

Wattsomian Lectures

ON EXCISIONAL SURGERY OF THE JOINTS FOR DISEASE.

Delivered before the Medical Society of London.

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LECTURE II.—PART I. THE HIP-JOINT.

MR. PRESIDENT AND FELLOWS,—In considering excision of the knee-joint, I endeavoured to subvert the position commonly held—that the operation of joint-excision for disease, and that of amputation of the limb above the seat of disease, should be regarded as alternative procedures for the selection of one or the other, when operative interference becomes necessary in the treatment of disease of the joints. When, in the course of joint-disease, either operation becomes justifiable, the other should not be entertained; a comparatively early period being alone appropriate for excision, a comparatively late period alone appropriate for amputation. It is, I conceive, this widely prevalent misapprehension of relationship which has hitherto arrested the progress of excisional surgery, and burdened it with a discouraging proportion of unsuccessful results. Here, therefore, in limine, renouncing the false association with amputation, I would break through the tradition of the past. On the other hand, I also endeavoured to show that the true comparison of joint-excision for disease is with the natural cure of joint-disease; both these principles of treatment having in view the production of ankylosis. The importance of substituting this standard of comparison for excision lies in the obvious fact that such reference throws light on the conditions of disease which are appropriate for operative interference by excision; and the guiding knowledge of pathology thence derived, in combination with a similar knowledge gathered from an analysis of carefully recorded cases, supplies a sure basis for the practice of excisional surgery.

Excision of the hip-joint for disease well illustrates this position, and the more especially because amputation should here be scarcely entertained.

The natural cure of hip-joint disease has not yet been investigated in a series of cases sufficiently accurate and comprehensive for comparison with the results of excision. Such an inquiry should have regard (1) to the joint, in respect to five essential particulars—the appropriate nature of the ankylosis and the proper position of the limb for its functional use, the average duration of the period of recovery, and the permanent character of that issue, with its average frequency; (2) the liability to life or the mortality of the natural cure. It would be from these points of view, as to limb and life, that the results of excision must be compared and its relative value estimated. Pending this clinical inquiry, we may approach the question from our present knowledge of pathology.

What, then, are the changes which the joint and constitution undergo in the course of natural cure by ankylosis? In the joint there is a twofold process of destruction and repair. A piecemeal or molecular excision, so to speak, is constantly progressing, apparently by absorption, and certainly by the draining away of debris of bone in the discharge until two healthy opposed surfaces are reached, so that union may at length be effected. This natural cure of joint disease entails a protracted period of recovery, extending even to many years, as compared with that of weeks or months required for recovery after excision. During this ordeal the constitutional vigour is reduced, subsequently leaving the patient stamped with the aspect of suffering in former years. Occurring also as it often does during the growing period of life, the reserve power, which should have been gained to meet the exigencies of after-life, is used up prematurely by incessant demand in the long pro-

cess of reparative ankylosis. Persons who have undergone the natural cure of diseased hip-joint, for example, may be seen hobbling about the streets, being easily recognised by the characteristic gait of old-standing hip disease, and by their sallow and prematurely aged appearance. This constitutional decrepitude may possibly be averted by a remarkable acceleration of the excisional part of the process. In a case represented by specimen No. 7 of the hip-joint series (exhibited before the Society), an eminent surgeon differed with myself and others respecting its diagnosis; nature subsequently undertook the operation of excision en masse, for she severed and discharged the greater portion of the head of the femur through one of the fistulous tracks. This natural excision of a joint—one of the only two, I believe, on record—will be singularly suggestive to operative excisionists, and it should be equally admonitory to those surgeons who blindly oppose the operation.

The conditions of hip joint disease appropriate for excision.—It was formerly held, and may still be maintained by some surgeons, that excision of the hip-joint for disease should be resorted to only in the following conditions, constitutional and local:—

- (1) Only in the last stage of the disease or of constitutional endurance.
(2) Only when the extent of disease is limited, the acetabulum being free from disease and the amount of pelvic disease trivial.
(3) Only when the head of the femur is dislocated.

The reverse of these rules, or nearly so, may be partly gathered from my cases, and can, I believe, be justified by accumulated experience, drawn from the results of a large but varying number of cases, with regard to each such rule in question.

Of the three conditions laid down respecting excision of the joints in general, the first only applies to the hip-joint.

- (1) Destruction of the articular cartilages, without the supervention of ankylosis, will always justify operative interference by excision. The constitutional condition will probably not then have advanced to hectic and emaciation. But the state of the general health should primarily determine the necessity for excision in all cases, and not any arbitrary consideration of the period of the disease and the condition of the joint. Whenever, therefore, the general health is manifestly failing, whatever may be the stage of the hip-joint disease, excision should be resorted to, and without further delay. This guiding rule was strongly urged and clearly illustrated by Mr. Hancock in his recent lectures at the Royal College of Surgeons. On the other hand, the most extreme state of constitutional exhaustion, previous to the operation of excision, may be followed by recovery after removal of the diseased bone—as the successful results in my own series of hip-joint cases, 1, 2, 4, and 6, clearly show.

- (2) Osseous ankylosis with malposition of the limb will not justify the peril of attempted excision. Section of the neck of the femur is practicable, whereby the limb can be brought down to a straight position. This principle of operation was lately practised in a case by Mr. W. Adams, and successfully.

- (3) The extent of bone diseased may be considerable, and involve both the femur and acetabulum. In the femur the diseased portion may include the head, neck, great trochanter, and shaft, entering even into the medullary canal. In the acetabulum the diseased portion may include the whole floor of this cavity, and even extend to adjoining portions of the ilium, pubes, and ischium. Neither of these conditions of extensive osseous disease prohibits excision; but the acetabulum not unfrequently recovers itself when the diseased head of the femur has been removed from further contact and attrition.

- (4) Dislocation is unfavourable for excision, as implying an advanced stage of the disease constitutionally. The significance of this local condition will therefore diminish in proportion to the absence of marked hectic and emaciation.

Operation.—Excision of the hip-joint was originally proposed by White, of Manchester, in 1769; but the operation was first performed by Schmalz, of Pirnie, Saxony, in 1816, and first performed in this country, and for the second time in Europe, by Anthony White, of the Westminster Hospital, in 1821. It was repeated by Hewson, of Dublin, in 1823, after which period the operation fell into disuse until its revival by Sir William Ferguson in 1845. Since that period

it has been performed by many surgeons, and in a large number of cases.

The hip-joint, deeply placed owing to the neck of the femur, is reached most conveniently by a T-shaped incision; the vertical line, perhaps slightly curved, being made from just above the great trochanter downwards on the shaft to about three inches or less in extent, and the transverse line about half that extent on the summit of the longitudinal incision. The very limited extent of this latter incision avoids the femoral vessels anteriorly, and the crural nerve posteriorly. In disease of the joint, with perhaps consequent dislocation backwards on the dorsum illi, and wasting as the result of long-standing disease, these incisions seem to be almost invited, so prominently does the trochanteric portion of the femur abut under the integument. By detaching the integument on either side of the vertical incision, keeping the knife turned towards the femur, especially on its inner side, the subjacent portion of femoral shaft is exposed; then, sinking the knife vertically in the transverse incision, just above the trochanter, the attachment of muscles thereto is divided, so that the finger can be readily passed down to the joint and its state ascertained. The capsular ligament will generally have given way or entirely disappeared. To turn out the remnant head of the femur for excision it may be necessary to adduct and evert the limb, when, with a touch of the knife on the bone, the round ligament yields and the head starts from its socket. Or this ligament also may have disappeared, and the head and neck of the femur be so reduced, and the acetabulum so patulous, from more advanced disease, that the bone can be readily dislodged and hooked out with the finger. In a third class of cases dislocation backwards has taken place. In any case, however, adduction of the limb across the opposite thigh presents the bone for application of the saw; and then the diseased portion is removed by one or more successive slices, the integument on either side being protected by a curved spatula. The chain-saw may be used by those who prefer it. A gouge may be used to finish off the femoral excision, instead of unnecessarily removing any healthy portion of the trochanter, if that be left, or of the adjoining shaft. The acetabulum should be scraped rather than gouged, to remove any carious or denuded portion; or more extensive pelvic excision may be necessary, and has proved successful. But superficial caries, acetabular or pelvic, will often recover itself, the former having been maintained by constant attrition of the femoral head. Any hæmorrhage is easily arrested by torsion. I have never had occasion to apply a single ligature in any hip-joint excision.

Excision of the trochanter major may occasionally prove sufficient, caries of this portion of the femur existing without disease of the hip-joint. I have had one such case, and with a successful result.

The *after-treatment* of excision, whether of the hip-joint or of the great trochanter alone, is very simple. The limb may be laid straight in bed, and retained in position only by a small side pillow or roller sand-bag, without absolutely fixing the thigh. Or a long splint may be applied, extension being made from the opposite thigh, as recommended by Sir W. Fergusson. Of these two modes of after-treatment I prefer the former, especially for the joint-operation. The section-end of the femur is drawn up by muscular action, and hitches just above the acetabulum, which, having been generally more or less superficially carious, is thus left to recover itself, undisturbed by any attrition of the femoral end of bone; while a new and firmly fibrous movable joint forms where the end of bone rests above the acetabulum. There is little or no tendency to displacement after hip-joint excision, and the slight extra shortening which results from thus leaving the limb to itself is unimportant compared with the advantages in regard to the acetabulum, and the formation of the best kind of new joint requisite for the functional use of the limb in progression, as well as for support. All my cases were treated in this way, and with perfect success.

Results.—(1) In relation to life or mortality. In 111 cases collected by Dr. Hodges of unrecorded conditions of operation, 56 recovered, 53 died from the combined effects of the operation and the previous disease, and in the remaining 2 cases amputation was resorted to. Thus about 1 in 2 died—a very high mortality. But Mr. Hancock presents the following very interesting results as to the

mortality with reference to certain *guiding conditions* of disease for operation:—The *acetabulum*, in a healthy state, gave a mortality of 6 in 18 cases, or 33 per cent. On the other hand, *acetabular disease* has had more favourable results of operation. Of the 10 cases in which perforation had taken place, 6, or 60 per cent., recovered; 2 only, or 20 per cent., died. Of the 4, in which not only perforation existed, but abscess also within the pelvis, 2 recovered, 2 died,—50 per cent. either way. Of the 3 in which the acetabulum was trephined for the evacuation of matter from the pelvis, 2, or 66 per cent., recovered; 1, or 33 per cent., died. Therefore, in the whole 20 of these apparently most unfavourable cases for excision, the mortality was only 5, 1 in 4, or 25 per cent. *Dislocation* of the head of the femur having taken place, the percentage of recoveries was actually 46, against 23 where it had remained in its socket; the total number of cases compared being 143. Of my own 8 cases of hip-joint excision, in 4 there was dislocation, and they all recovered equally with the 4 in which dislocation had not occurred.

Another equally large series of cases—112, British and foreign—has been collected by Dr. R. R. Good, late surgeon in the Confederate American army. This series is the more complete as it embraces the most *essential particulars* respecting excision of the hip-joint for disease, both in regard to its mortality and the state of the limb. We are thus enabled to take a commanding view of the whole subject; and in order to observe the results and their relationship more clearly I have tabulated them.

Tabular view of 112 cases of hip-joint excision, British and foreign; period 1860-68.

Collection of Cases by Dr. R. R. Good.

Number of cases, 112.

Recoveries, 52, or 46.43 per cent. Deaths, 60, or 53.57 per cent., caused by exhaustion, 22; phthisis, and progress of the disease, 10; pyæmia, 5; caries of the pelvis and purulent discharge, 4; diarrhoea, 3; exhaustion, with rapid pulmonary congestion, 2; tubercular meningitis, tetanus, diphtheria, amyloid degeneration of the organs, diffuse phlebitis of the limb, osteo-myelitis, hæmorrhage, acute necrosis of the femur, nervous collapse and pneumonia, each 1.

Disease recorded in 29 cases.—Scrofula, 3; 2 deaths, or 66.67. Cold, 4; 1 death, or 25.0. Injury, 20; 4 deaths, or 20.0. (Two cases not included.)

Duration previous to operation, recorded in 58 cases.—Average duration, 2 years 3 months. In *acute* cases, or before 7 months: of 9 cases, 7 deaths, or 77.77. In *chronic* cases, or 2 years or more: of 30 cases, 10 deaths, or 33.33—a balance in favour of chronic disease of 44.45.

Age in the 52 recoveries, average, 11 years; the extremes were 2 years and 58 years. Age in the 60 deaths, average, 14 years; the extremes were 3 years and 40 years. Age from 2 years to 12 years, 59 cases; 24 deaths, or 40.67. From 12 to 20 years, 25 cases; 15 deaths, or 60.0. From 20 to 58 years, 17 cases; 13 deaths, or 76.47.

Sex: 79 males; 30 females; (in 3 sex unrecorded.)

Bone excised, recorded in 105 cases.—(a) Femur: Section above great trochanter in 49 cases; 30 deaths, or 61.23. Section below great trochanter in 56 cases; 27 deaths, or 48.21. A balance in favour of section below of 13.01. (b) Acetabulum—Diseased in 72 cases, or 64.28; deaths 39, or 54.16. Abscess of pelvis, recorded in 6 cases; 2 deaths. Perforation in 11 cases (of the 72); 6 deaths, or 54.55. Perforated surgically in 5 cases (of the 72); 1 death, or 20.0. Gouged in 33 cases; 15 deaths, or 45.45. No interference in 6 cases; 5 deaths, or 83.33.—*Healthy* in 14 cases; deaths 7, or 50.0. As compared with the mortality of diseased condition, 54.16—a balance of only 4.16 in favour of healthy condition. Dislocation, recorded in 17 cases; 6 deaths, or 35.29. As compared with non-dislocation in 93 cases; 52 deaths, or 55.92: a balance of 20.63 in favour of dislocation.

Countries.	Cases.	Deaths.
Germany ...	34	22, or 64.71
England ...	32	11, or 34.37
America ...	29	13, or 44.83
France ...	14	12, or 85.71
Russia ...	3	2
	112	

Author's Collection.

1. Charing-cross Hospital; period, 1862-70. (Per Mr. Hancock.) Number of cases, 15; recoveries, 13; deaths, 2.
2. Royal Free Hospital; period, 1863-70. Number of cases, 11; recoveries, 10; deaths, 1.
3. King's College Hospital; period, last five years. (Per House-Surgeon.) Number of cases, 10; recoveries, 9; deaths, 1, six months after operation from tubercular meningitis.
4. London Hospital; period, last five years. (Per Mr. J. McCarthy.) Number of cases, 10; recoveries, 4; deaths, 5; 1 progressing favourably.
5. St. Thomas's Hospital; period, 1866-70. (Per Mr. F. Churchill.) Number of cases, 8; recoveries, 1; deaths, 5; 2 under treatment.
6. Westminster Hospital; period, last five years. (Per Mr. F. Mason.) Number of cases, 6; recoveries, 6.
7. Guy's Hospital; period, 1864-69. (Per Mr. T. Bryant, from Dr. Steele, superintendent.) Number of cases, 6; recoveries, 5; deaths, 1.
8. Liverpool Royal Infirmary; period, last five years. (Per Mr. W. J. Cleaver.) Number of cases, 4; recoveries, 3; deaths, 1.
9. Great Northern Hospital; period, last five years. (Per Mr. J. Willis.) Number of cases, 3; recoveries, 3.
10. Chalmers' Hospital, Edinburgh; period, last six years. (Per Mr. P. H. Watson.) Number of cases, 3; recoveries, 1; deaths, 2.
11. St. Mary's Hospital; period, last five years. (Per Mr. Gascoven.) Number of cases, 2; recoveries, 2.
12. Royal Albert Hospital, Devonport; period, last five years. (Per Mr. W. P. Swain.) Number of cases, 2; deaths, 2.
13. Royal Sea-bathing Infirmary, Margate; period, last five years. (Per Mr. J. E. Clouting.) Number of cases, 1; deaths, 1.
14. Royal Infirmary, Edinburgh; period, 1865-69. (Per Mr. P. H. Watson.) Number of cases, 1; deaths, 1.
15. St. Bartholomew's Hospital; period, 1866-70. (Per Mr. Callender.) No cases.

Taking the results of the preceding collections of cases, three general conclusions may be established respecting the rate of mortality from hip-joint excision for disease:—1. In different countries a very different mortality, being highest in France, and lowest in England. (2) An average death-rate of 1 in 4 or 5 (about the same as that of knee-joint excision for disease). (3) Very different death-rates in the hands of individual surgeons, British and foreign—varying from no mortality to 1 in 2 or 3, 1 in 5, 2 in 3, 4 in 5, or even total mortality; thus differing far more extremely than the mortality of knee-joint excision for disease. It can scarcely be doubted that the conditions of disease, both local and constitutional, in the cases selected for excision, have mainly determined this different resulting mortality; although the mode of performing the operation and the after-treatment have also been influential.

Mortality compared with hip-joint amputation.—In 42 cases of amputation at the hip-joint for chronic disease, 24 recovered, and 18 died, a mortality nearly as high as 1 in 2. It will be observed that the total number of cases here referred to is small, in proportion to the number of hip-joint excisions for disease. But the whole number of hip-joint amputations hitherto published is only about 126, including the cases of injury and disease.

(2) *State of the Limb.*—In Dr. Hodges' collection of 111 cases, 56 recovered, "with more or less useful limbs." In Dr. Good's collection of 112 cases, of the 52 recoveries, 42 patients could use the limb, and in the remaining 10 cases this result was not noted. The 42 cases are divided as follows:—

19	could walk without support.
9	" with the help of a stick.
1	" " two sticks.
1	" " " a splint.
1	" " " a crutch.
2	" " " two crutches.

In 9 the manner of walking is not specified.

In 40 of the 52 recoveries it was specially noted that the limb supported the weight of the body. In one case crutches were necessary for this purpose, and in the remaining 11 cases this particular was not noted. The movements in the new joint were reproduced in 28 cases, and in only 1

immovable ankylosis was the result. The ultimate period when the patients were seen after operation varied from three months to five years. Their cure was ascertained, in most cases, after two or three years. Of the 52 cured, the average period of known permanent result was nineteen months and four days. In my own 8 cases, the shortest period of known permanent cure was two years and a half; and the longest period of known permanent result, five years.

The average duration of the period of recovery has not generally been noted in the records of cases. In Dr. Hodges' collection of 49 cases wherein this particular was observed the average was 230 days. In my own cases the average period of union was three months. In extreme cases of hip-joint excision—extreme as to the extent of bone removed—the resulting state of the limb may yet be successful. It was so in my own two such cases, after removal of the upper end of the femur, to four inches and four and a half in length, with one inch more of cancellated bone, and entering the medullary canal in both cases; and also in two cases of acetabular and pelvic bone-disease, after removal of the affected portions of bone by Mr. Hancock and Mr. Erichsen respectively,—the patients recovering, and with useful limbs.

Section, rather than excision, of the upper end of the femur is a procedure which has been devised, and practised in a few instances, for failure of the natural cure—osseous instead of ligamentous ankylosis of the joint, with useless mal-position of the limb, as by flexion on the thigh and abduction. This condition, calling for operative interference, is comparatively rare.

Section of the femur has been performed, either between the trochanters, or in the neck, about its middle, and with successful results. The one line of section was originally proposed and performed by Dr. Rhea Barton, of Philadelphia, in 1826. A crucial incision was made over the great trochanter, seven inches in length and five inches in the horizontal direction. A fine saw was introduced, the femur divided transversely between the trochanters, and the limb brought down. The result was successful. An artificial movable joint was formed, but seven years afterwards ankylosis ensued, and two years subsequently the man died of phthisis, nine years after the operation. A similar operation in situation—between the trochanters—but an excision of a transverse plate of bone of an elliptical form upwards, by means of the chain-saw, was performed by Dr. Lewis Sayre, of New York, in two cases, both in the year 1862. The object of this procedure was to form a false joint of a ball-and-socket character. The first case was completely successful at the end of six months, the patient, aged twenty-six, being able to stand on either leg without crutch or cane; and upwards of five years afterwards the result was permanent; the man could move and walk with practical agility. In the second case the operation was followed by abscess and necrosis; but the patient, a female aged twenty-four, died, apparently of tubercular pneumonia. Post-mortem examination showed that an artificial joint had formed. The articular surfaces were tipped with cartilage, and provided with a synovial membrane, and there was a complete capsular ligament.

Subcutaneous section, and higher up—in the neck of the femur,—was first proposed and practised by Mr. William Adams, in December, 1869. The object of this procedure was to procure an artificial movable joint; that result having failed, osseous ankylosis, but with the limb in a straight position, was sought to be established and obtained. A long tenotomy knife was entered a little above the great trochanter, and passed down to the neck, the capsular ligament was opened freely, and the neck of bone divided by a narrow, fine saw, applied from before backwards. The tendons of the long head of the rectus, the adductor longus, and tensor vaginae femoris muscles, were then divided, the limb was brought down straight, and fixed by a long interrupted Liston's splint. Five months after this operation and subsequent treatment, the man, aged twenty-four, was exhibited at this Society, where he walked about the room without any assistance—a successful result which has since become permanently secured.

This operative procedure has since been practised successfully in three other cases, by Mr. T. R. Jessop (of Leeds), Mr. F. W. Jowers (of Brighton), and Mr. Furneaux Jordan (of Birmingham). The fact of four consecutively successful

cases having occurred goes so far to establish subcutaneous section of the neck of the femur, as a surgical procedure for osseous ankylosis of the hip-joint, with malposition of the limb.

ON THE ORIGIN OF CANCER.

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(Continued from page 42.)

It will be necessary to enter at length on the subject of the dissemination of cancer. We may start from the recognised physiological fact that every tissue has its own special power of reproduction. The blood brought to the tissues is the same; the tissue uses what it requires, and produces its like. I do not enter on the question of where, in the tissue, the power resides—whether in muscle alone or in cell. The experiments of Ollier have demonstrated that the scrapings of the soft inner layer of periosteum will form bone-nodules in whatever tissue they may be implanted. The recent practice of transplantation proves that epithelial cells planted on granulations will germinate and form layers of new epithelium. It is in tissues of low vitality and great tenacity of life that such experiments succeed; but they are sufficient to prove the fact. Hence we should expect that in cancer this growth from transplantation would be even more likely to occur, as it exceeds other tissues in the low vitality and tenacity of its elements. Intentional experiment has, of course, not been made on the human subject; but unintentional experiments have not been wanting. Several cases are recorded of men, whose wives have had uterine cancer, having themselves been victims to cancer of the penis. Of this I met with another instance only a short time ago. These may be mere accidental coincidences. They probably are, for there is no sufficient proof that cancer may be communicated from one person to another. Further evidence is still required on this point. There is no want of evidence of auto-inoculation. My colleague, Mr. Shaw, attended a patient in whom a pendulous breast, the seat at its lower part of ulcerated cancer, rubbed against the skin of the thorax. At the point of contact cancerous ulceration took place, the intervening skin between this and the fold of the mamma remaining healthy. Dr. Reinecke* has related two cases in which abdominal cancers were tapped, in error, with a trocar, and cancerous growth took place in the abdominal walls along the track of the puncture. Cancer is constantly found in the serous cavities at points opposed to those which have been the previous seat of the disease; and surgeons are familiar enough with the fact that, whenever a cancer is cut into in operation instead of cut out, the neighbouring parts become at once the seat of widespread disease. Dr. Moxon† showed at the Pathological Society a very interesting specimen, in which it was clear that numerous small nodules of epithelial cancer, occupying the lower lobes of the lungs, had been transplanted from a primary growth in the trachea. Dr. Dickinson lately brought a specimen to the same Society, showing numerous outgrowths in the peritoneum from the bursting of a spindle-celled sarcoma into the cavity. Nor does it, I think, admit of doubt that in a case of my own, where encephaloid tumour within the cranium was followed by small cancerous growths at the lowest part of the cerebrospinal sheath, the same kind of migration and implantation had taken place. The fact of the auto-inoculation of cancer and allied diseases is clearly established, and is now generally admitted.

What thus takes place on surfaces has been shown to occur within the tissues. That the absorbents and blood-vessels take up and disseminate cancer is admitted. There is as good evidence that the same may occur in any space through which minute particles can travel. The original observations of Van der Kolk have been confirmed, that dispersed cancer-cells may be found in the connective-tissue spaces of the gland to a considerable distance from the

parent tumour. The same may be found in the connective tissue of fat. If careful sections be made around and beyond the cancer tumour, cells similar to those found in the tumour may be seen clustered here and there, and lying free, in the areolæ of the connective tissue. This occurs in parts which appear to be perfectly healthy, and it shows that we may, and probably do, often believe that in operation we have got beyond the range of disease when in reality these germs have spread beyond our reach. I may recall one case which illustrates this. In that of the patient just referred to as having had encephaloid at the lower part of the spinal cord, the original disease was an intraocular cancer. The eye had been extirpated, and it was believed that the operation had been effected beyond the range of the disease. But the cancer rapidly returned; and on carefully examining the stump of the optic nerve in the eye which had been removed, Mr. Hulke found that lying in the meshes of the delicate connective tissue, between the outer fibrous sheath of the nerve and the mass of nerve-filaments, were small clusters of cancer-cells, and these were traced up to the point of section of the nerve. Of course they did not end there, but extended into the nerve beyond the point of section; and hence the speedy return. The nerve, by it remarked, appeared to the naked eye perfectly healthy.

If now we look to clinical cases, we constantly find evidence of the fact of this travelling of the cancer elements to a distance from the parent tumour. A very common phase of cancer is this:—A tumour is seated in the mammary gland, and the skin becomes adherent and puckered. The tumour does not tend to grow faster than is usual; but at some distance from it, from half an inch to three or four inches, small hard tubercles will be developed in the skin. There may be only one or two at first. The surrounding skin will appear to be soft and natural. By and by more will appear, and will perhaps coalesce and form broad hard plates. No surgeon would ever think of operating when these outlying tubercles have appeared. He would know that the disease would return at once in the seat of operation.

