As a work intended to facilitate and extend the study of the diseases of which it treats, this is certainly worthy of great commendation, if not entitled to the higher meed of praise generally reserved for essays professedly original. To the physician who is much engaged in the laborious duties of practice, it is especially addressed: he will find it a most useful compendium, in which the observations of previous authors have been sifted, and valued; affirmed or rejected;—and, what is of more importance, compressed into convenient dimensions, both as regards the memory and the pocket. To the student, these are advantages not to be overlooked; as with it, in his attendance in hospitals, and dreary wanderings among the wretched abodes of poverty and sickness, which, to the disgrace of our government, have continued for ages, and still continue to supply the fever hospitals or pest houses with the miserable victims of erroneous legislation,—he may never, if he chooses, be without a useful guide, in the study of an important group of diseases which ought to claim a large share of his attention. For it is not now deemed advisable to leave almost unnoticed, or to hurry over, as it was wont to be not many years since, the consideration of diseases of the organs of circulation, as if they still continued to present a chaotic mass of conflicting indications, baffling the ingenuity of man to disentangle their perplexities, and defying him to remove one pang more from the unfortunate sufferers, than has hitherto been accomplished by the hap-hazard therapeutics of former times. Percussion and auscultation have dispelled the darkness, and order has taken the place of confusion.

M. Aran's work is divided into two parts;—the first is on the anatomy and physiology; and the second, on the pathology and treatment of the organs of circulation. Both the author and his translator appear to us, to have executed their respective tasks with great ability.
The following quotation contains a concise view of a subject, which has very important bearings upon diagnosis.

**Topographical Anatomy of the Heart and Great Vessels.**

"There is at present no truth better established in medicine, than that of the indispensable necessity of studying perfectly all the phenomena, and all the conditions appertaining to the healthy state of the organs, in order to understand the different modifications which they and their functions undergo during their morbid states.

"It is only by comparing the pathological transformations with what experience has taught us to be incident to the normal state, that we can hazard an assertion respecting the nature of any lesion or of any modification of function.

"The perfect knowledge of the anatomy and physiology of the heart in its healthy state, is therefore indispensable to the study of its diseases and pathological alterations of this organ.

"It is not our intention to introduce here the details of descriptive anatomy, which are readily met with in books on that subject; neither is it necessary to say anything concerning the anatomy of its texture, on which point the able works of Steno, Borelli, Wolf, Duncan, and Gerdy, leave nothing to be desired.

"But there are some points, of which authors of topographical anatomy have, in general, treated very lightly, such as the exact position of the heart in its relation to the different parts surrounding it, its weight and size, and the relative volume of its different portions to each other.

"We are far from attaching to the estimate of the volume and the weight of the heart all the importance which some persons give to them; we are aware, that variable as they are, according to the subjects, they also vary in the same persons at different epochs of their life, and under very diversified influences; but we also think, that all sciences gain in point of precision and certainty, by establishing moderate limits, as standards, with which we can compare the alterations that are observed: we think, in conclusion, that the appreciation of the quantity must be left as little as possible to conjecture, because few persons judge rightly in regard to this point. We would have everything known relative to the weight and volume of the heart; but we refer what is further to be said of this point, to the article Hypertrophy, where other data will be found more in place.

"It is well known, that the heart, being the central organ of the circulation, occupies in the chest the inferior portion of the anterior mediastinum; that it is enveloped by a fibro-serous sac, called the pericardium; that it rests upon the diaphragm; that it looks obliquely from above downwards, and from before backwards; and that, while its body and apex remain free, its base is fixed, whence are detached the large vessels.

"It must be evident, from the preceding account, that the heart, resting upon the diaphragm, and being free at its apex, describes at each movement of the diaphragm an arc of a circle, of which the axis of the heart is the radius, and the base of that organ the centre. It would be impossible to appreciate the changes which take place in the several relations of this organ, if there was not a point of departure which remained invariable in its position; this fixed point is not exactly that which follows the movements of the diaphragm, but rather the point at which the large arteries are detached from the heart. Dr Hope has shown, and M. Gendrin has confirmed it by his experiments, that this point, where the motion of the heart and the large vessels arising from it terminates, this axis of the movements corresponds to the half of its extent, and to the centre of the pulmonary artery; that is to say, to the middle of the space embraced between the origin and the division of this artery, or rather to the middle of the space comprised between the synchondro-ster nal articulations of the second and third left ribs.

"At their origin, the two large arterial trunks which arise from the heart are placed above each other; the aorta, which is posterior, extends, by about
one-third of its volume, beyond the border of the pulmonary artery, on the right side.

