Haandbog i Therapien. Af Dr Prof. Oluf Lundt Bang, etc., etc. Anden omarbeidede Udgave. Kjøbenhavn: 1869. 8vo, pp. xi. 463.

Manual of Therapeutics. By Prof. Oluf Lundt Bang, M.D., etc., etc. Second improved Edition. Copenhagen: 1869. 8vo, pp. xi. 463.

Dr Bang ranks honourably among those hale veterans in medical practice, and in medical teaching and literature, whom it must always be a pleasure to the younger members of the profession to receive with respect and admiration. It has been his rare fortune to have been now for sixty years engaged in the practice of Medicine; and, already a lecturer on General Pathology in 1814, he has been a teacher of it also for a period but slightly shorter. During this unusually protracted career of labour, he has published, besides the Manual the second edition of which is now before us, several other meritorious works, including one or two on popular Medicine, with a variety of treatises in the Medical Journals. Among these works, we have for long had a more special acquaintance with his “Syge-dietetik” (Dietetics for the Sick), published first more than thirty years ago; of which the hearty and indefatigable writer is now, we are glad to learn, preparing an eighth edition, all the previous ones having been exhausted, in fullest attestation of the public appreciation of its usefulness. Seldom, indeed, is it that the medical historian or critic has to record an example of mental and physical strength and endurance so remarkable as this: and that physician must truly have lived according to wise rules of his own art, who, after toils so lengthened, has not only not closed them, but still continues to pursue them with ardour and success.

A leading necessity, in the execution of such a work as that before us, has naturally been a desire to concentrate. Designed as a manual for actual practice, or as a text-book for academical lectures, it was fitting that, while in its nosological arrangement it should proceed, as it does, from the simple to the composite, and from the general to the special, its definitions of disease should be made chiefly to rest on those more patent characters that may be seen readily, and described easily. The details of pathology, and of pathological anatomy, properly confine themselves to still narrower limits, though they are nowhere undervalued. The proper uses of such a work, of course, presuppose, on the part of the competent reader, a due knowledge of the etiology of diseases, and of the
most approved rules and methods in semeiotics; though, in its more immediate scope, it admits only the laying down of the broader and more promptly accessible results, or of such as more especially fit themselves for the institution of a diagnosis as the bare ground-work for treatment. Without diverging towards pharmacodynamics, of which the treatise shows scarcely a trace, to his directions for the exhibition of medicinal remedies the author binds usually, with more or less of precision, those rules for diet and regimen which are so necessary for maintaining or modifying the efficiency of the more aggressive agencies. In his array of the latter, we recognise, as it were, the history of the experience of his long life passing in detail before us: each disease, in the successive order of its remedies, showing too often the fickleness with which the fashion of the day clapsed hands with one or other of them for a while, and then coldly quitted it to greet some newer claimant for favour; leaving thinkers to stand by and wonder, how, if good, they had ever been abandoned, or, if worthless, ever adopted. Nor does our veteran writer, clinging, as might have been expected, with the customary tenacity of age to his early predilections, refuse their just relative place to even the most recent innovations in practice. Thus, under the head of Neuralgia, if we find recorded epistasics of all varieties, anodynes of all qualities, belladonna and veratria ointments, iodine, cyanide of potassium, chloroform, acupuncture, moxas, electro-magnetism, arsenic, valerian, monster doses of carbonate of iron, quinine, bromide of potassium, and not a few, besides, of remedies vaunted of old, we have also Richardson's aspersions of ether, subcutaneous injections of narcotics, freezing applications, and others of the newer devices; yet with the somewhat nullifying confession at the end, that it is by large doses of opiates, internally, that the pain is, after all, most surely encountered and assuaged.

