

VIII.—*On the propriety of introducing a Simplified Anatomical Nomenclature.* BY ROBERT HUNTER, Member of the Faculty of Physicians and Surgeons, and Lecturer on Anatomy, Glasgow.

It is much to be regretted, that a science so interesting and useful as anatomy, should be overloaded with cumbersome and unphilosophical technicalities. Technicalities are generally supposed to be indispensable in every department of science; but an immoderate use of them is surely a great evil; and in anatomy, I conceive, the evil calls aloud for reformation. Technical terms should be used only when common language is inadequate to the purpose; and when such a term must be resorted to, it should be applicable to one thing only, and susceptible of no other meaning than the one that has been applied to it. How few, however, of our technicalities are in these respects unobjectionable! Many of them can be as easily expressed in English as in Latin or Greek; but the more lofty sounding Greek or Latin appellation has been used, whilst the more simple and intelligible English term has been uniformly rejected. In the formation of these technicalities, science and principle of every kind appear to have been overlooked, and we can discover nothing that has given rise to them but the most puerile conceits, and the crudest and most absurd notions of the *things* intended by such terms to be notified or illustrated. Many of our technical terms were introduced in the infancy of the science; and although since that period, discovery has pressed hard upon discovery, and improvement upon improvement—although the theories which gave rise to many of the terms in question have been proved to be ill-founded—still these terms are as pertinaciously adhered to as if they had been formed on principles the most just and incontrovertible.

There is something exceedingly repulsive in the nomenclature of anatomy. It is not only harsh and disagreeable, but what is worse, is oftener calculated to mislead, than to impart vivid and correct ideas of the parts. Many intelligent students have lamented their incapability of remembering such terms, who had no difficulty in understanding and remembering the things themselves; and as the terms are at present an indispensable part of knowledge, time is occupied in overcoming artificial difficulties, which, even when surmounted, are of no practical advantage: the mind of the student is thus carried away from the legitimate object of inquiry, and directed to

others, which at best are but of minor or trivial importance. If a knowledge of anatomy could not be attained without such technicalities, there would be an overwhelming argument in favour of their continuance. But the idea is preposterous. Common language is sufficient for every purpose, either in science or art. In transacting the ordinary affairs of life, mankind never use a technical expression; yet the diversified incidents of human life are explained with a clearness, a spirit, and an accuracy which technical terms alone cannot impart, and which, indeed, are incompatible with the use of technical phraseology. If a science, then, can be taught as easily and perfectly without the use of technicalities, why press them into the service? Why choke up the avenues to the temple of science with so much rubbish?

In all descriptive sciences, as well as anatomy, terms of some kind, however, must be used, because the objects of the science must be notified and distinguished; and it would be highly advantageous to the interests of science, if terms could be invented, which would describe, in one word, the most important particulars of the things intended to be named. But from the complex nature of the objects which anatomical science embraces, this I conceive is impracticable. No attempt of this kind, so far as I know, has ever been attended with general success. That by Dr. Barclay, not only left the general technicalities of the science untouched, but added to the evil by the introduction of new ones, which referred principally to the aspect and position of parts. Dumas indeed followed out this principle in his nomenclature of the muscles, and so far as the muscles only were concerned, he was somewhat successful. He contrived to give them names indicative of their points of attachment; but from the multiplicity of their attachments, the names often became quite unwieldy and unmanageable, and were with difficulty either pronounced or remembered. His nomenclature, therefore, never became popular, and is now, I believe, almost neglected.

No terms appear to me of such universal applicability in anatomy as *numerical* ones. To their meaning no possible ambiguity can be attached. They are so simple, that even a child can comprehend them, and are as capable of distinguishing objects to which they may be applied, as more learned-like, or more sonorous appellations. They have hitherto, indeed, been very sparingly introduced, but sufficiently so to show their paramount superiority. How finely we name and clearly distinguish the ribs, and bones of the spine, in this way! Would our ideas of them be equally clear were twelve high-sounding technicalities attached to the one, and

twenty-four to the other? Would not confusion then reign, instead of, as at present, simplicity and order? How elegantly and expressively can the eight bones of the carpus be named according to this plan—by their numbers alone! We find that nature has arranged them in two rows, four bones in each row. With what precision, then, can we refer to the 1st, 2d, 3d, or 4th bone in either row! We have here no terms which, from uncouthness or complexity, can act as stumbling-blocks to the memory, or decoys to the judgment; all is simplicity itself.