"If we draw from one side to the other a horizontal line, along the inferior border of the two third ribs, this line passes over the valves of the pulmonary artery, which it leaves, situated a little to the left of the median line; the valves of the aorta are situated behind the preceding, but about half an inch lower, so that the artificial line just described, on one side, passes above the base of the valves of the pulmonary artery, whilst, on the other, it corresponds to the free extremity of the valves of the aorta. It is over the tract of this line, and consequently on a level with the inferior border of the third rib, that the murmurs produced by the diseases of those valves are found at their maximum. From this point the aorta and pulmonary artery arise; the pulmonary artery, at first, in contact with the sternum, afterwards inclines to the left, until it reaches the interval between the second and third ribs, where the fixed point of the movements, before alluded to, will be found. If, instead of forcing a needle through the second intercostal space, we force one immediately under the inferior edge of the synchondro-sternal articulation of the second rib, the needle traverses the pulmonary artery on a level with its bifurcation, and meets behind it the remains of the ductus arteriosus.

"The aorta, inclining slightly to the right, goes afterwards from the right side to the left, by passing before the right branch of the pulmonary artery. It is then found in its relation with the sternum, at the moment when it disengages itself from beneath the pulmonary artery, that is, on a level with the superior border of the synchondro-sternal articulation of the second right rib.

"It is also under this last articulation that the origin of the brachio-cephalic trunk is found. As regards the origins of the left carotid and the left subclavian arteries, they are found beneath the sternum, behind the synchondro-sternal articulation of the second left rib, and behind the left branch of the pulmonary artery.

"The auriculo-ventricular orifices are situated in the space included between the third and fourth left ribs, near the sternum; that of the right ventricle is a little lower than that of the left ventricle.

"The heart rests, by its flattened face, on the diaphragm; its point is inclined downwards, forwards, and to the left of the chest; its base looks upwards, backwards, and to the right; the left ventricle is posterior and superior; the right ventricle is anterior and inferior.

"The apex of the heart generally pulsates between the cartilages of the fifth and the sixth ribs, and sometimes between the cartilages of the fourth and fifth, at four or five centimetres, or little more than an inch, from the left extremity of the sternum; in women and children, it beats oftener between the fourth and fifth left ribs.

"The right auricle, which is situated before and to the right of the base of the heart, is partly concealed by the anterior border of the right lung; but its appendix and a part of its body correspond immediately to the sternum, or, more strictly speaking, to the synchondro-sternal articulation of the third rib. The left auricle, which is situated behind and to the left of the base of the heart, is covered, as well as its appendix, by the anterior border of the left lung, and corresponds to the interval between the third and the fourth ribs.

"The vertical line through the synchondro-sternal articulations divides the heart into two unequal parts, leaving one-third on the right, and two-thirds on the left side. The portion of the heart situated to the right, contains the superior extremity of the right ventricle, and the right auricle; that portion lying on the left side, contains the inferior part of the right ventricle, the left ventricle and auricle.

"The pericardium has a pyriform appearance; enlarged at its middle, and extending, especially to the left, it continues to contract more in proportion as it approaches the point where it is reflected upon the large arteries which take their origin from the base of the heart, that is, on a level with the synchondro-sternal articulation of the second left rib.

"The lungs descend separately, for the extent of two inches, along the edges
of the sternum; they cover the base of the heart slightly on the right side, but
to a much greater extent on the left; from this place, they separate from each
other; the left lung following the course of an oblique line, drawn from the in-
ternal end of the cartilage of the second rib to the anterior extremity of the last
rib; the right lung following the tract of an oblique line, drawn from the me-
dian and superior extremity of the sternum to the anterior extremity of the first
false rib; and by this separation, they leave exposed a considerable portion of
the right ventricle, and a much smaller portion of the inferior part of the left
ventricle.” Pp. 9-14.

To the much contested subject, of the causes of the normal sounds of
the heart, considerable space is devoted. Many theories are,
we think, justly set aside as unworthy of consideration, being at
variance with the ascertained motions of the different portions of
the organ; and, after due consideration of the remainder, the au-
thor comes to the following conclusions.

