

gether and perverted in the strangest manner; this delusion at times amounting to absolute delirium.* Imperfect as are our notions of our corporeal—they have at least advanced beyond our conceptions on mental pathology, whether in continued, or occasional disease of the mind. Further observations on this topic would be here misplaced; the short mention, however, which has been taken of it, will surely not be considered superfluous in a matter of such importance, frequently too much neglected.”—p. 62.

Our readers will see from this passage, not selected, but taken at random from Dr. M'Cormac's book, what pains he has bestowed upon his subject, and what learning he has brought to bear upon everything connected with fever. We regret extremely that our limits prevent us from indulging in copious quotations from his work, which we beg to recommend to our readers in the strongest terms.

R. J. G.

A new Synopsis of Nosology, founded on the Principles of Pathological Anatomy, and on the natural Affinities of Diseases. By G. HUME WEATHERHEAD, M.D., Member of the Royal College of Physicians, Lecturer on the Principles and Practice of Physic at the Westminster School of Medicine, Corresponding Member of the Zoological Society of London, &c.

THIS is an excellent little book, and contains within a short compass a vast quantity of practical information, arranged in a clear and scientific manner. Although we are not of opinion that diseases can ever be classified so as to form a nosological system bearing so completely the stamp of nature, that it will be found to contain an exact location for any collection of symptoms which, arising in individual cases, are referred back by the observer to his nosological standard; and although we despair of ever so perfectly understanding the morbid operations of the living body, as to be able even to count the different

* “Etwas stärkere Eindrücke treten auch im Wachen überaus lebhaft hervor, wenn der Organismus krankhaft aufgeregt ist; daher das Deliriren.—Meissner, System der Heilkunde, aus den allgemeinsten Naturgesetzen gefolgert.—Wien, 1832, p. 99.”

“The delirium of fever, says Parry, is probably of different kinds in different cases.—Elements of Pathology and Therapeutics, p. 338.—Difficilimam autem est, ob extremam hujus materiæ (delirium) obscuritatem, aut partes affectas assignare, aut diversos læsionum modos, quibus singulæ deliriorum species oriuntur.—Gaubius, Institutiones Pathol. Med. § 735.”

affections which deserve different names, still we cannot help feeling that this department of medicine has of late been too much neglected, for except in diseases of the skin, little has been effected since the time of Cullen, and yet what advances have been made during this very period in the diagnosis of diseases. New names, it is true, have been invented, and new arrangements made by Dr. Good, but the former were so grating to the ear and untenable by the memory, that happily for the rising generation of students they have never been either learned or taught; while the latter, although excellent in many respects, had the difficulty to contend against of separating diseases that had been long associated together in nosological catalogues, and in consequence of this, it was generally rejected by the mass of practitioners, who are unwilling to make an effort to overcome the force of habit, an effort more than usually painful when applied to unlearning names artificially arranged, and which, indeed, having been but slowly acquired, offer a stout resistance when we endeavour to expel them from the memory.

Others have occupied themselves with what rather deserves to be termed nomenclature than nosology, for being too little versed in the nature of diseases to attempt their classification or arrangement, they have sought the aid of new words and new names, generally Greek polysyllables, which stand arrayed in their pages, a dense mass impenetrable as the Macedonian phalanx. These words, hard and angular when first transferred to the mouth of Dr. Ryan, or some equally Attic Demosthenes, become speedily water-worn and rounded by constant attrition, and are misapplied with the greatest fluency of utterance when a display of learning is required. To such persons we willingly resign the task of inventing novel words and terms. The nomenclature of diseases and their diagnosis are very different things, and the grand error of nosologists appears to us to consist in pushing the naming system too far. As yet no good treatise appears to have been written on the general question of how far this system should be carried. Indeed we doubt whether any given system of nosology would not be considerably improved by amputation of its two extreme ends, performed in such a manner, however, as to leave the body of the work untouched. This summary mode of proceeding would abolish all classes and orders, which, however useful in a botanical arrangement, where they assist in determining the name of any given specimen, are never thus used in investigating the nature of diseases. Here we always begin with the investigation of particulars, and all our questions tend to elucidate specific or generic characters. Genera and species we would retain, abolishing the classes and orders on the one