The nerves that arise from the brain were first arranged by Willis into nine pairs, and distinguished by numbers; and the simplicity of this nomenclature has secured its continuance till the present day; but the majority of anatomists are still affected with the mania for *verbiage*; and instead of confining themselves to the simple nomenclature of Willis, which is adequate to every purpose for which it was introduced, to each nerve they have likewise given an arbitrary name, which has nothing to recommend it but its scholastic-like appearance. Many of these nerves have indeed two or three scholastic names, as if words and science were synonymous terms, or as if the great object of anatomy was to lead men into a knowledge of words, and not into a knowledge of the things of which the words are merely representatives. In the instances to which I have just now referred, numerical terms have been used with decided advantage. The question then arises, might not the same terms be more generally applied; or might they not, with the assistance of common and popular terms, supersede the use of every other?

Every *organ* in the body has a common or popular term, which I conceive is just as expressive as the most elaborate technicality. *Heart, stomach, liver, brain*, and other terms of similar character, are just as useful for every scientific purpose as more far-fetched or high-sounding epithets. Such terms, then, might be invariably used, to the exclusion of the technical; and when we wished to notify the processes or subdivisions of any organ, how effectually could this be accomplished by the use of numbers! Did I wish, for example, to distinguish the lobes of the liver, could I not attain my object by the use of the terms, 1st, 2d, 3d, 4th? Nay, is not this a much more natural way of distinguishing them, than by the terms at present in use; by such terms as *lobulus dexter, lobulus sinister, lobulus Spigelii, lobulus anonymus*? Will any one venture to assert that *lobulus Spigelii* is as expressive as the 3d lobe of the liver; or that, as a name, the 4th lobe of the liver is not as pointed as *lobulus anonymus*?

The brain is generally admitted to be one of the most intricate organs of the body; but however complex it may be, it has been rendered infinitely more obscure and perplexing by the technicalities with which it has been enveloped. More than fifty technical terms have been applied to certain portions of this organ, and all for what purpose? Does any one of these terms impart a clear conception of the structure, or even of the appearance of a single cerebral process? Can the use of such ridiculous terms as *corpus callosum*, *thalamus nervi optici*, *tænia semicircularis geminum*, *colliculus*, *pes hippocampus*, *fornix*, *nates*, *testes*, *vulva*, *anus*; can the use of such ridiculous appellations assist the student in attaining a knowledge of this most important organ? There is not the shadow of correspondence between the word and the thing. We could almost believe that some waggish knave had been busily at work in attempting to caricature the science of anatomy. The numerical nomenclature, however, renders all this "indigesta moles," order and simplicity. When we view the brain as consisting of three great divisions, five cavities, and a certain number of processes connected with each cavity, all of which can be easily distinguished from each other by numerical terms, the obscurity which surrounds the subject instantly vanishes.

I might proceed to show how all the other viscera in the body can be described and explained in the same manner; but this, I conceive, is uncalled for at present, as it is to a general view of the subject only that I mean to confine myself in this paper.

Besides the organs and viscera which constitute what is technically denominated the splanchnological system, there are in the body numerous bones, muscles, vessels, and nerves, for the names of which, technicalities are deemed quite indispensable. If, however, we be allowed to form certain divisions and subdivisions of the body (and this is no innovation), every bone, muscle, vessel, and nerve may be referred to and recognized with a precision, clearness, and facility, quite unattainable by the use of any technical nomenclature. We shall suppose it agreed upon that the whole body be divided into three parts, the *head*, the *trunk*, and the *limbs*; and that each of these be again subdivided, the head into two portions, the *brain-box* and *face*; the trunk into three portions, the *back-bone*, the *chest*, and the *basin*; and that the limbs, which are of two kinds, the upper and the lower, should be subdivided in a similar manner, the upper limb into *shoulder*, *upper-arm*, *fore-arm*, and *hand*, and the lower limb into *thigh*, *leg*, and *foot*. These are simple, but highly important, divisions of the human body; for however numerous the parts of

the body may appear when viewed in the aggregate, if thus broken down into well-defined regions or compartments, the perplexity ceases, the number of parts entering into each region being comparatively small.

