Part Second.

REVIEWS.

Praktisches Handbuch der Gerichtlichen Medicin, nach eigenen Erfahrungen. Von Johann Ludwig Casper. Thanatologischer Theil. Mit einem Atlas von neun colorirten Tafeln. Berlin, 1857. Pp. 860.

Practical Manual of Forensic Medicine, from personal observation. By J. L. Casper. Necroscopic Division. With Atlas of nine coloured Plates. Berlin, 1857.

This work will be welcomed as a valuable acquisition to the science of Forensic Medicine. The widely established reputation of its author, together with the nearly unprecedented amount of experience which it has so long been his good fortune to enjoy, will give everything contained in it an especial weight.

When we reflect that many of the German works on Medical Jurisprudence, as even that of Henke, have been written by men who not only wanted direct experience in medico-legal investigations, but wanted even actual experience in medical practice, and to whom therefore the appearance of wounds and diseases were known far more by description than observation; while, above all, the habits of the rank of life in which the immense majority of medico-legal cases occurs were familiar to them merely as matters of hearsay, or as something apart from an experience which, if it extended at all beyond the bounds of the library, certainly did not reach beyond the dissecting-room or the laboratory; we shall be able to estimate the value of a treatise, whose author has for upwards of thirty years actually observed nearly every medico-legal case which has occurred in such a city as Berlin, and who besides, from his official position, has necessarily become acquainted, for about the same period, with the particulars of almost every investigation of importance instituted throughout Prussia, and this with the additional advantage of having been long occupied in an extensive medical practice. In virtue of Dr Casper's position as Professor of Forensic Medicine, he is likewise medico-legal physician for Berlin; and it is in discharge of this latter office that the public prosecutor must require him to report on every inquiry in his department occurring within the city. As a matter of course, he is required likewise to give his evidence in such cases before the criminal courts; and it may easily be imagined, that within a sphere of observation like Berlin, where the morals are generally so lax and
The police so vigilant, the cases are sufficiently numerous. It is, on the other hand, in virtue of his position as a member of the Supreme Medical Board that the reports and protocols in every medico-legal case occurring elsewhere in Prussia, without exception, come before him for revision, in association with its other members. It may be almost questioned, therefore, whether any medico-legal writer has ever had previously the like opportunities for observation.

The results of the greater part of this experience are contained in the volume before us, designed by its author as the first part of a complete systematic treatise on medico-legal science. It embraces the whole of that important department which concerns the inferences which the forensic physician, as Professor Casper prefers to designate him, is justified in drawing from the inspection of the dead body; but, although thus merely a portion of a more comprehensive plan, it is so arranged as to constitute also a treatise complete in itself. About one-half of the volume consists of the textual exposition: the remainder is occupied with the details of 346 cases, selected from among those which the author has himself observed. This will be, perhaps, for the medical reader the most valuable part of the work. Many of these cases have been previously published, but their reappearance in connection with a systematic treatise is not on this account the less acceptable. They have been selected, it may be remarked, for publication, not, as the author states, on account of their being so-called "interesting" cases, but that the practitioner may be put in possession of a collection embracing, as nearly as possible, all conceivable combinations, and all modes, of violent deaths, in which he may find analogies to such cases as he may himself eventually encounter. Certain of the doctrines contained in the text were also previously more or less familiar, partly from their having been disseminated by the large number of students who have attended the author's lectures, partly from their appearance, from time to time, in the Journal of Forensic Medicine under his superintendence, and partly from their enunciation in judicial proceedings. The work throughout contains abundant evidence of the qualities which have established the author's reputation. Great knowledge of human nature, practical shrewdness and sagacity, and sound common sense, joined to a high talent for observation, and to a particular felicity and clearness of expression, are its leading characteristics. Whether all the doctrines enounced be unimpeachable, is more than we feel called upon to decide; but all, at least, are clearly propounded. The study of the reported cases is especially to be commended to medical practitioners; for it may be not unfrequently just matter of complaint elsewhere, that such cases have been inefficiently observed, or at least are inefficiently reported, and often upon the originally incompetent testimony

1 Gerichtliche Leichenöffnungen. Erstes Hundert. Dritte Auflage. Berlin, 1853.

Dasselbe. Zweites Hundert. Berlin, 1853.
of persons who did not succeed in finding what they knew not how to seek. The manner in which the deductions are drawn from the facts is also deserving of the highest consideration. The careful notice of every circumstance that speaks for innocence or for guilt, the heedful balancing of the evidence for and against, and, lastly, the well-adjusted precision with which the all-important conclusions are announced, leave no room for question that the mode in which these cases have been observed and reported was at once as intelligent, as it was humane and conscientious.