hand, and the specific varieties and subdivisions on the other. But let us not be misunderstood; we mean not to say that the information, the facts, the diagnostic characters which have been ascertained concerning these matters should not be imparted to the student; we would not withhold from him this knowledge; nay, we would wish to see this department elaborately worked; but this might be done without naming everything that is described, without naming every group of symptoms, or every distinct morbid change. In fact we think that the nature and use of language has been here misunderstood, and that much inconvenience and mischief have arisen from the vain ambition of conferring proper names on matters not possessing in themselves an individuality sufficiently permanent or definite to merit that distinction.

To illustrate these observations by an example, taken from the work before us: who, in studying the nature of a wound, ever finds out that it is a wound because it can only belong to the Class named *vitia* by Dr. Weatherhead? Dr. W. gives as a synonym for the word *vitia*, injuries, morbid formations, and malformations. To arrive at the nature of the case before him, the inquirer must next make out that it belongs to the Order, *dysalitica*, i. e. disunions affected by force; and here again he is required to exercise his discrimination in ascertaining that his wound belongs to Genus 1., *plagæ*, i. e. injuries of a recent nature; but his labours do not end here, for he must next determine it to belong to *plagæ carneæ*, or injuries inflicted on soft parts, and finally, he fixes on the fourth species *vulnus*, where he finds six varieties, and many sequelæ, each dignified by a distinct name.

Now, in truth, no one can deny, that words have in the above instance been converted into names much too often; we do not mean to question the propriety of distinguishing a *lacerated* from a *punctured* wound theoretically and practically, but we see no necessity for affixing these adjectives converted into Latin to the substantive *vulnus*, and setting them down, thus dignified, to swell the recital of a nosological arrangement. This is making diseases vary with every adjective which can be predicated of them, and behold what is the result? why, the passage referred to! *Vulnus, simplex laceratum, puncturatum, penetrans, contusum, venenatum*. Does not this remind us of the method resorted to by school-boys in writing hexameter verses. They first take a good solid noun substantive, connected however remotely with their subject, and then they select from its train in the *Gradus ad Parnassum* as many of the ready made epithets as are sufficient to fill up the various gasp in their line, or lines. Let us see what this method of proceed-

ing will enable us to manufacture out of our excellent substantive *vulnus*. What says the *Gradus*? *Vulnus, cavum, apertum, patens, hians, hiulcum, sanguineum, cruentum, atrum, sævum, durum, &c.* Now with all due deference to our author, we cannot see why he did not transfer the whole of this passage to his nosology; many of the adjectives are, to use a grammar phrase, quite as worthy as those he has selected. The word *ulcus* has been still more fortunate than *vulnus* in Dr. Weatherhead's *Synopsis*, (p. 74.) The following forms a character as complete of this *simple* but *irritable* personage, as any that ever came from the pen of Plutarch or Homer. *Ulcus, simplex, irritabilis, sinuosus, gangrænosus, specificus*, (here the metre suddenly changes with a grand effect,) *sarcophagous! scrofulosus, tuberculosus! &c. &c. &c.* But the hero of the poem is evidently *excoriatio*. Whence came this mighty being? The muse declares his mystic origin to be

“ ab acribus.

“ ab attritione.

“ ab inflammatione.

“ ab ambustione.

“ a solido candente.

“ a fluido fervente.

“ ab aere calido,” &c. &c.

Surely this poetry eclipses the celebrated

Dies Iræ,
Dies illa
Solvat sæclum
In favillâ, &c.

