

REVIEW OF NEW PUBLICATIONS.

Review of a Treatise on the Principal Diseases of Dublin; by Martin Tuomy, M.D.T.C.D. and Fellow of the King's and Queen's College of Physicians in Ireland.

THIS appears to be an excellent practical book, useful both to young practitioners, who, in general, read too much; and to the elder, and more experienced, who, as generally, read too little. To the former, it must be of service, by presenting in a moderate compass, a faithful history of diseases (not as the title page would seem to indicate, peculiar to Dublin, but such as are generally met with in common practice) with the most approved method of treatment, thus concentrating and fixing upon what is most valuable in the study of physic, that attention, which is apt to wander till it lose itself in a desultory course of medical reading.

Reading is, or at least, ought to be,* a mere stimulus to mental exertion, storing indeed the memory with useful and well authenticated facts, not *fancied facts*, but such as may exercise the judgment, strengthen the intellect, and improve the talents for combination. In such reading, there is perhaps required a discriminative taste rather than a hearty appetite. Many young men experience a sort of bulimia for books (if we may venture an expression so nearly related to a *bull*) in which the inordinate hunger is accompanied by a very weak digestion. The reasoning powers are, in the mean while, suspended, and at length as it were suffocated under heaps upon heaps of other people's ideas, wheeled into the slopshop of memory, where they remain, undistinguished, unassorted. The minds of such readers are apt to lose by disuse their natural energies, and thus proceed through their whole lives,

*—Who reads incessantly, and to his reading brings not a spirit and judgment, equal or superior, Uncertain and unsettled still remains, Deep sens'd in books, and shallow in himself, Crude or intoxicate, collecting Toys and trifles for choice matters, worth a sponge, As children gathering pebbles on the shore.

MILTON.

vibrating from system to system, or from the use of one empirical medicine to another, and resembling, on the whole, in their quick attractions and repulsions, nothing so much as the electrised chaff that plays between the plate, and the prime conductor.

Such a clear, and compendious view of the practice of physic as this of Dr. Tuomy's, may prove equally useful to older practitioners, who are apt to read *too little*, often by want of leisure from the hurry of professional avocation, and perhaps not less frequently, from repeated disappointments in theories founded on a partial induction of facts, and in facts seen only through the medium of theories. In early life, we are too fond of supposing a most recordite science can be opened by the master key of a single principle, and upon mustering a few facts, often forced into our service, we instantly begin to generalize and form a system which seldom fails of encountering, in the course of a few years experience, so many rude shocks from one quarter or another, as to topple to its foundations. The old practitioner is therefore apt to neglect systems altogether, and to adopt, in their stead, a self-sufficient and dogmatic empiricism. Wearied with being driven through a round of false systems after having experienced the futility of his own, tired of being compelled in practice to ring the changes upon all the metals (with the two additional bells of Mr. Davy) having couised through all their oxyd, from the oxyd of arsenic to the oxyd of bismuth, he will now set himself to do, what he should have done at first, viz. *reason upon the individual case*, not so much for the support of a system, or for the formation of general rules, as for adding, ant-like, one valuable fact to the heap he may have already collected.

Such indeed appear to be the complicated nature and functions of the human frame; such in its morbid state are the changes of form and place which diseases assume; such also is the frequent and ready *convertibility* of diseases into each other.

that we should ever be on our guard, in taking up such books as the present, against the too confident attempts of fixing *specific characters* upon different maladies, such as are apt naturally to produce an empirical uniformity of practice in all such cases, without a constant attention to the individuality of each particular habit and constitution, as well as to the concurrence of other affections that always must more or less influence the mode of practice to be adopted. There may be a general similarity, but there is an individual difference which often sets at defiance all dictionaries of definitions. In books of practice, like the present, all seems, distinct, perspicuous, and well defined, but in practice itself we shall find nothing so deceitful as Nosology.

