorder. Healthy children, in the higher and middle ranks of life, very seldom die of the measles; but, when it attacks the miserable and emaciated infants of the poor, scarcely any disease is more destructive. During the seventeen first years of the author's connection with medical practice, he does not recollect that he saw one child die of the measles; so that he almost began to think, that such an event could not happen, except through negligence. Since his residence in London, however, he witnessed a series of sixty cases, which occurred in a paro-

chial infirmary during the autumnal months; and he soon found that he still had much to learn respecting the danger of measles.

The children were chiefly infants; and having been badly nursed, fed and clothed, for they were the children of the poorest persons, the majority of them were, as may be expected, very unhealthy. The effect of this was but too soon apparent; for in almost all of them the disease was severe, and a large proportion of the whole died; perhaps, one in four or five; although they were attended with the most scrupulous care, and by one whose knowledge of the eruptive fevers of children is not exceeded by that of any other English practitioner. It was so invariable that the most unhealthy and emaciated children had the disease with the greatest severity, that on going round the nursery, it was easy to point out which children would die if they caught the disease; and the result very seldom negatived the prognostic.

The danger of measles however does not arise from the disease itself abstractedly considered. The eruption may be very abundant, and yet the child be safe; the fever may be violent and yet there may be no danger; so also may be the cough, the watering eyes, the sneezing and the state of general oppression. But, as is attempted to be explained in an article given above, the

sympathy which exists between the mucous membrane of the throat and of the lungs, and the skin is so strong, that the eruption on the latter, produces a consentaneous increase of action in the former. Thus the danger of measles depends on the degree of a secondary inflammation, which is found to occur in the mucous membrane which lines either the larynx, the windpipe, or the bronchia, (the air tubes) or all of them.

It is difficult to explain why this secondary inflammation should occur more frequently in unhealthy then in healthy children; but that the fact is so is certain. For, not to mention, that the extensive experience of several eminent men agree in this point, it was found to be invariably true in the numerous cases which are alluded to above.

Not one child got into danger except from inflammation of the larynx, or of the bronchia; not one died, in which this inflammation was not the cause of death. This was abundantly proved by dissection; for in all of them, the larynx was found to be highly inflamed, or was ulcerated, and the bronchial tubes were plugged up by mucus and by pus. The lungs also were generally inflamed, and the neighbouring glands enlarged.

It was remarkable too, that, in the most dangerous cases, the eruption on the skin was

scanty, or almost imperceptible; indeed, in two of the fatal cases the eruption never appeared on the skin; and this will explain the popular and true opinion, that a full crop of eruption in measles is a favourable circumstance.

In a great majority of these bad cases, this inflammation came on with the first fever at the breaking out of the eruption; and it invariably lessened the quantity of the eruption. The skin was pale and cool, instead of being hot and flushed; and though the cough and difficulty of breathing showed the mischief which was going on within, the external signs of fever were only present in a very moderate degree.

The warm bath, bleeding, both by the arm and by leeches, confinement in bed, emetics, and ipecacuanha in nauseating doses formed the most efficacious treatment; and whilst none died except of inflammation, which from the debilitated state of the little patients was uncontroulable; all those who recovered from the bad symptoms, were cured by evacuants, pushed as far as the constitution could bear.

In the ordinary cases, confinement to bed, an emetic, and a purgative; and afterwards ipecacuahna, and mild laxatives formed the only necessary treatment.

Thus then, it seems, that the measles are to be dreaded, in weakly and unhealthy children,

at least, in London. In such children, the dangerous inflammation will generally come on at the commencement of the disease; in many however, and even in healthy children, the decline of the disease forms a period at which the patient requires to be attentively watched. At that time inflammation of the mucous membrane, or of the lungs is very likely to occur, and it always requires very prompt measures.

Whenever therefore, at the decline of the eruption of measles, a child has his cough much increased, his breathing much quickened, and especially if he complain of pain in his chest, either on breathing or on coughing, let it be attended to, for pneumonia in some form or other is present.