It may be said that I am begging the question in taking this fact as illustrating the dissemination of cancer from a parent stock. When, however, it is considered that the fact of dispersion is proved in the dead-house and by the microscope, that primary scirrhus of the skin is extremely rare, that here we have it developed in a number of separate nodules around an original tumour, I imagine that no one would be disposed to deny that these outgrowths were from germs thrown off from that original tumour.

We have, then, three channels through which cancer may diffuse itself—the lymphatic system, the vascular system, and the interstitial system of the various tissues; and through one or other of these channels we may conceive that any part of the body may be sooner or later infected by the migration of some of the cancer elements. Even admitting this, however, there are difficulties in the way of accepting the doctrine that cancer is at one period of its life a purely local disease. How account for the simultaneous development of cancerous growths in various parts of the body? Why the almost constant return after removal? Why should an operation give immunity for years, and then the disease return? Why should cancer sometimes retrograde and disappear, especially when another disease is making progress?

The simultaneous development of multiple cancerous tumours has been already alluded to. Evidence is wanting of the existence of such a case. Indeed it is scarcely capable of proof; for how can it be shown that in no part of the body was there a tumour existing before these multiple ones appeared? The rapidity with which melanosis and encephaloid will be disseminated when once a tumour has formed is well known. I have mentioned a case* in which, on the removal of a solitary encephaloid tumour on the sole of the foot, a host of similar tumours were rapidly developed in the whole limb and lymphatic glands. Until some undeniable case of the multiple simultaneous development of primary cancer can be produced, it is needless to argue the point; more especially as, even then, it would be no conclusive proof of blood-poison, any more than would a simultaneous eruption of warts.

The next question is—why the almost constant return after removal? The conditions of cancer, viewed by the

* Virchow's Archiv, 61 Band, 3 Heft.

† Pathol. Trans., 1870, p. 28.

* Brit. and For. Med.-Chir. Review, Jan. 1869.

light of other recurrent disease, give us a solution. Enchondroma, fibroma, &c., we find, return after removal in distant parts. We have the evidence that these structures may be carried by the lymphatics or bloodvessels, and when arrested at any point may grow. If this may occur in the case of structures so coarse (if one may use the expression) as those named, how much more likely would be its occurrence in connexion with a structure the very essence of which is absence of coherence of its elements. It may be illustrated by the difference we see when a recurrent non-cancerous growth and a true cancer are cut into. In the former case, in order to get at any of its component parts for microscopic purposes, we must cut off or scrape up a portion of the tissue. In the latter, the cells, which constitute the active part of the cancer, exude on the cut surface, which presents a creamy character. Nothing is more easy to conceive than that the elements which compose this creamy matter, lying free and without limitary membrane in the midst of soft tissues, would be taken up by them, by their lymphatics or bloodvessels or connective-tissue spaces, and be carried anywhere and everywhere through the body. Principally, one would expect to find them within the range of the primary tumour, on the same side of the body; and so, in reality, we do. But there is no real limit. Just as we find that when a paper of pins is swallowed they may course through the body to any extent, upwards or downwards or in any direction—so, only infinitely more readily, might these minute germs of disease travel to any extent or in any direction. The differences observable in the various forms of cancer offer a support to this view. Take the four forms of rodent cancer, epithelioma, scirrhus, and encephaloid. It is, I am well aware, a disputed point whether rodent ulcer is really cancerous. I believe it to be so, as the structure of the deposit around the ulcer is like that of epithelioma, and on account of its strong tendency to recurrence. Its elements are, however, very localised—it does not travel usually even to the neighbouring glands. Epithelioma, of which the elements are grosser and more coherent than those of the higher forms, will affect the neighbouring glands, but will not readily pass beyond them, though it may do so, and give rise to secondary growths, just as will scirrhus. Scirrhus readily affects the glands, and will contaminate distant parts, but with nothing like the rapidity that is often seen in encephaloid, the structure of which is far softer, and the fluid more abundant, and laden with minute elements, nuclear and granular; yet it is found that of all the true cancerous diseases encephaloid is the one which may go on to spontaneous cure or to long quiescence. This would appear to militate against the view that cancers contaminate in proportion to the fluidity of their contents. But an explanation is found in this: encephaloid is often the least infiltrating of cancers; it pushes the tissues aside, it forms connective-tissue capsules around it, and hence in a large number of cases it is not brought into connexion with the tissues, as scirrhus is, so as to be disseminated amongst them. And this very fact, that the most malignant of cancers, the most rapidly growing, and the most destructive when it is disseminated, is often encapsuled, often non-infiltrating, and often less venomous than other forms, confirms the notion that it is not to constitutional but to local conditions that we must attribute the malignancy of the disease.

The laxity of tissues and the activity of vital action going on in them exercise a marked influence on the dissemination of cancer. In young persons—in those in whom there is much fat—tumours grow more rapidly, and are more quickly and widely disseminated. I have removed cancers from the midst of abundant fat, where minute points of disease have been traceable in all directions around, to the distance of from two to three inches. Surgeons know that they cannot take the fat away from around a cancerous breast too widely. Surely no one would consider these as evidences of blood-disease setting up cancers *de novo*, considering that the fat is not a tissue in which primary cancer is formed.

(To be continued.)

THE Town Council of Longton, Staffordshire, held a conference recently with the medical practitioners of the town as to the best mode of suppressing the small-pox. It was decided to make a house-to-house visitation with the view of persuading people to be vaccinated or revaccinated.

ON THE ETIOLOGY OF TYPHOID FEVER.

By P. W. LATHAM, M.D.,

FELLOW OF DOWNING COLLEGE, CAMBRIDGE; PHYSICIAN TO ADDENBROOKE'S HOSPITAL.

IN THE LANCET of July 1st the following account, on the authority of Dr. Flint, is given of the propagation of typhoid fever; and an annotation is appended that "it would scarcely be possible to devise an experiment which would better test the communicability of typhoid fever by contagion than this":—

"A stranger, who had been sick for several days, stopped from off a stage-coach at a tavern in a little village eighteen miles from the city of Buffalo called North Boston, and, after a few days, died. The village consisted of nine families, closely grouped together around the tavern. All these families, save one named Stearns, used water from a common well, and visited the sick stranger at the tavern. Prior to the arrival of this stranger there had been no typhoid fever there, but twenty-three days after his arrival a member of the landlord's family was taken down with the disease. Other cases quickly followed, and in a month more than one-half the population, numbering forty-three, had been affected, and ten had died. Stearns' family, being on ill terms with the tavern-keeper and most of the other families, who were his tenants, did not visit the sick stranger, and had been forbidden the use of the common well, and as they alone, of all the families immediately surrounding the tavern, escaped the disease, he was accused of poisoning the water of the said well—a charge which chemical analysis showed to be entirely unfounded."

Most certainly these facts conclusively prove the communicability of typhoid fever, but I hesitate to accept them, though with considerable diffidence, as any proof that the disease is *directly contagious*. An equally remarkable instance, which I shall presently relate, of the spread of the disease came under my own observation three months ago, and seemed decidedly to prove that the disease had spread by personal contact; further investigation showed the contrary.

The theory which my own experience leads me to support is as follows:—1. That *almost* invariably the disease proceeds from a special poison contained in the alvine excreta. 2. That this poison is *directly* introduced into the alimentary canal, either in the food or, most generally, in the water drunk. 3. That it is not yet proved that the poison is contained in, or disseminated by, the exhalations from drains, privies, &c., or that it can be absorbed into the system through breathing air contaminated with such exhalations.

The epidemic at North Boston lends support to my first point, and Dr. Flint himself says: "The fact that all the families in which the disease prevailed were supplied with water from a common well, and the fact that the family in which no case occurred did not obtain water from this well, afford ground for supposing that a virus derived from the excreta was conveyed in the water drunk." Though the stranger died within a few days after coming to the tavern, it was not until twenty-three days after his arrival that the first case occurred. This is a long period of incubation, assuming that the disease was contagious, but not at all too long if we assume that the cesspool or drain into which the excreta were poured was leaky, and so allowed the poisonous material gradually to filter through the ground into the well.

The epidemic to which I have referred above as coming under my own observation occurred at Harston, a small village about five miles from Cambridge. Between the 1st of January and the end of April of the present year, no less than twenty patients were placed under my care in Addenbrooke's Hospital suffering from typhoid fever. A large proportion, and those the most severe cases, were sent from Harston, where I learnt that whole families were being affected, and several deaths had occurred. I wrote to my friend Mr. Trestrail, asking him to investigate what I had heard respecting the introduction of the fever into the village, also for information about the wells and drainage, stating my belief that the disease was spreading through contaminated drinking water. He replied: "I find that you are correct in stating that there is a distinct history of the introduction of typhoid fever into this village. It ap-

pears that a man who had barely recovered from the fever came as a lodger to Mrs. P—, who resides in the village, and whose child was subsequently attacked. The second case was that of a Mrs. C—, a patient of mine, who had been in the house of Mrs. P— occasionally. Mrs. C—'s sister was afterwards taken ill with typhoid fever. The next case was that of a child who had also been to see the child P— frequently. The next two cases were persons living very near; and then cases around them. Nearly all the cases have been near each other, where the houses are overcrowded—no gardens nor any proper drainage. It is usual for these persons to drink water from one of the springs. Now these springs are continually running at the rate of many gallons per minute; they come from upwards of 200 feet below the surface, and the water is conducted up from this distance by tubes. It is therefore highly improbable that these springs can become contaminated."

Here, then, we have the disease introduced into a district and spreading rapidly, the first persons attacked being in direct communication with each other, and the drinking water not liable to contamination. Evidently a clear proof of its contagiousness! But wait. In a subsequent letter Mr. Trestrail writes: "I have discovered the cause of the spread of the fever—namely, there is running directly through the village a stream of water, into which nearly all the drains from the houses enter. The water of this stream has been generally used by the poor for cooking purposes, as the springs are at some little distance from their houses. Since the attention of the people has been called to the great importance of using only spring water I have not heard of any fresh case of fever in the village."

The outbreak of typhoid fever last year in Islington is strongly corroborative of the view that the disease spreads in the manner I have mentioned. As stated in THE LANCET for Nov. 26th, 1870, at a certain dairy the milk cans were washed in water taken from a tank communicating with the drains, and a little water of course remained behind: there was no charge of gross admixture of water with the milk. The dairyman himself died of typhoid, and, of 140 families supplied with the milk, 70 contracted the disease. The majority of the cases occurred in close proximity to the dairy; but "in one long road a mile and a half from the dairy there were three families thus supplied with milk; two of these had typhoid in them, and they were the only houses in which the malady occurred."

Another point against the contagiousness of the disease is the rarity of its infecting, in hospitals, the physicians, nurses, or the other patients. I have, however, seen this happen, and I have no doubt that such cases have led to the assumption that the poison is oftener introduced by way of the trachea than by way of the œsophagus; but, to my mind, the simple explanation is, that after examining the rose spots on the back or abdomen, or after auscultating the chest, the hands of the physician have been imperceptibly soiled by contact with the skin or linen; as he continues his round he perhaps unthinkingly brushes his hand across his lips, and so the poison finds an entrance. With respect to the nurses, there is sometimes, after removing the soiled linen of the patients or the bed-pans, not that scrupulous attention to cleanliness which is so essential, and thus, eating or serving out the diets of other patients with unwashed hands, some little speck of fever-poison is introduced with the food. I say "in hospitals"; for in private houses the nurses and friends are often exposed to the same influence which caused the illness of the patient, and so may be infected, but not necessarily through the patient.

I would, in conclusion, make two practical suggestions with regard to the treatment of typhoid-fever patients:—1. That every evacuation, as soon as passed, should be disinfected with carbolic acid. 2. That no surface-well water or pump water, whether boiled or not, should be used in a district where there are any cases of typhoid fever, but that all drinking water should be obtained from some spring not liable to contamination. I need not say that this precaution is of the greatest importance to the patients themselves. I am quite sure that neglect of it gives rise to many of the relapses in typhoid fever cases, perhaps more frequently than any other cause except the too early administration of solid food. And with respect to this last point, though I am now going beyond the subject of my paper, I would just point out the supreme importance of

the thermometer in telling us when solid food may safely be given. It should not be given until the temperature of the patient at 8 A.M. and 6 P.M. has remained, for two days at least, about the normal point, or between 98° and 99° F. The patient's tongue may be clean and moist, the appetite ravenous, the patient crying out for food, and yet the typhoid ulcers still unhealed. The thermometer alone will tell us this; it will probably show at this stage an evening temperature of about 101° F., with a morning temperature 1° to 2° lower; and a mutton-chop now might be sufficient to induce fresh irritation of the intestinal ulcers, fatal hæmorrhage or perforation. It is only after the evening temperature has remained, on at least two successive days, below 99° F. that we can be sure the ulcers have healed, and that solid food may be given without risk. Out of the twenty patients mentioned as admitted into Addenbrooke's Hospital only one died; but had not careful thermometric observations been made, the mortality would, I think, have been greater. In two who recovered there was, after the fortieth day of the disease, considerable hæmorrhage from the bowels, and this after the tongue had become moist and clean, the motions perfectly formed, and the patients for some days had been bitterly complaining at only being allowed beef-tea, milk, and wine. The evening temperature still rose as high as 101° F., and no solid food was given. If it had been I have little doubt it would have turned the scale in each case against the patient's recovery.

Cambridge, July, 1871.

A CASE OF EXCISION OF HALF THE LOWER JAW.

By WM. THOMAS, M.B. LOND., F.R.C.S.,
DEMONSTRATOR OF ANATOMY, QUEEN'S COLLEGE, BIRMINGHAM.

R. P—, aged thirty-one, a milkman. With the exception of the illness produced by his tumour, has always enjoyed good health. Seven years ago he hurt his jaw in trying to untie a knot in a hayband with his teeth. The pain of the injury passed off in a few days, but soon afterwards a little lump appeared on the left angle of the lower jaw; this gradually increased until it had the appearance shown in Fig. 1. The

FIG. 1.



From a photograph taken shortly before the operation.

growth of the tumour was at first slow, but much more rapid during the six months previous to removal. It encroached but little on the cavity of the mouth, the enlargement being for the most part on the outer and under surfaces and in front of the ramus. The molar teeth were gradually pushed

out of their sockets, and those which remain are considerably loosened. Abscesses formed on two occasions in the tumour: once about four years ago; and again in November, 1869, when he first came under my notice. On the last occasion, in opening an abscess at the most dependent part of the tumour, the knife entered a large cyst, from which there was an abundant discharge of a tenacious glairy fluid mingled with pus. Except on these occasions, when it was inflamed, the growth was quite painless; and there was no tenderness or enlargement of the cervical glands.

Jan. 9th, 1870.—The patient being placed under chloroform, the left lower incisor was extracted. An incision was then made from the condyle of the jaw along the posterior border of the ramus and underneath the tumour, terminating half an inch from the margin of the lower lip in the

FIG. 2.



From a photograph taken three months after the operation.

median line. The flap thus marked out was reflected upwards from the tumour with the masseter and structures upon it, and the jaw, being cleared in front, was divided with the chain saw close to the symphysis. The tumour

FIG. 3.



Microscopical appearance of a shreddy section (1-in. object).

was then drawn outwards, and the mucous membrane of the mouth separated from its inner surface. The ramus of the jaw and the part of the tumour connected with it were

now divided with the chain saw, as the form of the tumour interfered with the dissecting out of the condyle, which was then seized with lion forceps, and removed by a few touches of the knife. The divided mucous membrane of the mouth was (at the suggestion of Mr. Ross Jordan) stitched together, and the flap of skin laid down and united by numerous silver-wire sutures. No dressing was used, but a little cotton wool was laid over the wound. The patient rapidly recovered, and a week after was sitting up with the wound entirely healed.

The mass removed weighed 23½ ounces. On section, it was found to consist of a thin bony envelope (the dilated tables of the jaw) surrounding a mass of pinkish-white substance a little firmer than brain. In its substance were two cysts.

During the operation I was kindly assisted by Mr. Furneaux Jordan, Dr. Savage, and Mr. Ross Jordan; to all of whom my thanks are due.

The appearance of a section under the microscope is shown in the sketch, Fig. 3.

I have purposely withheld this case from publication, that I might be able to say something of the subsequent history. At the present time (seventeen months after the operation) the patient is in excellent health, and presents no sign of recurrence of the disease.

Birmingham, May, 1871.

Reviews and Notices of Books.

A System of Surgery, Theoretical and Practical, in Treatises by various Authors. Edited by T. HOLMES, M.A. Cantab., Surgeon and Lecturer on Surgery at St. George's Hospital. Second Edition, in Five Volumes; with Illustrations. Vols. IV. & V. London: Longmans.

THE two volumes completing this work have appeared with commendable punctuality; and comprise, in the fourth volume, the Diseases of Locomotion, of Innervation, of Digestion, of Respiration, and of the Urinary Organs; and, in the fifth volume, the Diseases of the Genital Organs, of the Breast, Thyroid Gland, and Skin, Operative Surgery, with an appendix comprising essays on the Surgical Diseases of Children, Regional Surgery, Hospitals, and Instruments. This latter volume contains also a valuable article of some fifty pages by Dr. Burdon-Sanderson on the Process of Inflammation, in completion of Mr. Simon's article in vol. i.; and to this we shall again refer. The space at our command will not admit of our going in detail through the essays; but we may say generally that they are all improved, some by additions and others by remodelling, and that the number of illustrations has been very largely increased. We shall, however, endeavour to notice the most salient points in the volumes before us.

The article on Diseases of the Nose, by the late Mr. Ure, has been rewritten and much added to by Mr. A. Durham, who has given the results of modern research and treatment in a troublesome class of diseases very completely. Mr. Salter's essay on Surgical Diseases connected with the Teeth, and Mr. Pollock's article on the Mouth, &c., leave little to be desired; and Mr. Durham's brief notice of the Laryngoscope in the former edition has been expanded into a treatise on Diseases of the Larynx. The essays on Hernia by Mr. Birkett, on Diseases of the Rectum by Mr. H. Smith, on Diseases of the Urinary Organs by Sir H. Thompson, on Lithotomy and Calculi by Mr. Poland, and on Lithotripsy by Mr. Charles Hawkins, were so complete and full in the last edition as to require little emendation; that, however, they have received at their respective authors' hands, and they form now most trustworthy guides to practice in their respective departments.

The fifth volume opens with Mr. Hutchinson's essay on the Surgical Diseases of Women, and Mr. Humphry's article on Diseases of the Male Generative Organs, both of which

are as full and satisfactory as the space allotted will permit. The latter is especially rich in references to the literature of the subject—a point but little attended to in many of the essays. Mr. Henry Lee's essay on Gonorrhoea is the work of a master; and we venture to quote from it one pregnant sentence:—"The writer firmly believes that, when used with ordinary care and judgment, injections are among the very best and most reliable agents we possess for the cure of gonorrhoea."

The article on Diseases of the Breast, by Mr. Birkett, is illustrated by some good drawings of tumours of the breast; and in that on general Diseases of the Skin Mr. Naylor has been associated with Sir William Jenner in the place of the late Dr. Hillier. The essay on Local Cutaneous Affections is, as before, from the pen of Mr. Thomas Smith.

In the section on "Operative Surgery," the essays on Anæsthetics and Amputation, by Mr. Lister, are well worthy of his reputation, and the latter is particularly interesting as containing full details of the antiseptic plan of treatment of wounds. The articles on Minor Surgery and on Plastic Surgery appear to us less satisfactory, but this is probably from the necessarily limited space allotted to their respective authors. The article on Excision of Bones and Joints, by Mr. Holmes, is much more complete than in the former edition, and is very amply illustrated with drawings from actual patients and preparations. We may notice, by the way, that Fig. 381, which is taken from the author's work on the "Surgical Diseases of Children," is printed upside down; and this is particularly unfortunate, as the drawing is intended to show the correct line of section of the femur and tibia in excision of the knee. Mr. Holmes discusses the subject of excision of the knee very fully and fairly; but he will pardon us for saying that the main difficulty in the operation is to make a proper section of the femur when tilted up as it necessarily is in the proceeding, and that scarcely sufficient stress is laid upon the necessity of making this section parallel to the condyles and at right angles to the shaft of the bone.

The great novelty in the last volume is the essay on the Process of Inflammation, by Dr. Burdon-Sanderson, supplementing that by Mr. Simon in the first volume, and containing, we have no hesitation in saying, the best account extant of modern physiological research in connexion with this important subject. By the "process of inflammation" Dr. Sanderson understands "the succession of changes which occurs in a living tissue when it is injured, provided that the injury is not of such degree as at once to destroy its structure and vitality." He then proceeds to describe the changes which have their seat in the bloodvessels under the heads of (1) disorder of the circulation; (2) exudation of liquor sanguinis and leucocytes (in which the views of Williams, Waller, and Cohnheim are confirmed); (3) stasis; (4) structural changes in the capillaries. Passing on to the changes which have their seat in the tissues, Dr. Sanderson describes the structural changes which occur in the connective and supporting tissues in inflammation, taking the cornea, the vascular connective tissue, and muscle as examples; and next the changes in the inflamed epithelial and glandular tissues. He then investigates the influence exercised by the form and mode of action of the injurious agent on the character of the resulting textural changes, and the direct influence of abundant supply and frequent change of nutritive liquid in stimulating cell-life. The conclusions which Dr. Sanderson draws from his researches are so important that we need not apologise for placing them before our readers as follows:—

"1. In every inflammation which attains its full development the changes which manifest themselves in the inflamed part are of three kinds, distinguished from each other ac-

ording to the organs which are concerned in their production. They are either (1) effects of disorder of the vascular nerves and centre, (2) effects of alteration of the properties of the living walls of the capillaries, or (3) effects of the stimulation of the living cells by transudation of liquor sanguinis.

"2. Of these three orders of phenomena the second only can be regarded as absolutely essential to the existence of inflammation, which may therefore, in the strictest sense, be said to have its seat in and about the veins and capillaries, it being there that the earliest and most constant effects of irritation or injury manifest themselves.

"3. The nervous and vascular effects of local irritation cannot be directly described as successive stages of one process, for the determination of blood to the seat of injury, which is the sole result and, if I may so speak, purpose of the vaso-motor disturbance, has no relation to the local vascular changes, excepting in so far as it tends to make the exudation more abundant. Exudation of liquor sanguinis, although favoured by increased arterial afflux, may occur without it, and as a rule continues after the afflux has ceased. The vascular and textural changes, on the contrary, may be regarded as successive stages of one process, for they are connected by a casual relation—the exudation of liquor sanguinis, in which the former ends, being the determining cause of the latter.

"4. The mode in which an injury changes the living substance of the vascular walls so as to make them permeable to the blood is unknown; the only clue which we have to its character being that afforded by the structural alterations to which it leads in certain organs, and particularly by those which are observed when the process of reparation, attended with the formation of new capillaries, is commencing. From these appearances we are led to infer that the primary change consists in the transition of the material from the formed to the plastic condition; from a state in which it is resistant, because inactive, to one in which it is more living, and therefore more labile.

"In all living tissues the effect of inflammation manifests itself in a modification of the action and properties of individual cells. In cells which form part of permanent structures the protoplasm increases in quantity, and becomes more or less contractile. Subsequently it is converted entirely or partly into young cells, either by cleavage or by endogenous germination."

The Appendix contains, as before, an essay on the Surgical Diseases of Childhood, by Messrs. Holmes, Brodhurst, and Shaw; one on Apnoea, by Dr. George Harley; on Parasites and Venomous Insects and Reptiles, by Mr. Busk; on Surgical Diagnosis, by Mr. Holmes; on Hospitals, by Sir Ranald Martin; and on Surgical Instruments, by Mr. Holmes Cooté. The first and last of these have been rendered much more valuable by the introduction of numerous illustrations, the woodcuts for the latter having been in most cases borrowed from the published catalogues of Messrs. Weiss and Maw. Taken as a whole, the "System" stands unrivalled as an exponent of British surgery of modern times. The component parts are necessarily of somewhat unequal merit; but the whole is satisfactory, and reflects the greatest credit upon its editor, whose powers of arrangement and punctuality are well shown by the rapid appearance of the successive volumes of his *magnum opus*.

MR. RICHARD LEY, M.R.C.S., of South Molton, Devon, has been presented with a handsome tea-service and a dozen dessert knives and forks, as a testimonial from his friends and patients on his retirement from the active duties of his profession. Mr. Ley has filled not only all the medical offices in the district, but likewise all the complimentary appointments that it has been in the power of the neighbourhood to bestow upon him. On recently resigning his post of Poor-law medical officer, the guardians unanimously passed a resolution thanking him for the manner in which he had uniformly performed his duties, and regretting the loss of his services. The testimonial was presented at a public meeting, and the proceedings throughout must have been most gratifying to Mr. Ley, who will carry with him into his retirement the esteem of a large circle of friends and patients.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

Session 1871.

THURSDAY, JULY 6TH.

THE Council met at two o'clock, Dr. Paget, President, in the chair.

PHARMACY AND THERAPEUTICS.