One thing seems manifest enough in Dr Bang's treatise, and that is, that he has not been himself anxious to appear anywhere as an innovator in therapeutics, but has contented himself with the safer, and by no means barren, function of a careful and judicious eclectic. It would have gratified us, however, if he had proceeded here at least so far as to have made a more frequent and direct reference to what had been the results of his own immediate experience; prolonged, and, we presume, ample, as that experience has been. Thus, in the admirable Commentaries of our own Heberden, while we learn that they, like the work before us, are the fruit of a "magna consuetudo exercitatioque medendi, et longa annorum series," we are pleased also to encounter such passages as "Cum juvenis adhuc essem, et medicinam ex libris praecipue hausissem, abhorrebam ab opio paralyticis dando;" and pass on with all the more eagerness to the interesting context. Willingly and respectfully we meet, too, in the "Enchiridion Medicum," the "Vermächtniss einer fünfhzigjährigen Erfahrung" of Hufeland, another patriarch in medicine, some
similarly practical remark, to which he has attached his own individual authority by such a phrase as a "wovon ich ein glückliches Beispiel weiß;" or some personal reminiscences, such as, to leave unnoticed many other examples, he introduces into his comments on the use of emetics in pneumonia. It is in this way that these veterans in our art succeed in worthily stamping the truth with each his own peculiar signet; and their treatises become thus invested with a degree of individual interest that throws generally an air of reality over their views and statements, and adds to a like extent to their authority. But of this kind of faith and reverence, the proper tribute to age and long experience, Professor Bang claims scarcely anything at our hands. Topic after topic passes under the eye of the reader, without the barest reference to a direct personal experience in treatment. With much information of a sound and clear quality, we have much here also that suggests rather the meagreness of a catalogue than the copiousness of a guide with its authoritative directions and warnings. Thus, the practitioner or student is too largely left to his own powers merely, to choose among a multitude of remedial plans, none of them certainly without authority, but few, if any, duly tested or attested by the writer's special verdict; and for the addition of that we should have felt grateful.

In corroboration of these remarks, we had intended, in supplement to what we have already said on the topic of neuralgia, to have glanced, by an almost random choice, through the details of treatment of hypochondriasis (justly and briefly characterized), as well as those of apoplexy, pneumonia, and pleurisy, as presented by the author; but this would lead to too great an extension of our notice. Another topic, however, on which we chanced to alight, was that of alcoholism, and on this we may still permit ourselves one or two observations. If memory supplied the hint, it certainly could affect us with no prejudice regarding Danish drunkenness, to recall the charge of Hamlet, or of Shakspeare through him, that other nations, when speaking of his countrymen, were wont to "clepe them drunkards, and with swinish phrase soil their addition." Nor, even while we could not help hilariously remembering the simple and kindly, but thorough and incorrigible, drunkard, depicted a century and a half ago with such superlatively humorous details by Holberg in "Jeppen Bierget," was it with any inclination to accept this delineation by the Danish Molière as a real type of the peasantry of his country. On the contrary, we believe that Denmark, with regard to the virtue of sobriety, holds, now as hitherto, no worse position than its other neighbours of the North, and we fear that we cannot assign to it a better. But Dr Bang enters into no statistics on this subject. Nor, indeed, could such statistics form any proper part of his scope or plan; though what he has said on the head of drunkenness, its results and its treatment, is well said, and as exhaustively as was consistent with the briefness necessarily enforced upon him. In his diagnosis of a fit of complete intoxication from apoplexy, it
may be objected that he seems to confide chiefly in the odour of the spirits in the breath. But what if the apoplexy have occurred after whatsoever extent of indulgence in drinking, even if it have not supervened upon an absolute intoxication? In such a case, where the anamnesis failed to instruct otherwise, we should prefer to trust to the circumstance, that no state of coma from drunkenness, that we have witnessed, is ever so intense that it cannot be interrupted, to a certain degree, by appropriate measures. Thus, we recollect an instance of a man found motionless on a roadside, in whom we were unable to recognise any odour of spirits, but where a piece of twisted paper, softened at the end, and thrust into the fauces, produced some uneasy movements, and, at last, a muttered objurgation of "Vade ad inferos" (though in less classical language), which left us in no doubt as to the diagnosis.

Our author gives the computation, with reference to the fatality of delirium tremens, that of those affected with the disease in its simple forms, scarcely three per cent. die; while, in the complicated forms, the deaths are thirty per cent. Without avouching this precise proportion, we can, at least, testify broadly to the general truth involved in the statement, and would recommend its consideration to all indiscriminating, yet not the less ardent, promulgators of new and successful methods of treatment. We may add, that the fact that sudden death by syncope, as we ourselves can attest, is by no means an exceedingly rare termination in this affection, claims also some attention on the part of those who confide for its cure in heroic doses of foxglove.

Dr Bang is one of not a few writers, the perusal of whose works ought to render us desirous that the medical literature of Scandinavia should be better and more immediately known among English readers; who will be pleased to find, in the sensible lucubrations of their Northern brethren, that they, least of any, are of that class, still not extinct anywhere, who smother ideas under words, or mistake words for ideas.

Injuries and Diseases of the Knee-Joint, and their Treatment by Amputation and Excision contrasted. The Jacksonian Prize Essay of the Royal College of Surgeons of England for 1865. By William Paul Swain, F.R.C.S., Surgeon to the Royal Albert Hospital, Devonport. Pp. 252. London: John Churchill & Sons: 1869.