But to be serious; we beg it to be distinctly understood, that the objections we have made apply not to Dr. Weatherhead's work, more than to any other system of nosology written on the same principles of concise definitions. The use of tabular arrangements of medical subjects has always appeared to us very questionable. What abler synoptical chart was ever published than that exhibiting the stethoscopic phenomena of pectoral diseases, composed by Dr. Townsend; and yet, who ever now consults it? How many tables have appeared, affording views of the symptoms produced by various poisons, and the treatment applicable to each? and yet, who will have recourse to such a table, when knowledge on these subjects is either to be acquired or used?

Having said so much concerning the impediments, which we fear the cultivators of nosological science will find it very difficult to overcome, we shall allow Dr. Weatherhead the ad-

vantage of coming before our readers in his own words, and for that purpose we have selected the passage in his Introduction, which explains the principles on which he proceeded in forming his arrangement.

“It now becomes necessary to say a few words in explanation of the plan adopted in arranging the following Synopsis of Nosology.

“The author has found that he has been able, by following the natural affinities, to classify all the diseases resulting from the derangements proper to the body, spontaneous and incidental, under four principal heads. These form his classes—namely, the *PHLOGOTICI*, or pure inflammatory diseases; the *HÆMAPHARMATICI*, or those diseases which originate from a miasm or poison entering the healthy blood, and tainting it; thirdly, the *NEUROTICI*, which comprehend all those diseases arising from affections of the nervous system, unaccompanied by any apparent structural disorganization; while the last class, or the *VITIA*, comprises all accidental disfigurations, new morbid formations, extraneous lodgments, and congenital malformations.

“The first class, or the pure inflammations, consists of two orders—fevers purely inflammatory, produced by the ordinary causes of idiopathic inflammation; and the inflammations of the membranous tissues. The diseases of the first order are few, and of rare occurrence, as idiopathic affections, particularly the first of the species, or Synocha, to institute which it is manifest, that the subject of it must be in that perfect state of health in which there exists no morbid predisposition whatever; so that, when the morbid phenomena are fully instituted, the inflammatory action shall evince no particular local determination—a condition of the system so seldom met with, and so difficult to sustain, as the habits of society are constituted, that we cannot wonder at the rareness of its occurrence.

“The diseases of the second order, again, which are infinitely more common, comprehend exactly all those inflammatory affections wherein the general equilibrium of the inflammatory action just spoken of has no existence; in which, on the contrary, the morbid action is either confined to a particular part, without involving the vascular system generally, or, synocha being present, it is accompanied with some particular local determination, constituting, in fact, the membranous inflammations. This order is divided into two sub-orders—the one including the inflammations of the tegumentary tissue, both idiopathic and sympathetic—the other those of the internal membranes.

“It is this last sub-order that contains such a multitude of diseases, which, though all purely inflammatory, yet evince very marked differences in their pathological characters, owing to the great diversity in the structure of the tissues affected. The author, taking Bichât as his guide, has divided these into the mucous, the serous, the fibrous, and the cellular, to which he has ventured to add another, the albuminous; and, although Bichât has many more tis-

sues, the author has found the preceding sufficiently numerous for all useful pathological purposes.

"There is a class of diseases instituted within the body that are strictly humoral in their nature, produced by miasms or poisons being introduced into the healthy blood, either by inhalation or by inoculation purposely performed, or accidentally inflicted. These form the author's second class, or the *Hæmapharmatici*; and, differing as they do in their nature essentially from all other diseases, they can only be properly arranged by themselves. This class includes the fevers produced by miasms, whether of a vegetable or animal origin; likewise all those exanthems occasioned by infection, contagion, or inoculation; thus limiting the name to those efflorescences that ordinarily occur but once during life; and lastly, it associates with these, but in a distinct order, the morbid effects of animal poisons, not febrile or exanthematous, which, on entering the healthy blood, attack the vital principle.