The point of view from which the work is written is somewhat novel in a German publication on Forensic Medicine. Writers there, on this branch of science, have been too much accustomed to present themselves as somewhat of a mongrel species, uniting the profession of a physician with that of a lawyer, and thus entertain their readers with disquisitions on "dolus" and "culpa," or other such purely legal questions. These discussions have, of course, much about the same value as would be likely to accrue from a discussion by a lawyer on fever or small-pox. Professor Casper opposes himself at once to this absurdity. "The forensic physician is a physician, nothing more, nothing less, nothing else." It is possible too that lawyers there, as well as here, might not be the worse of being reminded that they are nothing more than lawyers. In this country, however, it would only be the announcement of a truism, to tell the forensic physician that the legal bearings of the facts and inferences he advanced were matter for the judge, and that their value as evidence was matter for the jury. One other peculiarity, regarding the point of view from which the volume is written, deserves notice. The work is purely practical. The author complains much, and justly, that theories thrown out from the writing-table have, on many medico-legal topics, been adopted as truths, without being first subjected to the test of experience. The position that it can always be decided whether wounds, or marks of strangulation, have been produced before or after death, and the absolute value which has been assigned to the lung-test of Ploucquet, may be cited as instances. The number of experiments which the author has devised, in order to test the accuracy of former writers, or to form a ground-work for his own principles, is very large. The results of these experiments are given in the work, and there our limited space compels us to leave them, without any attempt at adducing examples. They have in general been instituted under every possible variety of circumstance, and in the great majority of cases are conclusive. Their description constitutes, therefore, we need scarcely add, a valuable portion of the treatise.

Professor Casper has divided his subject into two parts. In the first portion of the volume, he treats generally of necroscopic examinations, their objects, scope, and the method of conducting them, together with the manner in which the reports of the facts found,
and conclusions drawn, are to be framed. In the second part, he treats specially of the different kinds of violent deaths, and the appearances characteristic of each; and in a separate division of this part he discusses very fully that difficult branch of the subject which concerns infanticide. In the first part, there is much that more immediately relates to the experience of the Prussian, rather than of the British physician, at least for the present. We hope, however, that it will not be long before we may have in this country regulations as methodic for the investigation of such matters as those now established in Prussia. But beyond this, there is much in the first part which concerns equally, even at present, the British physician and jurist. Those portions which treat as to how far the judge is justified in asking, or the physician in answering, from the mere inspection of the body, are of universal application. The second part is very complete. The department where the British reader is most likely to be disappointed, is that which relates to poisonings; yet it is principally owing to a wise provision of the Prussian law that this department is here not fully treated. The duty of the forensic physician in Prussia, in a case of suspected poisoning, is to hand over the portions of the body most likely to contain the poison, for analysis by a sworn chemist; himself, however, retaining the chief superintendence. This indeed is generally, in so far, the virtual recourse in our own country, and ought to be the positive and universal rule; for it is absurd to expect that a physician in daily practice can ordinarily keep himself in possession of the most recent chemical knowledge, or retain the dexterity of manipulation necessary for a difficult analysis.

The question of the possibility of telling from an inspection of the dead body, whether a new-born child has actually lived, forms the subject of a second division of the second part. Professor Casper has here done much to bring this question to a definite issue. He maintains the efficiency of the hydrostatic test of the lungs, taken in conjunction with the supplementary tests of their colour, etc., to tell, at least in the great majority of cases, whether the child has breathed or not. It is a defect here, that it becomes still necessary to trust in some measure to the evidence given by the colour of the lungs. The floating test alone indicates nothing as to the difference between lungs inflated artificially in attempts to animate the still-born child, and the lungs of a child which has breathed naturally. Both equally float. With this possible dilemma, we must pay regard to the difference in the external colour; and to the sound produced, and the presence and aspect of the froth, on incising the lungs. In the hands of Professor Casper, with the eye and ear tutored by long experience, these tests are unchallengeable. But every one knows how very easily shades of colour are usually confounded, and how readily the fancy may evoke sounds where none exist. It is true, that in most cases which are likely to present themselves, the presumption is against artificial inflation. But the
The difference between the lungs determined. Then take their weight, and fill it with water. Thus, to sink them, the bulk of which has been previously accurately determined. Then take a liquid measure, graduated to ounces and their parts, and fill it with so much water as suffices to cover the lungs placed within it, and note the height. Now remove the lungs, with the appended weight, from the water, and again note the height. The difference between the heights, after deducting the bulk of the weight, will give the bulk of the lungs in fluid ounces. Having thus got the weight and bulk of the lungs, an easy calculation would determine their specific gravity; or tables might be previously constructed to denote it at once. Of course, if the lungs sank, no weight would be necessary; but in this case also, it would be of little importance to ascertain the specific gravity. This experiment would not be conclusive in all cases. As the specific gravity of uninflated lungs is greater than that of lungs which have respired naturally, while that of artificially inflated lungs is less, it is evident that, as the air is urged into the lungs of the still-born child, the specific gravity must gradually diminish; and that, if the inflation
be stopped before their complete distension, it is possible that the specific gravity may be at the same point as that of lungs which have breathed. But in the case of complete artificial inflation, the result would be decisive, as it would there show a less specific gravity than ever characterizes lungs which had actually respired.