Even those surgeons who studied with interest and advantage this essay on its gradual publication in the British Medical Journal for 1866, will be gratified by its republication in the present more compact and accessible form. New cases have been added to it, and the question of excision for gunshot injuries is more fully discussed.
It may be thought that already in our language sufficient monographs on this subject have been written, and that in a special manner the work of the late lamented Mr Price rendered this one unnecessary. This, however, is not the case; for even in the five years that have elapsed since the publication of Price's paper, some advances have been made in the pathology of the tissues involved in the diseases which render the operation necessary, certain improvements in treatment—specially in after-treatment—have been devised, and a very large number of new cases have been tabulated, giving more encouraging statistics than ever.

The following Table will show very distinctly the amount of new material on which Mr Swain founds many of his observations. It bears no pretensions to completeness; indeed Mr Swain's own cases are derived entirely from five hospitals,—Exeter, Plymouth, Devonport, St Bartholomew's, and King's College (for two years).

| Recorded in Mr Price's book to 1865 | Cases | Recoveries | Deaths | Amputations | Recoveries | Deaths |
|-------------------------------------|-------|------------|--------|-------------|------------|--------|
| Collected by Dr MacCormac            | 316   | 240        | 76     | 39          | 30         | 9      |
| Tabulated by Mr Swain               | 74    | 49         | 25     | 11          | 7          | 4      |
|                                     | 82    | 67         | 15     | 4           | 4          |        |
|                                     | 472   | 356        | 116    | 54          | 41         | 13     |

So far as this Table goes, we see a gradual but steady improvement in the results.

The first chapter, which gives a sketch of the anatomy of the healthy knee-joint, might have been omitted with advantage. It contains nothing new, and is quite unnecessary. The next two chapters, on the morbid condition of the knee-joint, are short and sensible enough, giving a very fair idea of the present views entertained by British surgeons on the subject. Mr Swain teaches, we believe correctly, that disease never commences in the articular cartilage, but, originating either in the synovial membrane or the osseous structures, is communicated to the cartilages. The fourth chapter gives a very brief account of the wounds, dislocations, fractures, etc., which may place the limb in a condition requiring either excision or amputation. Chapters V. and VI. detail the history and method of performing the operation. Nearly all surgeons are now agreed as to the incision—that the old-fashioned H-shaped incision is quite unnecessary, and that a horseshoe U, extending from the back part of one condyle, across the joint to the back part of the other condyle, gives both freedom of access and an excellent drain, while, in certain cases, a smaller wound can be made by carrying the incision simply straight across the joint. Mr Swain's remarks on the different possible complications of the operation, and the various ways in which they may be met, are very sensible and practical. He lays special stress on the importance of having the patient thoroughly under chloroform
during the process of bringing the cut surfaces into exact opposition, lest the delicate cancelli of the bone be destroyed by harsh rubbing together.

We cannot agree so thoroughly with regard to the after-treatment. We differ from Mr Swain on two points:—

1. He prefers the splint known as Price's modification of the Macintyre to the simpler, cheaper, and more efficient method devised by Dr Watson.

2. He advises that the thigh should be bandaged firmly from above downwards, and the leg protected with pads of lint and pieces of plaster before the operation. This method, while it may have the advantage of saving the time during which the patient has to be kept under chloroform, during the dressing of the limb, has the very great disadvantage of causing engorgement of the limb, and also of exposing the permanent bandages to the risk of becoming smeared with blood during the operation, and thus greatly increasing the risk of suppurative odour and discomfort during the after-treatment.

In Chapter VII. a list is given of the diseased conditions of the joint in which the operation is admissible. Three points are considered in order.

1. The extent and character of the disease; on this point we quote the following most excellent observations:—

"No operative measures should ever be undertaken whilst disease is confined, for instance, to the synovial membrane. In cases even of gelatiniform degeneration, the surgeon would be most culpable if he resorted to extreme measures at so early a stage of the disease as that in which the synovial membrane was alone affected. Indeed, not only is it incurring a wanton risk in the performance of what may be a needless operation, but there seems to be a peculiar fatality attending upon excision for disease of the synovial membrane alone. I have extracted from Price's list no less than twenty-one unsuccessful cases in which the operation was undertaken for the removal of diseased synovial membrane only. And Mr Cadge of Norwich writes, 'It will be generally found useless to remove the ends of the bones, when the synovial membrane is the primary and chief seat of disease.' The reason of this is, I think, obvious. In the first place, we lay open a joint, the main tissues of which are unaffected by disease; and the shock to the general system is in proportion to the integrity of the joint. In the second place, we expose healthy bone tissue, with the cancelli open, and not condensed by disease, and the consequence is that the risk of purulent absorption or infiltration is all the greater."—Pp. 92, 93.