Although, in the majority of cases, children ill of the measles should be placed under the skilful care of a medical man, yet there are many things in the treatment of measles, which may be advantageously attended to by the friends of a patient. The medical practitioner will, of course, moderate the fever which precedes the eruption by bleeding, if the degree of fever, &c. make it necessary, by an emetic, by purging, by abstinence, and by the warm bath; but the attendants may at the same time see, that, during the period of the eruption, the patient is kept strictly in bed, so that cold air is by no means permitted to blow

on his body; for it is found that one most efficacious way of preventing an accumulation of blood in the internal parts, is to keep up the circulation on the skin, by external warmth, and by favouring the continuance of perspiration. Infants, however, will not often be prevailed on to lie in bed; with them therefore a blanket may be doubled up like a shawl, and it may be thus worn, tapes being placed so as to tie it on round the child's neck. In this way the hands and chest as well as the whole body may be kept permanently covered, even when the child lies on the knee; and the same thing may be done when a child cannot be prevented from sitting up in bed.

Of course it is not meant to recommend a heated atmosphere and too much covering in measles. *Moderate warmth* is the thing required; especially as this will assuredly prevent the application of external cold to the skin.

If this be persevered in strictly, during the stage of eruption; if also, warm diluents be given liberally, *and no other food* be allowed during the same period, then it is probable that inflammatory symptoms will not appear at the decline of the eruption, and that the patient will then be convalescent.

When the eruption has fairly declined, the warm bath will be found to be very useful; especially if the skin be well washed with soap,

so as to clean off all the perspiration and other unpleasant secretions which will have collected there. The temperature of the water should be 96° or 97° of Fahrenheit's scale, and the only necessary precaution is, to do it in a warm room, and with a sufficient screen to prevent a draught of air from blowing on the skin.

As a general rule perhaps, the warm bath should be thus used at the time the patient's linen is first changed; and this should be immediately after the fever and eruption have in any material degree subsided.

It is usual to purge children repeatedly after the measles. As a general rule, this may be good; because it will very probably take away any slight and unobserved increased action in some part of the respiratory organs, or the mucous membrane, which, it will now be understood, may not improbably be left after the disease has subsided: and also it may tend to obviate the evil effects of the too great desire which always exists to feed patients after acute diseases, on the plea of recruiting their weakened powers. But, it is not necessary to *purge* them, unless symptoms of deranged health be absolutely present, such as cough, or sore eyes, or foul tongue; and though in strong children an occasional dose of medicine can do no harm, yet in weakly children the gentlest laxatives only should be administered.

One point more remains. It is usual to feed patients in convalescence after acute disease. Now this is a bad practice; doubtless a certain quantity of food is required, and that should be of a nutritious quality; but it should be recollected, that the powers, in such cases, have been weakened by the previous disease, and that therefore only the lightest and most digestible food is applicable. Even food of this kind should be given in much smaller quantity then the sharpened appetite would appear to demand: and with regard to measles, after which, slight inflammations of certain parts so often remain, it will often be necessary to deny any portion of nutritious food as long as cough, or inflamed eyes, or a foul tongue be present; for all these irritations are produced either by actual inflammation, or verge closely on it; and, they are always to be cured by such means as cure inflammation generally.*

* One exception to this rule may be mentioned. It occasionally happens, especially in large towns, that a state of deranged health will follow the measles and other eruptive diseases, which differs from inflammation; although the case would be mistaken by an inexperienced observer. On a general view, the child appears to be inflamed; his eyes water and are red, and his skin is hot; but the eye-lids are swelled and broken out, an eruption also commonly appears behind the ears, the upper lip too is tumefied, and the skin surrounding the mouth is chopped and covered by pimples. Bark and a nutritious diet cures this form of disease.

Miscellaneous Department.

This portion of our Journal will consist of Critical Analyses of New Publications, and a Digest of such parts of the Medical and Scientific Literature of the Day, as may either afford interesting information to our Readers, or allow room for useful remarks on our own part.