Thus, for example, not only in individual cases differ almost entirely from each other, though under one nomenclature, but there are great and frequent changes in epidemic maladies, not only in the progress of time which seems to wear out the virulence of most such diseases, but from the circumstances of society. The progress of civilization and refinement tends not only to change the type of epidemics, but often to banish them entirely. Dysenteries for example, are seldom or never epidemic at present, and the more general habits of cleanliness, ventilation, and better established police in great towns, in pavement, cleansing, &c. have in a great measure modified the character of such maladies as were once highly malignant and generally mortal. It is also to be observed that often there are *peculiar* symptoms superadded to an acute disease which are readily propagated *along* with the prevalent fever, and most materially modify its character and mode of treatment.

This advice, to reason only on the particular case, without regard to nosological distinction, would seem to lead to an unlimited variety of practice. But on a due consideration of THE UNITY OF THE VITAL PRINCIPLE, with an accompanying attention to the peculiar structure of the different organs, the regularity or irregularity of whose functions depends upon the

excess or deficiency of *this principle*, the practitioner may, thus, perhaps attain to a greater simplicity in his views of diseases, and of consequence in his methods of practice. Without having his attention distracted, and his practice puzzled by the mere nomenclature of diseases, he will probably consider them as referable to one principal cause, viz an irregular distribution of the vital power, and the general phenomena consequent upon this derangement of equilibrium, or irregular expenditure of living energy.

Life is certainly an occult quality, but not more than gravity, electricity, magnetism, the intimate nature of all which remains to be discovered. When the essence of animation is found out, the proximate causes of diseases will become apparent, but until that time, we must be content with observing some of its different relations, or in other words, the laws of the animal œconomy.

Life is a power, tending to self-preservation; health is the equipoise of this vital power through all the bodily organs. When the functions of any one of these, particularly of the most important, are injured, or destroyed, from the morbid effects of internal or external agents, otherwise called *remote causes* of disease, there is readily called forth a restorative or recuperative energy in the constitution. This acts most frequently by an excitement of either *local*, or *general* FEVER, the first usually called inflammation. The vitality is either exerted in the organ itself, or if that fail, the vitality of the whole system is stimulated into exertion, and comes in succour to the læsion of the particular organ. In the organ itself, the preternatural action relieves the morbid congestion by natural *evacuation*, that is, by an increased exhalation or excretion into the adjoining cellular substance. But if this increased action of the organ itself fails to restore equipoise, the general vitality of the whole system is stimulated into exertion, from its unequal accumulation, and *general fever* is produced. This operates a natural cure, in the same manner as in *local* fever, by *evacuation* of some kind or other, as by the skin, bowels, or

kidneys, which evacuations, though in distant parts, and in a longer space of time, yet end by relieving the organ originally affected, and thus again, though with greater difficulty and hazard from the frequent violence of action, the balance is restored, and the system again put *in order*.

The art of medicine is derived from a sagacious watchfulness of the process of nature in curing diseases, and the professors of this art are divided into *two great sects*, according as their attention has been directed most, to one part or to another of the process which nature makes use of. They attend either exclusively to the stimulative action, or to the evacuant termination; and strange it is, but such is the fallacy of physic, or rather such is the wonder-working power of nature, that both the stimulant and depleting systems of cure have been successful in practice, however discordant in theory. It is an extraordinary and curious fact, lately brought forward to observation, that modes of practice so very opposite as the stimulant and evacuant plans of cure, should both seem to operate in the same way, or through the instrumentality of the same medium, viz. : by restoring the balance of the system through the production of *fever*. It seems to have been ascertained that a fever of vitality, as it may be called, can be excited by a bold use of one powerful evacuating remedy, blood-letting; a practice so bold, as would scare most regular physicians, who, in general are careful of hazarding fame and fortune by hardy experiments, but individually, keep to safe, though rather timid and inert methods of cure, and, in consultation, are two easily satisfied "with an ineffectual result of neutralised opinions." It is, in general, surgeons, or physicians who have been bred surgeons, that have suggested the happiest improvements in the practice of physic. The palliating physician often perpetuates the evil.