"Cases of advanced disease of the cartilage are eminently adapted for excision of the joint, especially if the operation be performed before the constitutional symptoms have become seriously aggravated. The bones are not often much involved, and it is sufficient to remove merely the extreme articular surfaces, so that there is not much shortening; and, in young subjects, the saving a portion of the epiphysis provides for the future growth of the limb."—P. 105.

The condition of the bone which the surgeon likes best to see on making his section, and which gives the best hope, not only of a safe, but a speedy cure, is thus described:—
"We find the cavities of the cancelli diminished, and their walls thickened, and the whole surface presents a reddish pink hue from the colour of the serum exuded."—P. 107.

Under the same head of extent and character of the disease, we have an account given of the operation in traumatic cases in civil practice and in military surgery. The cases are few; some of the civil ones pretty encouraging, the military ones very much the reverse; indeed, out of 41 cases recorded here, only four recovered. Excision for deformity is the last question under this head.

"This proceeding is, I know, open to very grave objections; and although many surgeons have performed the operation, and restored to their patients useful limbs, there is, to my mind, this grave drawback to its general adoption, viz., that the life of the patient is endangered, without the actual necessity having arisen for its being so."—P. 127.

Of nineteen such cases recorded by Hodges, eight died, and one came to amputation.

Under the second head—the constitutional conditions admitting excision of the knee—we may sum up Mr Swain's opinion in the following sensible axiom:

"It seems so reasonable that it should be a sine qua non for the patient to be free from any other exhaustive visceral disease . . ."—P. 136.

Under the third head, that of age, some interesting cases are given, showing the amount of comparative shortening of the limb that had been operated on, and yet proving that, even with eight inches of shortening, the limb was more sightly and more useful than an artificial one. "As a general rule," Mr Swain says, "excision of the knee should not be practised on children under the age of ten years;" and that "excision of the knee in very young children is inexpedient."—P. 149.

A very salutary caution is given on the subject of patience. Cases of excision of the knee require much care and time before a good result is obtained, and surgeons should not be in too great haste to amputate for sinuses even after many months. By constant patient picking at the disease, and in some cases even by a repetition of the operation of excision, a good result may at last be obtained.

The last chapter is on amputation of the thigh for disease of the knee-joint. As might be expected, in it our author shows how rarely this need now be performed. When necessary, he rightly recommends the operation devised by Mr Carden of Worcester, or the other on the same principle recommended by Professor Spence, insisting that in every case the amputation should be performed as low down as possible.

An appendix of cases closes the volume. It contains 104, mostly cases of excision of the knee; the rest of amputation, painful stump, etc.

We have thus fully analyzed this work, on account of the interest and practical importance of the subject of which it treats. It will be seen that, though the work of a partisan rather than of a judge,
it discusses vexed questions fairly, and will be found a useful work of reference by surgeons anxious to know the present state of opinion in the south and west of England on the subject of excision. The work is illustrated by thirty-six exceedingly ugly woodcuts, mostly taken from photographs, which, we hope, were unsuccessful portraits.

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**A System of Surgery, Theoretical and Practical, in Treatises by various Authors.** Edited by T. Holmes, M.A. Cantab., Surgeon and Lecturer on Surgery at St George's Hospital., Memb. Corresp. de la Société de Chirurgie de Paris. Second Edition, in five Volumes, with Illustrations. Vol. I., General Pathology, pp. 783. London: Longmans, Green, & Co.: 1870.

The previous edition of this very valuable collection of papers on surgery having been fully noticed in these pages as the volumes appeared, it might seem hardly necessary to do more than merely announce the fact of a second edition being published, and congratulate publishers, authors, and editor on its being required so soon.

Some important changes, both in the form of the work and the contents of this first instalment, demand a brief notice.

In the first place, it is a decided improvement that the second edition should be in five rather than in four volumes; as the fourth of the first edition had become so thick and unwieldy, notwithstanding attempts at compression, and use of small type, as to be very cumbrous.

We are not so sure that the addition of the chromo-lithographs and lithographs is really an improvement. The chromo-lithographs are, as usual, too highly coloured, and not particularly life-like, and some subjects only are honoured with illustration, which gives a sense of incompleteness.

Of changes in the contents of this first volume, the first and most noticeable and important is the omission of the more strictly pathological portion of Mr Simon's beautiful paper on Inflammation. This omission is due to the very high conception this distinguished pathologist has of the importance of the later observations on the pathology of inflammation, and his most conscientious and praise-worthy wish that his papers should be the fruit of a thorough study of all recent work. His own words will bear quotation, and explain fully the reasons for his rather tantalizing delay:

"The process of inflammation, as regards the intimate nature of those circulatory and textural changes by which it is constituted, is, at the time of the issue of this second edition, matter of the utmost controversy; or perhaps I should rather say, all previous doctrines on the subject are just now in the very crisis of a reconsideration, of which the morrow cannot be foreseen.

