

case just reported, it appears probable that a loose clot which had formed in the right side of the heart was driven into the pulmonary artery, giving rise to the urgent dyspnoea which supervened so suddenly. The patient told me that throughout the day she had felt a little shortness of breath. Given that a clot found its way into the pulmonary artery, it is of course quite conjectural what changes took place in it; but it is not improbable that a loose clot might undergo such contraction as to allow the gradual re-establishment of the circulation, coincident with the slow improvement in the general symptoms. Different opinions will doubtless be entertained as to the share which the carbonate of ammonia had in relieving the symptoms, by reducing the hyperinosis of the blood which existed at the time. The large quantity of this alkali which was taken in twelve hours is specially deserving of notice. I am not aware that it has been given continuously for twelve hours in such large doses at such short intervals. Dr. Richardson, in one of his valuable contributions to the subject of thrombosis, gives reasons for administering the liquid ammonia rather than the carbonate; but when this case occurred I had not read Dr. Richardson's remarks on this point. Another fact of interest in the case now reported, is the low temperature which continued throughout the day succeeding the most severe symptoms.

My friend Dr. Playfair, who has written so well on thrombosis and embolism in the puerperal state, in commenting upon a case similar to mine, objects to its being called one of embolism, and says that it should be designated a case of thrombosis. I have, however, preferred to speak of this case as one of embolism, believing that the coagulum was originally formed in the right side of the heart, and then pursued its short course as an embolism into the pulmonary artery, rather than that coagulation occurred *in situ* in the pulmonary artery itself.

## THERAPEUTIC MEMORANDA.

### ON THE USE OF A SPONGE-TENT IN EPISTAXIS.

SEVERAL notices have lately appeared on the difficulty of plugging the nares in cases of severe epistaxis, but I have not seen any suggestion made of using a sponge-tent for the purpose. It would be difficult to devise any remedy more simple in its application, and yet in the majority of cases I believe it would be found very effectual. The following case occurred to me lately. A single woman, aged 39, had on several occasions been suddenly seized with severe epistaxis, which she found very difficult to control. On February 15th, she was again attacked. After the bleeding had continued for several hours, I was sent for. I found that the nose had been crammed with bits of rag; that she was very faint; but in a short time the bleeding ceased without any interference on my part. On inquiry, I found that the menses had stopped about eighteen months before, and the epistaxis had come on at irregular intervals ever since. I consequently anticipated a return of it, and on March 22nd was summoned again. I immediately passed a large sized carbolised sponge-tent into the nose, leaving only the string visible to extract it. In a very short time the bleeding ceased; there was no recurrence of it during the night, and in the morning she extracted the tent herself with the greatest ease, and there was no hæmorrhage afterwards. She complained of no inconvenience or disagreeableness whatever from the tent.

D. S. SKINNER, L. R. C. P. Lond., etc., Lyme Regis.

### CARBOLIC ACID INJECTIONS IN DEEP-SEATED INFLAMMATION.

HAVING lately had under my care three very serious cases of deep-seated suppurative inflammation successfully treated by injecting carbolic acid with oil or water, and not having seen any mention made of carbolic acid being used in the same way, I think it may be interesting to give a few particulars. Two of the cases were attacked with paronychia of a very violent character, extending to the tendon and bones. Having made free incisions, I injected into them, by means of a large brass syringe, a mixture of one part of carbolic acid in fifteen parts of olive oil (warm). The injections were partly made to pass into every structure. The immediate effect was very marked: the destructive inflammation was at once arrested. The injection was repeated three or four times; and, although the inflammation had extended to the periosteum, there was no loss of tendon or bone in either case, nor was the motion of a joint impaired. In one of the cases the whole hand was affected—so much so, that ten incisions were necessary to give free vent to the matter.