Author’s Views on the Normal Sounds of the Heart

“‘We do not, then, admit the sound of muscular extension; we admit that
the extension of the auriculo-ventricular valves is accompanied by an appre-
ciable noise; but does it necessarily follow that this sound, in connexion with
the muscular sound, are the only elements of the first sound? We cannot think
so; but there seems to have been no notice taken of a very important cause;
we allude to the shock of the column of blood against the sides of the auriculo-
ventricular valves; these valves vibrate, not only because they are submitted to a
violent extension, but because they are struck by the wave of blood. It is of
little importance, however, whether the valves are set in vibration by the ex-
tension or the shock of the liquid, since the result is the same. What we admit
for the first sound, we admit also for the second, and think that the return
stroke of the blood against the floor of the closed semilunar valves, is one of the
principal elements of the second sound.

“To resume; our belief is, that the first sound is composed, first, of the sud-
den extension of the auriculo-ventricular valves; second, of the shock of the
column of blood against the sides of the valves; and, third, of the muscular
sound; the second sound is owing, first, to the sudden extension of the semilu-
nar valves; and, second, to the rebound of the column of blood against the sides
of these same valves.

“As to the sounds which are produced by the impulse of the apex of the
heart against the thoracic parietes, or by the friction of the column of blood
against the walls of the ventricles, the orifices, and large vessels, we do not deny
their existence, but we think that they are entirely concealed by the normal
sounds of the heart. Hereafter when we study the pathology of the heart, we
shall see that these sounds gain force, are distinct from the normal sounds, equal
them, and sometimes efface them entirely, under the influence of pathological
conditions of this organ.” Pp. 44, 45.

This opinion is closely allied to those of Professor Williams, and
of Dr Hope, though differing in some of the details; which, how-
ever, may be almost all said to be implied, if not really included, in
their expressed opinions; and here we may remark, that the au-
thor has given an erroneous view of Dr Williams’ opinion on this
subject; nor yet does the statement agree with the observations of
Dr David Williams,1 which might have been confounded with the
other writer from a similarity of names. It is therefore clearly an

1 See Edin. Med. and Surg. Journal, 1829.
error, and one which the translator is more blameable for than the author. It ought to have been corrected by a note.

We have not space to quote the author's remarks on the "mode of investigation in the diseases of the heart," which are clearly and concisely drawn up; and must conclude this notice with the following interesting observations on arterial sounds, which contain certain views as to the cause of these sounds, at variance with the opinion of previous writers.

**Anomalous Sounds of the Arteries from Inorganic Causes.**

"1st, Arterial Murmurs.—It is now generally admitted as a fact, that the murmurs and purring tremor of the arteries from inorganic causes are only met with in persons whose blood presents alterations, either in its quantity or quality (deficiency of the valves of the aorta, anemia, cancerous and scorbatic cachexia, &c.), and also in certain pathological states, which are accompanied by a concentration of the blood (paroxysms of intermittent fevers). These being the conditions in which they are found, let us inquire how they are produced."

"In speaking of the murmurs of the heart from inorganic causes, we have already shown, that the alterations in the quality or quantity of the blood increase the friction against its parietae. In the arteries the circumstances are still more favourable. It is thus, that in anemia and deficiency of the aortic valves, the vessels when empty of blood return to their former state; and independently of their flaccidity, there are folds formed in the internal surface of these vessels; and hence, an increase of friction. Let it be added, that, under the influence of losses of blood, the circulation is constantly accelerated to the amount of fifteen to twenty pulsations per minute; and that there is in the arteries, on a level with all the branches that spring from a main trunk, a prominence, which, projecting into the arterial cavity, breaks the current of blood, and causes sonorous vibrations. In certain cachexies, where the blood is more deficient in quality than in quantity, the molecules of this liquid, being lighter and less viscid, and consequently easier of motion, pass more rapidly over the internal membrane of the arteries. To this cause may be added the flaccid state of the arteries, the rapidity of the contractions of the heart, &c.

"In this manner the intermittent murmurs of the arteries, and their purring or vibratory tremor, which is only an augmentation of the former sound, are explained; but it is not the same as regards the murmurs produced by a double current."

"We have placed the seat of the continuous murmur in the arteries, but the labours of Dr Ward of Birmingham, and of Hope, have caused doubt on this point.