If it be farther agreed, that in all our anatomical descriptions the body shall be viewed as continually maintaining the erect posture, with the upper limbs hanging perpendicularly by the sides, and the little finger turned towards the thigh, the terms which denote the aspect and position of the parts will be few and exceedingly simple. Let it be supposed, that while the body is maintained in the above-mentioned position, it should be bounded and intersected by the following straight lines:—First, a line drawn *over* the crown of the head, and parallel with the horizon; secondly, a line drawn *under*, and parallel with the soles of the feet; thirdly, a line extended from the head to the feet, and carried *before* the face and belly; fourthly, a line extended in a similar manner, but carried *behind* the body; fifthly and sixthly, lines extended from the head to the feet, and carried by the *sides* of the body; and, seventhly, a line which extends from the crown of the head, and which passes through the *middle* of the head and trunk, and falls between the feet, forming thus the axis of the body. These lines might receive names corresponding with their relative position, as *upper, lower, fore, back, right, left, and middle, or deep-seated*; and the same terms could be transferred to the position and aspect of any part whatever. The term *upper*, or *superior*, would then be applied to parts nearer the upper than the lower line; the term *fore* or *anterior* to parts nearer the fore than the back line; the term *lateral* to parts nearer the side than the middle line; and, as we have two sides, these can be appropriately distinguished by the terms *right* and *left*. By using one term only in reference to the axis or middle line of the body, or by the indiscriminate use of synonymous terms in reference to that line, great ambiguity may arise. To obviate this as much as possible, I would propose that two terms, with precise and distinct applications, should be given to that line. I would call that *middle*, or *mesial*, which is seated nearer to the axis than to the side; and that part *deep-seated*, or *central*, which lies nearer to the axis than to the periphery, while the part that lies nearer to the periphery than to the central line, I would call *superficial*. These terms have scarcely a technical appearance, yet they are sufficient for every purpose. They are adapted for explaining, not only the relative position of the great divisions of the body, but likewise the aspects and positions of the minutest parts. This is no innovation. The principle is acted upon in almost every French system of ana-

tomy, and among the French, descriptive anatomy has attained the highest degree of perfection. Having made these observations, we are now in some measure prepared to attend more particularly to the application of the numerical nomenclature.

1st, Many of the *Bones* have popular names, which are generally much more expressive than the technical. To the use of these I have no objection. At the same time I must be permitted to say, that the numerical names of the bones are still simpler and more expressive. I shall confine myself at present to the consideration of the applicability of the numerical nomenclature, to the bones, muscles, vessels, and nerves of the *upper limb* only.

There are 32 bones in the upper limb, and without those divisions of the limb to which we have already referred, the application of so many numbers would be attended with confusion: but when thus divided, the confusion is at an end. In the *shoulder* there are only two bones. Will not these be more easily remembered by the terms first and second bones of the shoulder, than by the absurd names, clavicle and scapula? When the student knows that the enumeration of the parts is uniformly made according to a systematic order, no confusion can arise. If he is taught to enumerate the parts, from above downwards, or from before backwards, or from the side to the middle, or from the superficial to the deep-seated parts, according to the circumstances of the case, he cannot possibly fall into error. The student knows, for example, that the bone denominated clavicle, is situated *before* the one called scapula, and according to this principle must receive the name of the *first* bone of the shoulder, while the scapula, which lies *behind*, can receive no other name than second bone of the shoulder.

In the upper-arm, only one bone exists; and is it not more consistent with truth, and consequently with science, to denominate it the bone of the upper-arm, than to call it the humerus, which means the shoulder—the shoulder indeed having little to do with the bone?

In the fore-arm, two bones exist, to which the ridiculous names radius and ulna are generally applied;—*radius*, from a supposed resemblance to the spoke of a wheel; *ulna*, because used in ancient times as a measure. These two bones lie parallel with each other, the one nearer the side-line than the other; and as we uniformly enumerate from the side-line to the middle, the radius will be denominated the first bone of the fore-arm, and the ulna the second.

