chlorine and the metal are supposed to have a stronger affinity than the oxygen and the metal), I cannot pretend to tell; for, with all our knowledge on this subject, the science of chemistry still abounds with inexplicable things of this sort.

New Haven, June, 1832.

REMARKS ON FEVER.

Some Remarks on Fever, and on the Prize Essay of the New York State Medical Society for 1828. By JOSEPH COMSTOCK, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

It was a wise remark of the father of his country, that the best method to preserve peace is to be prepared for war. In accordance with this sentiment, we may observe, that the medical world, in a time of general health, should be prepared to meet pestilence. The multiplicity of discrepant views, the extensive introduction of new terms, and the immense number of new publications, require a discriminating and generalising genius, like that of the illustrious BOERHAAVE, to reject the useless and concentrate the useful—to fix facts on a firmer foundation, and to establish paramount principles; not a mere compiler, but one that is able to supply some *new* links in the medical chain, which, even in this day of light, are still lacking, as well as to unite others, which, although well formed, remain still unconnected. He must be an anatomist, a physiologist, a pharmacist, and thorough in therapeutics. He must have the especial power of potent reason and acute discrimination, that he may be able to sweep away those numerous pleasing—sometimes elevated, but still more often unsubstantial—fabrics, which but puzzle, perplex, and often lead into the mazes of error. His pioneers must be those who have given their attention to one class of diseases; to one tissue of anatomical structure, healthy and disorganised; to one set of physiological actions, natural and morbid, and to the peculiar effects of a single remedy.

Half a century is now hardly sufficient to establish a single new article of the *materia medica*, owing to the want of specific attention, the omission of minute observation, and the lack of concentration of time and talent upon one single article.

With everything relating to *fevers*, he must be familiar; for he who knows the whole of their phases, phenomena, and treatment, is the most accomplished and useful physician. They are, in fact, the most extensive, the most variegated, and the most eccentric, of human maladies. He who knows best how to describe, define, and discover them, mitigate them when incurable, cure them when curable, and prognosticate their terminations, has arrived the nearest to the acme of his profession, and will find little difficulty in managing all other systematic complaints.

Still, fever, at this late day, is a name without a specified identity—a disease without a definition. This is not owing to any want of investigation, but to the intrinsic difficulties attendant on the subject itself. These difficulties do not apply, however, to the defining of any one particular fever.

Among the Greeks, *fire* and *fever* were nearly of the same import. *Πῦρ, ignis*, fire, and hence pyrexia, is employed by HIPPOCRATES himself, to signify fever. The views of the ancients are some of them handed down by tradition, from periods of antiquity more remote than any manuscript now in existence. The universal idea conveyed by the term *fever*, both to the learned and unlearned, is that of heat, or an increase of temperature. And yet to this phenomenon there are striking exceptions; especially in fevers of the typhoid type, and their congeners. And such exceptions do not appear to have been unknown to HIPPOCRATES; for proof of which, the very term *typhus* is one. So different were *some cases* of fever from their common burning *form*, and yet so fixed was the opinion of *heat* and *fire*, as belonging to all, that a term was used, signifying that there was *fire* still, but that it was latent, hidden, smothered, or covered. Hence the origin of the word *typhus*, as applied to fever; the Greek word τυφω, as we are told by DR. GOOD, signifying "to smoulder, or to burn and smoke without vent." I know that some authors derive the term from τυφος, a noun, which means *stupor*. Stupor, to be sure, is sometimes a symptom of typhus; but, like spots, and fainting, and delirium, not uniformly so. The authority for the former Greek word, and its propriety, are, therefore, both immensely in its favor.