"The diseases of the nervous system, like the *Phlogotici*, are numerous and varied, and form the third class of this synoptical arrangement—the *Neurotici*. I have divided them into four orders. In the first the reader will find those affections which are characterized by aberrations of the judgment; in the second, the diseases affecting the nerves of sensation; in the third are placed the diseases proceeding from affections of the nerves of motion; while the last, the most numerous list of the whole, comprises the diseases of organic function. In none of the nosological systems hitherto published do these form a distinct group, a circumstance which has necessarily compelled the author to assume a new term to designate the order to which they belong; and he has fixed upon the Greek word *ἐργατικὸς* to form its denomination. A similar reason has obliged him to find other new names for some of the tribes into which the order is subdivided. The diseases proceeding from the function of sanguification, for example, are ranged under the tribe *Hæmapoietici*; those ensuing from the state of the circulation he has classed under the *Hæmacyclici*; the functional diseases of the appetites form the *Orectici*; the tribe *Eccritic*i denotes the disorders of the secretions; while the functional diseases of the womb connected with pregnancy are arranged under the *Cyetic*i. The last three of these tribes do not require any particular explanation; but as the diseases belonging to the first two have never yet been grouped together as functional diseases, even by implication, a few words may be necessary to explain the author's views of the matter.

"The function of sanguification is capable of three different conditions: blood may be elaborated in excess, and thus induce not only a morbid predisposition, but a diseased state of the body itself, constituting, in fact, plethora; sanguification, again, may, through a debility of function, be defectively performed, thus constituting the disease called *anæmia*; and, lastly, the function may be depraved, and instead of elaborating healthy blood, a corrupt fluid may be the result of the morbid process, and thus give rise to scurvy. All these

three conditions of the blood, it may be observed, are not only diseases of themselves, but they embody morbid sequelæ that are frequently of a more fatal tendency than the diseased state from which they ensue. Hence it is, that we see a foundation laid by the first for secondary apoplexy, that is, rupture of some of the blood-vessels within the head from engorgement and congestion, or for some violent internal inflammation; while, in the other two, we find dropsical effusions into various cavities of the body as their very ordinary consequence.

"The diseases induced from the state of the circulation are not less interesting, and are of still more common occurrence. To the functional diseases of the circulation appertain all sanguineous congestions and fluxes, both active and passive, and their sequelæ are perhaps still more fatal than those ensuing from the diseases of sanguification. Apoplexies and palsies are their sequences; and if the sanguineous fluxes do not of themselves prove directly fatal, they are sure, by long-continuance or frequent recurrence, first to induce an artificial state of anæmia, and consecutively to be followed by the sequelæ of this state—dropsical effusions.

"The mention of sequelæ leads me naturally to remark, that diseases are not all primary in their nature, although, in arranging them, nosologists have never yet drawn the proper distinction between them; on the contrary, a great number of diseases are entirely morbid results of the primary disease, and many are again the sequences of these very morbid results themselves. Each of these the reader will find arranged in the natural order of their sequences in this new synopsis—a method that has not hitherto been adopted by any preceding nosologist. But it may be well to elucidate my meaning more distinctly, by exemplifying it. Let us take sub-acute hepatitis as the primary disease: a common morbid consequence of this is the interstitial deposition of coagulable lymph into its structure, which, on becoming organized, constitutes scirrhus of the liver. This is a sequela of the primary morbid action, but it is not its ultimate result, as we shall see by pursuing the subject a little further. Scirrhusity gives a preternatural solidity and induration to the liver: this naturally presents a constant and powerful obstruction to the free return of the venous blood from several of the abdominal viscera; a mechanical hæmostasis or congestion of necessity takes place in all the branches of the vena porta, which, in order to relieve themselves of the engorgement, force into the exhalants opening into the cavity of the abdomen an undue portion of serosity greater than the absorbents can remove, the morbid consequence of which is ascites. Here, then, we have two consecutive morbid sequelæ, each constituting a specific disease, the one being the subsequele of the other, besides the primary disease: indeed, it not unfrequently happens, that all these three morbid states shall simultaneously co-exist. The following, therefore, presents an illustrative diagram of the subsequent synoptical arrangements:—

Species 1. HEPATITIS.*Variety.* a. Sub-acuta.*Sequela.* a. Scirrhus.*Sub-sequelæ.* a. Ascites.

b. Hæmorrhœa intestinalis.

a. Recti.