The hand is one of the most complicated parts of the skeleton; but need I ask whether it has been simplified by the

multitude of terms that have been heaped upon it? We have a general division of the hand into three parts,—*carpus*, *metacarpus*, and *phalanges*. To the division itself, I have no objection; it is founded in nature; but might I not be permitted to inquire whether the technicalities that notify these divisions be absolutely indispensable? Might not 1st, 2d, and 3d division of the hand, prove as intelligible a way of expressing ourselves as the other? The eight bones of the 1st division have received names, indicative of their form, or relative size—*scaphoides*, *semilunare*, *cuneiforme*, *pisiforme*, *trapezium*, *trapezoides*, *magnum*, *unciforme*. Not one practitioner in a hundred remembers these names, after he is 12 months in practice. For what end, therefore, are they applied? All that practitioners, in general, remember is, that there are two rows of bones, an upper and a lower, and that there are four bones in each row. Now, I maintain that the numerical nomenclature is better adapted for impressing these facts upon the mind, than any other nomenclature whatever.

The second division of the hand consists of five bones, which run parallel with each other; and as we enumerate them, like others holding a similar relationship, from the side-line to the middle-line of the body, the terms 1st, 2d, 3d, 4th, and 5th bones of the second division of the hand, will clearly point them out, and distinguish them from all others.

It is scarcely necessary to show how the numerical nomenclature may be applied with effect to the third division of the hand—the fingers. We enumerate them upon the principle which was applied to the other parts of the hand. Hence we have the 1st, 2d, 3d, 4th, 5th, counting, according to the above mentioned principle, from the thumb: and the 1st, 2d, or 3d pieces of the respective fingers, the enumeration of the pieces being from above downwards, in conformity with the general principle stated above.

2dly, There is less philosophy and principle pervading the nomenclature of the *Muscles* than any other department of anatomy. Some of them receive names from their form, as *trapezius*, *rhomboideus*, *teres*, *quadratus*; others from their supposed structure, as *semitendinosus*, *semimembranosus*. Many receive their names from their osseous attachments, as *sterno-cleido-mastoideus*, *sterno-hyoideus*: more from their supposed uses, as *flexors*, *extensors*, *pronators*, *supinators*, *abductors*, *adductors*. Some take their names from the course and direction of their fibres, as *rectus femoris*, *rectus abdominis*, *transversus abdominis*, *obliquus superior oculi*. Others apparently from no assignable cause but the whim of the discoverer, as *vastus externus*, *vastus internus*,

massa carnea Jacobi Sylvii, sartorius. After viewing such a heterogeneous mixture of names, it is refreshing to contemplate the simplicity and universal applicability of the numerical nomenclature.

The muscles of the upper limb are, in the first place, arranged into those of the shoulder, upper-arm, fore-arm, and hand; and, in enumerating the muscles in each department, we proceed upon the general principle formerly laid down, and which was explained when illustrating the application of this nomenclature to the bones. Five muscles are situated on the shoulder: four of these muscles lie on the posterior surface of the second bone of the shoulder, and one on the anterior surface of the same bone. According to the general principle to which we have already referred, those on the back surface of the bone will fall to be enumerated before the one on the fore surface, because the former are more superficial than the latter. But how are we to distinguish the superficial muscles from each other? According to the above mentioned principle, the one seated nearest the upper line of the body falls to be first enumerated, and the others in succession downwards. In accordance with general principles, then, the arrangement is exceedingly simple. The supra-spinatus will be the 1st muscle of the shoulder, the infra-spinatus the 2d, the teres minor the 3d, the teres major the 4th, and the subscapularis, which requires to be enumerated after the superficial, is the 5th muscle of the shoulder. The numerical names of these muscles is infinitely more simple and expressive than the technical. By the technical nomenclature, only one of these muscles takes its name directly from the bone on which it lies, and consequently only one of them has a reference to the shoulder. Other two are named from their connexion with a certain process of the second shoulder bone—a process, too, the name of which is common to many others. The names of the remaining two muscles are perfect misnomers. They announce that the muscles are round, whereas every tyro in anatomy can tell that they are quite flat.