The chapters concerning new-born children embrace much more that is interesting. The recently proposed test of maturity (the centre of ossification in the condyles of the femur), and generally the difficult question of the probable innocence or guilt of the mother as evinced otherwise by proofs derived from the examination of the body, are carefully discussed, along with many other subjects which our limits debar us from noticing in detail. The accompanying Atlas deserves an especial attention. The attempt thus to illustrate a work on Forensic Medicine is novel, and to a certain extent will be useful. Among the objects exemplified are the appearances of gun-shot wounds, of the marks of strangulation, of lungs which have and which have not breathed, of the effects of burning, the aspect of the face and skin in the drowned, and a few others. These illustrations convey to the reader a better idea of certain of the objects than could be gathered from a mere description; and will be useful to those who may not have had the advantage of seeing such objects directly, as they will be valuable as reminiscences to those of greater, but still of only casual, experience. The plates are well executed in chromo-lithography.

One effect, we trust, of the appearance of this work will be to renew attention to the very inefficient state in which Forensic Medicine remains in this country. We are certainly no advocates for the multiplication of offices, but the placing of the departments of forensic and public medicine in the hands of properly qualified medical practitioners, and in their hands solely, is a reform imperatively demanded. At present, we leave these departments to be managed nearly as it pleases the procurator-fiscals of our inferior courts; unless in what are termed important cases, as if the dispensation of justice could ever be a trifle. The study of the Prussian system, as illustrated by Professor Casper's work, will be of value as showing the arrangements which have been judged best, in a country which has now for nearly two centuries possessed a public medical department. That this volume may be brought completely before the British public, by a good translation, is much to be wished; and we join cordially, meanwhile, in the hope expressed by the author in his preface, that leisure may yet be granted to him to convert, by the publication of a second (Biologic) part, the treatise he has begun into a complete and comprehensive Manual of Forensic Medicine.
Ever since the latter half of the last century, when surgeons, weary of lopping off arms and legs, bethought them of merely removing the diseased portions of a limb and giving the remainder a chance of recovery, the knee-joint has been occasionally excised; but, until the present time, there has not been that amount of evidence in favour of the proceeding which was necessary, before it could receive the unanimous sanction of the profession. However, since Mr Fergusson, emboldened by his great success in the excision of joints, revived the operation in 1850, it has been performed so frequently, and the various operators have so frankly given the results of their cases, whether successful or otherwise, to the profession, that we are now entitled to form an independent opinion upon the important question—Shall we amputate a limb for disease of the knee-joint, or remove the diseased articular ends of the bones? By none has this question been more ably discussed than by Mr Butcher of Dublin, who has recently published a second monograph on the subject. He begins by noticing the favourable reception of the previous publication in 1855, in which he says the history of the operation was traced to its "abandonment after Syme's failure in 1830." Now this is not a very gracious remark, and is a very unnecessary one. Many years ago, Mr Syme gave the operation what seemed a fair trial, and was not satisfied with the result; and he published his opinion, "that the knee-joint may be excised, but not with the effect of preserving a limb so useful as an artificial substitute after amputation of the thigh." This, coming from a surgeon who had done perhaps at that time more than any other for the preservation of limbs, very naturally had great influence over the minds of the profession, and has so still; for the boy on whom he operated "seemed at first to possess a limb little inferior to its fellow, except in so far as it was stiff at the knee. But in the course of time, it was found that the growth of the two limbs was not equal, and that the one which had been the subject of operation gradually diminished in respective length, until it wanted several inches of reaching the ground when the patient stood erect." So Mr Butcher ought to beware when he uses, with regard to this case, the word failure, lest, in "the course of time," many cases now registered as successful may deserve a similar appellation. Without waiting to consider whether Mr Syme's objections to the operation are founded on insufficient data, and we have no right to premise that they are confined to the two cases operated upon by himself, let us pass on to consider the evidence brought forward by Mr Butcher. He is enabled to refer to cases as far back as April 1851. Surely, in six years any arrest of development would have been evident, but in those operated on by Jones of Jersey such is not stated; and, in 1853, the cases alluded...
to exhibited no difference between the limbs except the stiff joint and the shortening, which was scarcely observable when the patient walked with a high-heeled boot. The boy whose knee-joint was excised by Mr Fergusson July 29, 1854, now runs about without any artificial assistance except the high-heeled boot, his general health is good, and the leg operated upon is apparently as well nourished as the other. Mr Holt excised the knee-joint of a boy in the Westminster Hospital on August 7, 1854: the bones were ankylosed at the expiration of six weeks; and Mr Holt states, October 1, 1856, that his patient can walk and run without difficulty, that he is fat, and in excellent health. I saw both these cases after the operation, and they suffered no more constitutional disturbance than after amputation at the thigh; and the result—how preferable!