But the idea that all fevers are *hot* is the traditional and popular one, and the world never gives up its first impressions. With the multitude, or, in the language of DR. RUSH, with "the great vulgar and little vulgar," *first* impressions are *last* impressions; they are indelible. The idea, therefore, that all fevers are hot, is accompanied with others, viz. that all require cooling, and cathartics, and depletion. Where we find but few ideas, we always find those few very firmly riveted. Such is the case in this instance. Errors of some kinds may be few, but fatal. When typhus fever first became epidemic, in a certain district into which I was afterwards called, it was mistaken for worms. The attending physician gave cathartics of such kinds as are usual on such occasions. But such was the extreme debility of the little patients, that, when *these* began to operate, *they* began to die. It is believed that not one child lived who was subjected to this treatment. The destructive effects of the depleting mode of practice reached us from the navy, the army, and all parts of the United States. Previous to the invasion of typhus fever as an epidemic, and since its cessation, with the exception of sporadic or endemic cases, evacuations have been used, in the fevers of this country, with decided advantage. I well recollect a case of pneumonia, which ended in recovery, and which occurred about two years after the cessation of the typhoid epidemic. This case required no less than eleven bleedings, with other evacuations.*

On our accurate discrimination and correct diagnosis, sometimes hang life and death. It is highly interesting to the public, that accuracy should everywhere prevail; but errors are most to be lamented when they ema-

* This was an extraordinary case, originating, in a man, from a fall on the frozen ground, from a cart. I mention it as illustrative of the different states of the system, when typhoid diseases prevail and when they do not. During the reign of typhus, I saw two cases, both in men, who received bodily injuries less severe than this man, and both died with typhoid debility—the system, in neither case, never reacting at all!

nate *from*, and prevail *in*, great states, great towns, and great minds. The state of New York—the first in our union in population, in the magnificence of its cities, in the fertility of its soil, and in the liberality and excellence of its institutions—should take the lead, also, in the correctness of its views. New York is the great source of reference and appeal in medical matters, at least in some sections of the union; and, as she is daily rising in glory, her influence and authority are daily increasing. How all-important, then, that *she* should be correct! At the head of her medical colleges, medical schools, medical societies, and medical professors, is *one*, called the STATE MEDICAL SOCIETY, holding its meetings in the capital city. Yet, so late as the year 1828, this society conferred its premium, for the best “*ESSAY ON THE HISTORY, CAUSES, AND TREATMENT, OF TYPHUS FEVER*,” upon a writer who denies the animal origin of diseases, and the hurtful effects of putrefaction and filth in producing fevers!

So great a medical heresy was never promulgated from so high an authority. The whole medical world, HIPPOCRATES, GALEN, AARON OF ALEXANDRIA, RHAZES—all the names of celebrity, remote and recent—PRINGLE, CULLEN, CHISHOLM, WILSON, GOOD, and others, are thus set at nought! As to the history of typhus fever, we are informed, by him, that “the ancient authors on medicine make no particular mention of it” [p. 1]. According to this, HIPPOCRATES is not an ancient author; for he particularly mentions it, and from him the very name is derived.* Under the head of *Prognosis*, we are told that “the chief danger, not only in this, but in all fevers, arises from the disorganising effects of high and uncontrolled excitement,” &c. [p. 7]. Will it be believed, by those who read this, that the writer ever saw a genuine case of typhus fever?

Of debility, he says—“This, then, is the case with the debility in the primary stages of typhus; it is increased by the exhibiting of stimulants, and lessened by evacuating measures” [p. 10]. Further, we are told [p. 11], that “every physician must have witnessed the positively strengthening effects of cathartics, in typhus fevers, before the constitution has been really debilitated by long-continued excitement.”

A writer of this stamp, we may be assured, cannot get along without shedding much blood; accordingly [at p. 22], we have the following passage: he says—“We should draw blood *pleno vivo*, and not rest satisfied with a small dribbling stream; the first mode of bleeding is infinitely preferable to the last, as it effects a more speedy reduction of the pulse, and sooner brings on a state of fainting, which is much to be desired in very violent cases, as it is accompanied with vast relief to the inflamed organ.” Will it be credited, that this sentence, which I have extracted entire, relates to the typhus fever of the United States, in which, “in very violent cases,” the patient faints spontaneously, has a pale countenance, and a weak, tremulous, thread-like pulse, if any pulse at all? Yet such is the fact! The prize pamphlet lies before me, and I have compared my extract with every word and every letter of the original. This sentence has a note in the margin, from which I

* See Latin translation of his works, by HALLER.

will extract three lines, in order to show the prize-writer's notion of typhus fever, and the disease by which he illustrates it. He says—"We have a striking example of the powerful effect of bleeding *ad deliquium*, or until a sensation of faintness or sickness is produced, in cases of violent ophthalmia."