The reader will further perceive b. *Hæmorrhœa intestinalis* and a. *Recti* superadded, by which it is intended to indicate, that sometimes, instead of dropsy being the sequela, as explained above, intestinal hæmorrhœa shall be the morbid consequence of the sanguineous engorgement; and the word 'Recti' is placed to shew when this proceeds from a particular part of the intestines, that is, from the hæmorrhoidal veins.

"This method of indicating the series of sequence and affinity is preserved throughout this synopsis; and the author has bestowed his utmost attention to deduce them in their proper order and place, so as to present to the reader not merely a correct nosological arrangement as to the nature of diseases in general, but a synoptical diagram, at the same time, of the relation they hold one with another, as consecutive series.

"The advantages of this arrangement to the younger members of the profession, and to students in medicine in particular, will be obvious, from its placing morbid phenomena before them based on the method of analysis. It is only thus that the natural alliances of diseases can be perceived, by connecting them together according to their pathological character, by which their affinities become obvious and intelligible, instead of classifying them, as has been done hitherto, in a manner wherein their natural relations were so much disregarded. For what can more forcibly exemplify this, than the practice of indiscriminately classing the sequelæ and sub sequelæ of diseases as genera or species, among those of a primary nature, to which they are imagined to bear some vague analogical affinity? The dropsies, for example, are placed, even by the sagacious Cullen, in his order *Intumescentiæ*, among which we find, most incongruously assembled together, polysarcia, the different chronic morbid enlargements of the viscera, emphysema, rickets, &c., and all from the single and indefinite character of *tumefaction* being common to them all. Sauvages goes even farther, and arranges retention of urine along with the dropsies.—The class 'Dolores,' again, among the older nosologists, afforded greater scope for still more inconsistent arrangements; and in later times we find Willan, from similar inaccuracy in adopting a fallacious criterion of distinction, congregating itch in the same order with small-pox. The principle, again, which Dr. Good adopted, relieved him from all observance of the affinities, either natural or pathological; and when these do coincide with his arrangement, it is altogether attributable, as a matter of accident, to the essential nature of the function forming the class or order. It is thus that the arrangement of his *Neurotica*

does not evince the same want of pathological connexion as we are compelled to observe in his classification of the diseases of the 'Digestive Function,' or among the multifarious and opposite diseases included in the affections of the 'Sexual Functions.'

"The plan of the following synopsis, differing as it does in so many respects from any other, has, as a matter of necessity, compelled the author to form and employ some new words, in a few instances; but, in venturing to do so, he has striven to conform them with the spirit of the accepted nomenclature of the day, and to introduce as few of them as he possibly could. For the most part, the new terms are formed to denote the nature of the new arrangement, and are, therefore, confined principally to the more abstract terms, such as the names of orders, tribes, and genera; and if, in one or two instances, he has presumed to change the name of a species, it has been solely for the sake of preserving a consistent uniformity, and only then where the term in use was either a solecism or an incorrect application of it with respect to its etymology, or to the pathological meaning it was employed to convey. No word is more frequently applied improperly by medical writers than one in very ordinary use—the word *chronic*. According to the meaning of its etymon (*χρόνιος*), it ought imply, speaking of a disease, one that has lasted for some time; for it is manifestly a solecism in language to say of any disease that it was *chronic* at its commencement; and yet this is done every day. A person who is affected with one of the species of rheumatism, though it may be for the first time, is said to be attacked with *chronic* rheumatism. Now, though a disease may by persistence, subside into a *chronic* state, it always begins either in an acute or sub-acute form; and in the above instance, therefore, the disease is sub-acute rheumatism, not *chronic*. But this is not the only inaccuracy entering into the acceptance of the word *chronic*. When employed to denote the last stage of an acute disease, such as that state of debility of the veins remaining after acute conjunctivitis, the latter periods of catarrh, or of gonorrhœa when the muculent discharge results more from relaxation than inflammation, that I conceive to be its proper application and meaning; but the term is abused when it is employed to designate, what it often is, that state of re-excitement to which very many sub-acute inflammations are liable: here, though the disease be of long standing, its exacerbation cannot be considered of a *chronic* nature, but only a renewal of the sub-acute morbid action.