"If it be considered that the continuous murmurs persist during the systole, and almost with the same intensity, that is, at a moment when the column of blood obeys no more than this feeble elasticity of the arterial tissue; that when the pressure is increased with the stethoscope, they give to the ear a sensation of a bellowing or rumbling sound; that they are commonly diffused, and not circumscribed, by the calibre of the artery; that these continuous murmurs are constantly reinforced at each arterial diastole; that they seem to the ear like two currents flowing in different directions; that it suffices, under some circumstances, to press lightly above the stethoscope, in order to cause them to cease, and only to allow the sound of the arterial diastole to be heard, we should join Dr Hope in the inference, not that all the bellows sounds are seated in the veins, as MM. Barth and Roger have imagined this author to say; but rather, that in the continuous murmur there are two things, viz., the venous element, if we may be allowed the use of the expression, which constitutes the foundation of the anomalous sounds, and which itself is continuous like the venous circulation; and the arterial element, which reinforces the continuous sound at each arterial diastole. In a work which we shall soon publish, we will mention some
curious facts and experiments, which appear to us to sanction this opinion: at present, we only intend to present the difficulty.

"In summing up, we find that the arterial sounds may be modified by organic and inorganic anomalous sounds. We now present their distinctive characteristics.

"1st, The arterial murmurs from an inorganic cause may be double; those from organic causes are almost always simple, and seldom take on the continuous character.

"2d, The inorganic arterial murmurs are best observed in certain arteries (as the carotid and subclavian); the organic arterial murmurs have no fixed position.

"3d, The arterial murmurs from inorganic causes always have a soft character; they are never rough like the organic murmurs.

"4th, The inorganic arterial murmurs are not permanent; they increase during the heart's palpitations, and disappear by rest, and under the influence of animal food; the organic arterial murmurs are permanent, like the cause which produces them.

"The vibratory tremor from an inorganic cause may be distinguished from that proceeding from an organic one, 1st, By the character of the murmur which accompanies it; 2d, By its being of less intensity; 3d, By its diffused character, and its propagation over a large extent of the arterial system; 4th, By its want of permanence." Pp. 93–96.

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Lecture introductory to a course of Clinical Surgery, delivered to the Students of the Glasgow Royal Infirmary, &c. By M. S. Buchanan, M.D., Professor of Anatomy in Anderson's University, and Senior Surgeon to the Royal Infirmary. 8vo. pp. 25. Glasgow, 1844.

The great aim of the enthusiastic lecturer is to prove, that Glasgow is the best and cheapest medical school in Europe; and that he has done so to his own satisfaction, is sufficiently clear from the whole tone of the discourse, but particularly from the concluding paragraphs, one of which we subjoin.

"Our southern friends, I know, begin to tremble lest such information as I have above endeavoured so imperfectly to afford you, may find its way to head quarters, and thus open the eyes of the medical profession to the advantages of the Glasgow school; but this just so much the more imposes the duty on me, to proclaim still more loudly those stubborn facts, for the information of the rising generation."

It may interest some of our readers to know, what are the chief grounds upon which Dr B. claims superiority for Glasgow as a school of medicine.

I. Locality and Population of Glasgow.

"Situated in one of the most extensive commercial, manufacturing, engineering, and mining districts in the world, it presents to the eye of the philanthropist the busiest field of industry and activity any where to be met with. The number and variety of severe and appalling accidents which are of every day occurrence, arising from this state of society, and demanding all the intrepidity and dexterity of the surgeon, render the surgical wards of the Infirmary more like those of a military hospital after a sanguinary engagement than those of a civil establishment. It is not, however, to the city alone that our attention must be directed; the
surrounding country, containing a population of nearly 1,000,000 inhabitants, furnishes us with many of our important hospital cases; and though attempts have been made to prove the insalubrity of the wards of our hospital, and the impropriety of conveying patients to it from a distance, either for operation or treatment, yet so unsuccessful have these attempts been, that there is scarcely a case of moment occurring in the whole west of Scotland which is not instantly sent for admission to this noble institution. But it is not so much to the amount as to the quality of the above dense population, that we must refer for the explanation of many of those advantages which you enjoy in attending those wards, and though at first sight little difference may be thought to arise from this cause, still, if the surgical wards of the hospitals of Edinburgh or Dublin, Rome or Florence, Berlin or Vienna, or indeed any of the most populous of the merely aristocratic capitals of Europe, are examined with the view of comparing them, as I have done, with those of Glasgow, this element will be found of the last importance. Look to the statistics of these cities,—to the occupations in which their plebeian population are engaged, or the diseases and accidents to which they are liable, and you will not fail to remark that they are of a totally different nature from those of this locality. A very large class of the population of the above capitals consists of household servants with all the subordinates ministering to the wants of their superiors, and also of localities, so much the more will it be found that the Glasgow Royal Infirmary presents at all times perhaps the most important gallery of acute surgical disease of any in the world."

"Our accident wards, which contain 40 beds, are generally well occupied, as formerly proved by the number of fractures and wounds annually under treatment. Our ordinary surgical wards are now limited to contain 60 beds, which are also usually filled with acute and chronic cases."