DR. PARKES brought forward the recommendations of the Committee on Education. He proposed, first: "That it is desirable that instruction in pharmacy should be separated from that in therapeutics, and that the former should be attended at an early and the latter at a later period of the medical curriculum." The Council, he said, had great reason to be satisfied with the influence that had been produced by the reports of the visitors of examinations and the report of the Committee on Professional Education in 1869. Almost all the points which had been brought before the licensing bodies had been attended to, and the most important of them adopted. It said a great deal for the power of the Council (considering the remarks that had been made on the subject) that it had influence enough to bring about those important changes. He believed the reason of the success was that the suggestions had really been sensible ones, and had been received in a proper spirit by sensible men on the part of the licensing bodies. It was not necessary to offer any lengthened argument in favour of the proposal now before the Council. It was obvious that instruction in regard to the drugs used in medicine, and the means of compounding them, which was a very elementary matter, should be separated from the higher instruction in regard to their use, which could only be properly understood when the student had gone through a course of physiology, medicine, and surgery. In the report of the Committee of 1869 would be found twelve answers given by experienced teachers on this subject, eight of whom strongly recommended that the instruction in pharmacy should be given at a different period of the medical curriculum from the teaching of therapeutics. There was no teacher in England or in Europe to whose opinion the Council would attach more importance than that of Dr. Christison, who had expressed a strong opinion in favour of the proposed separation. Dr. Aquilla Smith had also expressed a similar opinion. The educational report recommended that the teaching of pharmacy should be somewhat altered and made more practical and tutorial. The recommendation was not introduced into the motion, as the Committee knew that the Council was adverse to giving opinions to the licensing bodies on matters of detail. He believed that it would be sufficient to direct attention to the fact that such a plan was desirable. As a practical illustration, the report contained allusion to a course of pharmacy which was now being carried on at the University of Aberdeen. He held in his hand a detailed report from the professor, Dr. Harvey, which he thought might be usefully put into print. His course had been a great success, and he (Dr. Parkes) believed that Dr. Macrobin would bear him out in saying that the subject had been taught most thoroughly, and in a manner extremely satisfactory to the professor.

DR. CHRISTISON, in seconding the motion, said he felt great interest in reference to the suggested improvement, and he believed he was the first who mooted the subject. He had long seen the defects of the present system. "Materia medica" had formerly a very comprehensive signification, including the natural history and character of medicines, and the mode of preparing them for use, their action, so far as it was known, and the diseases to which they were applied; to which was afterwards added the subject of dietetics as a remedy. For a long time materia medica had that extensive signification; and it continued so to be understood in Scotland, whose universities borrowed the system very much from the Dutch school. The term was not now regarded in the same way; and he was much surprised, on entering upon his present professorship, to find that the London Society of Apothecaries gave it a totally different meaning. The students were required to

attend a course in this subject the first year. Now materia medica, properly understood, could not possibly be studied in the first year. The more important parts of it could only be taken up with advantage at an advanced period. On making inquiries he found, what the shortness of the course had led him to suspect, that it was almost always only a course of pharmacy. It was sometimes argued that the branch of pharmacy having attained such perfection in the hands of pharmaceutical chemists, practitioners might leave the subject unstudied. It appeared to be forgotten that, in many parts of the country, medicines were not to be obtained from a chemist, but only from the practitioner, who ought, therefore, to know something of the mode of distinguishing their characteristics. The subject ought to be studied practically as well as by means of lectures. This was not, however, always possible. In the University of Edinburgh there was not sufficient accommodation for the purpose; but changes were in progress with a view to providing such accommodation. By means of a good practical dispensary the students could be easily taught in a body, if there was sufficient accommodation for them. It was not necessary that the patients should swallow all the prescriptions that the students made up. (Laughter.) The subject might be taught in a short time; thus obviating the necessity of the student obtaining instruction at a chemist and druggist's, which was now generally required where an apprenticeship had not been served. Thus the student's work would be really diminished. Of course the period of study should be an early one—say, after chemistry or botany. With regard to therapeutics, he was aware that some persons thought it unworthy of consideration. This arose partly from the manner in which they had been taught. On that subject he declined to say anything specific; but he knew that therapeutics in many schools had been greatly neglected. The subject might be made most attractive; and there were many things taught in a course of therapeutics that could not be communicated in a course on the practice of physic, unless the lecturer went very much out of his way. If therapeutics were made part of the course of education, it should be almost the last branch of study engaged in. It was most important in giving effect to the other branches; for what was the use of the most accurate diagnosis unless the remedies to cure the disease were understood?

DR. MACROBIN, in supporting the motion, said he thought the course of pharmacy should be at the end of the first winter or the beginning of the following summer, after the course of chemistry, while therapeutics should be taught after a systematic course on the practice of medicine before attendance in the clinical wards. He was aware of the success achieved by Dr. Harvey, who no doubt had great advantage over many of the London schools in having ample accommodation at the expense of Government. He had a large class of sixty or seventy, who were taken through the whole art of compounding; and he thus prevented a very great error often committed by practitioners themselves—that of introducing incompatibles into prescriptions. Dr. Harvey was quite enthusiastic in the matter; he lectured twice or thrice a week, and his plan worked admirably.

DR. HUMPHREY was sorry to say anything in opposition to such competent authorities; yet he could not but look with great anxiety at the proposed alteration in the medical curriculum, especially as it tended to increase the already too heavy burdens laid upon the shoulders of medical students. (Hear, hear.) He greatly doubted whether the Medical Council ought to pass a resolution which should be binding on the licensing bodies, and require them to adopt a separate course in therapeutics. With regard to the opinions expressed by the teachers, it should be borne in mind that each teacher naturally regarded his own branch of study as a highly important one, and as one that ought to be extended and subdivided. It was the duty, however, of the Board in some measure to stand between the teacher and the student. He believed that nothing could be more grievous than an addition to the number of courses of lectures. When a student himself, although the lectures were not so numerous as at present, he found it impossible to attend them all with advantage, and it was absolutely necessary to forego attendance on some. Although not an over-idle student, there were certain courses which he regularly and systematically neglected. The Council could do nothing worse for medical education than promoting a system of what might be called

lecture-trotting, which would have to be adopted if the courses of lectures were extended. Nothing could more effectually interfere with the carrying out of another recommendation of the committee which was to be subsequently brought forward, that of instituting class examinations. He quite agreed that instruction in pharmacy should be of a practical kind, and be given at an early period of medical education; but he denied the necessity of a special course of therapeutics. To be a science at all, it must be based upon recommended physiological observations, which were at present in their infancy. The science was not sufficiently advanced to render it desirable that it should be the subject of a compulsory course. The only way in which it could be satisfactorily considered at present was in connexion with the practice of medicine and surgery. It might be thought that the proposed alteration would tend to promote the science of therapeutics; but he maintained that the business of the Council was not to promote any particular science, but to provide students with the opportunity of acquiring as far as possible a knowledge of science so far as was known. He begged to propose as an amendment,—“That practical instruction in pharmacy may with advantage be substituted for formal lectures on the subject, and should be attended at an early period of the professional curriculum; and that instruction in therapeutics should be conducted at a later period of the professional curriculum, either by a special course of lectures or as an essential part of the course of lectures on medicine and surgery.”

Dr. CHRISTISON said in explanation that, while therapeutics was taught in Scotland, it was almost entirely neglected in England.

Dr. APJOHN seconded the amendment.

Dr. ANDREW WOOD said he considered the motion proposed by Dr. Parkes one of the most important that had ever been brought before the Council. The subject of therapeutics had certainly not advanced in the same ratio as physiology, chemistry, and the other parts of the medical curriculum. It was all very well to say that the burdens of the students should not be increased, but the Council had also to consider how they could best diminish the burdens of the patients; and unless they had arrived at the *summum bonum* in the art of curing and preventing diseases, there was something yet to be accomplished. But in reality, as Dr. Christison had explained, instead of increasing the burdens of students, the present proposal, if carried out, would actually diminish them. A student at present was required to attend for a certain period at a laboratory or dispensary to learn pharmacy, but that would not be necessary when the proposed change was made. With regard to therapeutics, he believed a serious error had been committed. The examinations in materia medica, which included therapeutics, were conducted at a period when it was utterly impossible that a professor or examiner could put proper questions or obtain proper answers from the students. The subject was one to be taken up at a late period. It was the coping stone of the whole course, and should therefore be taken up last. By the proposed mode a greater impetus would be given to the progress of the science of therapeutics, which was confessedly not in a very advanced state, than by any other means that could be adopted.

Dr. STORRAB wished to remind Dr. Humphry that the motion did not necessarily require an increase in the number of lectures. The particular mode of instruction would be left to the medical authorities or licensing bodies.

Dr. A. SMITH said that the great merit of the proposal was that it left the licensing bodies free to carry out the proposed change in their own way. His conviction was that the labour of the students would rather be lightened than increased. He had long been convinced of the necessity of separating instruction in therapeutics from the teaching of pharmacy. The practice in Ireland was for the students to attend a course of materia medica in the first or the second year. A large proportion of the students in Dublin attended in the first year. He soon found out that it was a waste of time to teach therapeutics before the students had acquired any knowledge of discriminating diseases. With regard to pharmacy, it was impossible that it could be taught by lectures, and it would be much less laborious for the students to go through a practical course such as that established by Dr. Harvey in Aberdeen. He cordially supported the motion proposed by Dr. Parkes.

Dr. APJOHN opposed the resolution. It was impossible, he said, to have a distinct course of lectures on therapeutics without encroaching on the province of the professor of practical medicine. Therapeutics could only be taught in a hospital and by a person in large practice. The proposed alteration could not be adopted without an augmentation in the number of professors, and in some cases that would be perfectly impracticable.

Mr. HARGRAVE opposed the motion, which, he contended, could not be carried out without the establishment of an additional professorship.

Dr. ALLEN THOMSON said he felt some difficulty, not so much as to the separation of the two subjects, as upon the question in what the latter subject consisted. The distinction now introduced between pharmacy and therapeutics was a new one, and the Council were actually engaged in considering the establishment of a separate branch of study not before inserted in their programme. He did not object to that course; he thought that in some respects therapeutics might constitute a separate branch of study. But the Council ought to be fully aware of the nature of the proposition before it. What was wanted was a definition of the meaning of therapeutics. In Scotland there was a distinction between general and special therapeutics. There was another science that often went under the name—namely, the general principles of the action of medicine; and that was what appeared to be pointed at in the resolution. He quite approved of the proposed separation, and of practical pharmacy being studied at an early period. The resolution very wisely did not prescribe the nature of the course of instruction, but left it to the different schools to adopt their own methods. The manner in which the Council would practically regulate the education was by the examinations. If they wished to carry out the proposed distinction they must require that the examination in practical pharmacy should be included in the first division, and the examination in therapeutics in the second.

Dr. CHRISTISON said that the two subjects had been long separated in every school on the Continent. The French title of therapeutics was *matière médicale*, and pharmacy was the subject of a distinct professorship.

Dr. SHARPEY supported the motion, and contended that its effect might be to diminish rather than to increase the number of lectures required to be attended by the students.

Sir D. CORRIGAN wished to know what was understood by “instruction in pharmacy.” If pharmacy was to be taught in the lecture-room, he would vote against the resolution, for it was downright nonsense to suppose that anyone could learn how to make up prescriptions by attending lectures. The only place in which the effectual instruction could be given was in the compounding department of a chemist or apothecary, or in a hospital.

The amendment was then put and negatived, and the original motion was carried.

MIDWIFERY.

Dr. PARKES proposed “That it is desirable that instruction in midwifery should be extended, and that every candidate for a licence shall be required to attend not less than twenty labours.” He said he did not wish the Council to suppose that in moving that the course of midwifery should be extended he desired that the labours of the students should be increased. (Laughter.) He supposed that if the motion were carried, the licensing bodies would relieve the students in some other way, so as to allow of the proposed extension. That the course of midwifery should be extended he thought was clear from the evidence brought before the Council. It consisted of twenty answers from the most experienced teachers in the kingdom, who with one or two exceptions stated that it was absolutely impossible to do justice to the subject in the very limited time now assigned to it. The subject properly included the diseases of women and children, a branch which was almost entirely neglected, and he believed that students were less trained in those matters which concerned everyday practice than were the students of former days. The lectures on midwifery were at present almost confined to midwifery proper. The professors were asked how many lectures would be necessary for a course of midwifery, including the diseases of women and children, and none of them asked for less than eighty. The twelve teachers in London signed a common paper in which they remarked very strongly upon the

very small number of lectures now assigned to this subject. With regard to the number of labours required to be attended, the number twenty was adopted with some little hesitation. Some of the answers said thirty, and others ten; the London teachers stated that the number should not be less than twenty, and this was in accordance with the regulations of the London Colleges of Physicians. It was hardly possible to suppose that the desire of the teachers of midwifery to extend their course was promoted only by their partiality to their own particular subject.

Dr. HUMPHRY could not help thinking that the answers referred to must have originated in a "nothing like leather" feeling. The subject was one which might be fairly left to the various licensing bodies, and it would be far better not to introduce any fresh regulations respecting it. If the system of lectures was carried too far it would tend to destroy itself. A student would attend a moderate or rather short course of lectures with attention and advantage, but if the courses were extended and multiplied, and if the students were required to attend them all, a very superficial kind of instruction would be the result. The requirement as to twenty labours was in his opinion very unwise. After the first five, or at most ten cases, the information obtained at labours was by no means proportionate to the time occupied; and it should be remembered that the student was liable to be dragged out of his bed at all hours of the night, and to be subjected to a great amount of inconvenience and annoyance.

Dr. ALEXANDER WOOD opposed the motion. When the committee was appointed the great argument brought forward by the late Professor Syme was the necessity of lessening the number of courses of instruction. It would be observed that the whole tendency of the report of the committee was to substitute teaching by lectures for that kind of teaching which had previously existed in many places, and which, with regard to some branches of medical study, was, he thought, a better method. There were many branches of practical instruction that would be neglected if the student were overburdened with compulsory attendance at lectures. He thought that midwifery was sufficiently attended to in most schools at the present time, and he agreed with Dr. Humphry in thinking that the time consumed in attending labour cases might, at that period of the student's course, be better employed. A student might attend a great many cases before meeting with anything out of the ordinary course. When he remembered how much the students were overburdened with classics, and how little time they had for cultivating their own minds, he was strongly tempted to think that the report tried too much to press the lecture system upon them. A better class of students would be obtained if they were compelled to instruct themselves a little more—if they were more active in the accumulation of knowledge instead of being mere recipients of instruction. Intelligent students would tell them that a great deal too much time was consumed in sitting on benches, and listening to dreary lectures. Some of the lecturers (of whom he was one) were at the Council table, and from those specimens it might well be believed that it was a rather irksome thing to listen to lectures from them for four or five hours together. (Laughter.) They all knew how strongly disposed teachers were to magnify their office. Professor Syme used to think that clinical surgery was the only subject that a student should take up. The opinion that had been given by lecturers on midwifery had not been in the slightest degree endorsed by the examining boards.

Dr. PARKES said that the Council of the College of Surgeons reported that in their opinion the course of midwifery might be extended with advantage. That of course chiefly applied to the English curriculum and to the three months' summer course.

Dr. MACROBIN said it would be difficult to provide twenty cases of labour for the students in Aberdeen. He suggested that ten would be a better number.

Dr. CHRISTISON said that some of the schools had a longer course than three months. The universities in Scotland required a five months' course, and attendance at a lying-in hospital. He agreed with Dr. Humphry in thinking that twenty labour cases were too many.

Sir D. CORRIGAN was of opinion that the regulations on midwifery should be left entirely to the licensing bodies, who would adopt the best methods, according to the vary-

ing circumstances in which they were placed. In some places there were large lying-in hospitals, while in others there were none. He looked upon the proposal as a question of the sale of certificates. With regard to the difficulty of obtaining twenty cases of labour, he thought that would be overcome by bringing ten pupils round the same woman when in labour. (Laughter.) What security was there that that would not be done? It was the direct interest of every medical teacher to sell as many certificates as he could. He had great respect for the midwifery teachers, but he accepted their opinion much as he would take the recommendation of lawyers on a point in which their own profit was concerned. He was strongly opposed to the resolution.

Dr. ANDREW WOOD thought it was hardly fair to refer to the question as being a matter of the sale of certificates. The Council had been endeavouring to render the instruction of students as practical as possible; and how could a young man obtain practical instruction in midwifery without a certain amount of personal attendance in cases of labour? He thought, however, that twenty cases were too many, and he would be content with ten. It was impossible in a three months' course to give efficient instruction in midwifery, including the diseases of women and children. These diseases, it would be said, might be taught by the professors of medicine, but their complaint was that they had not time for the purpose, and so between the two stools the students fell to the ground. He thought the resolution should be framed somewhat as follows: "That it is desirable that instruction in midwifery should comprehend the diseases of women and children, and that every candidate for a licence should be required to attend not less than ten labours."

Dr. STOKES thought that the Council was moving in a wrong direction, and that the shoulders of the students were being too heavily burdened. He believed that no great advance in medical education would be made until the period was extended to five or six years.

Dr. BENNETT said he did not think it desirable that instruction in the diseases of women and children should be allocated to special professors. In the hospitals and all large schools there were abundant opportunities for students learning all that was peculiar in those diseases under the instruction of the lecturers in medicine and surgery. What did the midwifery teachers require? They wanted to absorb into their own hands every surgical operation on the female body, every medical disease in the female constitution, and all the diseases of children, as if there was anything in them that was not common to the human organisation. If the students were required to attend cases of labour, they ought to be under the superintendence of a teacher or senior student, who would tell them what was going forward, and give them an opportunity of coming away wiser than they went.

Dr. QUAIN said that the Council had hitherto wisely confined its attention to specifying the subjects in which it required students to be educated, without prescribing the mode in which instruction should be given. One teacher would communicate more in three months than another in three years. If it was now said that the course of midwifery should be extended, it might be said by and by that the course of medicine must be extended also.

Dr. FLEMING agreed with Sir D. Corrigan in thinking that it was impossible to lay down any exact rule that should be applicable to all cases. He was a great advocate for practical instruction, but there was a difficulty in the way of the students attending twenty cases of labour. A student might attend twenty cases and learn nothing more than by attending three or four. In all the large medical schools there were lying-in hospitals, where cases out of the ordinary course occurred, and those were the cases required to be seen by the students.

Mr. QUAIN believed that most of the resolutions proposed by the committee were founded upon a grievous fallacy. The fallacy of the present resolution was, that while confidence was entertained in the teacher, none was placed in the pupil. It was thought that young men did not know their own interests, and that they would do nothing unless they were forced. He wholly objected to that view, believing that the young men of the present day were as eager to acquire knowledge as they were in former days. In the school with which he was connected the best attended

course was that on midwifery. There was no rule compelling the students to attend, but they did attend in large numbers. He thought the Council would be going too far in making regulations such as those proposed. Reference had been made to what was done in France and Germany. No students were there compelled to attend any particular course, but they did attend notwithstanding. At present a great change was going on in regard to the diseases of women and children. There were special hospitals for these diseases, and special departments for them in every hospital, and the diseases were studied in the absence of any compulsion. He thought that that useful change would be interfered with by the proposed resolution.

Dr. PARKES, in reply, said he was willing to adopt the number ten instead of twenty if the Council desired it. No one had a stronger sense of the undesirableness of over-lecturing than himself; and he had already explained that the proposed extension would have to be met by some rearrangement, so as not to increase the number of lectures.

Dr. MACROBIN moved as an amendment,—“That it is desirable that instruction in midwifery should be extended beyond three months, so as to embrace instruction in diseases of women and children, and that every candidate for a licence should be required to attend not less than ten cases of labour.”

This amendment, which was seconded by Dr. ANDREW WOOD, was put and negatived.

Another amendment, moved by Dr. ANDREW WOOD, and seconded by Dr. MACROBIN,—“That it is desirable that the instruction in midwifery should be extended, and that every candidate for a licence shall be required to attend not less than ten labours,”—met with a similar fate.

The original motion was then put to the vote, and also negatived.

PATHOLOGICAL ANATOMY.

Dr. PARKES moved,—“That it is desirable that instruction in pathological anatomy should include a certain number of systematic lectures.” He said he must be a bold man to go on proposing additional lectures after the opinions that had been expressed at the Council table. But instruction in pathological anatomy in many schools was at present very carelessly conducted, and in some cases very little instruction at all was given. He had become personally aware of how very little attention was given to the subject. In some cases attendance at the dead-house was required, and in other cases specific instruction was given; but it fell far short of what was really required. All that was needed was that pathological anatomy should be carefully taught. It was not intended to supersede the dead-house instruction, but to add something to it which would make that instruction really valuable.

Dr. ANDREW WOOD seconded the motion.

Dr. HUMPHRY said he was sorry to have to rise again as an opponent to any addition to the courses of lectures. He would move as an amendment,—“That it is desirable that systematic instruction in pathological anatomy should form a part of professional education”; leaving to the licensing bodies the mode in which that instruction should be given. It was most important that the instruction should be systematised, and he thought that might be done without increasing the burdens of the students or occupying more time than was at present given. The subject was one which lay at the foundation of medical science, and unless the student attained a fair knowledge of it he was not likely to acquire it in after-life. Of all the information that he had obtained as a student, none had stood him in such good stead as the information he had acquired in regard to practical pathology at St. Bartholomew's under the admirable guidance of Mr. Paget.

Dr. STOKES seconded the amendment, and referred to the existence of a Pathological Society in Dublin where morbid specimens are exhibited once a week, which the students at the hospitals are permitted to inspect.

Sir D. CORRIGAN opposed the resolution. He said that pathological anatomy and medicine and surgery were so intimately blended that it was impossible to conceive anything more absurd than to give courses of lectures on pathology alone. In order to render the instruction useful, the students should see the cases during life. Lectures might as well be given upon a few broken bones as upon preparations. With regard to many of the preparations put up in jars, if the labels were changed, in three cases out of four

the change would not be recognised. The best mode of teaching pathological anatomy was to combine it with instruction in clinical medicine. Let the students attend such a Society as that founded by Dr. Stokes in Dublin, where morbid specimens were brought every Saturday, and there would be no need for any special courses of lectures.

Dr. CHRISTISON said he preferred the amendment to the resolution, as it left the licensing bodies at liberty to communicate the instruction in their own way. In Scotland there had been a pathological professorship for the last forty years. The first professor (the father of Dr. Allen Thompson) considered himself bound, by the terms in which the chair was established, to teach “general pathology,” without going into the minute details of pathological anatomy. The present professor took a different view of the subject, and now taught pathological anatomy both practically and by lectures. The chair was at present one of the most popular in the University. Although great attention was paid to this subject by the professors of clinical medicine, it would be of great advantage to the student to have an opportunity of studying pathological anatomy as a systematic subject, even prior to taking up clinical medicine, or at all events at the same time.

Dr. ALLEN THOMSON said that his father did teach the subject practically by a reference to a very large collection of drawings and specimens made by him on the continent and in this country, but he was unable, from his advanced age and from other circumstances, to avail himself of other practical means of instruction. Since his day pathological microscopy had arisen, and formed an entirely new branch of study.

Dr. SHARPEY supported the motion. Students, he said, would profit far more by the practical opportunities to which reference had been made if they had previously acquired some general knowledge on the subject in a systematic way.

Dr. GULL alluded to the importance of practical instruction. The student, he said, should be told, “There are two hearts; tell me what the diseases were during life, and what symptoms the patients had.” Sir D. Corrigan appeared to think that the student could not understand morbid anatomy unless he knew the clinical history of the case. He (Dr. Gull) would rather take the converse of that proposition, and say that a student should be able to tell very much of the clinical history of the case from the morbid appearances after death. He would submit to a student, not the clinical history, but, for example, an evacuation, and require him to say what was the matter with the patient who passed it. There was scarcely one man in fifty who would take the trouble to examine an evacuation. He thought the Council would miss a very good opportunity of advancing medical knowledge if it did not express a very distinct opinion as to the advantage of the study of morbid anatomy in a much fuller sense than at present. He could support either Dr. Parkes's motion, or Dr. Humphry's amendment, which was, perhaps, somewhat better because less explicit.

The amendment was then put and carried, and it was also carried as a substantive motion.

CLASS EXAMINATIONS.

Dr. PARKES moved, “That it is desirable that class examinations should be compulsory, and that the licensing bodies should require them in all cases.” The Council, he said, had so fully considered the subject that it was hardly necessary to debate it further. No teacher could teach efficiently without occasional examinations. The only objection to the proposal was that it entailed an additional amount of labour on the professors, but he knew from some experience that that additional labour was not very great.

Dr. HUMPHRY said he had great pleasure in seconding the motion. There could be no better method of instruction than class examinations, which gave the teacher the opportunity of accurately testing the attainments of his pupils, without which he could not satisfactorily make way.

Dr. STOKES objected to the word “compulsory,” and expressed a doubt as to the desirableness of passing the resolution.

Dr. ALEXANDER WOOD, in supporting the proposition, alluded to the advantages to be derived from class examina-

tions in preparing students for their final examinations by the licensing bodies.

Sir D. CORRIGAN moved, and Dr. A. SMITH seconded, an amendment, "That it is desirable that class examinations should form a part of every course of lectures, whether systematic or clinical."

Dr. ANDREW WOOD thought the motion would be emasculated if the word "compulsory" were omitted. The want of class examinations often compelled the students to go to grinders to have crammed into them in a few months what they ought to have been learning in three or four years.

Dr. CHRISTISON said he once examined his pupils every week, and after a time he found that many of the students absented themselves. He feared that this would be frequently the case unless attendance at the examinations were made compulsory.

Dr. GULL supported the motion. The intention, he believed, was that the teacher should make the examinations compulsory upon his students, and to this there could be no objection.

The amendment was then put and negatived.

Another amendment was moved by Dr. ACLAND, and seconded by Mr. QUAIN, "That it is desirable that class examinations should be compulsory on students."

This amendment was also put, and negatived.

A third amendment was moved by Mr. QUAIN, and seconded by Dr. A. SMITH, "That it is desirable that class examinations should form a necessary part of every course of instruction."