As adjuvants to bloodletting, DR. HAMILTON's purgative plan, and some pills of his own, formed of calomel, jalap, and aloes, are recommended. But, having discovered that cold bathing was debilitating, its aid is put in requisition, along with bloodletting and cathartics, to further reduce the pulse and prostrate the powers of life. Thus we are told [p. 37], that "these facts unquestionably prove that cold has none of the properties of a stimulant, since it weakens the pulse in a state of health, weakens it still more when already weak, as in a chill, and lessens very much its volume and frequency when in a state of excitement and fever."

As the writer does not allow cold to be a stimulant, he infers that it is a sedative, and says—"It is from its operating in this way, that we can readily account for its extraordinary effect in fever" [p. 38].

So intent is he on drawing blood in typhus, that, under the head of *Congestive Typhus*, which he considers the form putting on the greatest appearance of debility, he says—"If we cannot, however, procure blood from a vein, we must resort to arteriotomy" [p. 45]. We are told that "we are not to rely solely on bleeding, the bath, &c., in the cure of congestive fever. After bleeding," he says, "we should immediately order large stimulating enemata, that the bowels may, if possible, be at once evacuated, and then commence the use of cathartics." For this purpose, he again recommends calomel and jalap [p. 46].

Thus the twenty-fourth aphorism of HIPPOCRATES* is trodden under foot of men, as well as women!

It cannot indeed be discovered, by this essay, what the difference between typhus and inflammatory fever consists in. There is no attempt to define the former; and, as to the treatment, we have seen that it is wholly adapted to the most intense grade of the latter.

As the writer is at odds with the great and good of the medical world, he can hardly get through his pamphlet without being at odds with DR. MAGILL himself.† Having, in the anterior part of his essay, quoted the noted case of the fever at Oxford, in 1577, occasioned by the effluvia of a filthy prisoner, who was tried at the Black Assize, and who poisoned the court and spectators—and having referred to other similar instances at Exeter, Taunton, and the Old Bailey—he, in the latter part of his essay, adduces the opinions of DR. BANCROFT and himself, founded on the filthy manner of living of the Russian boors, the Greenlanders, the Esquimaux, the Samoides, &c., as triumphant proofs of the harmlessness of animal putrefaction and the eating of carrion! He ought to have called to remembrance the power of habit, which accounts for all these phenomena; and that Rowland Jenks, the criminal at the Black Assize,

* SECT. 1.—Women resorted to family physic, with very pernicious effects, in typhus fever.

† ALFRED T. MAGILL, M.D., of Winchester, Virginia, author of the Prize Essay. New York, 1829. CHARLES S. FRANCIS, 252 Broadway. pp. 69.

who poisoned the court and some five hundred others by the effluvia of his clothes and person, *was not himself affected*.

And now, once for all, we may with truth remark, that it is not one cause alone which produces fever. There is a predisposition to be affected in those who have fevers, and there is an idiosyncrasy to resist the most concentrated causes in those who escape. Hence, it was never known that the most *virulent virus* prostrated every single individual exposed to its influence. No; not even the plague, smallpox, or bite of a rabid animal. A predisposition to be acted on sometimes pervades a ship's crew, an army, a court, or a family. At other periods the majority escape, and one only, or a few, are attacked. In fact, an immunity is more common than an epidemic, although far less noticed. The pages of history record only battles, invasions, sieges, and massacres—sudden deaths, violent deaths, plagues, and epidemics. The times of peace, and plenty, and prosperity—of health, public and private, pass unheeded.