"In this state of the case, and regard being had to the practical intentions of the present work, it is thought, on the whole, better not to discuss in this place the questions which are now open; but rather to set aside for the present all deeper pathology of the subject, with the intention of devoting a separate
paper to it at or before the close of the work. And meanwhile, in discussing the symptoms and causes of inflammation, the least possible reference will be made to pathological theories concerning the process."—P. 3.

Doubtless this pathological paper will be a very difficult one to write, and a very valuable one for those who have not the time, or, perhaps, the linguistic power, to make themselves masters of the advances in the pathology of inflammation made by German pathologists, chiefly of the Berlin school, within the last ten years. Mr Simon promises that in it will be found a notice of the researches of Stricker on the contractile power of protoplasm possessed by the capillaries, and the peculiar penetrability (perhaps elective) which is associated with this power; also of the experiments of Moritz Traube on the ultimate fabric of cell-membranes, seen in the light of the late Mr Graham's researches on the laws of liquid diffusion.

In anticipation of this paper, we may simply notice, that Mr Simon seems to adopt and homologate the remarkable views of Professor Recklinghausen regarding the pus-cell, published in Virchow's Archiv for 1868.

"That pus-cells possess the contractility of amœbae; in virtue of which endowment they can undergo infinite changes of form; can (as with a kind of will) protrude and again retract processes or pseudopods of their common substance; can thus alternately intussuscece and discharge particles of finely-divided solid matter; and can slowly migrate from spot to spot in the body, certainly in the natural interspaces of texture, if not even actually making ways for themselves. It follows that previous microscopical descriptions of the pus-cell—such descriptions as that which is repeated above from my text of 1860—must now be read with the important qualification of the pus-cell as dead; as that in fresh-formed pus in its natural state, those globular pus-cells represent but one of many phases, and so far as they are present, express only an accidental repose of the function of amœboid motility."—Pp. 10, 11.

With such aims and with so much ground to go over, we cannot wonder at, though we may regret, the postponement of the pathological portion of this admirable essay.

Several new paragraphs have been added to the practical part of the essay. For example, a note on the value of refrigerating apparatus in the treatment of inflammation, and another on the method recommended by Campbell of New Orleans, Vanzetti of Padua, and others, of treating severe inflammation of a limb by compression or ligature of its nutrient artery.

The other papers of the first volume have undergone less alteration. It is enriched by the additions of Mr Croft's excellent account of hectic and traumatic fever and treatment of surgical cases after operation, which is now in its proper place, instead of being rather shelved, as before, in the fourth volume. It contains some very good thermometric observations.

Mr Poland's paper on Tetanus has been enlarged by the addition of a few observations on the pathological changes which have been found in the spinal cord, and illustrated by a lithograph portraying the morbid appearances observed by Lockhart Clarke and Dickinson.
The scientific continuity of the paper on Tumours is certainly improved by both innocent and malignant growths being conjoined in the new edition, and placed in the hands of Mr Moore, who re-edits, with considerable additions, Mr Paget’s excellent account of innocent tumours, and adds an introduction, in which he shows the relation which innocent and malignant tumours stand to each other, and the great difficulty there is in drawing any absolute line of demarcation between them.

Among simple tumours not noticed in the first edition, are myxomata, part of the account of which we quote:

“Myxoma resembles the loose gelatinous tissue, named mucous, which composes the substance of the umbilical cord, and is found in adults in the moister and soft connective tissues, and the vitreous body of the eye. From such tissue the myxoma is derived, as the fatty tumour is from adipose tissue, and the fibrous tumour from fibre. Myxomas are sometimes remarkable for the looseness of their build, and for the freedom with which, on section, their substance will trickle away in thick gelatinous strings. In their simplest form they present no other character than this, as in the eye, or in the brain, where they spring from the neuroglia. Sometimes, however, they are mixed with other textural elements, and grow (as we have seen in the septum of the nostrils) into a gigantic tumour, in which bone and cartilage are irregularly mixed with mucous tissue, no denser or more capable of supporting its own weight than is the corresponding shining substance of the hydatid mole. They also form in the connective tissue of a thigh, or of the neck near the angle of the jaw, in that of the nerves, the subcutaneous tissue, or on the breast. They have also been met with in the jaw.”—Pp. 525, 526.

Gliomata, another set of tumours, owing their name and much of their history to Virchow, are also alluded to.

In the new edition of Mr Poland’s paper on Animal Poisons, we find an account of verruca necrogenica or anatomical tubercle, the peculiar foliated or warty growth on the hands so familiar to demonstrators and pathologists, and yet so rarely alluded to in systematic works. Mr Poland recommends for its treatment the use of nitric acid, or the acid nitrate of mercury. We have found the frequent application of glacial acetic acid quite sufficient.