This amendment was put, and carried by the casting vote of the President.

The Council then adjourned.

FRIDAY, JULY 7TH.

The Council re-assembled at two o'clock; Dr. Paget, President, in the chair.

Dr. ACLAND alluded to a notice in the programme for the day, given by Dr. Bennett, that he would make a statement in reference to arrangements for a conjoint examining board; and proposed that, owing to the importance of the subject, Dr. Bennett should be requested to make his statement before the Council proceeded to any other business.

Dr. ANDREW WOOD seconded the motion.

Dr. STORRAR said that the proposal to which Dr. Bennett's notice referred was one emanating from some committees only. It was within his (Dr. Storrar's) knowledge that it was out of Dr. Bennett's power to make any statement of a complete kind, and he therefore thought that the ordinary prepared business of the Council should not be interrupted.

The Council having assented to Dr. Acland's proposal.

Dr. BENNETT said it would be in the recollection of the Council that at the close of the last session, prior to the introduction of the last Medical Bill, he stated that efforts had been made to form a conjoint board for England, and they had gone so far as to justify a hope that they would ultimately be successful. When the Bill was introduced all those efforts of course fell into abeyance, and nothing more was done for a considerable time. When the Bill failed it was thought desirable that the efforts should be resumed, and the College of Physicians had taken great pains in endeavouring to bring about the desired junction. They had met with very considerable difficulties, and scheme after scheme had been discussed and abandoned in consequence of those difficulties. The objections came sometimes from the universities, but more frequently from the Apothecaries' Company, who were bound by their Act of Parliament in such a way as to make it very difficult for them to accede to propositions to which there was every reason to believe they would have gladly acceded if they could legally have done so. The result was that they had determined to form a conjoint board between the College of Physicians and the College of Surgeons, facilities being offered for the junction of other bodies as well; and there was reason to believe that when the scheme was laid before the universities it would receive their concurrence; but whether or not, the arrangements were such as to leave no moral doubt that a conjunction between the two Colleges for the purposes of examination would be effected. At present the scheme had only been agreed to by the conjoint committees of the Colleges, there having been no oppor-

tunity of obtaining the official consent of the bodies themselves; but the committees were believed to represent the feelings and wishes of the Colleges. All candidates applying for their licences would have to appear before the conjoint board in order to obtain the qualification of either body. The universities were represented at the Council-table, and they would have an opportunity of saying for themselves how far it was likely that they would be able to co-operate in the scheme. The scheme consisted essentially in the formation of a board of examiners appointed by the co-operation of the College of Physicians and the College of Surgeons, and such other medical authorities in England mentioned in Schedule A of the Medical Act as could legally take part in its formation; it being understood that perfect liberty was left to such co-operating medical authorities to confer, as they might think proper, their honorary distinctions and degrees, but each of them would abstain from the exercise of its previous independent privilege of giving admission to the Medical Register. The examiners were to be appointed on the nomination of a committee to be called the Committee of Reference, but no member of that committee was to be eligible for nomination as an examiner. The committee would consist of an equal number of representatives of medicine and surgery—namely, one representative of medicine and one of surgery to be appointed by each of the universities in England, if they desire to co-operate; four representatives of medicine by the College of Physicians, and four representatives of surgery by the College of Surgeons; one-fourth of the committee to go out annually. The result would be that a qualification in medicine and a qualification in surgery would be given for the same examination. However great might be the difficulties in connexion with voluntary conjoint boards, it was evident that they were not such as to prove insuperable. If that were so, the action of the Council might be considerably modified with regard to the future legislation. He did not pretend that the formation of the board to which he had referred would render legislation altogether unnecessary with regard to the other matters. So far as regarded that part of the late Bill which referred to conjoint boards, all that was proposed by it would have been accomplished by voluntary effort. It would be seen that the proposed board was likely to be constituted in as good a way as it would have been under the late Bill, and in a way as unobjectionable as anything that could be conceived. The committee would select the examiners, and then submit them for the approval of the several bodies before they were finally appointed. That plan seemed calculated to secure such a board of examiners as would obtain the confidence of the public as well as of the profession.

Dr. STORRAR.—Has the College of Physicians assented to this?

Dr. BENNETT.—I have stated that it is the proposal of the conjoint committees, and not as yet of the College of Physicians or the College of Surgeons.

Mr. QUAIN.—I suppose there is no reason for saying anything more, but I do not dissent from anything that Dr. Bennett has said.

CLINICAL INSTRUCTION.

Dr. FLEMING moved, "That it is desirable that clinical instruction in medicine and in surgery should not be conducted so much by formal lectures in class-rooms as appears from the evidence before the Council to be the case at present; but that hospital students should be divided into classes of limited numbers, so as to enable them individually to observe cases of disease, and to be examined upon them conversationally at the bedside or in proximity to it. Further, that it is desirable that, where possible, all students should serve as clinical assistants or dressers." He said he looked upon clinical teaching as the most important part of a student's education, but he was not satisfied with the state of clinical instruction generally in this country. Very little progress had been made in it for the last twenty or thirty years. In many cases the students literally walked the wards, and the surgeon, instead of remarking upon the cases by the bedside, reserved them for regular, prepared clinical lectures. Such lectures were often published in the journals; they were admirable treatises upon particular diseases or forms of disease, generally of an anomalous character, which a student might scarcely see in his life-

time, but they were not, properly speaking, clinical instruction. The Royal College of Surgeons of England, much to their credit, had taken a step in the right direction, and required the students to be three months in the wards examining cases. He regretted that the period was limited to three months, but he was glad that the ice was broken. The present system was so imperfect that it ought to be discouraged, and the Council should bring its influence to bear upon the licensing bodies with a view to amendment. With regard to the last part of the resolution he did not think it necessary to make a single remark. They all knew the great advantage it was for a student to be a clinical assistant or dresser. There was one point of some importance not included in the motion. At present students had to attend clinical instruction in medicine and surgery, in some instances, at the same time; this he considered a great disadvantage, and he hoped that some steps would be taken with a view of remedying such a state of things.

Dr. MACROBIN supported the motion, and alluded to the importance of dividing the students into classes of limited numbers. In Aberdeen the clinical students were divided into three classes, and they were bound to attend one physician for two months, instead of being permitted to change continually.

Sir D. CORRIGAN opposed the motion as recommending a system that he believed to be perfectly impracticable. The licensing bodies should be left to adopt their regulations to the sizes of their hospitals and other circumstances. He objected to any minute code of directions, and he therefore declined to vote for the resolution.

Dr. GULL agreed with Sir D. Corrigan in thinking it undesirable that the Council should give such detailed recommendations. If the Council passed any resolution at all on the subject (as to the propriety of which he had some doubt), he thought it should be to the following effect:—"That the Council express their sense of the importance of making clinical instruction year by year more practical, more consonant with the phenomena of disease, and less dependent upon formal clinical lectures." The study of medicine must become more and more practical. Almost all lectures might be got rid of. He had heard of a celebrated professor in London giving three weeks' lectures on pericarditis; an hour's investigation of cases at the bedside would be of more service to the students. He did not desire to see the lecture-room entirely shut up, because there was an undoubted advantage in bringing the student into relation with the mind of his teacher in a class-room; but such occasions should be much more rare than at present.

Dr. STOKES seconded the amendment. He said he did not know of any formal prepared clinical lectures in Dublin. The proper kind of clinical instruction was the giving out of the mind of the physician or surgeon after leaving the wards. (Hear, hear.) To give such instruction in the wards was cruel and barbarous to the patients. The plan adopted in the Meath Hospital was to have a conversation at the bedside in which all painful topics were avoided; there was then a meeting in the theatre, where young men read their cases and were examined on them. The class numbered 80 or 90. The number of those who availed themselves of all the possible advantages of a hospital was very small, not, perhaps, more than a fifth or a fourth. It was better, however, for a teacher to produce a small number of good and willing men than to produce a large number of indifferent and unwilling men. No law could compel a man to learn, any more than it could compel him to be honest. The proposed regulation would only prove nugatory, if adopted; and if there was one thing which the Council should be warned against more than another, it was the making of nugatory laws.

Dr. CHRISTISON said he wished to draw the attention of the Council to the fact that during the last few years very great strides had been made, within his own knowledge, in clinical instruction in many schools; and if he were disposed to suggest any change in Dr. Gull's amendment, it would be to propose some expression of the pleasure with which the Council regarded the improvements recently made in clinical surgery. Those improvements were going on in all the schools with which he was acquainted in England, Scotland, and Ireland. It was no doubt a great advantage to the students to have a clinical lecture on the cases before them. He remembered once having an accumulation of cases of partial paralysis of the nerves of the

face, and the students were greatly interested in a lecture which he delivered on that subject, and which he followed up by taking them into the wards, and applying the general principles that he had set forth to each individual case. That was quite different from regular lectures on the practice of physic. He hoped that there would be no effort to interfere with the discretion of the authorities; but he hoped it would go forth that the Council attached the greatest importance to the observations of practitioners made in their visits and to the examination of the students. There was no necessity to examine them at the bedside. That was sometimes done, and in a loud voice, but he had always set his face against the practice.

Dr. HUMPHREY doubted whether the Council should interfere at all in the matter. There was some danger lest by over-interference it should diminish the value and authority of its opinions. Of late years there had been a decided improvement in clinical instruction, which might be partly due to the regulation introduced by the College of Surgeons. He had taken some pains to ascertain whether this improvement was going on in the London schools, and he found that it was being carried out to a much greater extent than might have been imagined. Indeed, so great was the labour of the physicians and surgeons in this department that it was almost necessary that some one should intervene between the surgeon and the pupil; certainly if the matter was pressed further that must be the case. In Cambridge clinical instruction, including class examination, was carried out most carefully.

Mr. HARGRAVE was surprised to hear Dr. Fleming say that there had been no improvement in clinical surgery for the last thirty years. He agreed with Sir D. Corrigan in thinking that these matters could not be carried out in the way suggested. He thought there was not sufficient ward teaching in the hospitals; he did not mean talking in a loud voice, but *sotto voce*.

Dr. ANDREW WOOD said that when he attended clinical lectures forty years ago the custom was, if a case of hydrocele, for example, occurred in the ward, for the students to meet in the lecture-room, where the clinical professor gave a systematic lecture on hydrocele. He was advised to go to Dublin, and there he found a different state of things. When the teacher came to a case in the wards, he entered into all such particulars as could be mentioned at the bedside, and then put the question to the students, "What is your diagnosis?" Then he would take the students into the theatre, and make such comments on the cases as could not well be made in hearing of the patients. That was his (Dr. Andrew Wood's) *beau ideal* of clinical instruction. He was prepared to vote for Dr. Gull's amendment, which he thought would sufficiently carry out the object Dr. Fleming had in view.

Dr. ALEXANDER WOOD deprecated needless interference on the part of the Council, especially in a matter in which it was obvious that great improvements were being carried out by the schools themselves.

Dr. A. SMITH supported the amendment.

Dr. QUAIN said it would be impossible to secure absolute uniformity of practice, and thought it would be sufficient for the Council to express generally its opinion upon the subject.

Dr. PARKES expressed a similar view. The great test, he said, of clinical instruction was examination, and this was now instituted by every licensing body in the kingdom. The College of Surgeons of Ireland was the only body that was not reported as having a clinical examination in surgery, but it had now directed such examination to take place.

The PRESIDENT said there appeared to be a pretty general agreement in the Council as to the importance of clinical instruction; the only point of difference was as to the expediency of minute legislation as to the mode of teaching. The Council, he thought, could not be too precise and positive on matters relating to the examinations on which the licences or diplomas depended. But the best kind of teaching for one man was not necessarily the best for another.

Dr. FLEMING, in reply, said that his motion did not dictate to the licensing bodies, but only expressed the desirableness of the method suggested, leaving the teachers and boards free to adopt any method they thought proper. The Council had applied to the best men in the kingdom to give

advice on the subject of professional education, and the question was, should that advice be disregarded, and their voluminous recommendations fall stillborn from the press? Let them not be afraid of their own shadows, but continue to give the best advice they could, and urge the best means of educating medical students.

The amendment was then put and lost, there being seven votes in its favour and eight against.

The original motion was put and negatived, only three votes being recorded in its favour.

CHEMISTRY.

Dr. STORRAE moved, "That it is desirable that students should have the option of acquiring an adequate knowledge of chemistry, and of passing an examination in it before they enter upon the period recognised by the licensing bodies as the course of professional study." This resolution, he said, he moved in the interest of medical students. It was agreed that four years was the utmost limit they could prescribe for professional study, but every member of the Council must be conscious that those four years were overcrowded, and that if it were possible to lessen the pressure it would be their duty to do so. With this view he proposed to give the student the option of studying and being examined in chemistry before entering upon professional study. He did not know so well what was going on in Scotland, but in England a wonderful revolution was taking place in the grammar schools by the introduction of physical science. Masters of high repute had been appointed in such schools as Eton, Harrow, Rugby, Clifton, Marlborough, and others, and the time might come when lads of sixteen or seventeen might know enough of chemistry to enable them to pass a very good examination for the purposes of medical study. He had no desire to render this compulsory, but only to make it optional with the student. Some parents wished to defer sending their sons to a medical school, having a reluctance to their going thither so early in life; and in such cases the intervening period might with advantage be occupied by the study of chemistry and natural philosophy.

Mr. QUAIN, in seconding the motion, said it was strange that chemistry should be considered as nothing but a medical science. It ought to be regarded as a part of general education. The ignorance on this subject was indeed marvellous. He had known a distinguished university man unable to state why stirring a fire caused it to blaze. He was lately interested in reading the report of the head master in a large city school, who said that he had put his boys into Latin three years later than was ordinarily done in schools, and that they had beat those who began three years earlier, because they had been set to study the two subjects of arithmetic and chemistry. The College of Surgeons of England had made it a rule not to require attendance at a course of lectures on chemistry in the case of candidates who should have passed satisfactorily in that subject in their preliminary examination. He had been curious to inquire what the effect of that regulation had been, and he found that of 300 candidates at the last preliminary examination as many as 126 took up chemistry, the number of failures being 36. That showed that the regulation was practicable.

Dr. STORRAE inquired if there was any examination in chemistry afterwards.

Mr. QUAIN.—Not at the College of Surgeons. But there were examinations in physiology, forensic medicine, pharmacy, &c., which included chemistry; in fact, there was no branch of medicine in which the subject was not more or less included.

Dr. A. THOMSON thought there would be a great advantage in having a preliminary year of scientific education (to include chemistry, physics, botany, &c.) before the student entered upon his course of professional study. It was very desirable, if possible, to remove somewhat of the pressure on the present four years. A scientific course like that proposed would form a very fitting introduction, and prepare the minds of the students for the reception of instruction on the more strictly medical subjects.

Dr. AFJOHN thought that the Council might legitimately encourage the study of the general principles of chemistry up to a certain point, but not to the exclusion of subsequent more detailed study. The Council should be very slow in suggesting any change which would tend to throw any dis-

paragement on an important subject like chemistry. He would propose as an amendment, "That chemistry is a most important branch of medical education, and that the Council does not think it desirable to adopt any resolution which, if it had any practical effect, would tend to discourage the efficient study of the subject by medical students."

Dr. ANDREW WOOD seconded the amendment.

A long discussion ensued. Both the amendment and the motion were negatived.

Dr. PARKES moved, "That a letter be addressed to each licensing body transmitting a copy of the resolution of the Council of February 26th, 1870, on the formation of conjoint examining boards, and urging that arrangements for the formation of such boards shall be undertaken without delay, and shall be communicated to the Council in sufficient time for the Council to transmit them to the Government before the close of the year." The resolution he said, would dispose of the educational report, with the exception of the last paragraph. The question was one upon which hardly any doubt could be entertained. The Council had taken such action in the matter that it was impossible that it should not go further. The first Education Committee in 1869 recommended very strongly the formation of conjoint examining boards, and after a long debate the Council almost unanimously decided that such boards were desirable. Subsequently that opinion was transmitted to the Lord President, and it formed the basis of the Bill introduced last year. Nothing had since occurred to lead the Council to retrace its steps. The licensing bodies were now in a better position than they were last year for the consideration of the subject, and he believed that any suggestions of the Council would have more weight than previously. He did not think that the statement made by Dr. Bennett would affect the question in any way. If the resolution was carried out the Colleges of Physicians and Surgeons might, perhaps, be able to inform the Council that a conjoint examining board had really been formed, and that would be the most satisfactory answer that the Council could receive. It was proposed that the replies from the licensing boards should be communicated to the Government, because it was extremely desirable that the Government should have before them at the earliest moment the fact that a conjoint scheme had been carried out—a fact that would in all probability very much influence their deliberations. It was impossible to watch the course of the debate on medical legislation this session without seeing that the Government were placed in considerable difficulty mainly by the medical profession. (Hear, hear.) That was a difficulty in which he conceived they were not likely to allow themselves to remain. He thought they would deal with the matter in some way or other, and it was very important that their hands should be strengthened. The motion was framed in conjunction with another asking the Government to proceed to legislation next year; but he did not think it was necessary to discuss the matter in connexion with that question, which would have to stand upon its own merits.

Dr. STORRAE, in seconding the motion, said he should be heartily glad if the efforts of the two committees of the Colleges of Physicians and Surgeons were brought to a successful issue. If the English bodies agreed in establishing a conjoint examination, it was important that a finishing stroke should be put to it within as short a time as possible. It would be seen by section 19 of the Act that it could only be carried out with the sanction and under the direction of the Council, and he had accordingly drawn up a motion, which would be afterwards submitted, that the authority of the Council in reference to the matter should be delegated to the Executive Committee.

Sir D. CORRIGAN opposed the resolution. He said he originally opposed the proposition to establish conjoint examining boards because he thought it could not be practically carried out. It was thirteen years since the Council permitted such boards to be established, and in only one instance in the United Kingdom had a conjoint board been formed, and that was in Scotland. The question had been taken up in Dublin, and the result was that, after a careful deliberation, they came to the conclusion that the plan would benefit neither the public nor the profession. The adoption of the plan in Scotland had evidently not produced better men, and they were just as far as ever from at-

obtaining the end desired. With regard to the proposal to submit the views of the licensing bodies to the Government, he claimed the right for his own college and university to deal directly with the Government, and not through the intervention of any third parties. (Hear, hear.)

Dr. GULL said that a conjoint examination had been the dream of his life. The Senate of the University of London had, on all occasions, expressed the greatest willingness to put aside their privileges and make any sacrifice for the good of the profession, in order that such a conjoint examination might be established. He believed that that was also the feeling of the College of Physicians. He was sorry to have said the other day that the College of Surgeons had been obstructive, because, from what he had learned, it appeared that they had not been so. He could conceive nothing more injurious to the working of the Council than a declaration that there should be no conjoint examining boards. It was the most disgraceful part of the profession of medicine that there should be nineteen examining boards through which it could be entered. It was a disgrace to the Council and to the boards themselves that such a state of things should exist. He hoped that Sir D. Corrigan would reconsider the subject in his cooler moments.

Dr. ALEX. WOOD suggested the omission of the last part of the resolution with regard to the transmission of the replies of the licensing bodies to the Government.

Dr. PARKES said he was willing to assent to the proposed omission.

Dr. ALEX. WOOD hoped that the resolution so modified would be adopted by the Council. They were interrupted, he said, in the work of reform by the introduction of the Government Bill last year, and they had now to resume their original position, and endeavour to effect, for themselves and for the profession, a reform so urgently needed.

Dr. HUMPHREY said he was able to state that the University of Cambridge heartily entered into the scheme, and he believed he might, in the absence of Dr. Acland, make the same statement with regard to the University of Oxford.

Dr. ANDREW WOOD said he agreed with Dr. Gull that it would be highly discreditable to the Council to obstruct any movement in the direction of the proposed reform. But the Council had not been inactive in the matter. The Medical Reform Bill of last year was approved by the Council, and by the majority of the bodies who had been represented as obstructives, and it was thrown out in consequence of the action of the highly-reforming body called the British Medical Association. The Council should now revert to its former position, and go steadily forward in the prosecution of its effort.

Dr. APOJHN said that the University of Dublin was opposed to the scheme of three conjoint boards, but was prepared to co-operate in any scheme for the establishment of a single board for the three kingdoms.

Dr. EMBLETON expressed the concurrence of the University of Durham in the proposal for the establishment of conjoint boards.

Mr. QUAIN thought it would be discreditable to the profession if what was so generally desired was not attained without Government interference. It should be remembered that the nineteen boards were made to compete with each other by the Government, and not by the profession. He had a distrust of Government interference, remembering what Government had formerly done. With regard to the agreement between the committees of the Colleges of Physicians and Surgeons, the Council ought to know that those committees were unanimous on the subject.

Dr. QUAIN believed that the combination which had been effected in England might be successfully carried out in Ireland if a similar effort were made in a like spirit. The example of the English corporations and universities might well be taken in the sister countries as models on which to proceed.

Dr. CHRISTISON, speaking for the universities of Scotland, said he did not see any obstacles which might not be overcome without much difficulty.

The PRESIDENT said he was so strongly in favour of the proposition that he did not like to vote for it in silence. It should be remembered that the Council had no power to compel the licensing bodies to unite. The steps taken by the Council had resulted in a great improvement in the examinations, as shown in the diminishing proportion of those

who failed. If it was found that, with nineteen sets of examinations, incompetent and ignorant men were occasionally passed, the Council ought to take steps to abate the evil, and the only effectual remedy suggested was that of reducing the number of boards to three or to one.

The motion was then put and carried *nem. con.*, Sir D. Corrigan declining to vote for or against it.

On the motion of Dr. PARKES, seconded by Dr. ANDREW WOOD, it was also resolved, "That the first resolution of the 28th of February be transmitted to the licensing bodies at the same time as the previous resolution."

The Report of the Committee on Education was then re-committed, and ordered to be brought up in a form adapted to the resolutions of the Council.

Dr. STORRAR then moved, "That the authority of the Medical Council in the matter of conjoint boards should be delegated to the Executive Committee."

Dr. QUAIN seconded the motion, which was opposed by Sir D. Corrigan, Dr. Bennett, and Dr. Alexander Wood, and was ultimately withdrawn by Dr. Storrar.

The Council then adjourned.

THE SMALL-POX EPIDEMIC.

THE decline of small-pox in the metropolis is now well pronounced, and the diminished number of fresh cases has been followed by a reduced mortality. From 235, the deaths from it have fallen to 164. The decline has taken place in every district, but the largest decrease was in the eastern districts. The fatality from small-pox was greatest last week in Somers, Camden, and Kentish Towns, and in Bermondsey, Battersea, and St. George sub-district of Camberwell; local outbreaks appear also to have occurred at Homerton, and in the Strand Union.

SMALL-POX IN THE PROVINCES.

The Registrar-General reports that small-pox continues fatally prevalent in Southampton, Weymouth, and Grimsby; in the two weeks ending last Saturday the annual death-rate from this disease was equal to 14, 21, and 24 per 1000 respectively in these three registration sub-districts.

There are still a good many fresh cases every week in Liverpool, and there are yet more than a hundred patients in the parish hospitals. The annual death-rate in the week from small-pox was equal to 3 per 1000 persons living in London and Liverpool, 6 in Newcastle, and was as high as 24 per 1000 in Sunderland, where the total deaths from small-pox were 45. House-to-house visitation has been commenced in Manchester, and as many as 5000 children have been found unvaccinated. During the week there were 15 deaths.

HOSPITAL ACCOMMODATION.

In the face of the greatly reduced number of fresh cases of small-pox during the last fortnight, and the large number of beds now vacant in the small-pox hospitals, the Metropolitan Asylums Managers have given orders that no more patients shall be admitted to the Fever Hospital at Homerton. Immediate steps will be taken to disinfect the wards, and make them ready for the reception of fever patients. Meantime, should the accommodation in the Homerton Small-pox Hospital prove insufficient for the requirements of the district to which that hospital is attached, the patients will be accommodated at Hampstead, where there is abundant room.

SMALL-POX IN IRELAND.

The report of the Belfast Union Hospital for the week ending July 1st shows an increase of 12 in the number of cases admitted for treatment during that period; whilst during the preceding week but one case was admitted into that institution. The mortality, however, has been slight, only 2 deaths having taken place during the last fortnight.

In Cork some fresh cases have arisen, the Norwegian barque *Augusta*, from Havana, having arrived in Queenstown harbour with several cases of small-pox on board.

In Dublin the disease has almost died out; a death, however, took place on the 6th inst., in the Hardwicke Hospital, and two deaths were registered last week. There are also at present four cases under treatment in the Cork-street Fever Hospital, besides a few other cases in some of the other hospitals.

THE LANCET.

LONDON: SATURDAY, JULY 15, 1871.

THE General Medical Council finished its business on Monday last, after sitting six days. It might have continued to sit longer, but, by a regulation of its own making, on the suggestion of Dr. ANDREW WOOD, members could not be paid for more than six days' work. The rule has had a good effect: it has shortened speeches and saved time.

The chief work of the Council during the earlier days of the session was the discussion of the Report of the Education Committee. This report reviewed the progress made by the various licensing bodies towards carrying out the suggestions of the Council; and it is only fair to say that nearly all the bodies have made alterations in their mode of examination, and in their requirements of students, which must tell advantageously on medical education. More clinical and practical teaching is required; and the final examinations also are, in accordance with this requirement, made more practical and clinical. We believe there is not one licensing body, for example, which does not examine its candidates clinically. Even the College of Surgeons of England now uses this obvious and indispensable test in its examinations. Moreover it has introduced into its curriculum practical instruction in Chemistry, Pharmacy, Morbid Anatomy and Physiology, and Surgery. The Council is certainly entitled to feel satisfaction at the extent to which its recommendations have been acted upon. No doubt both the Council and the individual bodies have in this matter been greatly influenced by public opinion; but they deserve praise nevertheless.