When the common evacuants of vomits, purges, and sudorific medicines have failed of discussing the disease and restoring the balance, it has been found that the supplementary fever excited by large and frequent blood-letting has superseded the

morbid one, by placing the system, under the influence of a new, and in its effects, a restorative, and salutary action. In many chronic ailments also, the cure seems to have been wrought by this superinduction of *fever*, not by the means of stimulants, but of evacuants, principally that of blood-letting. When a large portion of blood is abstracted, the blood-making process, or all the powers of life concerned in the formation and elaboration of it from chyme to chyle, and from that to its change of colour and quality in the pulmonary system, all these powers of life are by the *vis medicatrix* of nature called into action. Hence a new determination of the system, which operates by suspending and taking place of the morbid action, which is thus broken in its succession and series of symptoms, and thus a cure more readily takes place, if the process of nature be properly pursued by her servant and interpreter.

This supercession of one disease upon another, the milder fever upon the more dangerous, which, in consequence, decays and dies, is a new field of medical study, and a more perfect knowledge of the *convertibility* of diseases will perhaps yield important discoveries, and enlarge the powers of the medical art. The virulolous fever has been thus subdued, and overwhelmed by the fever of vaccination. It is, in this manner, that the operation of that universal stimulant, mercury, is often so successful, by exciting what may be named the *mercurial fever*, while the morbid one succumbs, under the influence of the artificial one. Were we capable, as perhaps we shall be, of inoculating a fever of a known salutary termination, that would *speedily* take place, anticipate, and overrule a fever known to end fatally, it would appear an invaluable discovery, thus to conquer one complaint by the instrumentality of another. No diviner glory could descend on the medical art, than to turn into blessings the hitherto accounted evils incident to humanity, and to make maladies themselves medicinal. In fact, nature herself, takes generally this method of operating her cure, by transforming one complaint into another, compa-

ratively innocent; as is testify'd by every critical metastasis. The study of the morbid and of the salutary *metastases* (but particularly the latter) will give new hints to the sagacious practitioner, in relieving the affections of the more vital parts by anticipating the methods of nature, and where her purposes would, though curative of the primary disease, prove fatal in the secondary (such as in empyema from pneumatic inflammation) to take, as it were, the management out of her hands, and by large and timely evacuation of blood, prevent the natural crisis.

Medicines themselves seem to operate by exciting a *counter* action in different parts of the system, during which local determination, thus artificially excited, the general morbid action is, at least, suspended. Medicines may be considered in the light of *transitory disorders*, during the continuance of whose action, the general disease is broken and enfeebled, and by their repetition, may frequently be overcome. But, in general, their effects are too short, and the intervals of their repetition, too long and too frequent, sometimes by timidity of the practitioner, often through the necessity of the case, and the disease thus occasionally, and impotently counteracted, often acquires additional strength. Thus it happens with most of the *internal* stimulants, as in the use of fermented and distilled liquors, volatile alkali, cantharides, aromatic oils, ether and opium. In all these, it would be dangerous if not impracticable to keep those internal parts of the system to which they are directed, under their constant and unremitting impression, which could alone efficaciously counteract the morbid affection; and with respect to *external* stimulants such as cold and warm bath, blisters, cataplasms, caustics, there is the same difficulty of overcoming a formed disease of the whole system by a fugitive impression on a part. The stimulant course is for the most part hazardous and inefficacious. The thing wanted is permanent, safe and general stimulus, which is alone adequate to cope with the morbid systematic affection.

The nearest approach to the command of an *artificial fever*, is by the timely use of mercury, and the mercurial fever, thus excited, seems to put the whole system under a new action for a sufficient length of time, to subdue completely the morbid disposition, but the same inconveniences attend its administration, so that sometimes the largest doses fail in exciting the specific fever, and that it is not sufficiently speedy in its operation, for the urgency of particular cases.* When indeed mercury is introduced fully into the system, and pushed on to *salivation*, it then becomes a very powerful medicine of the evacuant class, and will have all the good effects of depletion, but still, I am willing to ascribe its beneficial effects, chiefly to the new febrile action, and permanent general stimulus thus excited, which more *constantly* counteracts the morbid action, and at length supersedes, and displaces it. This effect no doubt is much assisted by the local excitement, and inflammation of the glands of the mouth and throat, by which determination also, the morbid action is abstracted from more vital parts. Yet although the salutary action of mercury in such cases, is probably owing to its permanent diffusible stimulus and fever thus excited, it is to be remarked, that its effects are never so fully accomplished, as when preceded by some previous evacuation, such particularly as *that by the lancet*, which mode of depletion will ere long