The third case was one of inflammation of the thigh extending to the deep-seated muscles, caused by a kick from another patient. Mat-

ter formed and incisions were made, and one part of carbolic acid in forty parts of water was injected, warm. The extent of the affected part was so great that I preferred water to oil. This man became greatly emaciated from the excessive discharge, the whole limb to the knee-joint being affected. The same beneficial effects followed the use of the carbolic acid injection in this case as in the others. It was continued for ten days, the limb being at the same time strapped with adhesive plaster. This man made a capital recovery, the limb being now (three months) as strong and well developed as the other.

The chief advantage, as it appears to me, in this mode of treatment, is the forcing the carbolic acid into the inmost recesses of the diseased structures, and at once arresting the further progress of the destructive inflammation. It is also most useful in altering the character of the pyogenic membrane in sinuses or large abscesses, checking in a marked manner the formation of pus, and, therefore, I think may be looked upon as a most useful remedial agent in the treatment of those troublesome cases.

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## REVIEWS AND NOTICES.

### WORKS ON PRACTICAL PHYSIOLOGY.\*

[Continued from page 464 of last number.]

THE scope of the work edited by Dr. Burdon Sanderson is described in the preface. It is stated that the book is intended for beginners in physiological work; and that many subjects are omitted, either because they do not admit of experimental demonstration, or because the experiments required are of too difficult or complicated a character to be either shown to a class or performed by a beginner. We have, therefore, carefully examined the book by this light, and have endeavoured to judge the work as its editor intends it to be judged. The part on Histology is written by Dr. Klein; that on Blood, Circulation, Respiration, and Animal Heat, by Dr. Sanderson; that on the Functions of Nerve and Muscle, by Dr. Michael Foster; and that on Digestion and Secretion, by Dr. Brunton. The authors are all well known as working physiologists of eminence and great ability; and any book which bears their names has the stamp of genuineness, and demands careful attention. The power of writing for students is, however, not given to all; and this book, we regret to find, illustrates the fact. The book is expensively illustrated, and, generally speaking, the engravings are excellent; but a singular blunder has been committed in separating the engravings from the volume which contains the text. They are collected into a separate volume; and, if it had been desired to puzzle and weary the reader, a more successful device than this could not have been adopted. The confusion into which the book has been thrown is all the more unfortunate, considering that it is intended for students, who above all things object to unnecessary trouble. In the histological part, this confusion is most unfortunate. Many of the figures do not appear to be referred to at all in the text, and so excellent illustrations come to be overlooked. In some cases, the illustration is referred to; but even then the confusion may still be complete. *E.g.*, at p. 33, Fig. 8 is referred to. We of course thought that this would be near the beginning of the volume of plates. After a good deal of search, we found it on Plate XVII, along with Figs 52, 53, 54, and 55. Fig. 15 occurs on Plate XXIV, along with Figs. 63, etc. To take the plates away from the text was unfortunate; but to leave the reader to search for them in out-of-the-way places was still more so, and is certainly not a judicious way of encouraging the beginner. Dr. Klein is well known as an accomplished histologist and excellent investigator, destined, we feel sure, by his ability and conscientious devotion to science to render high service to it; but it must be said that, although his part of the work will be valuable to the teacher and to the advanced student who may wish to prosecute the study of any special subject in histology, it is, in our opinion, not at all a work adapted for the general student. Dr. Bennett begins his work by a brief account of the microscope, and certain general principles regarding the description, drawing, and mensuration of objects: just what the student wants. Dr. Klein completely omits all this. His introduction to the microscope is (p. 1): "Take a clean glass slide and an absolutely clean cover-glass, which, as we must use high powers (that is, objectives of which the focal distance is short), must be thin." If it be

\* *Text-Book of Physiology: General, Special, and Practical.* By John Hughes Bennett, M.D., F.R.S.E. Edinburgh: James Thin. 1872.  
*Hand-book for the Physiological Laboratory.* By E. Klein, M.D., J. Burdon Sanderson, M.D., F.R.S., Michael Foster, M.D., F.R.S., and T. Lauder Brunton, M.D., D.Sc. London: Churchill. 1873.