The Education Committee, however, while cheerfully admitting and recording much progress, sought to carry improvement still further in four specific ways: first, by separating the teaching of Pharmacy from that of Therapeutics; secondly, by extending the teaching in Midwifery, and requiring twenty cases to be attended; thirdly, by the institution of a course of systematic lectures on Pathological Anatomy; and, fourthly, by making class examinations a compulsory part of medical education. Dr. PARKES proposed four resolutions with the view of securing these objects. The Council did not differ from Dr. PARKES as to the importance of these points in medical education. But there was a very strong and predominant feeling against imposing new burdens on the student, and especially new courses of systematic lectures. There was an equally strong feeling against any resolutions that would bind either teachers or pupils to any particular modes of study. Accordingly, Dr. PARKES had materially to modify the terms of his resolutions before the Council would accept them. There can be no doubt that, while Dr. PARKES was right in urging a more thorough teaching in Therapeutics, in Midwifery, and in Pathological Anatomy, the Council was equally right in refusing to add to courses of lectures. Students have been

lectured too much; and this excessive lecturing is one of the causes of the unsatisfactory results that have been got from medical education. There is a universal feeling in the profession that what is wanted is more direct teaching of the individual student, and less of the delivery of elaborate lectures to large classes of inattentive listeners; and that with a more perfect system of examination we may allow greater freedom in the modes of teaching. We congratulate Dr. PARKES on carrying the judgment of the Council with him in his suggestion that Therapeutics should be separated from Pharmacy. The mere knowledge of drugs and the art of dispensing is one thing; the science of therapeutics is another. This science has been greatly neglected in medical education, so that we have been threatened with a race of physicians who understood everything about disease but the means of curing it. This mistake is now perceived. Many of our best physicians are devoting their attention to therapeutics, and it is well that the Medical Council should have expressed its opinion in favour of special teaching on the subject to advanced students.

The next question of interest arising out of the Report on Education was that of the formation of Conjoint Boards for each division of the kingdom. It will be seen from another part of our present issue, as indeed from THE LANCET of last week, that attempts are being made by some of the English bodies to overcome the obstacles which hinder this great result. They clearly see, what indeed it requires no acuteness to perceive, that unless they can, and that quickly, sink all their differences and show a clear practical scheme, involving the two points—first, that of a single portal to the profession, and, secondly, that the portal shall be well guarded, so as to exclude unworthy entrants,—this work will be taken out of their hands, and done independently of them altogether. The Council is not a whit behind the individual bodies in perceiving that this is the case, and in desiring that the reform should be accomplished without the interference of Government. Independently of the beneficial results to the public depending on some such change in our examining system, the consideration of what is due to poor students, whose means will be more and more tried by the process of education, should impel the licensing bodies to quick action in this matter. Dr. GULL deserves the hearty thanks of all future generations of students for the strong feeling with which he, on two occasions in the Council, denounced the disgrace of nineteen rival bodies competing for a dip into the shallow purse of the candidate for a medical licence. We confess to thinking, with Dr. PARKES, that this consolidation of licensing bodies cannot be accomplished; that the difficulties are probably insuperable in each division of the kingdom. But this can only be found out by the failure of earnest attempts. And if the licensing bodies cannot succeed, at any rate they can fail in the attempt. The whole discussion satisfied us, and we suspect others besides us, of the wisdom of the proposals of Dr. LUSH's Bill for relieving the licensing bodies of these duties altogether, and for providing licensing examining boards perfectly distinct from them, and leaving them independently to dispense their own special qualifications, save mere licences to practise. Much is expected of this London scheme; but we

want a national scheme. Moreover, this very scheme contemplates leaving the Apothecaries' Society as at present, and with its existing powers of granting a licence independently of that of the Conjoint Board. The Council hopes that before its meeting in the early part of 1872 the bodies in the various parts of the country will have agreed upon a conjoint scheme. Far be it from us to discourage either hope or charity; but it is time that this reform was accomplished. If the licensing bodies can satisfy the profession and the Government, well and good. If they cannot, the time is at hand when they must resign the attempt altogether, and stand out of the way of a reform compared with which all other medical reform is of secondary importance.

It would be well for the profession to study carefully the statistics of the small-pox epidemic, and take to itself some of the lessons they contain. For the first time since the introduction of vaccination, the deaths from small-pox have assumed the proportions of a plague. Over 10,000 lives have been sacrificed during the present year in England and Wales; whilst Scotland and Ireland have, comparatively speaking, escaped. In London, 5641 persons have died of small-pox since the beginning of the year. Notwithstanding this fearful lesson, so great is the apathy of the public, and so imperfect are the arrangements for securing general vaccination, that of 34 children admitted into the Stockwell Hospital during the last fortnight, only 2 were vaccinated, and of the 32 not vaccinated, 16 have already died; whilst a visit to the public vaccination stations shows that the panic which existed at the beginning of the year has completely subsided, that at some the supply of infants is below the average and barely sufficient to secure an adequate and regular supply of lymph, and that, practically speaking, no revaccinations are being done. Now it is evident that, if the epidemic is to cease, the public must be aroused from this apathetic state; and the question is—How can this be done? We may certainly answer that it will not be accomplished by diminishing the number of medical men directly interested in public vaccination. We want to increase, not diminish, the number of agents interested in promulgating sound views. Every additional public vaccinator who can be made to use his personal and professional influence in favour of vaccination, is a true friend to the State; and we are of opinion that all secondary machinery, whether legislative or otherwise, is as nothing compared with the power over the public mind which may be exerted by the whole profession if the medical body really puts forth its influence. It is to the formation of a healthy public opinion on the subject of vaccination that we must look for the most complete success; and it is for the purpose of increasing as far as possible the number of apostles of vaccination that we have proposed that every medical practitioner who can show that he has vaccinated 150 children in the year from arm to arm, and who expresses his willingness to submit to the inspection of his work by the officers appointed by the Privy Council, should be made a public vaccinator. We want to enlist the spirit of emulation and competition in the work; and we believe that this will be far more effectual than any theoretical views as to the population and size of districts attached to public

stations, and more certain of exercising a good influence on public opinion than the restrictive system which is now in force.

But there are other facts which the profession will need to take to heart. Much of the neglect of vaccination may indeed be due to public apathy and defective administration; but let us seriously inquire how far that apathy has been increased by the defective way in which the operation has been done. Let us look at the facts. Of 9392 patients who have been admitted into the Small-pox Hospitals under the management of the Metropolitan Asylums Board, no less than 6854 had been vaccinated—that is, nearly 73 per cent. Taking the mortality from small-pox at 17.5 per cent. of those attacked, and the deaths this year in the whole country at 10,000, it will follow that more than 122,000 vaccinated persons have suffered from small-pox. Now the question is, do these facts represent the legitimate expectations of the profession upon the subject? Knowing as we do the comparatively high protective power of vaccination, and the all but complete protective power of revaccination, ought we to be satisfied with this alarming state of things? Can we greatly wonder that the opponents of vaccination should point to such statistics as an evidence of the failure of the system? Nay, further, can we wonder that the Government should be dissatisfied, and seek by administrative changes to effect an alteration? It is necessary to speak plainly on this important matter, for we believe that the unpopularity of vaccination and the mischievous alterations which have recently been made in the administrative machinery are due to the careless and defective manner in which the operation has been performed, rather than to any disbelief of its intrinsic value. It is for the profession itself to remedy this unfortunate state of things. Greater attention must be given to the teaching of vaccination in the schools. We must no longer treat the operation as one which may be left to apprentices and careless assistants. We must not be satisfied with small and imperfect vesicles. We must vaccinate over a considerable surface, and repeat the operation whenever there is the smallest deviation from the normal course. It is by such means that we shall increase the protective power of vaccination; and we should rejoice in seeing a larger number of public vaccinators, were it only with the object of bringing more of them under the wholesome education of the inspectors of the Privy Council. And the consequences of more complete protection will show themselves in an augmented public confidence, in a better tone towards public vaccinators, and in a less grudging remuneration of their important work. We are speaking generally, not less in the interest of the profession than of the public, when we say that we hope there will be more care in securing the full protective influence which vaccination can certainly bestow.

WHEN we read in the daily journals of Thursday, the 22nd of June, the account of the ceremonial of the so-called opening on the previous day of the Royal Hospital of St. Thomas by her Majesty, we little anticipated that on that day fortnight, Thursday, the 6th of July, we should find an appeal in the advertisement sheet of the leading

daily journal to the pockets of the public in behalf of this Royal but pauper charity! The appeal in question is worthy of analysis, for it carries its own condemnation. The Committee, when receiving the QUEEN and the public in the "pavilions" on the 22nd ult., said as plainly as they could that "money was no object"; that they had built a magnificent hospital for the poor of the metropolis, which was worthy of her Majesty's presence, and which would at once be filled with patients. It turns out, however, that the Treasurer has spent half a million sterling on the buildings (including £90,000 borrowed of the Charity Commissioners, to be repaid in thirty years), and he now asks the public for £20,000 "to enable the governors to efficiently furnish, fit, and complete the hospital, without further encroaching on the income upon which its future maintenance depends." The Treasurer's advertisement winds up with such an exquisite bit of "bunkum" with respect to the confidence he feels that, "as there have been in the past, so there are in the present time, helpers in like emergencies," and that the "personal interest" of the QUEEN will induce others to "generously contribute the funds," that we are greatly tempted to indulge in a well-known transpontine and locally appropriate exclamation.

Let us turn now to the question of maintaining St. Thomas's Hospital. The only information we gain from the Treasurer's appeal is that "after payment of interest on the loan, with the annual instalments of the principal, there will, it is believed, be sufficient income from the endowments to maintain the hospital in efficiency; but it is of extreme importance that its income should not be further encroached on by the unavoidable cost of the fittings and furniture." We have no means of gauging the extent of the Committee's "belief," but after going over this new hospital, and with some experience of other London hospitals to guide us, we shall be much surprised if the cost of the 600 promised beds is under £50,000 per annum; and we can quite understand the "extreme importance" of not encroaching upon an income out of which £90,000 has to be repaid with interest in thirty years. We were not surprised, therefore, to find an announcement of a festival dinner "in the Court-room of the hospital," to take place next Wednesday, with the view of producing the funds, without which not a single patient will reap the benefit of an expenditure of half a million in what we cannot but characterize as reckless extravagance.

For a Royal charity to be competing in the market for voluntary subscriptions is, on the face of it, scandalous; but when we know that other metropolitan charities are at their wits' end for funds, we feel bound to protest against the public appeal now made for St. Thomas's. The very next advertisement to the one we have referred to will serve as an illustration. It is from the "London Hospital" in Whitechapel, where, without Royal foundation or patronage, a great work is done; for, in 1870, no fewer than 5213 in-patients were relieved, and it is well known that the majority of these were urgent cases of accident or disease. The expenditure of the London Hospital, with nearly 600 beds, was last year over £30,000; whilst its funded income is under £15,000, and the balance has to be begged from the benevolent public. When St. Thomas's can show an equal

amount of relief afforded, it may perhaps appeal also for help, but not before.

We may probably be told that, whatever extravagances have been committed, there is the building ready for furnishing, and be asked what remedy we propose—save a public appeal. We reply that if the necessary expenditure is impossible without materially decreasing annual income, the new wards had better stand empty for a time, so that income may be saved; or let one or two pavilions only be opened with the same number of beds as there are at Newington. At least let the welfare of the patients become for once the first consideration; and, until every ward is furnished, let the "Treasurer's house" stand vacant!

At a time when the claims of physical science as an instrument of mental education are being somewhat warmly advocated, it is strange, although perhaps opportune, that distinguished physicists should come forward to afford convincing evidence that their favourite pursuits have in no way preserved them from the natural liability of mankind to error. The last echoes of Professor TYNDALL'S lecture on Dust have scarcely died away, when Mr. CROOKES, the editor of the *Quarterly Journal of Science*, devotes no less than ten pages of that publication, and three woodcuts, to an account of his own "Experimental Investigations into a New Force"; the manifestations of which are that Mr. HOME, the so-called medium, is able to play an inverted accordion with one hand, and to increase the action of a suspended board upon a balance. Of all the amazing things contained in Mr. CROOKES' article, perhaps the most amazing is the suggestion that the "force" concerned is "new"; since similar feats are at least as old as human records. SIMON of Samaria, according to the chronicles that have come down to us, beat Mr. HOME and his accordion all to nothing; for he caused a scythe to cut grass by itself, in a manner equal to the work of the most skilful mower. Men of science, indeed, have generally held themselves excused from investigating these things simply because they are so old, and because the modern professors make no advances beyond those of the most remote antiquity. We have no space to enter into the investigation of Mr. CROOKES' Psychic Force, and we are no more concerned to explain Mr. HOME'S performances than to explain those of Professor HERRMANN; but, referring the reader to the original paper for the details, we may observe that to play tunes on a musical instrument requires not only force, but the intelligent direction of that force. Any force, moreover, that can manifest itself by moving the keys and bellows of an accordion must be correlated to the ordinary physical forces of nature, and must always exist in some demonstrable form. To speak of it as being subject to "unaccountable ebbs and flows" is almost to utter a contradiction in terms.

Perhaps the worst symptom displayed in Mr. CROOKES' paper is the statement, contained in a footnote, that "it argues ill for the boasted freedom of opinion among scientific men, that they have so long refused to institute an inquiry," &c. When this dreary old claptrap begins to jingle, we may give up the case of him who performs upon it as wellnigh hopeless. Moreover, a genuine physical philosopher who writes F.R.S. after his name, will be so pro-

digious a prize in the net of the modern professors of occult science that they will spare no pains, skill, or ingenuity to retain him as a disciple, no subtle flattery to compromise him as an advocate. It will be well if we escape another general ferment among "intelligent people" about what will, we suppose, on this occasion be called "psychicism"; and as, if report speaks truly, a large number of ladies of advanced opinions will shortly be deprived of their occupation as agitators against the Contagious Diseases Acts, it may reasonably be expected that they will reinforce the ranks of the professors and students of the new science. We have only one hope of being spared all this. If Mr. CROOKES could be induced to read history, he might possibly come to be convinced of the utter uncleanness of the idol that he seeks to introduce into the temple of science, and might then lend his aid to the task of its speedy and ignominious expulsion. We think he owes it to his position at least to make trial of the remedy that we suggest.

Perhaps the drollest part of the whole paper, however, is in the confirmatory letters appended to it. Dr. HUGGINS writes what may be called the testimonial evasive—Mr. Serjeant Cox the ditto jubilant and illogical. We have neither space to refer to the former nor to quote at large from the latter, but we hope our readers will take notice of both. Mr. Cox is of opinion that the experiments establish "conclusively" the important fact that there is a force proceeding from the nerve-system capable of imparting motion and weight to solid bodies within the sphere of its influence; that they also confirm the conclusion (unknown to us) at which a committee of the Dialectical Society arrived after more than forty meetings, and that "it" (we do not know what) must throw light "upon the obscure laws of life, of mind, and the science of medicine." We had supposed that a force proceeding from the nervous system, and capable of imparting motion, not only to solid bodies, but also to hollow ones—e.g., to the crania of sciolists,—was about the best established and most familiar fact in nature. Before the conclusions of the Dialectical Society we can only bow in silence, retaining the parrot's privilege to "think the more."

SIR D. CORRIGAN moved in the Medical Council—"That the facts which have come to the knowledge of the Council in the investigation of the case of Mr. KEMPSTER have impressed the Council with the conviction that an amendment of the laws in force in regard to death registries is most urgently required; and that a copy of this resolution be forwarded to the Secretary of State for the Home Department." Sir DOMINIC has done further service in this matter by publishing a paper on it, showing the unreasonableness of expecting medical men to supply many of the particulars required by the present form of death-certificate. As regards the case of Mr. KEMPSTER, we need say nothing more about it. We cannot quite see why it was ever brought before the Medical Council. We think that the Council or its solicitor, Mr. OUVRY, would have shown more taste, and a sounder view of the design of the law, in refusing to make an investigation. If, as was said, both the Registrar-General and the Home Office saw no offence against the

law in Mr. KEMPSTER's conduct, the Council should have spared him the annoyance of the proceeding. Surely the Act does not contemplate the Council taking the initiative in bringing charges against medical men. The faults of the present system of death registration might have been made quite patent to the Home Secretary without taking up the time of Mr. KEMPSTER and the Medical Council in appraising the evidence adduced, the only valuable part of which was the frank information afforded by Mr. KEMPSTER and his friends.

The law of death registration varies in the different divisions of the kingdom, as is well set forth in Sir DOMINIC's paper. A medical certificate is not compulsory in England. In Scotland the law imposes a penalty of forty shillings on the practitioner who omits to transmit a certificate to the registrar. In Ireland a practitioner refusing to fill up a certificate of death is guilty of a misdemeanour. But, although a medical certificate is not enforced by law in England, the practitioner is urgently required to certify, inasmuch as the absence of a medical certificate is apt to give rise to suspicion or a coroner's inquest. The medical profession do not object to certify. On the contrary, practitioners are willing to give gratuitously returns of great public importance. But they object to the form of the certificate, as involving certification of particulars of age and of the fact and the time of death, which the practitioner cannot be expected to know except by report. Dr. RUMSEY has pointed out that, in cases of fraudulent representation as to the alleged death of a person, the medical man who incautiously signs a certificate of death may render himself liable to be indicted for a conspiracy to extort money. There is clearly no reasonableness in exacting such certifications from the medical attendant. Moreover, medical men do not like to be required to give information gratuitously under threat of fine or charge of misdemeanour, as in Scotland or Ireland. If the State will exact technical information from them, it should ask it as a favour, not demand it on threat of pains and penalties. There is reason to hope that these considerations will not be disregarded in the sanitary legislation which is expected. Whenever the form of death certificate is altered, the statement of the cause of death and of the duration of the different diseases should not be couched in such dogmatic language as is required at present. We do not agree in all that is said as to the difficulty of assigning the cause of death in most cases with sufficient accuracy for all public purposes; but, as Dr. STOKES suggests, the words "to the best of my belief" might properly precede the statement of the cause of death. A Minister of Health would amend the law touching all such questions with great facility.

THE British Medical Association holds its thirty-ninth annual meeting, under the presidency of Mr. Whipple, on the 8th, 9th, 10th, and 11th of August, at Plymouth. The annual museum will exhibit during the sittings the latest inventions in medical and surgical appliances; while specimens of ancient and modern fracture apparatus, or diagrams of the same, will also be on view, with new pharmaceutical preparations, new articles of diet for invalids, pathological specimens, and many other objects of professional interest.

Medical Annotations.

"Ne quid nims."

THE CONJOINT SCHEME FOR ENGLAND.

It would be premature to consider this scheme as an accomplished fact. At the time we write nothing more is known than that committees representing respectively the College of Physicians and the College of Surgeons have agreed to a scheme, the essence of which is the creation of a Committee of Reference which shall have the power of appointing examiners to examine all entrants into the profession in England. Members of the Committee of Reference are to be prohibited from appointing any of their number as examiners. Each of the Colleges agrees to abstain from the exercise of its present independent privilege of giving admission to the Medical Register—in other words, of licensing to practise in its peculiar department of the profession. The right to registration would thus depend, as far as the parties to the conjoint scheme are concerned, on the passing of the Conjoint Board. It is proposed that the Committee of Reference shall consist of equal numbers of representatives of medicine and surgery: thus, that each University in England shall have a representative of medicine and another of surgery, that the College of Physicians shall have four representatives of medicine, and the College of Surgeons four representatives of surgery in the committee. We may congratulate the committees of the Colleges on the amount of concession and self-sacrifice involved in this scheme. But a little reflection will show how inadequate it is, even supposing it to be accepted by the Colleges themselves and by the Universities. First, the Committee of Reference would be a sort of Medical Council of sixteen members, with very important duties, and yet not responsible either to the profession, or the Government, or the General Medical Council. Secondly, the scheme applies only to England, and involves no guarantee of similar arrangements in the other divisions of the kingdom. Thirdly, excluding the Apothecaries' Society, it leaves that body in full possession of its present licensing powers, which are enough to place men on the Register. It is surprising that the English Colleges should think for a moment that any such partial and local action would suffice to secure uniform and efficient examination throughout the kingdom. On the contrary, such an arrangement between the leading English Colleges, without any legislative alteration of the conditions of registration, would be a reckless sacrifice of their own privileges that would create unprecedented temptations to the other licensing bodies of the kingdom, and thus tend powerfully to the lowering of standards of examination. The incorporation of the Apothecaries in a conjoint scheme is said to be beset with insuperable difficulties; but if it were not, it would be sanguine beyond all justification to expect such a local and limited scheme as the above to effect the purposes desired.

THE UNIVERSITY OF LONDON.

We have lately had occasion to comment upon the Matriculation examination at the London University, with especial reference to the questions in Chemistry and in Natural Philosophy. We are glad to be able to place on record that the papers on these subjects for the June examination were of a more satisfactory character than on some previous occasions, and contained nothing to which candidates who had studied these subjects at all could fairly object. In the Natural Philosophy paper, moreover, only eight questions out of twelve were to be answered; so that candidates

might select those subjects with which they were most conversant. Notwithstanding this apparent relaxation, the prodigious fact remains that more than half the candidates (327 out of 569, or 58 per cent.) were rejected at the last examination—a circumstance that points only too plainly to a want of accord between the requirements of the examiners and either the teaching of ordinary schools or the capacity of ordinary learners. The slight change to which we have referred still leaves our essential objection untouched. We think the subjects mentioned ought not to be made obligatory at matriculation; and that extra marks in classics or mathematics should be accepted in lieu of them. The object of matriculation is, or ought to be, to show that the mental faculties have been sufficiently cultivated to render the boys fit recipients of a learned education. It is neither necessary nor desirable that they should be all trained into one colour and pattern. Would it not be judicious for the Senate to issue a report by the examiners upon the failures, so as to direct the attention of schoolmasters to the weak points in their teaching, and to assist them in obviating such a scandal for the future, as well as, possibly, to call forth criticism that might be valuable? No document could be more interesting to educationists than a tabular view of the marks gained in each subject by every candidate, whether successful or rejected. The University goats now outnumber the sheep; and the public may justly seek to know how the line between them has been traced out.

AN IMPERTINENT QUESTION.

A QUESTION asked of the First Lord of the Admiralty on the 6th inst. by Lord Richard Grosvenor deserves both notice and rebuke. It stood as follows in the official notice-paper:—

"Lord Richard Grosvenor,—To ask the First Lord of the Admiralty, what are the principles which direct the selection of officers of the civil branches of the navy for the honour of the military branch of the Order of the Bath. And whether it is intended that the head of the medical branch is always to be recommended for appointment as Knight Commander of that Order; if so, whether the head of the paymaster's branch is to be recommended for a similar distinction; and, if so, why not?"

Mr. Goschen's answer was dignified and to the point. He declined to discuss the principles of selection, which are embodied in the statutes of the Order of the Bath. He laid down the law that no such distinction as the K.C.B. could be gained except by meritorious service; and that no office could be permanently connected with the Order. He pointed out that there was no head of the paymaster branch corresponding to the Medical Director-General; and, if there had been, he held such comparisons to be odious and intolerable.

It may seem an extraordinary thing to Lord Richard Grosvenor that officers of a so-called civil branch should be eligible for military distinctions; but we would beg to remind his Lordship that these terms are purely conventional; and that the youngest assistant-surgeon in the service is on the same footing, as regards military distinctions, as the oldest captain, and for the reason that they are equally exposed to the dangers of warfare, though their duties under fire may be different. From the reference to the paymaster branch, we can only presume that the noble lord thinks that the "money interest" deserves support in the navy as well as in the House of Commons. He does not surely mean that the care of the money-chest and stores is more important than the charge of the lives of the crew of a ship; at all events, such, fortunately, is not the opinion of her Majesty's advisers.

In the case of the present Director-General, the implied

sneer at his services is particularly out of place, since he has distinguished himself, not only under fire, but under the still more trying circumstances of an Arctic voyage. On referring to Buckle's Medical Officers' Navy List, we find the following to have been Sir Alexander Armstrong's principal services, which, in our opinion, sufficiently prove his claim to the honour he has received as the head of his department:—He was senior medical officer of the exploring expedition in Xanthus, Asia Minor, 1843-44; was surgeon and naturalist to H.M.'s ship *Investigator* at the discovery of the north-west passage; was five years in the Arctic regions, 1849-54; and was present at the bombardment of Sweaborg in 1855, being senior medical officer of the rocket-boats in the night attack on the batteries.

RESUSCITATION IN CASES OF SUSPENDED ANIMATION BY HANGING.