Art. 5. *The Cholera Morbus of India.*

Dr. Kinnis, of the 56th regiment, gives us, in the Edinb. Med. and Surg. Journal, No. 66, an account of the late severe Indian epidemic, as it appeared at the Mauritius.

We mention it merely for the purpose of saying, that this tremendous disease, which so lately ravaged the East Indies, spreading like a pestilence, and cutting off the victims of its direful violence, frequently within a few hours after the first symptom of disorder, was a true cholera morbus. This disease is nearly allied to the autumnal bowel complaints of this country; the only difference being, that in India, the heat of the climate and other causes, gave it the character of a malady too often of uncontroulable malignity, and in scarcely any case, to be suppressed, except by bleeding and other modes of treatment proper in diseases of inflammation. The disease, in truth, was one of inflammation; and the extensive experience which has resulted from its occurrence, has at once verified the views medical men have lately

taken of the inflammatory nature of these disorders, and has opened the eyes of English practitioners to the fact, that our common bowel-complaints are frequently inflammatory, and always connected with an overloaded state of the liver, or of other parts of the intestinal apparatus, which requires attention in the treatment.

In India, bleeding, joined to opening medicine and opium, cured the disease. In this country, the bowel-complaints are cured, the most readily, by opening medicine and opium in conjunction, or by these medicines in succession, and by bleeding when these remedies are ineffectual. This, at least, is the case in by far the majority of cases.

Art. 6. Dr. Abercrombie, a rising practitioner of Edinburgh, in addition to his late researches into the pathology of diseases of the head and the abdomen, has now written an interesting account of Consumption, and of the diseases which are confounded with it.

Consumption was treated by tonic remedies from the time of Hippocrates to the seventeenth century: the favourite remedies being nourishing diet, friction, cold bath, exercise, sea voyages, preparations of iron, and astringent or stimulating remedies. Sea voyages formed perhaps the most approved prescription.

In the eighteenth century, a totally opposite plan of cure was recommended, and antiphlogistics became the favourite remedies. Sea voyages were still used indeed, but with the new explanation of their operation, that they lowered by keeping up nausea. A few physicians, however, still recommended the tonic treatment; and thus opinions went on, until the introduction of digitalis gave them a new direction. It, also, has sunk into disrepute.

We agree with Dr. A. in believing, that whilst certain cases have been occasionally cured by all these methods, it is impossible that the cases can have been all of the same kind, although all ranged under the title of consumption; and therefore, that many diseases of different characters, and of greater or less capability of being cured, have been called consumption. The fact is certainly so; and Dr. A. goes on to mention and describe several forms of chest complaint, which, though commonly called consumption, are very dissimilar to it in their character and dangerous tendency.

The French also have done much in discriminating between these various forms of pulmonary diseases; and it is indeed often a matter of anxious investigation, to determine between true consumption and a curable disease. We need not say, that Dr. A's paper is very valuable. (Edinb. Med. Surg. Journ. No. 66.)

Art. 7. *Rupture of the Tendo Achillis.*

Dr. Edmondston recommends the application of straps of adhesive plaister, to support the limb or joint in cases of sprains, and of injury of the muscles and tendons at the back of the leg.

He ruptured a part of the tendon belonging to the calf of the leg in dancing; and found, that by sheathing the whole limb in sticking-plaister, he was enabled to walk soon after the accident, and that by thus taking exercise, he was cured in a much shorter time than when the limb is laid on a sofa and kept at rest.

We are sure that the practice recommended in this paper is proper. We have very often witnessed the

great advantage which accrues from using exercise after sprains and similar accidents; and we shall have much to say on it hereafter. (Edinb. Journ. No. 66.)

Art. 8. *Erysipelas of the Face,* is a dangerous disease, from its being frequently followed by symptoms of head affection. The proper treatment of erysipelas, or St. Anthony's fire, as it is called, is not yet settled. Some bleed for it; others give bark; and under certain circumstances both succeed. Dr. Dickson of Bristol, relates, (in Edinb. Journ. No. 66.) an interesting case, in which delirium, screaming fits, and other signs of inflamed brain made a part of the disease, and where bleeding to a large amount was followed by convalescence.