The account of snake-bites is much fuller than in the first edition, chiefly by quotation from the researches of Dr Weir Mitchell on the pathological appearances and cause of death in such cases.

Mr Moore’s paper on Wounds of Vessels includes a much fuller account than was given in the first edition of the various methods of suppressing haemorrhage, including acupressure and torsion.

The volume ends with Mr Savory’s paper on Collapse. The papers on Burns and Scalds, and on the general Pathology of Fractures and Dislocations, are postponed to a future volume.

In conclusion, we have great pleasure in stating our conviction, that this second edition is still an improvement on the first. As before, the papers are very unequal in value; but in most of them an attempt has been made to bring them up to the level of the present day, without any very undue increase in length, which is the great snare to be avoided by authors and editors of this age.

VOL. XV.—NO. VII.
This is a republication of some papers, bearing more or less upon physiology, which have already appeared in the "Westminster Review" and other periodicals. It is the production of a highly educated man of a thoughtful disposition, interested in the questions of the day, fond of new ideas, and who is yet capable of greater and more systematic efforts. Though we are very willing to give the widest extension to medical literature, to include within it everything bearing upon the healing art and accessory sciences, there are some subjects treated of in this book which must be passed by. In one sense, everything in the universe bearing upon human nature, physical and mental, has a bearing upon medicine; but such questions as the theory of evolution, and its relation to theology, though at present of great interest, are really beyond our scope. Dr Child has a well-reasoned defence of vivisections, which is scarcely required for the readers of this journal, who know well enough that without the experiments of Marshall Hall, Reid, Flourens, Magendie, Bernard, Brown-Sequard, and many others, the science of physiology would not have existed. The author, among other considerations, advances that the lower animals are immensely less sensitive to pain than human beings, and even that the degree of sensibility to pain in mankind "varies directly with the increase of civilization." He proves this by citing from Mr Palgrave's book on Arabia the case of a young Arab who endured with great fortitude the removal of a bullet lodged in the muscles of the forearm. Civilization renders a man, or at least some men, less accustomed to pain and misery, and thus less able to repress any outward display of suffering; but we do not understand how an uncivilized man should not feel an incision as much as a civilized one, and we have seen European soldiers endure the removal of bullets with a fortitude not to be surpassed. What degree of pain brutes endure is not so easily settled. In the lower organisms it is probably not very great; but, as far as our own observation goes, the higher classes of animals are very susceptible to pain.

Mr Child's essay on "Physiological Psychology" is an attempt to make some of the conclusions of physiology upon the function of the brain and nervous system "intelligible to persons whose chief interest is in psychological rather than in physiological science." We can only say in passing, without either endorsing or combating the materialism of the writer, that we have a deep distrust of knowledge gained in this easy and superficial manner. There is no royal road to science, and no popular one either. Those who wish to understand the physiology of the brain and nervous system, as far as
they are now understood, must not be satisfied until they have studied physiology out and out, in all its connexions and antecedents.

The book contains two well-written essays on recent researches on the production of the lowest form of animal life, and on the production of organisms in close vessels, which have already appeared in the "British and Foreign Medico-Chirurgical Review," and in the Proceedings of the Royal Society.

Our readers will no doubt remember the keen controversy on this subject between MM. Pasteur and Pouchet, by which we confess to have been borne to and fro. Though the majority of scientific men took the side of Pasteur, Mr Child is inclined to believe that the experiments and arguments of Pouchet and his fellow-labourers have not been sufficiently appreciated in this country. M. Pasteur has in an elaborate series of ingenious experiments shown, that where all possible germs have been excluded, no organisms appear in closed vessels; but again M. Pouchet has, by a rival series of experiments, shown something very like the contrary; and where they agree to try the same experiments the results are different.

M. Pasteur's experiments do not always succeed in other hands. Using air admitted at great heights on Mont Jura, where he imagines germs should be absent, or at least not so common, M. Pasteur satisfied himself that in fifteen cases out of twenty no traces of animal life were found in his decoctions. M. Pouchet, with two friends, ascends to even a greater height on the Pyrenees, but finds organisms present in every one of his eight flasks. Mr Child details some experiments of his own made in company with Dr Beale. He used the precautions which M. Pasteur himself speaks of as exaggerated, yet he found bacteria to be produced exactly under the circumstances in which Pasteur asserts that they do not exist. He believes that M. Pasteur examines his substances with a power no higher than 350 diameters, whereas it is impossible to recognise them properly even at double that magnitude. This objection, if correct, vitiates the whole series of Pasteur's experiments.