necessary to tell the "beginner" this, surely it would be of as much importance to tell him a great deal more in this connexion. By the time the student reaches the end of page 2, he is expected to know all about the objective (although he has only been examining a drop of blood); for he is told that, "if high powers are used, the *front glass* of the objective comes into contact with the cover-glass." Dr. Klein describes hot stages, the mode of making sections, of staining, of injecting, etc. Why omit the points to be attended to in selecting a microscope? Why say nothing to the "beginner" regarding the importance of drawing, in order to make him *really see* things—the importance of making him describe things, in order that he may be able to give a lucid account of what he sees? And why should mensuration not be enjoined, in order that he may learn how to get accurate notions of the size of things? In all this, Dr. Bennett is far more successful as a teacher. He evidently understands how to write for beginners; and it is to us quite as evident that Dr. Klein has yet to acquire this art. Strange to say, Klein omits most of what Bennett gives; and the converse also holds true. Dr. Klein gives much valuable information regarding the preparation of the tissues and organs. He is, generally speaking, too minute for the beginner, and does not even indicate the things to which the beginner should principally attend; and we can assure him that the medical student, for whom he writes, has no time to work through all that he prescribes. The "beginner" is introduced at once to a study of three kinds of colourless corpuscles in the blood of the newt. After puzzling as to how the student is to recognise these three varieties, we found, quite by accident, that two of the varieties are contained in a plate to which no reference is made in the text. In speaking of these corpuscles, Dr. Klein makes free use of the words "large" and "small", leaving the student to find out what is meant by these vague terms. If the student were told what relation the size of the "large" and "small" white corpuscles bear to the coloured corpuscles, he would at once get a definite idea, and might have a chance of escaping from the vagueness into which microscopists appear to be very apt to fall. When Dr. Klein, at the outset, tells the student (p. 1) to use "high powers" for the examination of the white blood-corpuscles, why does he not at once simply tell him what eye-piece and what object-glass he should employ, and have done with it? There is a great disadvantage accruing from indefiniteness. In the illustrations, the number of the ocular and that of the objective are generally put; but the number of times the object has been magnified is always omitted. Many persons will read the book who have no means of knowing the magnifying power of the combination of lenses mentioned; and we need scarcely say that the value of the otherwise excellent figures is on this account much diminished. The addition of the magnifying power would have been very easy, and for students, who are to be trained to accuracy, very important. In fact, Dr. Klein, while endeavouring to educate students in the preparation of the tissues, leaves them to become accurate microscopical *observers* under inspiration from other sources. If the student is to be taught by a *book* how to make sections, he might surely as well be taught by a *book* how to record and delineate what he sees.

But, although Dr. Klein has missed the mark as far as the general student is concerned, we repeat that his part of this book contains much useful information for the advanced worker in histology. But we fancy that even the advanced student would like to get rid of such vague statements as "sherry-coloured solution of bichromate of potash". Why not say at once the percentage strength of the solution, and not leave the student to guess at what is a "sherry colour"? Sherry, we need scarcely say, may be of very many gradations of tint. At page 89, it is stated that "Müller's liquid consists of two parts of bichromate and one part of sulphate of soda, in one hundred parts of water." This may be Klein's modification of Müller's liquid, but it certainly is not the original Müller's liquid as all the other books give it. As is well known, it contains bichromate of *potash*, and not bichromate of *soda*. We wish Klein had told us what he regards as a "very dilute solution of picric acid". Picric acid is much lauded by Ranvier. It would, therefore, have been important to give the definite strength of the solution. Even the advanced student will be puzzled to know what is meant by a "very dilute" solution. There has been a good deal of confusion regarding the term protoplasm; but we do not remember being told by any histologist that the *fibres of connective tissue* consist of protoplasm. Dr. Klein says (p. 45), in speaking of the development of connective tissue, that "the protoplasm subsequently undergoes a process of splitting, by which it is converted into fibres" (!). The development of connective tissue and of fat-cells is described, but the development of muscle and of bone is omitted. Epithelium, silvered and unsilvered, connective tissue, bone, and nerve-fibre, are illustrated by first-rate woodcuts; but, although the structure of ganglia, the liver, the kidney, cornea and retina, lymphatics, and even tubercle, is figured,

sections of the brain and spinal cord, ear, olfactory mucous membrane, skin, etc., are omitted.