Our own experience agrees with this recommendation of antiphlogistic remedies; and we see, that Mr. Rice relates two very good cases of the same kind in the Medical Repository, No. 45. In both of these cases, the brain was much affected, and in both the liberal use of powdered colchicum cured the patients very rapidly. Colchicum acts, like bleeding, as an antiphlogistic.

Art. 9. *The Guinea Worm.*

Mr. Scott, of the Madras Artillery, describes some cases of Guinea-worm; in one of which, after immersing the patient's leg in a running stream, he extracted twelve inches of the worm. It was round, of a pearly colour, and as large as a large violoncello-string.

Mr. S. believes, that the Gordius Aquaticus, or parent worm, pierces the skin of persons who wade in the rivers, and deposits its ova underneath; that the worm

increases in size slowly, but without producing pain; that pain only arises when the worm arrives at maturity, and is therefore called on by its natural habits to make its way out, externally; and that the usual treatment of favouring its expulsion by wrapping it round a quill, as it gradually emerges from the skin, is much improved by frequent immersion of the limb in a running stream of water. (Edinb. Journ. No. 66.)

Art. 10. *Case of Cæsarian Operation.*

This operation has only yet succeeded once out of twenty-four cases in this country; although on the continent many women have been saved from death, by having their child taken away from them by this incision into the abdomen.

In the present case, the woman had become deformed after the measles; and therefore, although she had borne living children before, it became impossible now to finish the delivery, except by performing the Cæsarian Operation.

Dr. Henderson, of Perth, performed it in September, 1820. The patient died in twenty hours after the operation

It has been supposed, that all such patients die in this country, because the operation is deferred too long. Of course there must be some such reason; for it is impossible to believe, that an English woman cannot bear what a German female easily recovers from. (Edin. Journ. No. 66.)

Art. 11. *Cancerous Complaints.*

We willingly give further publicity to Mr. Young's papers, on the treatment of cancerous complaints by pressure; because, as we have witnessed his mode of applying pressure, we can testify, that in our opinion, he applies bandages so scientifically, and with such extraordinary dexterity, that nothing like it has ever passed under our observation, as done by any other surgeon.

Mr. Y. has been much opposed in his practice by medical men; and certainly it must be said, that unwarrantable means have been sometimes used to check his endeavours. But we must also say, that perhaps Mr. Y. may thank himself for the opposition; for if he had conciliated the profession by mildness, instead of irritating many individuals, by too often putting his own strong feelings into appropriate language, not only would he himself have reaped more benefit from his ingenious and admirable practice, but the public at large would have received an equal share of profit, by its more general extension.

One of the cases given by Mr. Y. in his present paper, (London Med. Journ. No. 264.) we saw in its progress; and therefore we can verify the truth of his statement. A man had a tubercular disease of his eye-lids, and of the surrounding parts; which disease, the chief hospital surgeons in London pronounced to be cancerous, and refused to treat. Under Mr. Y's pressure the whole disease was entirely removed, and we believe the patient continues to be quite well. When we saw this case first, it was dread-

ful; the last time we saw it, the whole was perfectly well.

We shall recur to this subject again on a future occasion; for even as an improvement on the practice of bandaging, Mr. Y's principles are of incalculable value.

ART. 12. *An Infant with Two Heads.* MR. JACKSON of Bolton, in Lancashire, describes a full grown child, born alive in August, 1820, with two heads.

One head breathed for forty minutes; the other did not breathe at all. The child could move all its limbs, and it opened and shut the eyes of both heads. The heart palpitated for some time after it ceased to breathe. It was a male child. It weighed 8lbs. 15oz. 6drs. (Med. Journ. No. 264.)

ART. 13. MR. MARLEY, of Vigo Lane, relates a case of re-union of the end of a finger trapped off by a stone. The end of the finger had been separated for twenty minutes before it was re-applied to the stump. (Med. Journ. No. 264.)