* In a case of traumatic tetanus, which occurred lately in the dispensary of this town (and which by the bye, bore a striking analogy in its symptoms to hydrophobia) as soon as the administration of opium by the mouth became impracticable, the powers of life suddenly sunk, before the effect of the mercurial stimulus (used by way of friction) could be substituted in its stead, and I have, since that time, supposed that a free and bold abstraction of blood (which the plethoric habit of the patient, at any rate, did not preclude) might have contributed to a *more accelerated* action of the mercury, and thus given a salutary change to the morbid and unnatural nervous excitement.

take place of the purgative plan, so much at present in medical fashion. It is a means of depletion much less indirect and circuitous, more speedy in its operation, more under command, and, on the whole, less debilitating.

In these climates, Mercury has been made use of principally as an *evacuant* medicine, in the form of calomel combined with jalap, scammony, or aloes, and Dr. Tuomy in this treatise seems to follow in his methods of cure the formula of Dr. Hamilton in his essay on purgatives which has recommended, with such effect, the evacuant plan of cure, in many diseases where the stimulating course had been before adopted, and which has done much in turning the tide that now so strongly sets against the Brunonian practise. The era of infatuation is now nearly past when one hundred drops of *l. mct.* *Opii* in a glass of spirits was deemed the grand arcanum vitæ, elixir salutis, (though in reality only taking place of the ancient theriacas, and mithridates in a liquid form) when the sick room was turned into a wine and often a spirit cellar; when a cool regimen externally, was accompanied with the most audent internal medicines; when apoplexy was treated only by stimulants, as a disease of debility, and the lancet prohibited entirely even in the most notorious congestions; when catarrh by the continuance of severe cold was often changed into pneumonic inflammation, and incipient pthisis, instead of frequent and moderate venesection, was managed by beef stake and brandy; the time is almost over, when

this Boutefeu of Physic, the Burke of the medical world, fascinated by his decisive tone, the young and often the more experienced practitioners. We honestly aver that we are much more disposed to be disciples of Doctor Sangrado, than of Doctor Brown.

It continues to be, as it has been, our firm belief, that the lancet, the first of evacuant remedies, has been too seldom used, not only in the first stages of fever, but in many other diseases, in many varieties of dropsy, in diabetes (as lately ascertained by Watt) in Hydrocephalus, and particularly in that insidious, and disguised catarrhal affection, which generally precedes the constitutional pulmonary consumption. We may also safely assert, that morbid fever never can be repressed successfully but by the means of an evacuation, and it is, we again observe, by sagaciously noting the different terminations of diseases made by nature, adopting her more favourable ones, at an *early season of the disease*, thus superseding one affection, by another comparatively milder, by a new action produced or by means of appropriate medicines, and principally those of *depletion*. It is by this method, that we, by art, anticipate nature, make the *materia medica* operate as *vires medicarices*, and thus play with the Esculapian serpent, after having robbed it of its fangs, and its poison. *Homo, naturæ minister et interpretes, tantum facit et intelligit quantum de naturæ ordine, re vel mente observaverit, nec amplius scit aut potest.* BACON. X.

DISCOVERIES AND IMPROVEMENTS IN ARTS, MANUFACTURES, &c.

Patent of Mr. John Slater of Birmingham: for an Improvement in Hanging and Securing Grind-stones.

Dated Feb. 1810.

MR. SLATER describes his method of hanging grind-stones in the following manner.

I cause each grind stone to be hung through its center upon a spindle in the customary manner, tight wedging

excepted; I then place on each side of the grind-stone a flat piece or a washer, of wood or other substance of a soft or yielding nature, which must extend in a circle from the spindle hole in the grind stone to any degree or part of its diameter, as may be found most convenient, to form a bed or equal bearing upon wood or washer, before mentioned.