The muscles of the fore-arm are five in number, and generally receive the following names—deltoid, biceps, coracobrachialis, brachialis anterior, and triceps. These names may appear sufficiently expressive, when once we are familiarly acquainted with them; but, in reality, can any one of them, with the exception of brachialis anterior, lead us to a knowledge of the position of the muscle to which it is applied; and how should *that* muscle monopolize the name of the anterior muscle of the brachium? Do not the biceps and coracobrachialis lie there, as well as the muscle styled brachialis

anterior? When we take an unbiassed view of these muscles, we find that the deltoid lies on the outside of the upper-arm bone, that the biceps, coraco-brachialis, and brachialis anterior, lie on the fore part of the bone, and that the triceps is situated behind. Here then we have a natural threefold division of these muscles. In the first division, we have one, the deltoid, which might be called the lateral muscle of the upper-arm, because it is seated nearer the side line than any of the others. In the second division, we find three muscles—the biceps, coraco-brachialis, and brachialis anterior, which cannot receive more appropriate names than 1st, 2d, 3d anterior muscles of the upper-arm. And from the triceps lying on the posterior aspect of the bone, it may be expressively denominated the posterior muscle of the upper-arm.

The muscles of the *fore-arm* are twenty in number, and all the names and classifications of these muscles, which are found in our most popular systems, impart, I think, an air of complexity and difficulty to the subject, which naturally does not belong to it. We find them arranged frequently into pronators and supinators, flexors and extensors of the whole hand, and flexors and extensors of the fingers. Now, although this classification may be useful in enabling us to form an idea of the combined action of certain muscles of the part, it tends to impart a very erroneous idea of the actions of these muscles individually, and cannot possibly lead the student into a knowledge of their position. A more simple and useful arrangement is that according to their position. Three muscles lie on the outside of the fore-arm, eight on the front, and nine behind. Now, could not these muscles receive highly expressive names indicative of their very positions? We should then have the lateral, anterior, and posterior muscles of the fore-arm; and to particularize them farther, we have only to use the numerical terms, according to the principle stated above. When we are acquainted, then, with all the muscles that enter into these regions, and know at the same time the principle upon which the examination of them proceeds, we not only by this simple contrivance, form effective names for these muscles, but we at once get quit of a host of technicalities, which are admirably calculated to bear down the memory and mislead the judgment.

The muscles of the *hand* are generally considered a perplexing part of anatomy. But although somewhat numerous, they are by no means complicated. If we adopt a natural arrangement of these muscles, and express ourselves concerning them in simple and intelligible language, all will appear plain and easy. Nature seems to have arranged them into three sets—1st, those forming the ball of the thumb; 2dly, those constituting

the ball of the little finger; and, 3dly, those that lie in the palm of the hand.

The muscles of the thumb generally receive the following names—abductor pollicis, flexor ossis metacarpi pollicis, flexor brevis pollicis, and adductor pollicis. These names express, no doubt, the principal uses of these muscles, but they do no more. Whereas the terms 1st, 2d, 3d, and 4th muscles of the thumb, enumerating them according to fixed principles, express the precise relative position of these muscles; and I am bold to maintain, that a name that would lead a surgeon to the situation of any part, is infinitely more valuable than one that would give him an idea of the use and not of the locality of the object.

The muscles that form the ball of the little finger are likewise four in number, and when enumerated from the superficial to the deep-seated parts, and from the side towards the middle line of the body, the names 1st, 2d, 3d, and 4th muscles of the little finger, will clearly indicate their situation. According to this arrangement, palmaris brevis would be the first, flexor brevis minimi digiti the second, abductor minimi digiti the third, and adductor minimi digiti the fourth.

The muscles in the middle of the hand or palm are eleven in number, and when named, as many of them are, according to their uses, they are exceedingly perplexing. The most natural arrangement is according to their situation; and when arranged and studied in this way, they never can be forgotten. We find these muscles arranged into three layers, which may with propriety be denominated the 1st, 2d, and 3d layer, or the superficial, middle, and posterior layer of the palm. The superficial muscles of the palm are the four lumbricales; the middle layer consists of the three palmar interossei, and the posterior layer of the four dorsal interossei. These natural divisions cannot perplex, and are of the highest utility. After they are thus arranged, how easily can any of the muscles be named, and referred to by numbers alone! The situation of the *lumbricales* may be forgotten, but how is it possible to forget for a moment the situation of the 1st, 2d, 3d, and 4th superficial muscles of the palm! The technical names frequently given to the muscles that constitute the 2d and 3d layers in the palm, can hardly be remembered for a day; but by the use of the numerical nomenclature, these muscles become exceedingly simple. Their names can never be forgotten so long as the muscles themselves are remembered.