Mr Henry Smith operated on a boy, October 18, 1854; and he now gives the following account of him:—He can run and walk well without a stick—of course uses a high-heeled shoe; and as regards the bulk of the two limbs, the circumference of the thigh of the operated limb is "just equal to that of the sound limb, whilst that of the calf, taken over its prominence, is, as nearly as I could tell, a little more than one quarter of an inch less than that of the other. Now," adds Mr Smith, "you must look upon this as very satisfactory evidence that the limb has gone on developing well since the operation, because, although the circumference of the leg is somewhat less, you must take into consideration the general wasting of the limb which existed previously to the operation, in consequence of long continued joint disease, and which always obtains, more or less, when an extremity has remained inactive for months or years."

Mr Erichsen operated, in University College Hospital, on a boy at seven years, with a successful result. Mr Butcher himself operated successfully on a man in January 1854. He now describes this patient as in excellent health, prospering in his business as a shoemaker, and finds the previously diseased leg of great service, as it enables him to grasp the shoe between the thighs at their lower part, and so steady it for stitching. "Had the thigh been amputated," he says, "he could not have worked at his employment." The muscles of the limb operated on are well developed, and he can walk fifteen miles a-day without fatigue. Mr Butcher seems to consider that sixteen months, at least, must elapse before all immunity from bowing of the limb can be secured; and to obviate this cause of distortion, "he uses a short splint placed behind, and steadied with a few turns of the roller." What a contrast to the crutches and the wooden leg! and even this simple apparatus is laid aside as the bones become more firmly knit together. Mr Brotherston of Alloa excised the knee of a boy ten years old in May 1854; and, in November 1856, he had the satisfaction of seeing his patient "running down the hill to the house without any assistance, and without the use of a crutch or stick." On examination, he
found "the femur and tibia firmly anchylosed, and the patella im-
moveable at the junction of the bones; the leg is not quite straight,
and slight ulceration remaining on the line of the incision." But
he adds, "the leg is, however, strong and most useful; he can walk
and run with freedom, and can stand on it alone and hop. Mr
Brotherston again operated successfully, January 12, 1855; and in
November 1856 reports, that "the leg continues well up to this date,
the tibia and femur are firmly anchylosed, and the patella moveable,
but a little drawn up; he can walk without a crutch. The leg is
an inch shorter than its fellow, but is evidently keeping pace in
growth with it and the rest of the body. The lad has grown much
since the operation." Mr Jones of Jersey operated upon a girl aged
nine years in August 1855. Her health immediately began to im-
prove; in eight weeks she was going about on crutches, and in three
months was moving about without any apparatus. The narrative
of this case is marred by the woodcuts, which we are requested "to
contemplate and dwell upon," as they represent the great change
before and after the operation. Great, indeed! for the leg before
operation is the right, and that after operation is the left. This
"argumentum ad absurdum" might have been well left out.

Mr Butcher gives a table of fifty-one cases of excision of the
knee-joint. From that number, fifteen have recovered with perfect
use of the limb; six have recovered after amputation; ten have
died; fifteen are recovering; while one is stated to be in a precari-
ous state. One of the chief objections appears to be, the great length
time the patient who undergoes excision of the knee-joint has
to continue under treatment. Mr Butcher's report is up to De-
cember 1856, and in the cases stated to be recovering are some
operated upon in April, May, and June. For instance, two cases
by Mr Hey of Leeds, one operated on in May, the other in July,
are stated to be recovering. "Union between the bones delayed!"
A delay of seven months is rather a long one, no doubt; and when
spent in a hospital must seem especially so. Compare with this the
table of twenty-eight amputations at the thigh given by Mr South
in his edition of "Chelius' Surgery," and it will be seen that the
difference is not so great between the length of time necessary for
recovery after excision of the knee and that for amputation at the
thigh, and in both it depends mainly on the condition of the patient.
It will be seen that, though in one case Mr South discharged his
patient thirty-two days after circular amputation in the thigh, in
another case, also a circular amputation, the patient remained in
hospital from May 12th to November 6th; and between two and three
months seems to be the average under favourable circumstances.