The name of every disease ought to express, as perfectly, and in as concise a manner as language will admit, both the nature of the disease and the exact seat of it. Thus the termination *itis* is now made by convention to denote inflammation; and when this is united with the name of the part inflamed, we have the disease accurately signified. It is from such a reason that the author has not hesitated to adopt several very useful words, especially those indicative of several ophthalmic diseases, as *blepharitis*, *dachryo-cystitis*, &c. from some of the best German writers; and in one or two in-

stances he has been induced to alter the nomenclature, where this was egregiously improper, as in the case of gonorrhœa and hæmorrhoids, adapting the new term to the general model; and, in another instance or two, the author has been obliged to form a new word altogether, from none being in existence, designating the disease, such as the sub-acute inflammation which affects the tunica vaginalis lining the scrotum and covering the testis, the common sequela of which is hydrocele. But as a general rule of observance, the writer has made it a point to interfere as little as possible with the nomenclature in use; for, though sensible that many names of diseases would not stand the strictest etymological scrutiny in reference to their propriety as apposite denominations, he is not the less persuaded of the impropriety of introducing any improvement in this respect in any other than the most gradual manner, and, as it were, *verbatim*.

“With respect to the signs employed as distinctions, in the present synopsis, a few words will suffice to explain their import: the numerals, as will be seen, denote the species, the Greek letters the different varieties of the species, and any of the varieties having sub-varieties, such as being epidemic, or having more forms than one, these are indicated by italic letters. The morbid consequences, again, or sequelæ, primary and secondary, are distinguished after a similar manner. Thus, taking perichondritis, or inflammation of the perichondrium, as the species, we observe that there are two varieties of it—simple perichondritis, such as may affect the cartilages of the ribs, and synovial perichondritis, or inflammation of the inter-articular perichondrium. Now this last has three sub-varieties, the syphilitic, the scorbutic, and the scrofulous; while the varieties of the scrofulous, again, take their denomination from the joints severally, as they may chance to form the seat of the morbid action. The manner in which these several diseases are denoted, the reader will find thus:

“*Sp.* PERICHONDRITIS.

“*α.* Simplex.

“*β.* Synovialis.

“*a.* Syphilitica.

“*b.* Scorbutica.

“*c.* Scrofulosa.

“*a.* Coxendicis.

“*b.* Genu, &c.

“By ‘General Sequelæ’ it is intended to signify the secondary diseases common to all the varieties collectively; but when a sequela immediately follows any particular variety, it simply denotes the secondary disease belonging especially to that form, and not to the others that follow. There are diseases, again, that are subsidiary to the sequelæ themselves, accruing, in fact, from them: these the reader will find indicated under the denomination of sub-sequelæ. The sequelæ, for example, of perichondritis, are two; first, absorp-

tion of the substance of the cartilage,* by which it becomes thinner, but not ulcerated; and, secondly, ulceration of the cartilage, a common consequence or sub-sequela of which is ankylosis. Vicarious enuresis, in consequence of suppression of urine in nephritis, furnishes another example of a subsidiary sequela, where the urine is at times excreted from the skin, or it may be effused into the ventricles of the brain.