3dly. The *Vascular System* comprehends three sorts of vessels: one sort commonly called arteries, through which the blood moves from the heart to every assignable point of the system;

another sort veins, which return the blood from every part of the body to the heart; and a third sort commonly denominated lymphatics or absorbents, but regarding the use of which a difference of opinion exists among physiologists. Is it not strange that terms so palpably absurd as *artery* and *vein*, terms which were introduced in the darkest ages of anatomy, and derived from theories which have been proved long since to be utterly unfounded—is it not unaccountably strange that these terms should still be in use, although Harvey has lived, and the truth of his transcendent doctrine is known and universally admitted?

I have long been of opinion that such terms as *primary*, *secondary*, and *ternary* vessels are far less objectionable than arteries, veins, and lymphatics. The artery I would denominate *primary vessel*, because it is not only first in point of surgical importance, but likewise because it carries the blood directly from the heart. As the veins return the blood to the heart, forming thus the second link in the great chain of the circulation, they might be denominated *secondary vessels*; whereas the lymphatics, both from their minor size and inferior surgical importance, can claim the third place only, and may thus be aptly enough designated *ternary vessels*.

More than 500 arterial ramifications have received names, and amid such a host of technicalities, it cannot be very surprising that some few of them should be objectionable. Indeed, with the exception of some of the larger arterial trunks, it is difficult to point out one, the name of which is not fundamentally bad, or at least calculated very much to mislead the student. I do not at present advert to such terms as *aorta*, *arteria innominata*, *carotidea*, *vertebralis*, *collateralis*, *recurrens*, &c., but I refer to more common terms, such as those derived from the names of the parts upon which the vessels are ramified. *Thyroid*, *lingual*, *facial*, *posterior auris*, *occipital*, &c., are of this description, and the terms at first view may appear quite correct and expressive. But a very little consideration will satisfy us that names of vessels formed on this principle cannot be correct, that such names must express either too much or too little, and therefore ought to be rejected as unscientific. This circumstance arises from the very economy of the vascular system. No one artery is exclusively confined to one organ, and every organ is supplied with primary vessels from a variety of sources. Did the artery, for example, which we denominate *superior thyroid*, send its branches exclusively to the thyroid gland, then the name would be highly appropriate and expressive. But when we find that it supplies the hyoid bone, and some of the muscles

connected with that bone, that it likewise ramifies upon the sterno-mastoid muscle and larynx, as well as upon part of the thyroid gland, it clearly can have no right to the exclusive appellation, thyroid. It might with as much propriety be denominated hyoideal, sterno-mastoideal, or laryngeal, as thyroid. Now all the arteries of the body are precisely in this state. Not one arterial name expresses the extent of the corresponding arterial ramifications. Nor can a term with such an extent of signification be invented, for we cannot tell the full extent of any arterial ramification. A very small branch is frequently found to carry its vivifying streams into the substance of bones, cartilages, ligaments, muscles, vessels, nerves, cellular membrane, and skin. What term, then, could be invented to indicate such a distribution? Before we can attain simplicity in the nomenclature of the blood vessels, we must leave this track of investigation altogether.

The most variable parts of the vascular system are the minute branches—those that spread and terminate on the substance of our organs. We do not find two bodies in which these branches ramify alike. Yet, strange to tell, this is the very part of the vessels that has been exclusively attended to when allotting to them their names. The vascular trunks, and the branches that immediately pass off from the trunks, are far less variable than the minute ramifications. They are besides of paramount surgical importance. To them, therefore, our attention ought to be particularly directed.