AN interesting case of an attempt to resuscitate a criminal who had been hanged, which, if the experiment had been allowed by the authorities to proceed, would probably have proved successful, is recorded in the *Gynaecological Journal* for June of the present year. The criminal, whose name was Skaggs, was hanged at Bloomfield, in America, in the autumn of last year. He was thirty-five years of age, of sanguine temperament, 5 ft. 10 in. in height, and weighed 160 lb. Prior to the execution his health was good. The drop was six feet. The noose was adjusted to the usual place, but slipped, as the man fell, behind the mastoid process. In three minutes all struggling ceased. At the end of four minutes Dr. Robert Jackson, who furnishes the account, perceived a distinct fremitus passing over the region of the radial artery, which entirely ceased at the expiration of six minutes and a half. At the end of four minutes more all signs of life had disappeared, and the body was blue. Dr. Jackson pronounced the man dead, in which opinion he was supported by Dr. McDonald. The body was allowed to hang four minutes longer, in all fourteen minutes and a half since the fall. The corpse was then taken a distance of nearly fifty yards, to a room in the court-house, and placed face upwards on a carpenter's work-bench. The external appearance was unmistakably that of a person dead, the pulse and the heart's action having entirely ceased. The rope had made a deep impression on the neck, and had brought up tumefaction on both sides, which caused the appearance of a depression a quarter of an inch in depth. Examination proved that the neck was not broken. Dr. Jackson and Dr. McDonald then proceeded to the experiment of resuscitation. Divesting the chest of its covering and employing artificial respiration for a few minutes proved of no effect. The poles of a galvanic battery were then placed on the course of the pneumogastric nerves, and strong currents passed into the body at intervals of four seconds; this was soon followed by indications of respiration. The sheriff who had executed Skaggs now interfered, and compelled the operators to suspend their labours for ten or fifteen minutes, during which time the favourable indications diminished. They then resumed the experiment as before, but were again desired to desist. At the expiration of an hour and six minutes after the fall they again went to work, and in a few minutes the action of the heart and of the radial pulse was perceptible. The epiglottis now became swollen, and the tongue had to be drawn forward with the forceps to permit free respiration. A few ounces of blood were then taken from the medio-cephalic vein. The dilated pupils contracted slightly, and signs of life were more marked. The experiment was again suspended during the succeeding thirty-eight minutes, by reason of the wires of the battery being carried off by the sheriff, excepting for a few minutes whilst the current was passed through the

arms of the operators. After recovering the wires, and working a short time, Skaggs swallowed a small quantity of brandy-and-water. At 113 minutes after the drop slight muscular action was perceptible independently of the battery. The circulation at the extremities was languid, to excite which cayenne pepper and whisky were employed; sensibility of the cornea appeared. Eighty minutes later the body was again rubbed, and the feet became warm. Pulsation in the carotid artery was then perceptible to the eye. Until seven o'clock, six hours after the execution, all signs of life increased, at which time the pupils began to dilate, and indications of life to decline. The room, it is stated, was crowded to suffocation throughout the experiment. Dr. Jackson then took between twelve and thirteen ounces of blood, of a dark venous colour, from the same vein of the opposite side, when the pupils again contracted to nearly their normal size, the pulse assumed a strong and steady action, and the breathing became easier and more regular. He now used the ocular muscles, his eyes following persons around the room. This was most marked at nine o'clock, at which time, by the interference of a mountebank, the opposition of the populace became so violent as to render the further prosecution of the experiment impossible. The man lived till four o'clock the following morning.

The lessons taught by the experiment appear to be—first, that if we desire to extinguish life in a criminal, he should either, as Professor Haughton has shown, be allowed to fall further than six feet, unless he happen to be a Daniel Lambert in point of weight, or made to hang for a longer period than fourteen and a half minutes; and, secondly, the results here obtained give good hope that, by judicious treatment, a considerable number of instances of suicidal hanging, in which case the drop is seldom considerable, might be resuscitated. We should like to have seen appended an account of the post-mortem, and particularly in reference to the question of the condition of the laryngeal and tracheal cartilages.

THE CHOLERA OUTBREAK AT SECUNDERABAD.

AMONG the puzzling facts connected with the history of cholera, especially in India, is the way in which that disease will break out in the most sudden and unexpected manner, and then as mysteriously subside and disappear, after having prevailed with great virulence within the narrow limits of a corps, or similar body of men. The recent outbreak in the 18th Hussars is an instance of this kind. That regiment with a battery of garrison artillery, was stationed at Secunderabad; the other European troops being fortunately at Trimulgherry. The first case of cholera occurred in the 24th Native Infantry, on or about the 24th of May last, and was soon followed by three cases in the 18th Hussars. In the course of twenty-six hours there were 35 cases of cholera in that regiment, and 9 deaths. By the 30th the virulence of the disease was diminishing, although the attacks were still numerous. Altogether, upwards of 80 persons belonging to the regiment were attacked, with 39 deaths. By the latest accounts the disease had disappeared. The 18th Hussars moved out from Secunderabad to camp on the 26th without much apparent benefit, but on their again moving, on the 29th, to a camping-ground at Cheeralah, the disease began to subside. There appears to be very little beyond surmise as to the origin of the outbreak in question. It is alleged, on the one hand, that on the 24th of May some cases of diarrhoea were present in the bazaar, and that a few travellers with suspicious cases had arrived in the neighbourhood. On the other hand, it is rumoured that suspicions were entertained that the native servants had of late been surreptitiously

obtaining water for the troops from a well that had been condemned. As usual on such occasions, the officers of the regiment escaped. All the facts connected with the outbreak should be rigidly investigated while the occurrences are still fresh in the minds of persons present at the time. Every antecedent circumstance affecting those who were attacked and those who escaped should be minutely gone into. Was there something in common by which the victims were linked together, and to which the officers and the men of the other corps were not exposed?

THE CONTAGIOUS DISEASES COMMISSION.

It was believed that the Report of the Commission appointed to inquire into the working of the Contagious Diseases Acts would have been laid on the table of the House of Commons this week; but up to the hour of our going to press this had not been done, and we are therefore unable to present our readers with a summary of the document. We have reason to believe, however, that the medical and other evidence brought forward in opposition to the Acts completely failed to convince the Commission of the alleged necessity for repealing them, and that, on the contrary, an extension of their area will be suggested, whilst at the same time certain modifications in the arrangements will be made. First, and most important is, we regret to hear, the abandonment of enforced periodical examinations of prostitutes. This will be, in fact, returning to the voluntary provisions of the Act of 1864, which was proved to be inefficacious; secondly, the period of detention of women found to be diseased is to be limited to three months; thirdly, the provisions of the amended Act are to be extended to any locality the authorities of which request it, and have proper hospital accommodation; and, fourthly, the powers of the Act will be extended to parts of London.

We hope to be in a position next week to discuss at length the Report itself.

THE GROWTH OF LONDON.

Now that the decennial stock-taking of our population is completed, it becomes interesting to compare the results with hypotheses which have in earlier days been advanced in reference to the increase of population. Especially is this the case with London, whose growth two centuries ago threw an eminent statist of that time into such bewilderment as to induce him to predict that in less than 200 years London would absorb almost the entire English population. In the year 1683 Sir William Petty put the metropolitan population at 670,000; and, having calculated that this number would double itself in forty years, he went on to estimate that by the year 1840 there would be, out of a total population for all England of 10,917,389, no less than 10,718,880 in London. One would have thought that to a mind far less acute than Petty's the absurdity of this conclusion would at once have suggested that a fallacy or fallacies must be underlying his hypothesis; but, so far from this being the case, he further deduced as "certain and necessary" that the growth of the city "must stop before the said year 1840," and, in fact, would be at its utmost height about the year 1800, when its population would amount to 5,359,000. The Census of 1801 demolished Petty's theory, by showing that the population within the bills of mortality was 744,803, and in 1841 it was 1,351,396, the total population of England at the latter date being 15,914,148. London has gone on increasing until the present time, and now contains 3,251,804 persons, or about one-seventh of the whole population of England and Wales.

The "sleeping" or Census population of the City proper,

the nucleus of the whole mass, has decreased since 1861, dwelling-houses having given way to warehouses, offices, &c., the population being driven outwards. The population within the limits of the Registrar-General's Weekly Returns of Mortality (which include the City) has gone on increasing, but the ratio of increase has diminished because the building area is limited. But if we take the wide circle within which is comprised the Metropolitan Police Division, we find not only an actual increase of numbers, but also of the rate of increase. In point of fact, it is in the ring lying outside the registration limits, but within the police division, that the growth is most marked; the population in this outer ring has increased more than 50 per cent. in the last ten years; and the Registrar-General does well to raise the question whether adequate sanitary provision has been made for this rapidly increasing community without the pale of the Metropolitan Board of Works. The tendency of the metropolis to enlarge her borders ought to be taken timely advantage of in view of future requirements; and amongst these the acquisition of a sufficient number of open spaces and the provision of healthy homes for the industrious poor should have a prominent place. And it is to the border-land encircled by the Metropolitan Police ring that we must look in great measure for the supply of both these needs.

THE INJECTION OF AMMONIA INTO THE VEINS.

THE April number of the *Australian Medical Journal* contains a paper by Dr. George B. Halford, in which he reverts at some length to the statement of the results of his experiments made in 1869; to the effect that, within one hour and a half, as much as four drachms and a half of the liq. ammoniæ (B.P., sp. gr. '959) might be injected into the veins and even into the heart of dogs completely narcotised with chloroform, with the effect, at each injection of thirty minims, or even sixty minims, of restoring the animal to thorough consciousness and apparent original vigour. When the animals were subsequently killed, no injurious effect could be discovered in any organ of the body, the punctures into the ventricles even not being visible. Dr. Halford therefore suggested, in over-prolonged narcotism from chloroform, and in threatening syncope, the injection of ammonia into the jugular vein, or even into the heart itself. Dr. Halford says that some of his detractors have endeavoured to make it appear that Dr. B. W. Richardson had tried this practice so far back as 1854, and found no advantage from it; quoting to this effect from a lecture by Dr. Richardson in a contemporary last year. He argues that he can find no allusion in Dr. Richardson's writings to such a practice. We may leave Dr. Richardson and Dr. Halford to settle the question of priority in the use of the injection of ammonia into the veins for narcotism from chloroform. The practice is one that British practitioners will be naturally slow to adopt; nevertheless, we feel it right to notice the records of Australian practice. Dr. Halford says further that he has thrown four grains of carbonate of ammonia dissolved in a sufficient quantity of water into the jugular vein of a dog without any bad effect—that he has thrown ten grains into the veins in the space of five minutes without the least bad symptom. Dr. Richardson, years before, with the assistance of Dr. Halford, performed a similar experiment; symptoms like tetanus followed, and death. Dr. Halford believes these bad results of Dr. Richardson's experiment were due, not to the ammonia, but to the manner of injecting the altered or altered blood. He mentions a case of snake-poisoning in which Drs. Jackson and Coker successfully injected twenty-five minims of liquor ammoniæ fortior (sp. gr. '880); another in which Dr. Dowling heroically injected sixty minims in a

severe case of snake-poisoning, saving his patient. And he refers to a case of Mr. Gilbee's, detailed in the same number of the *Australian Medical Journal*, in which, after heavy drinking of brandy, a young man swallowed an ounce of chloroform. He fell rapidly into a state of insensibility, with irregular pulse, cold extremities, laboured breathing, and complete anæsthesia. After using the stomach-pump, half a drachm of the dilute liquor ammoniac (B. P., sp. gr. .959) was injected into the median cephalic vein of the left arm. In twenty minutes, the symptoms being somewhat improved, the injection was repeated in the right arm, with the effect of further reaction. In about two hours from the first injection another half-drachm was injected into the left arm. Consciousness returned in less than six hours. In six or seven more the patient died, having been troubled in the interval with thirst, sickness, diarrhoea, and sleeplessness. It is argued that the patient died from exhaustion and brandy poisoning, but that he was recovered wonderfully, though temporarily, by the injection of ammonia. It is to be regretted that experience elsewhere does not result in such favourable reports of this proceeding, but our duty is to record the practice of our colonial brethren, which is at least bold and original, and is said to be successful.

THE MERCANTILE MARINE.

THE Merchant Shipping Code is again shelved for another session, and a fragmentary Bill has been brought in by the President of the Board of Trade and Mr. Arthur Peel to meet some special emergencies. All matters relating to the health and accommodation of seamen are, however, conspicuous by their absence, though, according to our knowledge and belief, the time has arrived when the adoption of varied scales of diet at sea might now supersede all necessity for the regular issuing of lime-juice. But, though it is perfectly well known that good preserved meats and vegetables can be obtained at less cost than salt beef and pork of corresponding quality, shipowners are still indifferent or object to their general adoption.

The Marine Department of the Board of Trade has lately issued a circular recommendation with respect to disinfection in cases of small-pox, which circular was put in motion at the instance of Mr. W. S. Whitfield, Secretary to the Local Marine Board at Newcastle. This gentleman appears to have compounded the circular by using about equal parts of the Ship Captain's Medical Guide and some other authority not so clearly discernible. They do not mix well, and so the result is not happy, for we are told, *inter alia*, that "the small-pox epidemic exists at present to a small extent in our merchant vessels," and also that "great care should be taken by the master in choosing his crew, so as to avoid the engagement of any sailor who exhibits symptoms of the disease." We recommend those who are interested in the matter to compare the former statement with the particulars of small-pox in the Marine that have appeared in the *Shipping Gazette* and THE LANCET during the past two or three months, and to gauge the value of the latter extract by paying two or three visits to any of the shipping offices in the United Kingdom when men are signing articles.

DEAF-MUTISM.

WE are glad to see that *The Times* has noticed the efforts of Mr. Van Praagh to introduce the system of "lip-reading" and speaking into the education of the deaf and dumb of this country. The system so successfully carried out by Mr. Van Praagh and others on the continent has been noticed more than once in these columns during the last two years, and we are glad to find greater publicity given

to what we regard as a most useful public effort. Of course there is likely to be some considerable opposition to the general introduction of the system of teaching the totally deaf to speak and to read off other persons' lips; for there are vested rights in deaf-mutism as in everything else. The Society which at present looks after the interests of the deaf and dumb, with its head-quarters at the Polytechnic, and which has a church and schoolrooms building in Oxford-street, is not likely to look favourably upon efforts made in a direction opposed to its own; for one of the primary points of Mr. Van Praagh's system is to discard, at once and for ever, all finger-talking or similar system of signs. The active and excellent secretary of the Society, who, we understand, preaches to his afflicted congregation on his fingers, will probably be convinced with difficulty that deaf-mutes can be taught to read off anyone's lips or to talk articulately; but that such is the fact we have had personal opportunity of ascertaining. The benefit to the afflicted themselves and their families by the successful introduction of such a method can scarcely be too highly estimated.

We understand that Mr. Van Praagh is organising a public meeting, to be shortly held, at which his plan for the establishment of day-schools for the deaf and dumb will be brought forward under distinguished patronage; and we believe that the effort is in every way worthy of the support of the medical profession, the members of which must necessarily be brought in contact with many sufferers from the trying affliction of deaf-mutism, either congenital or the result of early disease.

THE DINNER OF THE FELLOWS OF THE COLLEGE OF SURGEONS.

THIS annual festival took place on the evening of Thursday, the 6th instant, after the election at the College, under the presidency of Mr. Carden, of Worcester, and proved a great success. The speech of the evening was that by Dr. John Osborne, of Bitterne, who in eloquent terms proposed the Medical Corporations, conjoining with them the representative institutions of America, out of compliment to Dr. Sayre, of New York, who was present as a guest. Dr. Burrows replied for the College of Physicians, Sir William Ferguson for the College of Surgeons, Mr. Bradley for the Apothecaries' Society, and Dr. Sayre made a highly humorous and characteristic speech on behalf of the transatlantic institutions. The toast of the Provincial Schools was given by Mr. Hancock, and responded to by Mr. J. Voss Solomon, of Birmingham; that of the Metropolitan Schools by Professor Humphry, of Cambridge, and responded to by Mr. Holmes Coote. The Chairman's health was proposed by Mr. Paget, who was received with great enthusiasm; that of the Stewards by Dr. Sayre; whilst the exertions of the Honorary Secretary, Mr. Carr Jackson, to which much of the great success and pleasure of the evening was due, were not forgotten when that gentleman's health was proposed as the concluding toast from the chair.

THE NAVAL MEDICAL SERVICE.

DR. MINTER, R.N., the senior Deputy-Inspector on the active list, has been appointed to succeed Deputy-Inspector W. T. Domville in charge of the Malta Hospital. According to the *Army and Navy Gazette*, this appointment has been made at the request of the Court, and this we can readily believe, for Dr. Minter has had no hospital experience to warrant the appointment; and the only reason for his desiring it is because, in order to attain promotion to the rank of Inspector, it is required that an officer should have had charge of a hospital in the subordinate rank. Dr. Minter has been attached to the Royal Yacht since 1854, and travelled

in Egypt with the Prince of Wales in 1861-62. He had, however, seen active service in his earlier career, having been present at the operations on the coast of Syria in 1839, and having received the thanks of the Governor-General of India for services in the field during the Burmese war in 1851.

Dr. Dugald McEwen has been appointed to succeed Dr. Winter in the Royal Yacht, and the appointment will be for a period of five years.

CHEMISTRY AT THE ROYAL ACADEMY.

It is, we understand, proposed to add to the professors of the Royal Academy of Arts a Professor of Chemistry, whose especial duty it will be to instruct the students in the chemistry of the pigments they employ, with the view of obtaining, if possible, that permanency and brilliancy of colour which were known apparently to the old masters, but have died out in these degenerate days. We learn that Mr. F. S. Barff, the assistant Professor of Chemistry at University College, London, is a candidate for the chair; and we imagine that no one more fitted for the post could be found, since Mr. Barff, in addition to being a chemist of the first order, is known to have for many years devoted much attention to art subjects, and to have even studied fresco-painting at Munich. Mr. Barff's recent "Cantor Lectures" before the Society of Arts on "Materials employed by Artists" showed such an acquaintance with the practical details of painting that we should esteem the Royal Academy fortunate in securing his services.

THE NEW MINISTRY OF LOCAL GOVERNMENT.

THERE is to be an end to the Poor-law Board. Mr. Stansfeld has introduced a Bill to establish a Board of Local Government, which, whilst embracing the functions of the Poor-law Board, will include the duties of a Local Government Act Office, and of the Privy Council, so far as the latter relate to vaccination and to public health. The Board will also have in charge the registration of births and deaths, the registration of disease, drainage and sanitary improvements, baths and wash-houses, town improvements, artisans' and labourers' dwellings, and local taxation. The Board will consist of the President of the Privy Council, the Secretaries of State, the Chancellor of the Exchequer, and a Secretary who, like the President, will sit in Parliament. We hail this large instalment of sanitary reform with great satisfaction. We have reason to believe that the Bill will be accepted by members on all sides of the House, and we feel sure that it augurs great good for the public, and not a little advancement for the medical profession.

THE SANITARY STATE OF ILKLEY.

ILKLEY, near Wharfedale, has recently been visited by Mr. J. Netten Radcliffe, one of the inspectors of the Medical Department of the Privy Council, on account of complaint having been made of great nuisance arising from the defective sewerage and drainage of the place. The following is the inspector's opinion as gathered from the report—viz., that Ilkley is without proper sewers; that water-courses (and probably ditches also) are used as outfalls for sewage, and are productive of much nuisance; and that the local authority, the local board of health, has neglected its duty in respect of sewerage matters, and in respect of the abatement of nuisances resulting therefrom. It seems scarcely credible that, with such a state of things, Ilkley can be, as Mr. Radcliffe says it is, "a beautifully situated village and well-known health resort in Wharfedale." It is suicidal on the part of the people of Ilkley, if it is a summer resort, not

to construct sanitary works, for illness is sure to follow, sooner or later, upon such conditions as have been described; and when a place of this class has once been visited with a severe local epidemic, it is a very long time before it recovers its prestige.

HOW SMALL-POX IS PROPAGATED.

MR. GREYSON, the general manager of the Great Western Railway, has written to *The Times* stating that the Board of Trade have refused their sanction to a bye-law making it a punishable offence for a person to travel or cause another to travel whilst suffering from a contagious or infectious disease. This seems to us unnecessary, as it is already a punishable offence for any person suffering from such a disease to expose himself in any public place, which without doubt a railway train is. The real obstacle is the difficulty of taking the person affected before a magistrate in order to have the fine inflicted upon him. But we think if the law were put in force, and a patient were taken off to gaol and detained there until he could be safely set at large, people would be a little more careful before they enter a train with the eruption of small-pox full out upon them. But it is not only in railway trains that the disease is propagated. Only a few days ago a hansom cab drove up to the small-pox hospital at Stockwell, at half-past three o'clock in the morning, that being the hour selected by the manager of one of the largest West-end hotels for getting rid of one of the barmaids. It is rather too bad that the hospital officials should be knocked up for such a purpose, but happily it did not prevent them from giving the cab into the charge of the police. It would be interesting to know if the premises have been properly disinfected.

ST. PANCRAS AGAIN!

THIS parish is determined to be notorious. An action was recently tried before Mr. Baron Pigott in the Court of Exchequer, in which Mr. D. N. Dyte, the late medical officer of the Highgate Infirmary, sued the St. Pancras guardians for salary in lieu of notice on account of his alleged illegal dismissal. The defence was singular, and quite worthy of St. Pancras. It was that the contract under which Mr. Dyte acted, and under which they had paid him two quarters' salary, was invalid by reason of its not having been passed under the seal of the board. We feel that we are using moderate and appropriate language when we designate a defence such as this a mean and contemptible quibble. As the guardians rested their case solely on this and one or two other technical pleas, and did not dispute any of the facts alleged by the plaintiff, a nonsuit was the result; but leave was given to the plaintiff to appeal. For the purpose of assisting Mr. Dyte to do this—a proceeding entailing considerable expense,—a subscription has been set on foot, which we trust will be extensively and liberally responded to. Dr. Bathurst Woodman, of the London Hospital, has kindly consented to receive subscriptions.

THE "AMBULANCES DE LA PRESSE."

A CORDIAL welcome cannot fail to be extended to Dr. Ricord, chief surgeon, President of the Surgical and Medical Committee of the "Ambulances de la Presse," and Dr. Demarquay, second surgeon of the same "Ambulances," who are now in London, on the invitation of Colonel Loyd Lindsay, to meet our Committee in aid of the Wounded. M. Edmond Tarbé, editor of the *Gaulois*, and President of the Patriotic Subscription of the "Ambulances de la Presse," was also invited, but being unable to leave his journal, will be represented by M. de la Grangerie, the general secretary of the "Ambulances"; while Count Flavigny and Count

Sérurier will appear for the International Society in Aid of the Wounded. Dr. Ricord conveys to Colonel Loyd Lindsay the Cross of Commander of the Legion of Honour, conferred by the Government of France in return for the sympathy shown for the "Ambulances de la Presse" by the English Society in Aid of the Sick and Wounded, of which the Colonel is president.

ST. ANDREWS MEDICAL GRADUATES' ASSOCIATION.

THE summer session, or rather summer holiday (for little but formal business is transacted), of this Association was held on Friday, the 7th instant, at the Orkney Arms Hotel, Maidenhead. There was a goodly gathering of London and country members under the headship of the President of the Association, Dr. Day, of Stafford. M. Sarazin, late Surgeon to the Cent Gardes of the Emperor of the French, and Mr. Serjeant Robinson were among the honorary members present. The day was glorious, and many keenly enjoyed a quiet row on the Thames under the Cliveden woods to Cookham. Visits were paid to Lord Boston's house at Hedsor, and to Dropmore, where, under the shade of mighty araucarias and deodaras, one echoed the wise words of the great philosopher: "God Almighty first planted a Garden. And indeed it is the purest of humane pleasures; it is the greatest refreshment to the spirits of man."

SIGNIFICANT.

JULY is said to be the hottest month of the year. If we are doomed to see nothing of the sun this month, it does not appear that we are to escape the evils which are sometimes ascribed to his presence. We regret to hear that a soldier of the Foot Guards, who was present at the review in Bushey Park, has died of cholera. He was admitted to hospital suffering from what appeared to be trifling diarrhoea. The exciting cause of the attack does not seem to have been discovered. The symptoms progressed until collapse set in, and continued for about three days, with a fatal result. The case, although it bore a strong resemblance in several respects to the Asiatic form of cholera, differed from it in others, and was, in all probability, an example of what is termed English cholera, which does occasionally, though rarely, prove fatal.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE annual assemblage of this Association will be held at the Freemasons' Tavern, Great Queen-street, Lincoln's-inn-fields, on Wednesday, July 26th, at 4.30 P.M. precisely, when, as we understand, several subjects of much importance to the service and the profession will be brought before the meeting. The question of Poor-law medical reform is just now attracting very considerable public attention, and as Mr. Corrance has given notice of his intention to bring on a discussion of the subject in the House of Commons on the 21st, it is most desirable that, whatever may be the conclusion at which the House shall arrive after hearing his statement, there should be no appearance even of falling off in earnestness on the part of the friends of the cause. We therefore trust there will be a full attendance of members and friends of the Association. In the evening, at half-past six, the annual banquet will take place. Gentlemen desirous of attending the dinner should at once write and announce their intention of so doing to Mr. J. Wickham Barnes, hon. secretary, 126, Gower-street, Bedford-square.

We also urge on all gentlemen interested in this question to immediately communicate with such M.P.s as they may happen to know, and urge them to attend and support Mr. Corrance's motion.

OUT-PATIENT HOSPITAL REFORM.

A MEETING of the committee appointed to carry out the resolutions of the late meeting on the abuses of the out-patient system of the metropolitan hospitals and dispensaries was held last week, when it was resolved to seek a conference with the Charity Organisation Society, and to request the President of the Poor-law Board to receive a deputation with respect to the first resolution passed at the meeting,—that an improved administration of Poor-law medical relief, in accordance with the Metropolitan Poor Act of 1867, is essential to the reform of the out-patient administration of the metropolis. The committee passed a resolution that it was desirable that the deputation should be accompanied by delegates from the Charity Organisation Society, the British Medical Association, and the Poor-law Medical Officers' Association, and that the interview should, if possible, take place before the impending debate on medical relief in the House of Commons on the 21st instant.

The President of the Poor-law Board has consented to receive the deputation on Tuesday, the 18th instant, at one o'clock, and a conference will be held with the Council of the Charity Organisation Society on Monday next, at 5 P.M.

SANITARY MATTERS AT THAME.