We wish very much that Dr. Klein had not left us so much in the dark as to the sources whence he has obtained his methods. We were much struck by the fact that he has availed himself of Ranvier's somewhat recent discoveries regarding the structure of tendon, without the slightest mention of Ranvier's name. Of course, such a fact when discovered leads one to ask whether, in many other cases, we have or have not to thank Dr. Klein for what appears to be novel. We think Dr. Klein would have done well to imitate the excellent book by his countryman Frey, in copiously giving the names of his authorities. The omission of names is misleading to the student, and does not enable him adequately to estimate his relative obligations. Most of the drawings which illustrate the histological part are original, and, as examples of histological wood-cutting, many of these could not be surpassed.

We are sorry to be obliged to be so niggardly of praise regarding Dr. Klein's attempt to write for students, and we gladly turn to what we can conscientiously commend as well adapted for beginners: we mean the *Functions of Muscle and Nerve*, by Dr. Michael Foster. In this we perceive at once that we have to deal with an author who has carefully studied practical tuition. Precise directions are given to the student; great things are held prominently forth, and presented in bold outline to the student's mind; and the effect upon us has been to wish that Dr. Foster had written a good deal more of the book than he has done. All that this author gives is excellent. We observe, however, that in Bennett's book there is an account of an instrument for measuring the rapidity of the transmission of nerve-force. Foster leaves this out altogether. Of course the book is for "beginners"; but we should have thought that the mensuration of the swiftness of nerve-force would have greatly interested even them. Dr. Foster omits a great deal of matter which the advanced student would, we should think, be glad to obtain. However, we cannot grumble at this, though we regret it; for he really adheres to the editor's prefatorial thesis.

[To be concluded.]

## NOTES ON BOOKS.

*Posological Tables*.—Dr. HANDSEL GRIFFITHS of Dublin has published a Posological Table for the use of students and others, in the form of a large table to be suspended on the wall. We do not find, however, that it possesses any advantages over other similar tables. It does not give any more information, nor does it supply it in an easier form. It is true, Dr. Griffiths has not followed the usual order: for instance, he does not arrange the remedies alphabetically, but according to their dose. Thus, under the heading of Tinctures he groups those administered in the same dose. The table, however, will probably be useful if suspended in a surgery for ready reference.

*Syllabus of Materia Medica, for the Use of Teachers and Students*. By ALEXANDER HARVEY, M.D., Professor of Materia Medica in the University of Aberdeen, and ALEXANDER DYCE DAVIDSON, M.D., Assistant Professor. London: Lewis. 1873.—The object of the authors in this small work is one most deserving of support: they advocate selection, or definition of subjects, in Materia Medica and Therapeutics; and oppose the indiscriminate and compulsory demands of the examining boards. They point out what is evident to common sense, but, unfortunately, not to many Examiners, that the system of requiring a knowledge of all the articles of the *Pharmacopœia* is unfair to students, and most prejudicial to their memories, and to their medical education. They propose that official relative-values be given to the articles and preparations, and that students be examined on the more important of these. They would make the mere recognition and naming of the primary articles co-extensive with the entire list, and give the students every facility for making themselves familiar with the specimens by handling and inspecting them at their leisure. They would restrict the class-teaching mainly to these selected articles, their preparations, and their relative values, as therapeutic agents, and would absolutely deny the Examiner any license beyond this. In pursuance of this plan, the authors, in the absence of an official authority, have arranged, according mainly to Dr. Garrod's "Essentials," the articles of the *Materia Medica*, the *Pharmacopœia* and other doses, giving to each a relative value which, they believe, will very nearly meet the views of the majority of medical men. This labour they have performed with evident care, and they have produced a handy guide of the relative values of our therapeutic agents, which will save the student much needless trouble and loss of time. In advocating the importance and value of the principle of selection in their own and other departments of medi-