The plague of India, and the present pestilence of Europe, the *cholera*, is acknowledged to be a disease of the typhoid diathesis. It is treated by the celebrated MAGENDIE, at Paris, with hot wine and strong punch. It is, therefore, very important that typhoid diseases should be well studied, and their nature fully understood. He who thinks that he finds a typhus fever with a full, hard pulse, a tense fibre, and which requires repeated bleeding and drastic cathartics, is utterly mistaken. There never was, and never can be, any such a *typhus fever*. Neither ophthalmia, cephalitis, gastritis, nor carditis, are claimed to belong to its class, neither pneumonia* nor phrenitis to partake of its nature. If there is ever any inflammation attending typhus, it is of the erysipelatous kind, in which bleeding is death—at least sometimes. In a case of typhus fever, the most distinctly marked, with all the symptoms of complete debility, such as fainting when lying on the bed and on the back, the first attack was that of erysipelas in the face and forehead.

It would seem that every kind of fever has been called typhus by some indiscriminating writers. The author of the prize essay, speaking of the pulse, says, that "in some cases it is tense and hard." Now we deny the existence of such a pulse in typhus fever. It is known only by a soft, feeble, and easily compressible pulse, whether or not it be increased in frequency. In general, however, the pulse is very much accelerated, varying from one hundred and twelve to one hundred and forty in a minute. We apply the terms *typhus* and *typhoid* exclusively to diseases of direct debility. Cholera is undeniably a disease of this class; so are cynanche maligna and scarlet fever. Cynanche trachealis, or croup, on the contrary, is a disease of a contrary diathesis, the attending fever being inflammatory, or a *cauma*. The last case of this the present writer had, his little patient was saved by the very free extraction of blood by leeches applied to the throat, aided by emetics of ipecac., tartarised antimony, and lobelia.

These remarks on the prize pamphlet would not have been given the public, had not its doctrines been sanctioned by the high authority before

* Pneumonia typhoides is here, of course, excepted.

mentioned, and been so utterly discrepant to our own views of the subject, founded on a large experience. They are made with a spirit of conviction of the danger of its doctrines, and not of hostility to any person or persons. The writer of it deserves the credit of wielding a potent and polished pen, which is fully conceded him.

Lebanon, Ct., June, 1832.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JULY 11, 1832.

CHOLERA AT NEW YORK.

AFTER our last paper went to press, we had intelligence of the occurrence of several cases of cholera at New York. Its introduction into that city appears, so far as facts have come to light, to be wholly independent of contagion. How far its subsequent progress has been aided by this cause, we have no means of judging.

The Board of Health report every day, at 12 o'clock, the number of new cases and of deaths. On the 5th instant there were 20 cases and 11 deaths; on the 6th, 30 cases and 19 deaths; and on the 7th, 42 cases and 12 deaths. The progress and fatality of the disease, thus far, has been much less than could have been expected in a commercial city of 200,000 inhabitants.

At the suggestion of our City Council, the Consulting Physicians have designated Drs. BIGELOW, WARE, and FLINT, as a Medical Committee, to visit New York, and acquire and communicate knowledge of the disease as it there prevails. These gentlemen left the city on Sunday last, and are now engaged in the duties of their commission. The result of a deputation so wisely selected will be communicated, as soon as possible, to our readers. In the mean time, we offer below a letter from Dr. PAINE, of New York, which contains some interesting details of the post mortem examination of two (and we believe the first two) cases of the disease that proved fatal in that city. The letter was addressed to a distinguished practitioner in this city, to whom we are indebted for the liberty of publishing it.

New York, July 3d, 1832.

DEAR SIR,—The reports respecting the existence of cholera in this city are so contradictory, that you may be desirous of knowing the absolute truth; but I am chiefly induced to make you this communication for the purpose of submitting to you the morbid appearances on dissecting two individuals who were supposed to have died of this disease, and the notes of which I took during the examination, which was conducted by Drs. CARROLL and LUDLOW, and myself.

The subject of the first case is the man who lived at the corner of Reed and Greenwich streets. I did not see him till about twenty minutes after death, and have derived my knowledge of his symptoms from his wife and his physician.

He was forty years of age, very robust and corpulent—pursuing the trade of pianoforte making—of intemperate habits, and had drank rather