"For the sake of distinctness, the inflammations of the several tissues have been treated of separately; but it must always be held in mind, that an inflammation commencing in one tissue is extremely apt to involve another, though of a different texture, if contiguous, in the same diseased action. For example, inflammation of the pleura covering the lungs is exceedingly liable to extend to their parenchymatous structure, thus forming pleuro-pneumonitis; but in such a case the inflammations of the specific tissues have each their distinctive symptoms; and, therefore, even when an inflammation extends its sphere of action into another tissue, we are enabled to detect it by the supervention of a new set of symptoms. The only exception, perhaps, to this law in pathology, is when several distinct tissues are wounded by one and the same cause; then the different sets of symptoms may be nearly simultaneous in their appearance; but this is a circumstance that does not affect the general law, neither can it well mislead us. These complications, therefore, are not specially noticed in the following nosological arrangement.

"To conclude, the writer may be permitted to observe, that it cannot be expected he should enter into a full development of so extensive a subject as the present, or elucidate views so important as those embraced by the outline he has barely sketched, in the narrow limits of an Introduction. Suffice it for the present to say, that such constitute the principles on which his lectures are based. The subject has occupied his attention and thoughts for years; and he fain would hope, that the prosecution of it will tend to facilitate both the study and the satisfactory illustration of disease, by affording, to the student of medicine in particular, the means of acquiring a just idea of morbid affinities; and by thus associating diseases in a connected se-

* "Some have been much inclined to doubt whether cartilage be an organized part of the body, simply from the circumstance that they have not been able to inject it, or to observe vessels in it when evidently diseased; but both circumstances have little weight, in my judgment, as being conclusive against their vitality, when we give due consideration to the fact of their being not unfrequently partially absorbed without being ulcerated. To measure the limits of vitality by size and vermilion, is graduating the powers of life by a biometer neither accurate nor applicable. Neither can we inject the cornea in its healthy state, or crystalline lens, and yet disease can do both: so are they also capable of being absorbed, and of having matter (coagulate lymph) deposited within their structure. It is necessary to ask, or to answer, how, and by what means these effects are accomplished? Anatomy and pathology go hand in hand in reciprocally elucidating each other, and both must at times be received in evidence circumstantially."

ries of relations and sequences, a correct knowledge of them will be attained by simplifying the diversity of morbid actions, which otherwise only confuse the understanding by being unconnectedly subdivided, or discordantly grouped."—pp. xvii. xxxix.

R. J. G.

Beitrage zur Lehre von der Eyhüllen der Menschlichen Fötus.

Von Dr. TH. L. W. BISCHOFF. Bonn, 1834.

Contributions to Human Oology. By Doctor TH. L. W. BISCHOFF, &c.

THERE is no subject within the wide range of human knowledge possessing so profound an interest as researches into the mode of, and provisions for, intra-uterine existence. Panoplied in the glories of his mature intellectual powers, man may be to us an object of amazement and possibly of admiration; but when we endeavour carefully, step after step, to trace back the stream of life to its source, it is with breathless anxiety, nay a feeling of awe, that we approach the solution of the problem. If we examine the structure of the human frame and carefully investigate the strict interdependence of the various organisms, the circle of their mutual relations—without beginning and without end—each function communicating and receiving impressions necessary to the continuous performance of the whole series, the aliment for each derived certainly from without, but the motive-power self-centered, we are irresistibly impressed with the individuality of man, his isolation, his physical independence of his fellows. So complete is our conviction of this, that we can scarcely conceive that it has ever been otherwise with him. Our imaginations would fail in reaching the point where this characteristic is lost, and man is merely *a thing*—an organic particle in organic union—a molecule, which, with other molecules, makes up an organ, enjoying the same species of life, and destitute of all which would shadow out its future being. And yet, anatomy, so far as its province extends, would appear to put this beyond a doubt. Examine a Graafian vesicle before its peculiar stimulus has been applied, and what do we discover? A certain form and structure with certain relations to surrounding parts of the ovary, and which, if they do not apparently preclude, certainly do not induce the conception of its future independent existence. However, at a certain period of its development a stimulus is applied which impresses upon it the character of a separate, though not at first of an independent being; and from this moment, that series of phenomena commence their unfolding, which terminates in the perfect establish-