Mr Fergusson, in a letter to Mr Butcher, states, "that in three
months after this latter operation (excision) he has seen the patient
standing on his own leg, and within three months walk in a more
efficient manner than he ever saw any one in the same time make
use of an artificial limb." This argument against the operation is
scarcely a sound one; for if the patient has longer to wait for the cure, surely his own leg after six months is a better recompense for his patience than a wooden leg after six weeks. And except that they are both performed with the same object—removal of disease of the knee-joint—the two operations are not sufficiently similar to stand comparison. Excision may more fitly be compared to compound fracture, and we do not think several months an unreasonable time for recovery after such an accident. The most important question between the two operations is the comparative mortality. Out of Mr Butcher's first list of thirty-one operations, five died; out of his second list of fifty operations, nine died: in all, fourteen out of eighty-one; while the statistics of amputation at the thigh for disease, though varying with locality, show a much higher average. For instance, Mr Erichsen gives an average of twenty and a half per cent, Malgaigne sixty, and Mr Syme fifty to seventy; the last-mentioned surgeon adding, that many of the survivors suffer from uneasiness connected with protrusion of the bone. And again he observes, that adult patients who have suffered amputation for caries "often fall into bad health, and die of dropsy, or some other chronic complaint, within a year or two after the operation." Mr Butcher gives a table of twelve cases of amputation at the thigh in St George's Hospital—six recoveries, and six deaths; and one of the recoveries only reported as convalescent on the sixty-second day.

There is another feature with regard to the mortality from excision of the knee-joint: death has in only one case immediately followed the operation, whereas it but too commonly is the immediate result of amputation. This difference is probably owing to the subjects of excision being spared the severe constitutional shock from loss of a large quantity of blood, and a considerable portion of the body. Mr Butcher also brings forward evidence to show that, in the event of failing to save the limb, amputation can be had recourse to.

"In seven cases, amputation of the thigh was performed, and all made a rapid recovery save one." Surely, taking all these facts into consideration, a surgeon is scarcely justified in recommending amputation at the thigh for disease of the knee-joint. The method of performing the operation has been slightly modified by various surgeons; Mr Butcher has devised a small saw with a shifting blade, which he passes behind the bones, and cuts from within outwards. It is difficult to decide on the merits of an instrument without seeing it in use, and we should imagine the common amputating saw would answer all the purposes of the other; bleeding is seldom troublesome. We have frequently witnessed Mr Fergusson perform the operation, and never saw any remarkable hemorrhage; indeed, except a few twigs of the articular, or perhaps the tibial recurrent arteries, there are none in the neighbourhood, except the main artery, which has never yet been injured, and is not likely to be by any surgeon of ordinary dexterity.
Should the patella be left or taken away? Mr Smith informs us that it is generally left, and appears to add strength to the limb. It is, however, rather unsightly. We lately saw a young man walking the passages of King's College Hospital upon two sturdy legs; the right one was stiff, and the scars told, on examination, its history; but the outline of the thigh blended so symmetrically with that of the leg, that at a little distance there was no peculiarity observable. Whereas, a little boy, also present, had an equally useful kneeless leg, but the patella presented an awkward appearance.

Mr Butcher seems rather sore at some remarks made by Mr Syme in his Introductory Lecture of 1856, in which he states, "that excision of the knee-joint is so easy in execution, that it may be accomplished by the most inexpert of operators." Surely, facility of performance is rather an advantage than otherwise; and, in the case of such experienced operators as Mr Syme, it must apply to nearly every surgical proceeding. However, it is not the execution of the operation, but the result, that is of paramount importance; and whoever reads Mr Butcher's pamphlet will, we think, be of opinion that he has made out a good case for his favourite operation, and has disproved the old-fashioned arguments against it;—showing that, in young patients, the limb, after excision of the knee-joint, grows in proportion to its fellow and to the rest of the body; that in adult patients, the limb is equally well nourished with the other, and is more serviceable than a wooden leg under the most favourable circumstances; that the mortality is less after excision than amputation; and that an attempt to save the limb, by excising the knee-joint, does not prevent subsequent amputation at the thigh with a favourable result. The profession owes much to Mr Butcher for the pains he has been at in collecting evidence on this interesting subject, and to the various surgeons who have communicated to him the results of their experience.