Extraordinary cases of this kind do sometimes occur. The old Taliacotian plan of making a new nose is very nearly a similar case. We saw a successful operation of this kind performed. A triangular piece of skin was cut from the forehead, but without separating it at the top of the nose; it was then turned down, and united to the skin covering the part where the nose had been.

ART. 14. DR. SMITH, an army medical officer, relates, that a soldier had one of his eyes green and the other grey. He found, on enquiry, that they were formerly of the same colour; but that about three months after one

eye had been much injured by the blow of a rope, it became of a greenish colour; and that gradually the colour had afterwards changed to "a light grass-green." There is, it seems, still however, a slight appearance of disease about the edge of the pupil. (Med. Repos. No. 66.)

Art. 15. An excellent volume on the nature of *fever* has been lately published by Mr. Sandwith, of Bridlington. Mr. S. was led to write this work, from having witnessed a severe epidemic at Bridlington, in 1818 and 1819; and it is very creditable to the author, that the great attention which he paid to the cases, and the industry with which he has recorded the peculiar symptoms of each and all of them, has enabled him to collect so much information as to make his work very valuable.

He found that bleeding was the most efficacious remedy; and that the cases were manageable, or the contrary, just as this remedy and the other parts of the antiphlogistic plan of cure, were or were not decidedly adopted. (Med. Repos. No. 86)

Art. 16. Baron Larrey, the celebrated French army surgeon, relates several cases of *fistulous sores* in the *cheeks* being cured by drawing teeth, with which the sores appeared to be connected. We once cured a case of this kind by the same means; much to the surprise of the man, who was a dispensary patient, and had applied, without much hope of relief; as he said, "he had been under the care of many medical men in vain." (Med. Repos. No. 86.)

Art. 17. The *milk of spurge* dropped on *warts* removes them. (Month. Mag. No. 350.) Would not the red juice of the greater celandine do the same thing?

CHEMISTRY AND SCIENCE IN GENERAL.

ART. 18. AN elaborate account of the curious and important trial between Severn, King, and Co., and the Imperial Insurance Company, is given by MR. PARKES.

In this trial, an important question respecting the *habitudes* of *boiling oil* was involved; the question being, whether or not a fire, which occurred in a sugar-house, arose from the boiling oil, which was used for the purpose of boiling the sugar.

Almost all the principal chemists in London were examined; and it was matter of diversion, to see how completely they differed in their opinions on the subject. The judge said, it was under such circumstances impossible to decide the question, as it certainly was; and of course the philosophers got into disgrace.

However, on consideration, it was impossible for them to be able to decide the question. It was not one of speculation and theory, but one of fact; and as the subject of boiling oil in the large way, was but little connected with the researches of experimental chemists, it was impossible for the latter to have been properly informed respecting it.

It is more agreeable to turn to the ingenuity of the contrivance by which sugar was boiled, by passing through it heated oil; the latter boiling at a much higher temperature than the former, and therefore causing the former to boil long before it itself had arrived at the temperature of boiling. The utility of the contrivance is to prevent the spoiling of the sugar, by boiling it over a naked fire; as also to avoid the difficulty and danger,

which often arose from the boiling over of the sugar. It is such simple applications of science as this, as do honour to the chemical philosopher.

Art. 19. In an account of Capt. Parry's Polar expedition, it is stated, that an excellent opportunity was afforded for the examination of quicksilver in its natural congealed state, (for quicksilver is a metal as well as gold, the only difference being, that they melt at *very different* degrees of heat.) Large masses were frozen by the severity of the cold, and from them "we learn that it (quicksilver) possesses the characters of a ductile, malleable and tenacious metal; that, in these respects, it appears to rank between tin and lead; that it becomes brittle and easily frangible when near its melting point; and that a piece of the size of a walnut, dropped into a tumbler of warm water, occasioned its instant congelation, accompanied by the fracture of the glass."