DR. BUCHANAN'S report on the insanitary condition of Thame has had the effect of stirring up the inhabitants to a sense of their needs, and a public meeting has been held to consider the advisability of adopting the Local Government Act. We regret to learn that at this meeting a medical man so far forgot not only the amenities of his profession but also the courtesy due from one gentleman to another as to stigmatise Dr. Buchanan's report as "one-sided, false, and disingenuous." Mr. Reynolds has, of course, full right to entertain his own views upon the point whether the disease which has prevailed in Thame is or is not the result of sanitary defects, but he has no right to doubt, or, at any rate, to publicly call in question, the good faith of those who differ from him. He thinks that open gutters are better than covered drains, but it would be very hard indeed if all medical men were bound to have the same preference on pain of having improper motives for their objections attributed to them. We are glad to observe that the adoption of the Local Government Act was decided upon at the meeting.

THE PLYMOUTH GUARDIANS AND THEIR DISTRICT MEDICAL OFFICERS.

IN the face of a rapidly increasing population, the Plymouth guardians have reduced the number of district medical officers from four to three, and they have at the same time equalised and reduced the salaries to £90 per annum for each officer. We rejoice to observe that the matter has been seriously taken up by the whole profession in Plymouth, and that a memorial, which will be found in another column, has been presented to the Poor-law Board on behalf of the gentlemen deprived of their offices. The guardians have treated the memorial with silence, but we sincerely trust that the Poor-law Board will interfere.

THE Great Northern Hospital, it is stated, refuses admittance to the many serious accident cases taken thither, in consequence of deficient beds and insufficient funds. Till these are supplied, the sufferers from accidents in the northern suburbs must go to the Royal Free, Middlesex, or University College Hospitals; though the surgeons of these have their hands quite full.

THE Chalfont Cottage Hospital, which has been erected and furnished at the sole expense of Mr. and Mrs. Hibbert, of Chalfont Park, was opened on the 19th June last, on which occasion the Bishop of Oxford preached at the parish church of Chalfont St. Peter. The hospital is constructed for the admission of six patients. The medical officer is Dr. Andrew Kirkland, of Chalfont St. Peter. Dr. Cape, of Curzon-street, is the consulting physician, and Mr. Campbell De Morgan the consulting surgeon.

WE are glad to hear that the Council of King's College has followed the lead of the sister College, and has conferred the titles of physician and surgeon upon Dr. Duffin and Mr. Henry Smith, who have zealously laboured at their hospital for twelve and ten years respectively, and richly deserve the promotion.

A SPECIAL general meeting of the members of University College is announced to take place on the 29th inst., "for the purpose of supplying the vacancy in the office of President of the College, occasioned by the death of the late George Grote, Esq."

THE Metropolitan Board of Works has decided to oppose further attempts at legislation this session in respect of the Metropolis Water Bill No. 2, now before a select committee.

THE Gainsborough local Board of Health has resolved to appoint a medical officer of health, all the practitioners of the town being eligible for election.

WE understand that the Council of the Medical Society of London has appointed Dr. Habershon to be the Lettsoman lecturer for the ensuing year.

THE post of coroner for the northern division of the county of Bucks is vacant by the resignation of D. P. King, Esq., solicitor.

THE second reading of the Pharmacy Bill has been postponed until Monday next.

THE

REPORT OF DR. PARKES AND DR. SANDERSON
ON THE SANITARY STATE OF LIVERPOOL.

DRS. PARKES and SANDERSON have presented the first part of their report on the sanitary questions arising out of THE LANCET report on the sanitary state of Liverpool.

The first point to which we drew attention was the impropriety of using ash-pit refuse as the foundation of dwelling houses. Drs. Parkes and Sanderson confirm the observations of our commissioner that the deposits complained of do not consist of pure dry ash and cinders, but contain other matters liable to decomposition, and offensive even after the lapse of thirteen months. They state that the remains of potatoes and other vegetable matters could not be discovered after two years and eight months, but that straw, wood, cloth, &c., though very rotten, were not found decayed after three years, and would probably remain in the same state for many more. Organic impregnation was present in all the deposits examined, and ammonia and nitric acid in some; and, although no sulphuretted hydrogen was discovered, the doctors have no doubt that from a soil formed of such cinder refuse, and gradually decomposing, some effluvia must be given out, which would be likely to pass into the houses placed on the soil, and that therefore, on the general principle of requiring and ensuring purity

of air, such soil is objectionable, at any rate when first laid down. After such an emphatic condemnation of the practice we regret to find that the doctors go on to sanction it under certain rules. They recommend the Council to insist on efficient drainage of the sites; that the places filled up with cinder refuse shall not be built upon for at least two years from the date of the last deposit; that the scavenging department should be more careful than they are at present in selecting the kind of refuse used for this purpose; that some system of sorting out the more offensive matters should be adopted; and that in all cases deposits of this material should be inspected by an officer of the Corporation.

It will be well for the Liverpool Corporation to determine whether these precautions will be sufficient to ensure the safety of the public. We do not hesitate to express our opinion that they will be found to be inadequate. The drainage of the brick-pits before the material is put into them will only diminish, not destroy the evil. Decomposition, though slower, will still be going on, and whilst effluvia are given off, the objection remains in full force. The proposed delay in building upon the sites cannot be enforced without a special Act of Parliament, and it is scarcely likely that speculative builders and land proprietors would voluntarily submit to the loss of interest caused by the delay. Moreover, if the suggestion were carried out, the collection of decomposing and offensive matters would still be permitted to give off their foul and dangerous effluvia during the whole of two years, to the annoyance of the neighbourhood in which the deposits are being made, to say nothing of their objectionable appearance in such neighbourhoods as Grove and Sefton Parks. This is a point which the Liverpool Commissioners appear to have lost sight of; perhaps they were not informed that the Corporation were compelled to discontinue the filling in at Grove Park on these accounts. The recommendation that the officers of the Corporation should be more careful in selecting the material appears to us equally fallacious. How can the town safely trust to those who have uniformly stated that the deposits now declared to be improper are altogether harmless? How rely upon officers who have repeatedly denied that the refuse has ever contained deleterious matters? We think, therefore, that the Liverpool Commissioners would have done more wisely if they had firmly counselled the abandonment of a process which is condemned alike by science and by common sense.

The Commissioners then proceed to discuss the practice of filling in with chemical refuse. They say:—"Some portions of the town are built on the refuse of the chemical manufactories (of carbonate of soda), which formerly was largely used for filling up. Sulphuretted hydrogen and carbonic acid are liberated by acids; but in the two samples obtained by us no disengagement of sulphuretted hydrogen takes place from the action of the atmosphere alone. From the personal inquiries we made, it appeared to be clear that in some of the houses built on ground made of this refuse the smell of sulphuretted hydrogen is distinctly perceived, and is a source of great discomfort. On inquiry, we found that the gas entered the houses from the sewers, and did not pass up from the ground below, and this was confirmed by finding that the air in the ventilating sewer shafts contained a large quantity of sulphuretted hydrogen. From what has been said, it is clear that the disengagement of this gas cannot be attributed to the mere action of air on the chemical refuse, but is only produced by contact with acid liquids. We believe there is no reason to doubt that such acid liquids do exist in the sewers between Vauxhall-road and the Mersey, and that these are derived mainly, if not exclusively, from certain chemical works in that neighbourhood. We gather from the statement of the chairman of the Health Committee, 'that the sulphide of calcium will, in spite of every precaution, find its way into the sewers; and if this be so, the only remedy will be to prohibit the passing of acid liquids into the sewers. While advising the Corporation to persist in the prohibition of the use of chemical refuse for foundations, the Commissioners are of opinion that in those parts of the town in which the houses are built on chemical refuse the public health is not likely to be injuriously affected by the fact.'"

It is extremely desirable that we should have a full report of the experiments on which this opinion has been formed. It is one thing to say that the sulphide of calcium

does not disengage sulphuretted hydrogen on exposure to the atmosphere, and another to affirm that it never does so. It is well known that it is a most unstable compound, that it is decomposed by carbonic acid, and consequently by rain, or in the presence of decomposing organic matter; under such circumstances it seems to us rather bold to affirm positively that there is no danger. At all events it would be safer to cover the deposits with a layer of concrete, and make the sewers impervious by the same material.

We shall recur to the report as to the state of the sewers and their ventilation next week.

A RECENT CONTRIBUTION TO MILITARY SURGERY.

AN important contribution to our knowledge of the results of amputation has been supplied by Dr. Stephen Smith, in the shape of an analysis of four hundred and thirty-nine cases of recovered amputation in the continuity of the lower extremity.

The paper is based upon the careful study of the stumps of patients when prepared for the application of artificial limbs. Many of them came under observation at the General Hospital at Central Park, New York. This hospital was for upwards of two years the rendezvous of soldiers who had lost their limbs by amputation, and while inmates large numbers were supplied with artificial limbs by Dr. E. D. Hudson, of New York, who held a Government commission for the manufacture and adjustment of appliances to compensate for losses, deformities, &c., resulting from service.

The records include a table of 158 cases of recovered amputation of the thigh, and 287 cases of recovered amputation of the leg. Great pains seem to have been taken to secure accurate information, and the subject involves points that are at once novel and important. The opportunity for studying the final results of amputation on so large a scale has never occurred before.

Of the two principal methods of amputation, the circular and antero-posterior flap, it is noticed that the antero-posterior flap was preferred more frequently in the thigh, and the circular in the leg. Among other methods, that by flaps of skin and circular incision of muscles was performed in ten cases. This method was, it appears, very popular, with many military surgeons, especially with those who were compelled to transport their patients long distances. The surgeons in General Sherman's army came to prefer this operation to all others. The flaps of skin being lateral, the cicatrix runs vertically over the face of the stump, allowing the ligatures to be brought out of the lower angle of the wound, and securing good drainage of it.

Regarding the success of amputations at different periods after receipt of injury, we find that—(1) Immediate amputations, or those performed *before the shock*, give good results in military surgery. (2) Amputations performed between the first and sixth hours after the injury, or *during the shock*, are more successful than when performed at a later period, but are not probably more successful than when performed immediately. (3) Amputations performed between the sixth and forty-eighth hours, or in the period of reaction, are more successful than at any subsequent period, but are not nearly so successful as amputations performed previous to the sixth hour. (4) Amputations performed between the forty-eighth hour and seventh day, or in the intermediary period, are more fatal than at any time prior or subsequent to that period. (5) Amputations performed after the seventh day, or in the secondary period, are more fatal than amputations performed at any time prior to the forty-eighth hour after the receipt of the injury. We pass over those sections of the paper relating to the influence of the *place and method of amputation upon the amount of atrophy of the stump*, and come to the effects of transporta-

tion on gunshot fractures and amputations. Many of the disastrous results of amputation in the lower extremities have been attributed to immediate transportation; such as the sloughing of flaps, gaping of wounds, protrusion of bone, &c. Although there is, undoubtedly, some truth in this very prevalent opinion, the statement must nevertheless undergo certain modifications. The unfavourable results are often to be attributed to conditions which military exigencies necessitate, or which are the result of negligence. During General Sherman's long marches from Atlanta to Savannah, and from the latter place northwards, the amputation cases did uncommonly well. It ought to be remembered, however, that the army marched through a pleasant country with good roads, and that the men were in good physical and mental condition, with a plentiful supply of fresh food of every kind. Similar results have been experienced by the surgeons of our own army in India; the amputation wounds of those soldiers who were borne on the march progressing most favourably towards healing, while the result in similar cases left behind and treated in hospital was often most unhappy. During the late Franco-German war, the system of evacuation, however useful from military and sanitary points of view, entailed great suffering on the wounded, and no doubt a fatal issue in many cases. To be successful, good roads and vehicles, a plentiful supply of food, water, and dressings, with an adequate number of attendants, are necessary. In the case of wounds involving the fracture of long bones, however, the effects of transportation are most unfavourable. To say nothing of the suffering to the patients, the irritation set up by the movement of the fractured bones is very likely to be followed by osteo-myelitis. Out of six cases of compound fracture after the battle of Jonesboro', but one recovered, where every circumstance seemed most favourable. On the other hand, out of thirty-five cases of amputations, only four proved fatal, and two of these were secondary amputations.

A part of Dr. Stephen Smith's paper may be considered in the light of an appendix to the foregoing analysis. It is devoted to the subject of amputations at the ankle-joint in military surgery, and will probably be new to most of our readers. Amputation at this joint was a comparatively infrequent operation in the American as in other wars. Out of 9705 amputations, but 67 ankle-joint amputations have been fully ascertained at the Surgeon-General's office. The medical director of the army of the Potomac published an order to the effect that amputation at this joint by Pirogoff's method, in preference to amputation through the leg, was to be carried out whenever practicable. The subject is discussed by Dr. Stephen Smith in a very satisfactory, and practical manner, and it is one well deserving of consideration. The conclusions at which he has arrived are the following:—1. Ankle-joint amputations are fifty per cent. less fatal than leg amputations. 2. They are three per cent. more liable to be followed by re-amputation than leg amputations. 3. The stumps left after ankle-joint amputations are far more serviceable than those resulting from leg amputations for unassisted locomotion. 4. An artificial limb can be far more usefully applied to an ankle-joint than to a leg stump. It may be stated in general terms, that the experience of the American war has established the fact that ankle-joint amputations are less fatal than leg amputations, but that sloughing and necrosis are more likely to occur in the former than in the latter; that the resulting stump in ankle-joint amputation is much more favourable for unaided or aided progression than in leg amputation. The correct inference from these conclusions is that ankle-joint amputations should be recognised as occupying an important place among the legitimate operations of military surgery.

Among the real and alleged causes of failure after this operation, sloughing of the flaps, necrosis, sensitiveness of the stump, and tendency to displacement of the heel-flap backwards by the action of the muscles of the calf, are enumerated; and it is asserted by some that, owing to the large size of the posterior flap and its imperfect nourishment, the stump will not endure transportation. The facts do not, however, appear to be sufficient to decide the last point. The other objections receive due consideration; and the subject is concluded by a critical examination of the comparative value of the methods of amputation at the ankle-joint by Syme and Pirogoff.

THE HABITUAL DRUNKARDS BILL.

THE reply given by the Home Secretary to the deputation of the 6th inst., on the Habitual Drunkards Bill, and the fate of Mr. Dalrymple's motion in the House of Commons on the 12th, were eminently characteristic, not only of the Government's dealing with questions of a medico-social kind, but of the spirit in which it approaches all measures affecting the liberty of the subject.

Abuse of stimulants, it is notorious, weakens the moral sense and the power of self-control; in other words, the habit causes an organic change in the nervous system which renders it difficult for the drunkard to withstand temptation, to effect his own cure, or even to co-operate with his family and his physician to that end. The question therefore arises, "whether, through prolonged seclusion and compulsory abstinence from intoxicating drinks, the nervous system might regain its normal condition, and the moral sense and the power of self-control be restored?" The answer has been attempted in the United States, where the Government allows the committee of the habitual drunkard, duly appointed under statutory provisions, to place him in the Inebriate Asylum, and authorises his detention under such restraint as may be required to prevent his escape. A description of such an asylum at New York was given in THE LANCET for October 1st, 1870; while the facts which had previously been made known regarding it were such as to lead Mr. Dalrymple, M.P., to introduce last session into Parliament a Bill to amend the law of lunacy, and to provide for the management of habitual drunkards, whereby power would be given to treat such persons as lunatics, and commit them to special institutions—"private patients for indefinite periods, and pauper patients for not less than three or more than twelve months." The extreme jealousy with which the British Legislature regards all measures affecting the liberty of the subject, except those which enforce obedience to the law, proved fatal then, as now, to Mr. Dalrymple's Bill; and, in spite of official assurances, will, we fear, postpone its enactment indefinitely.

At the same time, the advocates of such a measure as Mr. Dalrymple's must be prepared to meet objections drawn to its provisions from experience recorded elsewhere than in America. "Under existing statutes," say the Commissioners in Lunacy for Scotland in their last report, "habitual drunkards or dipsomaniacs are frequently sent to asylums, and are rarely discharged under a period of three months. Frequently they are detained much longer; but the evidence in favour of lasting benefit from this step is by no means satisfactory." The Scottish Commissioners anticipate, therefore, that beyond the relief afforded to friends and fortune by temporary detention, no great good would result from the enactment of Mr. Dalrymple's measure. Reformatory treatment, however, would, in their opinion, be possibly more favourable if made systematic. But industrial employment is not enforced under our lunacy legislation; and with a view to make a remedy of recreation, institutions have been proposed for dipsomaniacs of the upper ranks, where the nervous system should regain its tone by out-door amusements, and sports like hunting, shooting, or fishing. Here, again, however, the Commissioners would take a desponding view; at any rate, experiments in this direction have never, within their knowledge, been carried out "with such perseverance and completeness" as to be followed by any marked success. Institutions of this kind could not possibly be established for pauper dipsomaniacs; and, accordingly, the Commissioners raise the question, "whether compulsory employment should not be regarded as an essential part of any scheme for restoring the power of self-control in drunkards, not only for economical reasons, but also on grounds of rational physiology." This suggestion, however, is at once beset by the difficulty: compulsory employment implies power of punishment, and power of punishment is not allowed under lunacy legislation. Habitual drunkards, if brought under the restorative discipline of the reformatory, must be dealt with, not as lunatics, but as offenders against whom the criminal law may take action. Mere detention from the risk of temptation will not, as we have hinted, ensure such renovation of the nervous system

as will give self-control. The practical recognition of the principle of penal discipline appears, therefore, an alternative mode of solving the question. But even this is only in the tentative stage; being acted on in continental "Dépôts de Mendicité"—institutions as to which the Scottish Lunacy Commissioners might supply us with some information in their next report.

The whole subject of dealing with habitual drunkards is, we are sorry to think, only in its infancy; and, while we would advise no relaxation in devising and discussing schemes like Mr. Dalrymple's, we would caution the profession and the Legislature as to the danger of putting too much confidence in such solutions of the problem. "Prevention" is still the paramount rule to be observed in this, as in nearly every other, social evil. Let any man compare the habits of the upper classes sixty years ago with those of the same classes now, and ask himself, to what agencies is the improvement due? Was it the seclusion of the asylum or the discipline of the reformatory that saved them from their intemperance and grossness of life? Or was it enhanced education, refined tastes, ennobled aspirations? Give the poorer classes, as far as we can, the same advantages. House them in dwellings compatible with physical health and moral decency. Wean them from animal indulgence by domestic comfort, and by facilities for intellectual recreation. Train them early in the knowledge of the fabric and functions of their bodily and mental constitutions, so as to make them, in Sir James Cox's words, "the intelligent guardians of their own health, and the intelligent cultivators of their own moral and intellectual powers." Then, but not till then, shall we diminish lunacy, intemperance, and crime.

PRESSED BEEF AND DESICCATED BEEF-JUICE.

BARON LIEBIG conceived the idea of extracting from the wild cattle of South America those substances to which meat owes its characteristic properties, and conveying them to the ill-nourished populations of Europe. The so-called extract of meat was to be made, sent over to Europe, and distributed among the labouring classes, whose cheerless fare was thereby to be rendered stimulating and equivalent to an animal diet. From the entire ox only eight or ten pounds of the Liebig's extract are procurable, but these eight or ten pounds of extract are very potent, and will animalise a mountain of vegetable food. The plan has, to some extent, answered. European food has been enriched with animal products from South America, and, in token of the success of the enterprise, the Liebig's Extract Company paid an 8 per cent. dividend some time ago. There are, however, difficulties in the way. The great bulk of the carcass—all the nutritive part, as distinguished from the stimulating extract—is thrown away or converted into manure, and, in those hot climates, constitutes a serious drawback, involving considerable outlay for its proper disposal. On the other hand, the extreme concentration of Liebig's extract is a hindrance to its proper employment by the poorer classes in Europe. At present the benefit has been almost confined to invalids and the wealthy and middle classes, and has hardly reached the poorer people, who ought to be the chief recipients of it.

A new process for accomplishing the objects above referred to has just been brought out by Mr. Henley, a well-known engineer, and a company called "The Pressure Meat Preserving Company" is being formed to work it.

Flesh in its natural condition consists of about 75 parts of water and 25 parts of solids. Mr. Henley proposes to remove the greater part of the water, whereby the meat will be reduced to one-half of its original weight (without loss of substance), and will be preserved at the same time. We have just tasted some of it, which had been kept for about a month in a chemical laboratory, and can speak to the soundness of its condition. The novelty in Mr. Henley's process is the employment of powerful pressure as a means of making the drying possible. In six hours the bullock which walks into the slaughter-house may be put on board ship in the shape of highly dried pressed beef and desiccated beef-juice.

ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

THE Local Committee appointed by "The Three Towns," Plymouth, Devonport, and Stonehouse, to prepare for the annual meeting of the British Medical Association in 1871, have succeeded in obtaining the cordial co-operation and assistance of the civil and military authorities; so that every facility will be furnished them for inspecting the naval and military arsenal; Her Majesty's ships of war in the Hamoaze and Plymouth Sound; Her Majesty's dockyards at Devonport and Keyham; the Royal William Victualling Yard and the naval and military hospitals in Stonehouse; the Breakwater and its lighthouse; the Eddystone Lighthouse; the Plymouth Citadel, the Hoe, and the forts recently erected within a radius of five miles.

By the kind permission of his Grace the Duke of Bedford, the Right Honourables the Earl of Mount Edgcumbe, the Earl of St. Germans, and the Earl of Morley, and other gentlemen, opportunities will be offered to the members of surveying the grounds and the extensive views commanded in the parks attached to their mansions on the banks of the Tamar and Plym; whereby they will be enabled to pass in review the objects before-named, as well as the magazines at Bull Point; Antony House, the seat of W. H. Pole-Carew, Esq., whereat is preserved Holbein's portrait of Dr. Butts, Physician to Henry VIII.; Ince Castle, the residence (*temp.* Charles II.) of the Wit of Cornwall, Killebrew; St. German's Church, the site of Cornwall's ancient Cathedral, and Port Eliot (the ancient Priory); Trpmaton Castle, the residence of the Norman Earls of Cornwall; the late Brunel's masterpiece, the Royal Albert Bridge at Saltash; Landulph Church; Buckland Abbey, the seat of Drake, the great circumnavigator; Maristowe; Cothele House; Pentillie Castle; Morwell Rocks; Harewood, the scene of the fair Elfred's treachery; and other objects of interest in a trip of twenty miles by steamboat. Other excursions will be arranged, with the sanction of the directors, &c., of the railways, to Launceston Castle, the ancient Cornish stronghold; to the Saxon Abbey of Tavistock; to Endsleigh Cottage; to the wild and romantic scenery of Dartmoor; to West Cornwall, Penzance, the Logan Rock, and Land's End; St. Just; the famous mine of Botallack, &c.

PRIZE-DAY AT ST. MARY'S HOSPITAL.

THE distribution of prizes to the students of this school came off on the 6th instant, in the anatomical theatre. Dr. Sibson presided on the occasion. The proceedings commenced by the reading of the annual report by the Dean, Dr. Cheadle. It alluded to the losses which the school had sustained by the retirement of three of its oldest and ablest teachers, Dr. Sibson, Mr. Lane, and Dr. Tyler Smith, but, nevertheless, found many subjects for congratulation in the recent additions which had been made to the teaching staff, the additional prizes and inducements which the liberality of the governors had enabled them to offer to the students, and the recent improvements which had been made in the school buildings.

After the successful students had severally received their prizes, Dr. Sibson delivered a most thoughtful and eloquent address upon medical education. He pointed out how vastly medical knowledge had increased during the past half-century, how much and what good work had been done by physicians both in England and abroad, and how the various sciences had each contributed to our medical knowledge. While, however, medical knowledge had made enormous advances, medical education had stood almost still. We were still trammelled by the traditions of our forefathers. Above all things, it was necessary that a rigid and extended preliminary scientific examination should be passed by every student before commencing his medical studies properly so called. He should then devote himself for years to the practical study of anatomy and physiology, and the practical study of medicine at the bedside, each of the four years to be terminated by a practical examination. The learned president warned his hearers that the tide of education was

everywhere rising, and that if the "medical ship" failed to rise with the tide, it would inevitably be swamped.

A vote of thanks to the President and the Dean brought the proceedings to a close. We append a list of the successful prizemen.

Winter Session, 1870-71.—Scholarship in Anatomy (value £25): Mr. James Lidderdale. Prosectorship in Anatomy: Mr. W. Hugh Davies and Mr. B. Schlesinger. Prize for Students of the First Year (value £20): Mr. W. V. Lindsay. Certificate of Honour: Mr. J. J. Gawith and Mr. J. Perkins. Prize for Students of the Second Year: Mr. D. Protheroe Saer. Certificate of Honour: Mr. B. Schlesinger. Clinical Prize for Students of the Third Year: Mr. Parrott.

Summer Session, 1870-71.—Prize for Students of the First Year: Mr. D. Protheroe Saer and Mr. B. Schlesinger. Prize for Students of the Second Year: Certificate of Honour, Mr. Cumming.

Correspondence.

"Audi alteram partem."

"GENERAL PARALYSIS OF THE INSANE"

To the Editor of THE LANCET.