First Report of the Clinical Hospital for Diseases of Children, Stevenson Square, Manchester. By A. Schoepp Merel, M.D., and J. Whitehead, M.D., 1856. Pp. 52.

To remark and to give publicity to efforts, wherever made, to advance our science, where these efforts are of a solid quality and in a just direction, is as manifestly a duty of the medical journalist, as to the conscientious one it must be always a gratification. We had some time ago a satisfaction of this description, in announcing the establishment and the early labours of the London Hospital for Sick Children; an institution having the advantage of the enlightened superintendence of Dr West and Dr Jenner, and having made the first claims upon public sympathy with the sanction, and under the
Placed ourselves within the arena of a distinguished medical school, and exercising a just appreciation of the endeavours of those with whom it is our anxiety to contend as associates, and not as rivals, we could not fail to see, and seeing were bound to proclaim, the void caused by the want of a like organization for humanity and instruction in this city, and the benefits which would necessarily accrue from that void being supplied. Science, as it changes everything, changes our responsibilities. The painful mortality oppressing infantile existence, so long as it could be regarded as a necessity, was submitted to as a natural ordinance: but so soon as experience had shewn that this mortality was a consequence of the neglect of obvious laws, and might be immensely diminished through the instrumentality of a knowledge which it was in the power of all to attain, and the duty of all to diffuse; and when gradually country after country, and city after city, was seen joining in the humane effort, that which was excusable under ignorance as an error became arraignable under knowledge as a fault. We do not wonder, therefore, that Manchester, considering the eminent position which it occupies among the cities of the empire, should have already followed London in this praiseworthy course. It is as little a matter of surprise, that our shrewd and active transatlantic brethren should have newly inaugurated a like institution in Philadelphia, of which we have heard since we last introduced this subject to the notice of our readers. We shall rejoice, we need scarcely add, to have an early opportunity of welcoming a similar benevolence among ourselves.

Meanwhile, we have much pleasure in acknowledging the exertions of Dr Merei and Dr Whitehead. We learn from their Report that the institution, constituted after a plan prepared by themselves, was brought into active operation during the early part of last year; and that it is designed not merely as a charity, but as a clinical school for the department of medical science to which it is devoted. Among its peculiar objects are signalized an inquiry into the causes and character of the principal infantile diseases prevalent in Manchester; the ordinary progress of physical development in childhood, and the circumstances which hinder its due advancement; and the different modes adopted among the poorer classes in nursing, feeding, and managing their children, with the influences respectively on health and disease. Hence the diffusion of instruction among mothers and nurses; with the opportunity to students and young practitioners of acquiring direct practical knowledge, guided by periodical clinical lectures, in an important branch of medicine. The number of beds provided within the walls of the institution is not specified; but it appears that there have been treated in all, whether in the Hospital or as out-patients of an attached Dispensary, as many as 605 children, up to the close of last November; although it is upon the cases of 530 of these only that the Report is founded.
The appreciation by parents of the value of the institution was, as usual elsewhere, gradual, and therefore may prove the more likely to be rational and persistent. In the first quarter, only 19 cases presented themselves: in the third, the number had already advanced to 272. What is of special importance, is that no fewer than 20 students have inscribed their names; some of whom, we learn, have during the last seven months uninterruptedly devoted themselves to the facilities of study thus happily placed at their disposal. There is evidently ample scope here for benefits to society, which must soon extend themselves into spheres far remote from the humble homes of the workmen. The tender mission of science, bearing aid to the mother for the preservation of her child, will bring the hand of experience to soothe not less effectually, if less frequently, at the couch of affluence than beside the pallet of poverty.

Not a few points of remarkable interest are already profitably approached in the Report before us, or suggest themselves as topics of future and more extended inquiry. The researches of the authors into the conditions and manifestations of physical development are well designed, and foretoken not a few valuable deductions. The course and significance of the dentition; the progress of ossification, especially in the bones of the skull; the various grades of expansion of the chest; the relative dimensions of the thorax and head; the period and extent of the exercise of the faculty of walking, as a leading criterion; and the effects of nursing considered with reference to its duration, to the adoption of lactation as an exclusive resource, or in combination with other kinds of sustenance, are all examined in detail, and the statistical results are carefully tabulated. This is a class of results which must grow in importance as the inquiry extends in compass, and we are glad to perceive that the investigations are proposed to be continued. We notice as an individual remark, that no case of noteworthy disease was observed as evidently arising from local dental irritation. Such a statement as this will shock the prejudices of the nurse, ever ready to assign a paramount influence to teething, and will provoke the opposition of the routine practitioner, with whom the scarificator has always been a favourite means of displaying his efficiency. But it is entirely consistent with our own experience; for, while we have seen, on the one hand, the most intense irritation preceding the protrusion of the teeth customarily accompanied by no reflex ailment, we have, on the other, observed cases where the local excitement chanced to be co-existent with some constitutional disorder, yet where the recourse to scarification was utterly devoid of influence. Nothing, indeed, can be more ridiculous than the habitual and empirical employment of the scarificator, were it only to regard it as an unwarrantable, and not always a harmless, interference with a natural process. Occasionally, it is safe to use it where irritation is really conspicuous; but it is never safe to confide in it as a remedy.