We are by no means prepared to admit that the active and often bloody character of the surgery, which, from Dr B.'s account, must necessarily obtain in the Glasgow hospital, is the best calculated to steady the student, make him a patient observer of surgical disease, and at last a judicious practitioner. Injuries and capital operations, however important they may be to the student, are not the only sources from which he ought to derive his knowledge of the doctrines and manifestations of scientific surgery. Far be it from us to detract from Glasgow as a school of surgery. We believe that it is a good one:—but still, we have very many reasons for thinking, with all submission to our author, that there are others as good, though we will not presume to say, (with Dr Buchanan's lecture before us,) that there are any better!

II. Short Residence of the Patients in Hospital.—We are some what surprised at the following statement.

"So anxious are the Directors of the Hospital to prevent careless and slovenly practice on the one hand; or, on the other, to allow our hospital to degenerate into an almshouse, that a Senatus Consultum was issued by them some years ago, that two months only should be allowed for the treatment of each patient, except in special cases. To a superficial observer, this regulation may appear harsh and unfeeling, but when we examine the methods sometimes adopted by the inmates to delay their cure, and the system of malingerung which prevails, it is right that such an ordinance should be suspended in terrorem before their eyes."
humanity; but be that as it may, it appears to us that this law detracts immensely from the value of any institution as a school for diagnosis, which is the only sure basis of therapeutic knowledge. If cases of phthisis, heart disease, and chronic affections of the liver and other organs, are to be dismissed at the end of two months, because the chances are, that they may linger on for some months longer, we are at a loss to conceive how the business of clinical teaching can be carried on at all. From the dissections of cases which have been long and carefully observed during life, the most instructive lessons of diagnosis are to be derived: in fact, it is as much in the theatre as at the bedside, that the practice of medicine is to be learned. The Senatus Consultum will have two very obvious effects upon the statistics of the hospital: it will give a small number of deaths, and cause a great saving of the wine required by chronic cases in their last stages.

III. THE DISPENSARY CLINIQUE.—We have been present at the Glasgow dispensary clinique, and willingly testify that the vast field which it presents to the pupil for observing disease and performing the minor operations of surgery in the presence of his fellow-students and zealous teachers, is admirably calculated to form in the youthful mind correct principles of practice, and give a quickness of applying them, which no other kind of discipline can impart. [This system of instruction is termed Polyclinique by the Germans, by whom it is much esteemed.] The interests of our poor, as well as of our pupils, call for a better regulation of dispensaries; and we know of no way by which the interests of both would be more advanced and secured, than by the training of the latter in a well-regulated polyclinique, before they were let loose to prescribe in the lanes and alleys.

The business of the Glasgow Polyclinique is conducted in a suitable theatre, which is noticed in the following passage.

"I found great inconvenience in the Dispensary for want of accommodation. The crowding was so great, and the obtaining a view of the patient so difficult, that I was under the necessity of memorializing the Directors for the erection of a small theatre. This was immediately granted by those gentlemen, who have at all times your welfare at heart; and now you will find in your little Dispensary Sanctum Sanctorum, as much comfort, and even more instruction than in any other department of the Hospital. The cases are of all kinds; they are examined carefully at the moment, the whole history is detailed, the diagnosis, prognosis, &c., explained, and the treatment left to a senior pupil, under the correction of the ordinary attendants; by this means you are familiarized with disease, and compelled to think for yourselves as to the ratio medendi." P. 14.

IV. THERE BEING NO RIVAL HOSPITAL AS IN DUBLIN AND LONDON.—Difference of opinion will exist as to whether this is an advantage or disadvantage. When a wise and liberal spirit pervades the direction, it may be the former,—on the other hand, when the interests, alike of the student and medical school generally, are sacrificed to monopoly in teaching, and restriction of opportunities for the study of disease, then, we cannot but regard
the want of a rival hospital as most disadvantageous. We have therefore great pleasure in congratulating our Glasgow friends on Dr B.'s next ground of superiority, viz:—

V. THERE BEING NO MONOPOLY OF CLINICAL TEACHING.—We cordially agree with Dr Buchanan in thinking that the directors of the Glasgow "hospital have most judiciously enacted that every (medical) office-bearer shall in his turn be a clinical lecturer;" and to show how heartily the directors lend their aid to the medical officers in their endeavours to improve medical instruction, we quote the following:—

"About the year 1827, the Glasgow Medical Journal was commenced; and so alive did all the hospital surgical staff feel to the important advantages to be derived from recording their cases in that well conducted and spirited periodical, that proposals were made to the Infirmary Directors for the establishment of a regular series of clinical lectures to be delivered by all the attending medical and surgical officers. These proposals were instantly complied with, and ever since, there has been kept up in this hospital the most complete system of clinical instruction, which is to be found in this or any other country."" P. 16.

