AN INAUGURAL DISSERTATION
ON
Theories of Idiopathic Fevers

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Upon a subject so important as Fever, which has occupied so much of the time and attention of writers on medicine, in all ages, it is deemed proper, even in the slight notice of the subject which we shall be able to produce, to give a glance at the most prominent opinions which have been entertained in this connection, especially as in these opinions are involved the medical doctrines of the times when they prevailed.

The first hypothesis broached in relation to fever was the humoral pathology, and that which continued longest to command the fast of the Medical world. The humoralists ascribed it to a disordered condition of the fluids of the body.
And they regarded increased heat of the animal body to be the presence of fever, and its proximate cause to be a surfeit abundance of the bile, the black bile, atrabilis, the phlegm, and the blood. That the blood becomes contaminated or depraved either by the reception of noxious substances from without or of changes going on within the body, that the system is excited by the presence of these impurities either to direct efforts for their expulsion and that, in the language of some a disease is no more than a vigorous effort of nature to throw off the morbid matter, and thus recover the patient. This is the sum and substance of the immoral pathology.
According to this view, fever is only a violent effort of the system to rid itself of noxious matters and the sweats, bilious discharges, turbid urine, purpura, and cutaneous eruptions which so often attend fever as merely different means by which this matter is expelled. Among the modifications of opinion connected with the humoral origin of fever were those of Boerhaave and Stahl. While they admitted the influence of chemical change in the fluids, they ascribed fever not so much to contamination of the blood as to its greater thickness or viscosity, which causes it to stagnate in the extreme vessels. Thus
Constituting the cold stage of fevers, some however conceiving that fever consists of a plethoric or depurative condition of the fluids, imagined the existence of a superintending rational principle called the *Vis Medicatrix Naturae*, which in this, as in all other diseased conditions of the system watches over and directs the movements of the system with an eye to its preservation. So that fever, instead of being a morbid condition was in fact a series of conservativ actions under the guidance of this principle for the removal of the real cause of offence. This theory led to an expectant practice which still has its advocates on this as well as the other side of the
Atlantic. The next theory is the nervous, introduced by Hoffman, who sought in the nervous system the source of all the mischief, and it is wonderfully strange considering the character of the symptoms, that the idea did not sooner occur to scientific investigators. He believed the first step in the establishment of fever to be spasm of the capillaries, and the heat of skin and vascular excitement which follows; he considered the new reactionary movement of the system necessary to overcome this spasm. It was Cullen however who gave constancy and popularity to the new opinions, and completely overturned the old humoral doctrine. In the
estimation of the profession. The key point is that celebrated teacher was that under the influence of some abortive agency upon the nervous system, the energy of the nervous centres is diminished, and all the functions consequently debilitated, especially those of the extreme vessels and from the nature of the animal economy and probably through the instrumentality of the cold, a spasmodic state of the extremity vessels occurs in connection with the cold stage. By this a degree of irritation is extended to the heart and large arteries in which increased action is induced, constituting the hot stage, and that finally through this excitement energy is restored to
the brain and extends to the extreme vessels, thus overcoming the spasm of the capillaries and allowing the secretion of sweat to take place, together with other evidences of relaxation. Cullen denied that any precipitating morbid condition of the blood was the cause of fever, though he admitted that a change in the crisis of the circulating fluid occurs during the course of the affection, and as one of its effects, an opinion which has been previously advanced by Bagliani. Though the explanation of Cullen is greatly in advance of the old humoralism, it is obviously altogether hypothetical and in some of its parts contradictory to facts. The first step in the formation
of fever is probably, as he maintains, a state of depression, exhibiting evidence of a sedative influence upon the nervous system, but all the rest of the theory is certainly purely assumption.

We next have a theory which attributes fevers of all kinds to some local origin. All writers have recognized the existence of fever as a disease independently of any local lesion, while it was also admitted to arise from inflammation of particular parts of the body. In the former case it was called etiological or essential, in the latter symptomatic. It was reserved for the present century to dispute this position. It is true that Pinel considered each variety
of fever to be connected essentially with some local disorder, as bilious fever with disease of the digestive organs, nervous fever with disease of the Brain, &c., but he did not deny the essential nature of the fever itself. Clutterbuck, who published in 1807 his "Inquiry into the seat and nature of Fever," was probably the first author who distinctly denied the existence of Idiopathic fever, and asserted the uniform dependence of all fevers, upon local inflammation. Those which had hitherto been considered as Idio-
pathic he considered as inflammation of the Brain; he supported this hypothesis by the arguments, that the brain is always affected in these fevers as proved by the symptoms, and the ap-
paranances frequently presented after death, and that the affection is identical in its phenomena, in its mode of cure, and in the structural lesions left behind with inflammation of the brain. This, however, made little impression, and scarcely indeed attracted general attention, until brought forward in contradiction to the claims of a more celebrated author to originality in the denial of the existence of epidemic fever to wit, Brunssais. This doctrine of the celebrated Frenchman was enforced by all the energy of his powerful mind, and he has in his Pathology given us his views upon this subject. The mass of the medical world was for a long
time, particularly in France, submissive to this view—-and all fevers being considered as reactionary movements of the system from some organ suffering inflammation, a rigid anti-phlogistic treatment was followed as a rule, much to the injury of mankind at that day. Indeed, the primum era, medicinae, of some of the practitioners of the present day in the idiopathic fevers of our country would indicate that they have inhibited, and still retain, something of this Broussaian doctrine.

The view upon this subject which we think most reasonable and consistent, consider that some intrinsic influence, whether that be what we call Malaria, Typhoid poison, or the peculiar view of
of the blood, enters the circulation, most commonly by respiration or metabolism, and by thus poisoning the blood, the nervous system is relatively impressed. And through this present function of the organism, every organ and part with their separate functions are deranged. How can doubt the conservative action of the vital principle and the natural resilience of the system who has seen the recuperative and conservative energies brought into play for the preservation of its organs and functions intact. The series of actions set up in the system for its sustenance against these depressing influences in their sum total constitute fever. Of the constitution can sustain itself sufficiently long for this anthelic agent
to expend itself, or if the natural immunity can rid the system; health is usually restored. And the greatest danger is not from the febrile movement, as from intercurrent inflammations, accidentally supervening. Some of these fever poison may be counteracted in the way by an antidote, as Quinine in malarial fevers, this as the Typhoid, and Paratyphoid, resist our curative measures, and are these, for the most part self-limited in their course.