Taking the number of patients at 530, we find that the deaths
were 34, or presented a mortality of 6.41 per cent. Certain of these patients, however, were the subjects of more than one illness, so that 785 diseases were treated, giving a mortality of 4.33 per cent. But neither of these numbers presents the true ratio, as each deals with an aggregate only partially represented. Not more than 273 cases have been determined as positively cured; leaving, therefore, to be accounted for, by a ratio of their own, those of uncertain result, whether from the patients having discontinued their attendance, or from the treatment having been prematurely interrupted. This ratio may probably be an exceedingly low one, as the cases under both categories were generally regarded as advancing favourably. Upon the whole, taking into account the quality of the population, the result must be considered as of more than average success. The most fatal form of disease was diarrhoea, either muco-catarrhal, or accompanying disordered digestion, or associated with retarded development. There were no fewer than 28 well characterized cases of rachitis. In relation to this disease, and in certain other morbid conditions, some interesting investigations regarding the pathology of the urine have been made for the purposes of the institution by Mr J. Robertson, pharmaceutical chemist. The results of these inquiries are important, especially with reference to the degree of predominance of the phosphates. They are to be further prosecuted, and the inferences will be afterwards published, along with dietetic and clinical observations relative to the respective patients, so as to give all necessary precision to the details. It is thus evident that the new institution has not been defective in present performance, if it be still richer in useful promise.

We shall not be charged with enthusiasm, or, at least, it is an enthusiasm which is become of wide prevalence, if we repeat that such institutions as that which has thus been so creditably established at Manchester are in harmony with the spirit of the times, and with a just consciousness of the necessities for future progress. It may seem somewhat like a paradox, yet it is certain, that they would take a narrow view of the functions and proper efficiency of a sick children's hospital, who would measure these alone, at least for long, by the ratio of mortality actually occurring within its walls, or who would look there, or anywhere, for a striking and immediate result as the product of its agency. Slowly, possibly very slowly, yet surely, the truths which it must teach will extend themselves among the homes of society, throwing fresh gleams upon their pinnacles, and unaccustomed light into their recesses, yet recognized only at last through the more vigorous life diffused insensibly everywhere; and conferring the boon under the most prudential circumstances for its enjoyment, because teaching along with it the conditions on which alone it can be retained securely. It is in the child that we are called upon to reverence the man. The early training, continued from the first throbs of life, moulds the constitution, and gives the tendencies to the individual: not rarely as to the moral qualities bound up with his
being, and always as to his physical existence. There is not a child who can quit the precincts of a well-regulated hospital, with the wholesome tokens upon his person of the careful diet, the cleanliness, and the pure atmosphere of its wards, and the general management of its skilful officials, who is not as a missionary of health to the little circle where he is an object of solicitude, and of whom the example will not strike somewhere, at least in part, and teach its valuable lesson. There is not a mother who herself receives the admonition as to the proper care of her offspring, both as to what belongs to herself and what belongs to her charge, and who sees what is taught exemplified here before her, with whom some portion of the instruction will not rest, even if it be unconsciously, for profitable remembrance. Above all, there is not a probationer of the art of healing who studies within its walls, or labours under its auspices, who will not carry with him afterwards into that which must be usually his widest sphere of practice, the diseases of the young, an amount of direct knowledge which he cannot obtain, and which is not even pretended to be offered, under any system of tuition of which such institutions do not constitute a part. This activity for good, specially and persistently devoted, cannot fail ultimately in its perceptible influence; and we can promise as securely for the future, as we know, in smaller measure, undeniably from the past, that there lie within it many rich sources for the diminution of epidemics, the mitigation of suffering, the development of a sounder progeny, and the increased average longevity, to a limit difficult to forejudge, of a healthier and a happier race.