While we heartily commend this important step, we must not omit to claim a due consideration for other similar institutions. For example, let us take the Edinburgh hospital, which was one of the earliest, if not the first, in which clinical instruction, worthy of the name, was given in this kingdom, and which, from its very foundation, upheld clinical instruction as one of the most important advantages to be derived from its institution, as appears from the following quotation from its original history. "A School of Medicine having been for many years established in Edinburgh, and having arisen before the period of the erection of this hospital, to a flourishing state, the managers of the Infirmary resolved to spare no pains in cherishing it, as far as the hospital could serve that purpose; and foreseeing that its interests would soon be interwoven with that of the University, they resolved to adopt every measure that could tend to facilitate medical education, and to render it complete." Thus, while the charitable objects of the institution were not overlooked, the advantages which might accrue to medicine were not undervalued by the original founders of that institution. Whether or not any improvement on the present system of clinical instruction in that institution could be made, so as to carry out the liberal views of the founders, we will leave for future consideration.

As to the arrangements for clinical lecturing, Dr B. has the following remarks:—

"No monopoly is allowed as regards the wards of our hospital. The charter of the institution being of the most liberal kind, the medical and surgical practice has always been thrown open to the widest competition; by this means insuring the most able and experienced office-bearers. Indeed, so jealous have the directors all along been of the least approach to monopoly, that a bye-law was made many years ago, that all the physicians and surgeons, however

1 History of the Royal Infirmary of Edinburgh. Quarto Pamphlet without date. VOL. FOR 1844, NO. VII. 4 F
talented, must vacate their respective situations after an incumbency of four years, and can only be re-elected after the lapse of two years.

"However much opinions may differ as to these regulations, it must on all hands be allowed that much good has resulted from the above practice in this hospital; for while, on the one hand, it has allowed a plentiful infusion of young blood, on the other, it has retained a goodly proportion of the matured and experienced in the profession." P. 21.

With these remarks, except perhaps as to the period of incumbency, which we think might be extended to five or six years, we entirely concur; for any hospital which adopts a contrary method is liable to fall behind in the improvements of the day; and this applies to every art based on rapidly progressive sciences, such as those on which the practice of medicine is founded. It may be for the interests of the few, that it should be otherwise, but is certainly hurtful to the student, who, be it remembered, is, at no distant period, to take the place, not only of the practitioners of today, but of his teachers themselves; and thus it is, that the vital interests of the public demand, not only that every facility be given to the advancement of the healing art, but that every encouragement consistent with justice and sound policy, be afforded. And here we beg to remark, that no hospital or dispensary that does not, to some extent at least, remunerate its medical officers,—who are the willing instruments of so much good, not only to the poor, but also to the rich,—stemming, as it were, the torrents of disease, which might otherwise overwhelm even the strongholds of wealth and power,—is entitled to the public support. It is not creditable to the managers and supporters of such institutions, to receive and expect the cordial assistance of physicians and surgeons, and at the same time withhold from them in any shape, that remuneration to which they are justly entitled, and which, did a wholesome feeling of justice pervade the public mind, they would not be permitted to want.¹

We propose to take another opportunity of calling the attention of the profession to the subject of clinical instruction; and we shall conclude this notice by remarking, that to us it has always appeared a very short-sighted proceeding, not to place this, by far the most important branch of medical study,—because the end and aim of all previous studies,—on the widest and best foundation. It is