The great trunks of the vessels might have their names from the great divisions of the body to which they correspond, or over which they pass, as the vessels of the *shoulder*, of the *arm-pit*, of the *upper-arm*, of the *fore-arm*, of the *hand*; and should two or more vessels of the same description exist in any one of these compartments, as in the fore-arm and hand, these could be most satisfactorily distinguished from each other by numbers—it being clearly understood that in our enumeration of such vessels, we proceed upon the principle adverted to in a foregoing part of this paper. In the *fore-arm*, for example, we find two great primary vessels; one which corresponds with the first bone of the fore-arm, another with the second; and in the hand two great primary vessels likewise, the one lying more superficially than the other. These, then, I think, could be distinguished from each with the utmost facility, by such names as the 1st and 2d primary vessels of the fore-arm, and the 1st and 2d primary vessels of the hand. So far then as the names of the vascular trunks are concerned, we would deviate very little from the names at present in constant use. But how are the

branches that pass directly from the trunks to be distinguished? Most effectually by numbers. The humeral, or great primary vessel of the upper-arm, for example, sends off three branches, which usually receive the following names—arteria profunda superior, arteria profunda inferior, and ramus anastomoticus magnus. Now can these names bear a comparison with the numerical, either for elegance or simplicity? The 1st, 2d, and 3d branches of the primary vessel of the upper-arm, are the numerical names. The technical names cannot give the least idea of the situation of the vessels. Many arteries in different and opposite parts of the body receive the name of profunda; and where is the branch that cannot be denominated anastomoticus, as well as those to which that name has been applied? But the numerical names of the vessels are easily remembered, lead to no misconception regarding their distribution, and are indeed sufficient for every purpose for which a name can be used.

4th.—It would be superfluous, I conceive, after what has been stated, to enter into any prolonged discussion regarding the applicability of the numerical nomenclature to the *Nerves*. Numerical names have been for a long time introduced into this part of anatomy, and with triumphant success. In no part of anatomy is the nomenclature so perfect and unobjectionable. Indeed, it was from observing the effect with which it was applied to the nerves, that I was first led to the idea of its more extended application. This kind of nomenclature has hitherto been confined to the trunks of the nerves only—to those that arise directly from the brain and spinal cord—and the regularity with which they arise, and their similarity of appearance, would naturally suggest this mode of distinguishing them. But the principle may be easily extended to all the principal branches of the nervous system. Let us suppose for a moment that we are confining our attention to the nerves of the upper-limb. We find, in the first place, that they arise from a nervous network, with which at present we have little to do, and afterwards ramify upon every part of the extremity. When we carefully examine these nerves, then, we find that they arise in succession from different parts of the nervous network, and can therefore be as easily arranged according to the order of succession in which they arise, as those that spring more directly from the root of the nervous system.

Time will not permit me to be more particular at present; but I hope I may in conclusion remark, that the introduction of such a nomenclature as the numerical, would be attended with manifold advantages to anatomy—that it would tend to

remove an oppressive load from the science—that it would change its rugged and barbarous exterior, and exhibit it to the world in its native simplicity and beauty.

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IX. *Case of Ascites, in which the Abdomen was tapped through the Fundus of the Bladder, and an attempt made to establish a Fistulous Communication between the Bladder and Abdomen.* ✓
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THE mode of operating, and the subsequent treatment adopted in the following case, are I believe new; at least, I have not been able to find any traces of them in the surgical works I have looked into, nor in the course of the inquiries I have made among my professional friends. In the first volume of the *Medical Communications* (p. 361), Mr. Henry Watson describes an operation for ascites, which he had practised three times successfully. Finding the vagina forming an external protrusion from the pressure of the fluid above, he introduced the trocar into the abdomen in that situation, preferring it to one higher up, as ensuring the more complete evacuation of the dropsical fluid. Mr. Watson's operation more nearly resembles the one here proposed, than any other I have read or heard of. My researches, however, upon this subject have not been very minute, conceiving it of little moment. It is far more important to inquire, whether the operation described below be in any respect superior to the one commonly practised, and whether the plan of treatment subsequently adopted be calculated to supersede the necessity of repeating the operation; but it will be best, before entering upon these inquiries, to give the history of the case which suggested them.

Mrs. H. a middle-aged, married woman, in October 1826, was put upon the list of sick paupers, for ascites. By her account, the swelling of her belly had commenced about 18 months before, and after increasing to such a size as to induce her to consider herself pregnant, had gradually subsided, without the employment of any medicinal means. Twelve months ago, however, the swelling again appeared, and soon after became attended with anasarca of the legs.

When I first saw her, the abdomen was very much distended with fluid, the legs anasarcaous, and the urine scanty, with much debility and emaciation. Deriving no relief from the purgative and diuretic medicines prescribed for her, she was sent to the Infirmary. Medicinal treatment was there in like