Argument, to prove the clamancy of the need, is scarcely required where the facts are so abundant and so striking. Month after month, the Returns of the Registrar-General for Scotland, the most authentic of accessible documents, now avouch to us, for our own country, the truths which we knew to exist elsewhere, but to which it was rarely possible to point among ourselves with a precision at once absolute and extensive. These valuable records admonish us, that in the eight principal towns in Scotland, at an average of seventeen computations, nearly 49 per cent. of our gross mortality occurs at periods below five years of age; while the ratio is found to rise, in repeated instances, to upwards of 60 per cent., and in Dundee, for a series of twelve returns, has presented a mean of nearly 55 per cent. Thus we huddle half our city population, before its sixth year, into a hurried sepulture. But no one will tell us that the mortality of infancy has not already, under certain of its conditions, been materially diminished: no one will tell us that it is incapable of being still further diminished: and all will admit that our progress here must be in proportion to the opportunities permitted for the elaboration and the diffusion of our knowledge. If this, then, be a preventible mortality, it is criminal to suffer it. The time is not far distant, when charity, enlightened by science, will extend nearly equal reprobation to every community that sacrifices its in-
fants, whether to its selfishness like the Chinese, to its idols like the ancient barbarian, or to its apathy like the laggards of modern civilization.

As to Edinburgh, the question is one only of time and priority. To defer the institution long may be to prejudice, for so long, our interests as a social body, and as a school of science; but these are too valuable, too peculiar, and in too safe keeping, to incur the risk of being abrogated.

The Prostate Gland, and its Enlargement in Old Age. By Decimus Hodgson, M.D. Edin., M.R.C.S. Eng.

Dr Hodgson was awarded the gold medal for his inaugural dissertation in 1855, and the volume now under our notice is principally founded upon that admirable essay. The author arranges his subjects in three principal divisions, viz.—The anatomy of the prostate and neighbouring structures; their functions in the healthy, and their changes in the diseased, condition of the prostate gland. The first six and twenty pages contain a clear and copious description of the anatomy of the pelvic viscera, and directions for their demonstration on the dead body. On the development of the prostate, Dr Hodgson remarks, "There can be no doubt that the prostate is developed from the mucous glands of the urethra and neck of the bladder. The simple nature of the gland, the termination of the secreting surfaces in the prostatic urethra by several orifices, and the growth of fresh glandular tissue with ducts and orifices proper to itself (in the case especially of the third lobe), quite establish in my mind that hypothesis." Again, he "believes there is no real distinction between the circular muscular fibres of the prostatic urethra and the muscular structure of the prostate in the natural condition of the parts;" and he seems to consider that the distinction which is supposed to exist between the urethral and prostatic muscular fibres is made by dissection, and "does not exist in the natural condition of the parts;" and that "the muscular structures, from the mucous membrane of the urethra to the capsule of the prostate, may be considered as the general muscular coat of the urethra, interspersed with glandular tissue, and somewhat altered in arrangement and form to adapt it to this condition."

We fear there are many distinctions made by dissection besides the one just mentioned; but the truth is, both views of the subject are correct: Dr Hodgson, we presume, only alludes to the morphology of the prostate. Dr Hodgson considers that the vesiculae seminales in man "not only receive the semen, but are the means by which it may be absorbed into the system, if not employed in reproduction." And he brings forward, as a proof of this, that seminal filaments are constantly found in the vesiculae, but usually
in small numbers; and he considers this as indicating that "they pass slowly, or lose their characteristics as soon as they enter the seminal vesicles."

In describing the morbid conditions of the prostate, the author says, "The lateral lobes first begin to enlarge at the sides of the gland, and after a certain time, being restrained from increased extension outwards by the capsule, protrude in the form of rounded bodies on the sides of the urethra; by this means the urethra is flattened from side to side, and presents the appearance of a vertical slit, if the gland be cut through transversely. In the meantime, the middle lobe has been encroaching on the neck of the bladder, in the form of a central nipple-shaped eminence." He then proceeds to describe the progress of the disease, and the inconveniences arising from it. He shows that there need not be any proportion between the inconvenience produced on the bladder and on the rectum by the enlarged body. In the latter case, the symptoms arise from the general increase of bulk, while, as regards the bladder, it is not "so much the actual size of the gland, as the manner in which it presents itself to the urethra, that produces dangerous effects." We have not space to dwell further on Dr Hodgson's excellent little book, which we recommend every man to read for himself. It is quite refreshing now-a-days to read an anatomical and physiological essay founded upon facts gathered in the dissecting-room and at the bedside, instead of, as is too commonly the case, a compilation of microscopic "difficiles nuga."

The Medical List, or English Medical Directory for 1857. London.
The Medical Directory for Scotland, 1857. London.

These useful works we beg to recommend to the favourable notice of the profession. They are well edited, and contain a mass of information relating to our common profession which cannot fail to be of service to all connected with it. These works deserve the support of the profession, and every assistance should be given to the editors in their endeavours to secure accuracy in the returns.