¹ The two medical and the two surgical lecturers in the Glasgow Infirmary receive half of all the pupils' fees who enter the hospital. Besides this, the medical officers are allowed L.50, and the surgical L.30 annually. In a good paper on clinical instruction, in a contemporary Journal, we find it stated, that "in Paris there are nine clinical professors, all of whom are named by concours, and receive L.400 a-year from the Faculty of Medicine. Of these nine, four are professors of medicine, four of surgery, and one of midwifery. They are bound to lecture at least three times a-week, immediately after visiting their patients, during six months of each year. Most of them, however, voluntarily lecture every day, Sundays and Thursdays excepted, during the ten months that the Faculty is open. Whether they lecture or not, they are obliged, like all the other hospital surgeons and physicians, to go through their wards every morning between the hours of six and ten." Lancet, 11th May 1844. From the same article, it appears that in London, clinical teaching, especially medical, "with two or three solitary exceptions, may be said to be unknown."
quite clear, that in order to understand disease, the student must examine into each symptom and indication for himself; and if this be done under the direction of the physician and surgeon with whom he may have associated himself, it is obvious that much labour will be saved, and fatigue to the patient avoided. That this may be accomplished, however, it is also plain that there must be a restriction on the number of pupils specially attached to any one medical officer; and surely this is quite as necessary in clinical instruction, as in practical chemistry, in which, for years, such a limitation has been enforced with advantage. Much more might be accomplished in clinical instruction, were the number of students under each medical officer never to exceed from 20 to 25. In this way more minute attention could be afforded to the cases, and thus would the advantages to the student be increased; especially, if, as would naturally happen, the different medical officers turned their attention to different groups of diseases, at different times. For it is not so much the number of the cases, as the attention which is bestowed upon them, that contributes to the advantage of the student. And how, we would ask, is the latter to become acquainted with the various important methods of diagnosis by percussion, auscultation, mensuration, chemistry, and the microscope, without the expenditure of much time and labour, both mental and physical, on the part of his clinical teachers, who, when their time and energies have been exhausted in ministering to the wants of the sick, cannot be expected to give that minute attention to the wants of the student, which such duties imperatively require.

On Dysmenorrhœa and other Uterine Affections, in connection with Derangement of the Assimilating Functions. By Edward Rigby, M.D., &c. Pp. 138. With 2 plates. London: 1844.

The perusal of Dr Rigby's work has not tended to make us give up what has long been a favourite speculation,—the benefit which would accrue to the reading part of our profession, were a court of censorship to sit on every work before it was permitted to go to press, and expunge such passages as are merely a useless repetition of what had been already published in our classical authors.

Dr Rigby starts with the rather sweeping assertion that "what little notice" uterine diseases "do excite, is chiefly directed to their local symptoms and treatment, and but little attention is paid to the functional derangements which are so closely connected with them." The first part of his volume, on "assimilation and its derangements," simply propounds what everybody ought already to know to be Dr Prout's opinions. Dr Rigby follows with implicit
confident that illustrious chemist in all his theories; but the dissecta membra of his most ingenious hypotheses receive little elucidation at the hands of our author, except in so far as they are made, for the first time; to apply to the affections of the uterus itself.

Thus we are told, (p. 2.) as if it were acknowledged truth, that secondary assimilation "comprises the conversion of the elements which form the blood corpuscles into the primary structure of cell life," the author forgetting the part which the plasma of the blood plays in nutrition. And, again, we are informed, (p. 8.) that the surplus products of primary assimilation, "not having been applied to supply the wants of the system, are subjected to the disorganizing action of the kidneys, and then thrown off;" a statement which begs the question, still unsettled, of the modus operandi of secreting glands. In the very same page, apparently in happy ignorance of the whole modern doctrine of the assumption by animals of the proteine compounds which vegetables alone are charged to form, and substituting for it a baseless theory, he states that the "albuminous principle is evidently not furnished directly from the food, but developed by the combination (of what?) with azote, which appears to be supplied (how?) from the circulation."

In the following passages, the author's meaning is far from being distinct. "In diabetes the peculiar saccharine character of the disease has been detected in the circulation." (P. 3.) "The simplest, easiest, and most common form of deranged assimilation, is that condition of the stomach, in which, either from an impaired or faulty state of function, or from food improper as to quantity or quality, its powers of digestion are so deteriorated, that its secretions are greatly deranged." (P. 4.) The condition of the stomach, whose function is merely digestion, is a form of diseased assimilation! The secretion (not the chyme) is deranged in consequence of its power of digestion being deteriorated!! and those powers are so deteriorated from an impaired or faulty state of function!!

The author's object in Part I is, by quotations from Scudamore, Graves, and other authors, to show, (what these very quotations prove all the profession might know already,) that the mucous membranes, including that of the uterus, are apt to give evidence, by inflammation and by the secretion of gas, of the presence of the gouty diathesis. Part II is intended to evolve this fact as far as the uterus is concerned, and to describe the nature and treatment of what the author calls rheumatic gout of that organ. We shall allow him to speak for himself.