Mr Child is disposed to admit either that the germs of bacteria are capable of resisting the boiling temperature in a fluid, or that they are spontaneously generated. If in despair of the question being settled by human ingenuity we are disposed to fall back upon the consideration that the heterogenists have been driven from the whole field of animal life to seek for a refuge for their hypothesis amongst creatures whose extreme minuteness renders their study very difficult, and whose propagation from ova may be assumed from experience of larger organisms since it cannot be settled by direct observation, Mr Child objects to this view that the undeniable fact of fissiparous division in the hydra and other lower organisms is in like manner inherently improbable, and opposed to experience drawn from the rest of the animal world; but then at least we have ocular demonstration of the truth.
There is some force in the remarks of M. Pouchet, originally made by Needham: You torture your decoctions with re-agents and artificial arrangements, until you have succeeded in bringing about within your closed vessels a state of things incompatible with the production, or perhaps with the existence, of animal life; and because no microzoa appear, you attribute this to all germs having been successfully excluded. On the other hand, you declare that the precautions which your adversaries have taken in their experiments were insufficient, for no better reason than that these experiments have been attended with results different from your own. For example, is it not at the outset highly improbable that an atmosphere passed through sulphuric acid and solution of potash should be fitted to produce or sustain any kind of animal life? M. Lemaire has shown "That the mere fact of an infusion being enclosed within a hermetically sealed vessel, even without any application of heat, is in itself sufficient to check the production of organisms, for that in such circumstances fermentation begins, but cannot continue. This certainly tends to show that other conditions besides the mere presence of germs are required for the development of organisms, and that such conditions are interfered with where infusions are hermetically sealed up."

On the other hand, Dr Wyman has stated that, although organisms appear in infusions boiled for a few minutes, "yet if the infusions were boiled for six hours no organisms ever appeared." The pervading diffusion M. Pasteur has given, not without some reasons, to the germs of microzoa in the air, and the part he has assigned to them in causing fermentation, has been the foundation of the new method of treating abscesses by carbolic acid; and it is possible we may get a new theory of fevers where parasitic organisms are to do the work formerly assigned to catalytic action.

The subject of marriages of consanguinity is handled in a sensible and thoroughgoing manner. Mr Child rejects the notion that there is anything in the mere nearness of blood-relationship of the parents to cause degeneracy in the offspring. Dr Boudin's statistics may leave a suspicion that congenital deafness is occasionally the result of such marriages. We commend those interested in this point to consider Mr Child's remarks on the relation between the assumed cause and the effect. He shows, by instances drawn both from the vegetable and animal kingdom, that breeding in and in is not attended with any evil consequences, the very finest breeds of horses, oxen, and sheep having been produced by consanguine connexions which could not possibly be made nearer, and which have been repeated through many generations.
The History of Four Cases of Chronic Inversion of the Uterus. By T. Gaillard Thomas, M.D., etc.

Dr Thomas is well known in this country for his work on the Diseases of Women, which was reviewed in our pages not very long ago. Besides, he is the partner of the highly esteemed Dr Metcalfe, who was educated in Edinburgh. The pamphlet which he has now sent us is a very interesting one, illustrating as it does the replaceability of inverted uterus of long standing; indeed, of however long standing.

Dr Thomas's cases illustrate the well-known value of persevering efforts at replacement, success coming after several hours of work repeated day after day. To this principle Dr T. adds another, namely, the pulling down again the partially replaced uterus, with a view to immediately replacing it with increased vigour, "reculer pour mieux sauter."

But the chief thing in the pamphlet is the history of a case in which quite a novel treatment was successfully used. The recovery is very wonderful; for, not only was the patient subjected to the operation we are just to describe, but in the manipulation for replacement the uterus was completely perforated by the operator's finger; and, after the operation was over, intraperitoneal accumulation of blood took place, the bleeding reaching the peritoneal sac through this finger-hole. The operation for replacement consisted in the usual manipulation, but as this alone had fourteen times completely failed, Dr T. opened the abdomen, as is done in ovariotomy, and dilated by an instrument introduced from above the uppermost part of the ring of inverted tissue. Whatever may be said of the plan, it is at least true that Dr Thomas was bold, and succeeded.

Cases of Ovariotomy. By Dr Sven Sköldberg, Stockholm.