Art. 20. It was formerly considered to be curious, that a negro's skin should be black; because as black absorbs heat more rapidly than any other colour, it was said, that it was the worst possible tint to preserve the skin from the effects of a tropical sun. But, Sir Everard Home has found by experiment, that whilst the skin is blistered by exposure to the sun's rays when covered only by thin white linen, no such injury occurs when black crape is used. Thus, as the black colour acts by converting the radiant heat of the sun into sensible heat, it in reality prevents the scorching quality of the rays; whilst the increase of sensible heat is neutralized by the corresponding increase of perspiration which naturally takes place. (Brande's Journ. No. 20.)

ART. 21. IT is now perfectly ascertained, that the *red snow* of the Polar regions, is formed by the vegetation of a fungus, of the genus *uredo*. The proper soil of this plant is snow at a temperature far below 32°.

Dr. Henderson, in the Annals of Philosophy, No. 1. relates, that Pliny was aware that snow might become red; and he found that it was old snow which became so. His words are, "*Ipsa nix vetustate rubescit*;" or in English, even snow becomes red by age.

In the same number, an interesting account is given of two unsuccessful attempts to *ascend Mont Blanc*, by DR. HAMEL and others. An accidental slipping of the snow on which they walked, overwhelmed them when near the top, and three of the guides were suffocated. Many interesting observations are given of the effects of the rarefied atmosphere of high situations, in producing difficult respiration, causing fatigue, quickening the pulse, inducing thirst, and destroying the appetite. The danger of the ascent, in common cases, arises from the crevices between the masses of ice, and over which it is necessary to pass.

ART. 22. *Of Sounds Inaudible to Common Ears.*

DR. WOLLASTON, with his accustomed ingenuity, has remarked, that no person can hear sounds which are above a certain note; probably because the stretching of the tympanum of the ear has its limit at those notes. There seems no assignable limit to the hearing of low notes; whereas, it is easy to fix the point to which any person can go in hearing sharp or high sounds; for the limits are very small.

Dr. W. makes a striking and entertaining use of his observation. By means of a series of very small organ-pipes, he produces an ascending gradation of sounds; and he finds, that the point of hearing distinctly, varies in different people, and even according to the health of the same persons; so that at last he comes to certain notes which some of the company can hear and others cannot.

This is an unlooked for circumstance; although on consideration, it is easy to see that it must be so. (Brande's Journ. No. X.)

Art. 23. *The Mildew in Wheat* may be cured by sprinkling the diseased stems with a solution of salt. Six or eight bushels of salt is required for an acre; but the increased value of the salted straw as a manure, repays the expence of the salt. Two men, one to spread, and the other to supply the salt, "will get over four acres in a day."

Art. 24. *Wasps* feed greedily on yew-berries, hence *yew trees* protect fruit from *wasps*.

Art. 25. *Eggs* may be *preserved* by covering them over with a coat of gum arabic, and then imbedding them in charcoal.

Art. 26. A barrel of damp oatmeal lately took fire; it is supposed on the same principle that wet hay is consumed.

Art. 27. M. Guy Lussac rendered cloths, as muslin, nearly incombustible, by immersing them in a solution of phosphate of ammonia and borate of soda. They were carbonized by heat, but would not inflame.

ART. 28. CAPT. BAGNOLD has found, that in hares and rabbits killed in November, a tape worm is found in the intestines; and that his pointers and spaniels, employed in killing them, were afterwards affected by tape worm. He cured the dogs by feeding them for ten days on potatoes. It seems that the dogs were fed on the paunches of the killed rabbits.

The above matters of information are abridged from Mr. Brande's Journal, No. X.

ART. 29. In the Edinb. Philosoph. Journal, No. 7, a method of constructing *bee-hives* of wood, so as to resist the severest winter cold, is described by MR. JAMESON; also, MR. DUNBAR gives "his observation on *bees*, made by means of the mirror-hive." Mr. Jameson covers his hives with a stratum of charcoal. Mr. Dunbar's observations are, on the effect of introducing two queen-bees into one hive (one is destroyed by the other bees); and on the power which bees possess of forming a queen bee, out of the worm of a common bee. The observations vary somewhat from those of Mr. Huber.