"Rheumatic gouty affection of the uterus, as of other parts of the body, implies a certain series of local phenomena or symptoms, preceded or attended by a corresponding state of the general system; they are chiefly of a congestive or inflammatory character, or at least in some degree resembling the phenomena of inflammation, being attended with local vascular excitement of a more or less acute nature, with the chief features of inflammation; viz., heat, swelling, redness, and pain; or of a chronic form, with much venous engorgement, swelling, induration, and ultimately alteration of structure. The first form is
more sudden in its attacks and recessions, more erratic in its movements; the latter more gradual, but fixing on the part with a firmer hold, and relinquishing it with proportional difficulty. The acute form is usually seen in connexion with dysmenorrheal attacks, or with the interim excitement which is generally observed in such cases at the half-way time between the menstrual periods. The other is mostly attended by chronic leucorrheal discharge, and chronic or subacute inflammation of the cervix uteri, followed by induration and organic disease." Pp. 37, 38.

To our knowledge of the symptoms of dysmenorrhea, as exposed in our classical authors, Dr Rigby has added nothing; and the connexion of the disease with the rheumatic diathesis is not unknown to the profession. It is expressly described, for example, by Dr Locock, as well as in the work of Dr Todd, which, though quoting it elsewhere, our author passes unnoticed here; and if we are not indebted to Dr Rigby for our knowledge of the connexion between the uterine affection, and the rheumatic condition of the system, why, we ask, should he think it necessary to publish a volume to show, what every practitioner must see from the bare announcement, that such a disease must be treated generally as well as locally, and that the constitutional treatment must vary with the varying phases of the constitutional disease; that when the "primary assimilation" is deranged, this must be set right by the appropriate means,—mild mercurials, salines, mineral waters, and so on; that with reference more especially to the gouty and rheumatic condition, colchicum, guaiac, and iodine will often be very useful; that the functions of the skin should be particularly attended to, and that baths will be often productive of the greatest benefit; that when digestion is impaired, bitter tonics will frequently be used with advantage, and that regulation of the diet will always be necessary; and that the preparations of iron are the best means wherewith to combat the approaches of subsequent anaemia. We apprehend that such treatment would be adopted, in similar circumstances, by every intelligent practitioner, even had Dr Rigby never written; and in proof, we beg to refer him to the works of Dr Dewees, as to guaiac, of Dr Montgomery, as to iodine, and to Dr Copland's articles on Leucorrhæa and Menstruation. We think there is some self-sufficiency exhibited in the following paragraph, (page 53); for though what is said be all very true, we flatter ourselves, that since John Abernethy's time it ceased to be new to our well educated confrères.

"In considering the treatment of these afflictions, my object is to call the attention of the practitioner to the peculiar condition of the system on which they depend, and thus furnish sure and stable data on which to found his indications and course of treatment. It is of great importance that he should possess fixed and certain principles for his guidance in these cases, because, as the local affections are little more than part of a general diathesis, little permanent relief can be obtained for the one, unless an effectual impression be made upon the other," &c.

Warm baths, and camphor, with extracts of lactuca and hop, are recommended as palliatives, during the accession of the menstrual
pain; local depletion, and particularly leeching the anus, when there is much local congestion; tartar emetic friction, when there is coincident inflammation of the ovaries, which Dr Rigby states may sometimes be felt enlarged and tender, on examination per rectum. This last is the only point which strikes us as having any novelty. The following artificial mineral water he prescribes with success as a stimulant alterative.

"R. magnes. carb., calcis. carb. ââ 3i.
"Acidi hydrochlor. q. s. ad saturandum.
"Calorem adhibe ad exsicandum. Dein adde
"Aquæ distillatae ââ viii.
"Sodæ hydrochloratis.
"Sodæ sulphatis ââ ââ 3vi.
"Tincture Iodinii ââ j. Misce.
"Sumat. cochl. magn. j ex cyatho aquæ tepidæ pleno bis die inter agendum." P. 109.

The main subject having occupied forty-four pages of the book, a like space is taken up by the detail of cases, which strike us as being better fitted to exhibit the phases of the disease, than any remarkable success in treatment, but which certainly go to prove the necessity of that patient perseverance in our efforts, which Dr Rigby takes care to inculcate.

We object most decidedly to the appendix, on the chemical examination of the urine, and to the two plates of crystals, &c., which accompany it. The whole adds unnecessarily to the expense of the book, and, moreover, it is both incomplete and unsatisfactory. The author should have avoided whatever might be construed into book-making, and contented himself with enforcing the necessity of making an examination of the urine, referring his readers, for the mode of doing so, to works expressly on the subject. Besides, in spite of the parade with which the analyses are set forth, we cannot, in reading the cases, discover that they are made particularly subservient to the regulation of the treatment.