Dr Sköldberg is a young surgeon who is not unknown in this country. He was, not long ago, a diligent student in several of our medical schools. Especially he sought acquaintance with the great operators, Keith and Wells. As soon as he has returned to Stockholm and begun practice, he has tried his hand at ovariotomy, helping to establish the operation among his Scandinavian brethren. Dr Sköldberg may well be proud of the success he has achieved. He has performed ovariotomy twenty-one times, and has had only four deaths among the cases in which he has completed the operation, removing the tumour. In one of his fatal cases the tumour was a malignant mass of the size of an adult head. In four cases he performed exploratory incision, and of these four, one died of peritonitis fifty hours after the exploration. We have no doubt we shall hear again of Dr Sköldberg.
On Aphasia, or Loss of Speech, in Cerebral Disease. By Frederick Bateman, M.D., M.R.C.P., Physician to the Norfolk and Norwich Hospital. Pp. 124. Bacon Lewis: 1869.

This most interesting essay has already appeared at intervals in the pages of our contemporary, the Journal of Mental Science, and it is now republished as a pamphlet, in deference to the opinion of those whom the author feels bound to respect. It is an advantage to science that Dr Bateman has in this instance taken the advice of his friends; for however we may differ in regard to his conclusions, there can be no difference of opinion as to this being the most concise and comprehensive monograph upon the subject in the English language. Its very curtness militates somewhat against its true utility, though it does not deprive it of more than a passing importance, as, if not a reply to certain views which have been propounded, at least as a loud call of Question?

Dr Bateman's conclusions are: "1st, That although something may be said in favour of each of the popular theories of the localization of speech, still, so many exceptions to each of them have been recorded, that they will none of them bear the test of a disinterested and impartial scrutiny. 2d, That he by no means considers it proved that there is a cerebral centre for speech at all, and he would venture to suggest that speech, like the soul, may be something, the comprehension of which is beyond the limits of our finite minds." This we conceive to be going a little too far, and we think that a wider view of the subject, and a little less curtness in dealing with it, would have prevented our author from making any such rash statement. The comparison is not a happy one. The existence of a soul, in the opinion of many, is altogether an open question. Granting it, a soul must be either an entity having little but a theoretical connexion with ourselves, or it is ourselves; that is, our vital force, the only indestructible part of us incapable of being transformed by correlation into any of our physical, chemical, or mechanical forces. We need not argue the point here; whatever a soul may be, speech belongs to quite a different category. It is not necessary for existence, as from any point of view a soul must be; it is merely given us to maintain our mutual relations, and aid in our mutual advancement. Speech must have a central organ, because, wide as its relations are, they are not coextensive with our frame, yet it requires to be correlated with many other faculties; there must, therefore, be some central point where these correlations meet. To produce intelligent speech, memory and the power of vocalizing are required, for without them even a parrot could not speak. But that is not all, for many aphasics speak as perfectly as parrots. Intelligence, combination, and reflection are all additional faculties called into play in the production of such speech as shall convey to another the meaning of the speaker. Each or all of these
faculties may, however, be affected by inhibition, or by disease, partial or general (as applied to the frame or only to the locality), influencing the separate organs of these faculties. Speech, therefore, may be affected by many different causes, some of them organic, others only functional. There must, we believe, be a true organ of speech, and yet it may unquestionably remain apparently unaffected in many cases of so-called aphasia. As yet, we are but on the threshold of such inquiries, and we welcome Dr Bateman’s pamphlet as a valuable contribution towards their elucidation.

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**Part Third.**

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**MEETINGS OF SOCIETIES.**

**MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.**

**SESSION XLIX.—MEETING II.**

*Wednesday, 1st December 1869.—Dr Omond, President, in the Chair.*

I. *Dr Watson* showed a cast taken recently from the foot of the boy in which he performed **EXCISION OF THE ASTRAGULUS AND OS CALCIS**, in July last. The cast showed how a dense mass of tissue occupied the gap resulting from the operation. The posterior portion of the arch of the foot being gone, of course the patient could not expect to retain the spring of the foot; but in spite of this, not only was walking easily effected, but the foot, as was seen, presented a most seemly appearance.

II. A specimen of a large **OXALATE OF LIME CALCULUS** removed from the bladder, by lithotomy, of a lad aet. 17. This operation was chosen in preference to lithotritry, because the urinary passage was small, the calculus large, and of the hardest description.

III. An **UPPER JAW** which he had recently excised on account of epithelial cancer invading its anterior and external wall. The orbital plate was not interfered with.

IV. The **LEFT SUBCLAVIAN AND AXILLARY ARTERY** of a patient who was brought dead into the Infirmary, a cart-wheel having passed over the left side of the chest. The whole of the ribs and the clavicle on the left side were broken; the chest cavity was found half full of blood; the cellular tissue of the thorax and axilla were extensively infiltrated with coagulated blood. The opening in the subclavian produced by the first rib was readily recognised.

V. The parts removed in a case of **EXCISION OF THE RIGHT KNEE-JOINT**, performed yesterday on a little lad. The disease commenced