ART. 30. In the same journal it is stated, that flocks of *starlings* generally alight on the ground in *circles*; that MR. SWAINSON is publishing zoological *illustrations of birds*; and MR. SELBY, "the natural history of *British birds*, (both works are much recommended): that *serpents* with *two heads* are not uncommon; neither are *hermaphrodite butterflies*; and that an old *packing sheet*, covered with *oil*, took fire spontaneously, when lying in contact with a wicker basket.

Art. 31. Interesting notices also are given of Capt. Parry's *Polar Voyage*. The sun entirely disappeared on Nov. 11, and reappeared on Feb. 3. "Vegetation was marvelously rapid." Some account too, is added of Lieut. Franklin's land expedition to the Polar Sea.

Art. 32. Dr. Wilkinson gives many details of the *antiseptic* qualities of the *pyroligneous acid*, in Tilloch's Mag. No. 273.

This acid of wood is found to be very efficacious in preserving vegetable and animal food; but it is not so useful without some addition of salt. The plan is, to add two table spoonfuls of the acid to the pickle for a ham of ten or twelve pounds; and at last, to brush the ham over with the pure acid once or twice. This process gives it all the flavour of smoke-drying; and indeed the smoke of wood is antiseptic, merely on account of the wood-acid which it contains.

Meat may be kept sweet also by this acid, as we have found on trial; but the meat requires to be well washed before it is cooked; and even then it has an acid taste, which is however not disagreeable.

Art. 33. Dr. Ure, of Glasgow, has lately published an excellent *Chemical Dictionary*. So says Mr. Tilloch.

Art. 34. *Sweeping Chimneys.*

It is proposed by Mr. Feetham, to make a door into each chimney in the attics, and then sweep the upper part by means of a long-handled brush, and the lower by a brush worked by a rope; one man being at the top

and one at the bottom of the chimney. The Society of Arts have voted the silver medal for this communication.

Art. 35. *Longevity in Russia.*

The tables of longevity, published for the year 1817, in the Russian empire, give the following results.

Amongst 828,561 persons who have died, all belonging to the Greek church, there appear to have been as follows:

1	above	140	years of age
1	do.	135	do.
7	do.	130	do.
21	do.	125	do.
51	do.	120	do.
83	do.	115	do.
783	do.	100	do.

An account also is given of a German soldier, living on the banks of Lake Champlain, who is now 135 years of age. He is very strong, and soldier-like; he can see and hear, and his youngest son is only 27 years of age. He never drank spirituous liquors. (Blackwood's Mag. No. 46.)

Art. 34. It seems that Capt. Kater has read a paper to the Royal Society, describing his discovery of a *burning volcano* in the *moon*. When examining the dark side of the moon, Capt. K. observed a luminous spot, which as he afterwards convinced himself, was a volcano in the state of active conflagration. Of course he could perceive the luminous spot no longer, when that part of the moon came into the sun's rays; and it is feared, that the eruption may be over before the time for observation again occurs.

ART. 35. THE Preston Chronicle reports, that MR. PARKES's plan for making *furnaces consume their own smoke*, has fully answered in that town. Several steam-engine chimneys are mentioned, from which no smoke is emitted; and the proprietors of the many steam-engines in that town, are so convinced of the efficacy of the discovery, that in a short time, Mr. P's invention will be applied to all the steam-engine furnaces in Preston; and thus, a dark and gloomy town, will be changed into one of an opposite character.

Science becomes doubly inviting, when we find it thus adding to the comforts of mankind, by its beneficial effect in remedying the inconveniences of social life.

As may naturally be expected, the smoke, which is thus burned, stands in the place of other fuel; but it seems, by experiments made by one of the Preston manufacturers, that the saving in fuel by this consumption of smoke, is not only appreciable, but very considerable.

No. 2, of this Journal, will be published on April 1.