SIR,—In the current number of the *Journal of Mental Science* my friend Dr. Mackenzie Bacon, of the Cambridge Asylum, takes exception to some remarks made by me in the last volume of the *Guy's Hospital Reports*, on the expression "general paralysis of the insane," and as the pages of neither work are open to controversy, you will, perhaps, allow me to restate my case in a few words. I take objection to the term since I am daily brought in antagonism with it, but of course do not for a moment ignore the existence of so characteristic a disease as that which alienists are pleased to call by this name. Dr. Bacon's brief description of it is excellent, but by no means removes my difficulty. I maintain that the use of so general a term as "paralysis of the insane," or "dementia paralytica," is essentially bad, as I and my pupils know to our cost, when we have before us a paralysed patient whose mind is affected, and we are excluded from adopting an expression which its simple meaning would suggest as strictly appropriate, because it has already been restricted to a narrower sense by the alienists. The term dementia paralytica, in its obvious meaning, is applicable to other cases than the peculiar disease known as general paralysis of the insane. Suppose, as an analogous instance, we have a dozen diseases of the kidney, which, leading to its destruction, terminate in a suppression of the healthy urine, and to this condition the term ischuria is applicable; would it not be of great disadvantage to employ a term of such general meaning to one particular form of disease, marked during its progress by peculiar symptoms; would it not tend to confound such different diseases as granular degeneration and suppurative nephritis? So in the nervous system, if the brain and spinal cord degenerate, both body and mind become weakened, and a dementia paralytica results. But the symptoms vary in the course of the disease, according to the causes and mode of degeneration; one kind of change in the cortical structure, leading to degeneration, might be accompanied by melancholia, and another kind of change, leading equally to degeneration, might be associated with an exaltation of ideas, and yet the term general paralysis of the insane ought to be strictly applicable to both. What I require of the alienist, therefore, is to apply to the disease which he treats a more specific name. If he acknowledges a strictly pathological condition, he may style it peri-encephalomeningitis; if he would rather adopt a clinical nomenclature, then he might call it "paralysis ambitieuse"; and the latter I think he would prefer, for I have observed, as a matter of practice, that the mental phenomena alone are quite sufficient for its recognition, whilst without these very few physicians will venture upon a diagnosis, even if markedly universal paralytic symptoms are present. I am entirely precluded from the use of the expression "general paralysis," although my patients have a general loss of power, because the term is already appropriated in an

exclusive manner; and if these patients are also mad, I must not say that they have general paralysis of the insane, because a peculiar form of insanity is always intended. I think we general physicians have a perfect right to the use of "insanity" and "paralysis" in their common and obvious meaning, whilst it is the duty of the specialist to adopt a name more strictly applicable to the form of disease which he is considering. Can he not make a good English counterpart to "paralyse ambitieuse"?

I am, Sir, your obedient servant,

Grosvenor-street, July, 1871. SAMUEL WILKS.

ON DR. SAYRE'S "SUBPERIOSTEAL EXSECTION" OF THE HIP-JOINT.

To the Editor of THE LANCET.

SIR,—On Saturday last my friend, Dr. Lewis Sayre, did me the honour to visit the Charing-cross Hospital, as I had informed him that a case for excision of the hip had been placed under my charge. The distinguished surgeon of New York has performed that operation a great many times, and has described his method as "subperiosteal," using for peeling away that membrane a blunt or semi-blunt instrument which he calls his "oyster-knife." This instrument has in the middle a roughened handle, at one end of which projects a straight thick blade, and the other a thick curved blade, both with blunt edges. I also have often performed this operation, and likewise have my own method, in which the periosteum is preserved; but I use the same sharp blade throughout.

In the operation of Saturday I commenced my semilunar incision with forward concavity, one inch above the trochanter, and terminated it on the outer aspect of the thigh three inches below that point. This was deepened so as to divide the external obturator muscle and the capsular ligament on the back and upper part, also for some distance on the lower aspect of the joint. My left forefinger then lay on the carious head of the bone, still in the acetabulum, and when passed above the neck it lay beneath the two lesser glutei and the external rotator muscles. My next step in the procedure is to pass my knife flatwise on my finger beneath those parts, then, lifting the blade over the top of the bone, to pass it along the outer surface of the trochanter, peeling away the gluteus medius and periosteum from the oblique line and the surface in front; next, bringing the handle forward so as to place the blade, still under the periosteum, on the front margin of the trochanter, to separate in the same way the smallest gluteus and pyriformis. There now only remains of periosteum that part which lies behind the oblique line. A cut across the bone in the place where the saw is to come separates this triangular piece from its continuation below, and by seizing the front and lower angle with forceps or fingers, this piece, with very little or no assistance from the knife, can be stripped from the bone as far as the posterior intra-trochanteric line. The rest of the operation is merely throwing the bone out of the socket, and sawing off its end.

When, however, I had bared the head and trochanter, and before I separated these muscles and the periosteum (down to which points Dr. Sayre's method and mine are, I believe, the same or nearly so), I wished to see, and to give Dr. Sayre an opportunity of showing in England, the use of the instrument termed "oyster knife," and his method of employing it, which is as follows:—He makes a crucial cut through the periosteum on the outer face of the trochanter, and then uses his blunt tool with considerable force to peel away the periosteum, with a good deal of bone detritus attached, as far as the inter-trochanteric line in front and behind; he then throws the head out of the cavity, and applies the saw as usual. I am bound, however, to say that his use of the "oyster knife" impresses me with a profound conviction that it is not a desirable weapon; it does not separate the membrane cleanly, but ploughs through the outer casing of the bone. It therefore prolongs the operation, renders a considerable amount of force necessary, thus bruising the periosteum and brutalising the bone-surface. Moreover, the crucial incision in the periosteum renders it almost indispensable to dislocate the bone by throwing it straight upwards, a less easy direction than that to be described, and rendering a higher place of incision necessary.

Recurring to what I consider those original points of my own proceeding which contrast with Dr. Sayre's, I would point out that the upper horn of my first incision, about three-quarters of an inch above the trochanter, falls a little higher than the spot where the smaller glutei begin to form their tendons, and leaves just room enough for lifting the blade over the top of the bone so as to make these muscles directors for separating the periosteum. By using nature as my guide, I take advantage of the oblique line, along the edges of which, as on a hem, we can get the firmest grip of the membrane. Moreover, in throwing the bone out of its fibrous bag we give it the backward and upward inclination of this line—the easiest direction in which to dislocate the femur. The proof that my operations are quite "subperiosteal" lies in the fact that the portions sawn off are clear of that membrane, but are smoother and less marred than they appear after application of the "oyster knife."

I shall of course watch this case closely, and duly report if any subsequent events warrant a change in these views; but at present I must continue to prefer using, for all work not absolutely bony, the knife, and avoiding any forcible dealing with a blunt instrument where a sharp one may be more gently and as safely used. I have known Dr. Sayre so long by interchange of letters and other courtesies that I am sure he will receive my criticism in the spirit which prompts it.

I am, Sir, your obedient servant,

RICHARD BARWELL.

George-street, Hanover-square, July 11th, 1871.

MIDWIFERY IN THE MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—Will you pardon my intruding on your space, but I ask for information. Are we to understand that the Medical Council by their recent decision consider that midwifery proper requires no more instruction than botany, and that the diseases of women and children require none at all?

I am, Sir, yours, &c.,

St. Thomas's-street, E.C., July 11th, 1871. J. BRAXTON HICKS.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

THE event of the week is the election to the new special Hospital for Women. The candidates were ten in number, and embraced the cream of the rising members of the profession who are unconnected with the present hospitals. Mr. Bracey, M.B., surgeon to the Children's Hospital, Dr. T. Savage, F.R.C.S., Professor of Comparative Anatomy in Queen's College, Mr. Ross Jordan, M.R.C.S., and Mr. Lawson Tait, F.R.C.S., were the successful candidates. The mode of election was novel. Candidates were not required to be proposed or seconded; they merely announced their intention of standing, and sent in their applications, which were duly examined by the consulting staff, and then the voting was conducted by means of papers on which the names of the ten candidates were printed. Four names were selected by each elector and placed in a ballot box. The numbers having been counted, the names of the two candidates who had the fewest votes were struck out. Fresh papers were then given out and the process repeated until there were only four names left. Even then the election was not considered complete until a final ballot for place had been taken, when the above-named gentlemen were declared elected.

Some surprise and not a little disappointment have been expressed that Mr. Bassett, Professor of Midwifery in Queen's College, was not one of the elected officers. By age, position, experience, and special devotion to this branch of practice, he certainly was worthy of one of the appointments, and his zeal for the promotion of this special hospital deserved a better reward.

The recent disclosures made by Dr. Thorne, as to the sanitary condition of Dudley, have led to energetic efforts being made for the improvement of that borough. We hear that at a recent meeting of the Town Council the

sanitary state of the town was declared to be vastly altered, and that the town "would be quite clean by the end of the week." We regret that the proposition for the appointment of a medical officer of health, at the modest salary of £75 per annum, was not agreed to. Surely, after the recent disclosures, the Town Council of Dudley do not want further evidence of the necessity of the appointment of a health officer for their borough.

You will probably take notice of the charges and insinuations of the Editor of the *British Medical Journal* in another place, but it may be as well to remind him that he is making an untrue and unwarrantable statement in saying that Mr. Gamage represents THE LANCET in Birmingham, Your correspondent, who is, nevertheless, a member of the Association, clearly agrees with Mr. Gamage, that the Secretary of the Association ought not to be degraded to the position of a subordinate officer of the Editor of the *Journal*, and that an independent audit by professional accountants of the accounts of the Association is imperatively called for.

During the past week the following appointments have been made: Dr. Underhill, late resident medical officer to the Children's Hospital, has been appointed Resident Physician to the Queen's Hospital; Dr. Sawyer, extra physician to the Children's Hospital, has been appointed Director of the Pathological Department; and Dr. Mackey, also extra acting physician, Director of Anesthetics.

Chloroform has once more proved fatal. The patient in this case was a brewer, forty-five years of age, whose middle finger was about to be amputated for necrosis at the Queen's Hospital by Mr. Wilders. Hardly was the patient under the influence of the drug, of which three drachms had been administered, when he suddenly died. Mr. Gilbert Smith, the house-surgeon, who was administering the chloroform, noticed no perceptible alteration in the breathing, until the man's face became pale and the heart's action almost instantly was arrested. Artificial respiration and galvanism were employed, but without any result. The man's heart was found to be fatty, and death was attributed to syncope.

Birmingham, July 10th, 1871.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

THE FACULTY OF MEDICINE OF PARIS.

The re-opening of the School of Medicine took place on the 12th of June last. The courses of lectures will continue till August 15th, and, exceptionally, the time of examinations prolonged till the 31st. The gentlemen who now lecture are Professors Bouchardat, on hygiene; Tardieu, forensic medicine; Gubler, therapeutics; Pajot, midwifery; Dolbeau, surgical operations, &c. The attendance is pretty full. A most important measure has been adopted at a recent meeting of the Professors—namely, the re-establishment of the appointment of Professors by public competition. This system had been discarded by the Empire, which reserved the right of nominating the professors, after a preliminary voting among themselves for the presentation of three names to the choice of Government. This system has undoubtedly produced many evil consequences, and much good is expected from the re-establishment of the *concours*, which, at the time it existed, produced all the able men who are now dying away (Velpeau, Trousseau, Malgaigne, Bouillaud, &c.)

THE SURGICAL NOVELTY OF PARIS.

The surgical novelty of the day here is M. Alphonse Guérin's new plan of dressing wounds. It consists in introducing a quantity of cotton wool into the stump immediately after amputation, or on any wound whatever, surgical or accidental. The amputated limb—to take this case—is then wrapt round and round with cotton wool, quite dry and alone; a bandage is then applied, and that is all. The bandage is pressed a little tighter on following days if necessary, so that there may be a mild compression; but the dressing remains undisturbed till the 20th or 25th day, when, on removing the packet of wadding, a glassful of pus is found within the folds of the cotton, and the wound

is discovered quite healed. M. Guérin, amidst the extraordinary mortality which has attended all the amputations done since the beginning of the German siege, has already obtained by this means six successful cases of amputation of the thigh out of nine, whilst all his amputations of the leg are doing well. This has created quite a sensation here in the surgical wards of the hospitals, and Professor Gosselin, of La Charité, and M. Guyon, of Necker, are already experimenting with this method of their colleague of St. Louis. I send you this rough sketch of the case, but I need not tell you that I shall make your readers fully acquainted with all the details of the question next week.

REMOVAL OF THE STRASBURG FACULTY.

This is a fact which is now busily occupying the medical public in France, especially in Paris, and exciting much interest. Nancy and Lyons are the two rival towns which claim the succession of Strasburg, and between which the Government still hesitates, though it inclines, it is said, to Lyons. Both towns have their warm partisans, and bring forward numerous claims. Lyons is the larger and more populous town; better provided with the implements and opportunities of medical work—namely, hospitals, &c. But Nancy faces Strasburg, it is next to Alsatia, and in the midst of Lorraine; better placed to recall France to the lost populations of these provinces, to vie with the German Universities, attract students from Alsatia and Lorraine, and form a natural and topographical link between French science and German science. So argued the deputies of the North and of the East in favour of Nancy, on laying a petition on the President's board at the National Assembly.

WHAT IS TO BECOME OF THE NEW HÔTEL DIEU?

It is a question whether the new Hôtel Dieu had not better be converted into a Hôtel de Ville, to replace the lost monument. This is especially suggested and insisted upon by the adversaries of large hospitals; and certainly Hôtel Dieu stands forth as one of the bulkiest.

DEATH OF DR. LIEGEOIS.

Dr. Liegeois, the talented anatomist and physiologist, Vice-Professor at the Paris Faculty, and surgeon to the Paris Hospitals, the author of several highly esteemed works on anatomy and physiology, has just died suddenly from cerebral hæmorrhage. He had accompanied an ambulance during the war as chief surgeon, and the wear and tear of the campaign had much prostrated him.

MORTALITY OF PARIS.

The number of deaths during the week ending June 24th was only 892, a normal figure for Paris; it had been 1250 the week before. Variola had completely disappeared, and the other causes of death are made up of the ordinary diseases in normal proportions.

Paris, July, 10th, 1871.

Obituary.

THOMAS HAWKES TANNER, M.D., F.L.S.

ONE of the successful medical men of the day has passed away at the early age of forty-six, after only a few months' cessation from that professional work which was his pleasure, and in the zenith of a professional success which must have gratified his highest ambition. The son of a former Secretary of the Army Medical Board, Dr. Tanner was born in London, and was educated at the Charter House, where he sustained an accident which left him a slight permanent limp, and rendered his health somewhat delicate. In 1843 he entered the medical school of King's College, and in 1847 became M.R.C.S. and took the degree of M.D. at St. Andrews. After filling the office of resident house-physician in King's College Hospital, he commenced practice in Charlotte-street, Bedford-square, in 1848, and soon afterwards was elected Physician to the Farringdon-street Dispensary. In 1850 Dr. Tanner became a Member of the Royal College of Physicians, and for a time lectured on Forensic Medicine at the Westminster Hospital. In 1867

he was elected Physician to the Hospital for Women in Soho-square, and held that office for six years to the great satisfaction of the governors of the charity, and it was here that Tanner laid the foundation of the reputation he enjoyed later in life in the treatment of diseases peculiar to women. In 1858 Dr. Tanner took an active part in the formation of the Obstetrical Society of London, and acted as one of its honorary secretaries for five years. In 1860 he was, in conjunction with Dr. Meadows, appointed Assistant-Physician for the Diseases of Women and Children to King's College Hospital, and here he did good work for three years; but at the end of that time the mode in which certain alterations in the staff of the hospital were carried out led to the resignation of both the assistant-physicians, and Tanner was able to devote the whole of his attention to a largely increasing practice. About ten years ago Dr. Tanner removed to Henrietta-street, Cavendish-square, and since that time his *clientèle* rapidly expanded, owing doubtless in great measure to his success as a medical author, and still more to the personal qualities which attached his patients to him.

As an author Dr. Tanner commenced his career as a writer of reviews in a medical contemporary, of which he was afterwards for a time sub-editor. His "Memoranda on Poisons" was the result of his short career as a teacher of forensic medicine, but the work which has made his name a household word in medical circles is his "Practice of Medicine," which first appeared in 1854 as one of Renshaw's small manuals. In this form the work was deservedly popular with the students of the day, and accompanied them into practice, so that four editions of the book in the manual form were exhausted in ten years, and in 1865 Dr. Tanner brought out a fifth and much improved edition, in one handsome octavo volume. This, again, was followed a year or so since by a sixth edition, in two volumes, and it is to the night work involved in such literary labour that we must attribute the premature breakdown of Dr. Tanner's health. In addition to this work Dr. Tanner published a work on the "Signs and Diseases of Pregnancy," which has gone through two editions; an "Index of Diseases and their Treatment," being an epitome of his "Practice of Medicine"; a "Practical Treatise on the Diseases of Infancy and Childhood," of which a second enlarged edition has recently been edited by Dr. Meadows; and a "Manual of Clinical Medicine and Physical Diagnosis," which has also been lately re-edited by Dr. Tilbury Fox.

The great secret of the success of Dr. Tanner, both as a writer and a practitioner, lay, we believe, in the practical character of his work. He was a man who thoroughly went into and was fully acquainted with all the minutiae of treatment, down to the details of nursing and the preparation of the patient's food. Evidence of this will be found throughout his writings, and especially in the chapters on Diet and in the elaborate formulæ appended to his Practice of Medicine. In his earlier years Tanner was virtually in "general practice," and the experience then acquired proved most useful when, in after years, he was able to weed his practice and restrict himself to consultation cases. Though occasionally hasty when thwarted, he was kindness and gentleness itself in the sick room, and the personal regard entertained for him by many of his patients was very great. Dr. Tanner had suffered for years from slight albuminuria, and from frequent headaches, which prostrated him occasionally for days together. He was feeling so unwell that at Easter he took a short holiday, but soon after returning to town urgent head symptoms appeared, for which he again left work never to return, for he died at Brighton on the 7th inst., having had a series of convulsive attacks for many days before death. Dr. Tanner leaves a widow and four children to lament his loss.

We believe Dr. Tanner's great desire was to live a useful life to the world, and to be practical, if anything, in his professional work. His desire has been fulfilled to the letter; but his life has its lessons and its warning. He was a singular example of what determination and perseverance, with a definite and good object in view, will effect, and the difficulties they will surmount, for Tanner was a self-made man. He was an instance of the sad results of overwork of body and mind, of which so many professional men are guilty, and of a violation of those laws of hygienic self-preservation which he himself would have been the first to condemn in others.

JOSEPH GOODALE LANSDOWN, M.R.C.S.,
OF BRISTOL.

This highly respected gentleman died at Bristol on the 6th inst., aged sixty-seven. He received his medical education at the Bristol Infirmary, and at the Aldersgate School of Medicine and St. Bartholomew's, becoming a Licentiate of the Apothecaries' Society in 1827, and a member of the Royal College of Surgeons in 1828. Mr. Lansdown was for many years surgeon to the General Hospital, having been elected in 1832, and on his retirement from the active duties of the hospital in 1861 he was appointed consulting surgeon. He was an excellent practical surgeon and an amiable courteous gentleman, and his death is regretted both by his fellow-townsmen at large and by a numerous body of personal friends, many of whom have been his patients.

THE ANNUAL ELECTIONS AT THE COLLEGE
OF SURGEONS.

THE annual elections to the various offices in the College of Surgeons took place at the meeting of the Council on Thursday, the 13th inst., when the following officers were elected:—President: Mr. Busk. Vice-Presidents: Mr. Hancock and Mr. Curling. Examiners in Medicine: Dr. Peacock and Dr. Wilks. Examiners in Midwifery: Dr. Farre, Dr. Barnes, and Dr. Priestley. Professor of Surgery and Pathology: Mr. T. Holmes. Professor of Comparative Anatomy: Mr. W. H. Flower. Professor of Dermatology: Mr. Erasmus Wilson. Lecturer on Anatomy and Physiology: Dr. Humphry.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on July 6th:—

Bowes, John Ireland, Elham, Canterbury.
Pope, Harry Campbell, Tring, Herts.
Wilcocks, Isaac, West Looe, Cornwall.
Williams, Ralph Worthington, Hurst, near Ashton-under-Lyne.

As Assistant in Compounding and Dispensing Medicines:—
Nutt, William Anthony, Barnstaple, Devon.

On the same day the following gentlemen passed their first professional examination:—

M'Nomed, F. H. A. A., Guy's Hospital.
Webb, William Edward, King's College.

QUEEN'S UNIVERSITY IN IRELAND. — The following gentlemen have passed the first examination in Medicine:—

Archibald Adams, John Geo. Adamson, Ringrove Atkins, Jas. Battersby Bailey, Robt. T. Beamish, Robt. Arthur Bernal, Philip Lambert Benson, Thomas Bennett, Wm. Edwards Breton, Terence Brodie, A. L. Browne, John Bevan, Robt. Burgess, Francis Butler, Robert Campbell, Thomas Clarke, John Collis, John Corbett, H. Corby, Charles Forsythe, Henry Fogarty, T. Galliver, S. Gayley, J. Gormley, J. Graham, C. Harrey, R. Heath, J. Holland, G. Johnston, E. Leader, J. Leech, C. Little, S. Lucey, C. Macaulay, R. Macaulay, W. M'Gowan, P. Macnamara, C. M'Nally, M. Malone, W. Maybury, W. Moynan, B. Munro, P. O'Connor, J. O'Sullivan, W. Pearson, E. Read, J. Ring, W. Rosten, J. Ryan, J. Scott, W. Skelly, A. Smith, C. Smith, J. Smith, G. Sprule, J. Strahan, W. Thomson, M. Walsh, J. Wheeler, J. Wilson, J. F. Wilson, H. C. Wilson.

It is stated that the number of rejections at the recent examinations in Arts &c. for the diploma of Fellow or Member of the Royal College of Surgeons is very large. The result will be made known to each candidate this week.

INTERNATIONAL PROFESSIONAL COURTESY.—At the moment of going to press we learn that it is intended to entertain at a complimentary banquet MM. Ricord and Demarquay, who are now in London. Sir W. Ferguson, Bart., F.R.S., will preside. The committee of arrangement includes Mr. Busk, Mr. Paget, Mr. Hilton, Mr. Curling, Mr. Hancock, Mr. Erichsen, and Sir Henry Thompson. Gentlemen wishing to take part in this act of international courtesy are requested to send their names at once to Sir Henry Thompson, Wimpole-street, or Mr. Ernest Hart, Harley-street, hon. secs.

SURGEON-MAJOR HOME, V.C., is, we understand, to be appointed one of the new Medical Inspectors under the Privy Council.

DR. McLEOD, Deputy Inspector of Hospitals and Fleets, has been reappointed to the Royal Naval Lunatic Asylum, at Great Yarmouth, for a period of three years.

At the quarterly meeting of the Directors of the Naval Medical Compassionate Fund, held on the 11th inst., **Dr. J. W. Johnston**, Inspector-General, in the chair, the sum of £83 was distributed among the various claimants.

SALISBURY MEDICAL SOCIETY.—The annual meeting of the members of this Society was held on Thursday week, at the White Hart Hotel, when **Dr. Fox**, of Broughton, resigned the office of president, which he had held during the past year, and **Mr. W. M. Coates** was elected in his stead. After electing the officers of the Society, and transacting other business, the members partook of an elegant luncheon.

DR. BOSCH, OF BUENOS AYRES.—The "Revista" of February last contains a biographical notice of this physician, who seems to have secured the esteem and affection of all who knew him. The writer of the notice principally refers to the late **Dr. Bosch** as the founder of two large asylums for the insane. The latter (especially females) were, before that period, hardly taken care of, and the asylums have become a real blessing to the country. The venerable deceased planned this great improvement after a visit to Europe.

A PRESENTATION.—**Dr. Johnston**, of Montrose, on retiring from practice, after having been nearly thirty-five years engaged in it, has been presented by his friends and patients with a very handsome testimonial in the shape of a silver service. **Dr. Johnston** was entertained at a banquet on the occasion of the testimonial being presented, and if we may judge from the large number of persons who were present, and the warm terms in which his kindness, skill, and long-tried services were dwelt upon, **Dr. Johnston** must be a deservedly popular member of our profession.

THE BRITISH PHARMACEUTICAL CONFERENCE.—The eighth annual meeting will be held in August, at Edinburgh, in the Craigie Hall, St. Andrew's-square, under the presidency of **Mr. W. W. Stoddart, F.C.S., F.G.S.** On Tuesday, the 1st, at 10 A.M., the President will deliver an address; the reading and discussion of papers on pharmaceutical subjects will then commence, be continued in the afternoon, and on Wednesday. Members intending to be present are requested to communicate with the local secretary, **Mr. John Mackay**, 119, George-street, Edinburgh, who will give all information concerning hotel accommodation, &c.

TESTIMONIAL TO PROFESSOR HALFORD.—The *Melbourne Argus* of May 20th says that Professor Halford has been presented with a testimonial, consisting of a handsomely bound book and a purse of 120 sovereigns, as a recognition of the merits of his method of treating cases of snake-bite by the injection of ammonia. The presentation was made by **Mr. J. Wilberforce Stephen, M.L.A.**, at Scott's Hotel, in the presence of a considerable number of medical and lay gentlemen. In making his acknowledgments, Professor Halford expressed his belief that his mode of treatment was capable of extension to constitutional diseases. An influential committee was then appointed by those present to wait upon the Government in order to ask that a sum of money might be placed at the disposal of Professor Halford to enable him to make experiments in this direction.

REQUESTS, DONATIONS, &c.—**Mr. Job Hindley** has given £1000 to the Manchester Infirmary, in recognition of benefits received from it when a working man forty-five years ago. The Rev. **W. G. Sawyer** bequeathed £500 to the Leicester Infirmary; and £200 to the Nottingham Infirmary. The General Hospital, Birmingham, has become entitled to £500 under the will of **Mrs. Ann Sutton**; £100 under that of **Mr. W. Tredwell**; and £50 under that of **Margaret Gibbs**; and received £100 from **Mr. John Mason**, in memory of **Sarah Mason**. **Miss S. J. Thackeray** has given £100 to the Addenbrooke Infirmary, Cambridge. The Royal South London Ophthalmic Hospital has received from his Royal Highness the Prince of Wales the contribution of £40.

At the annual meeting of the Kent Benevolent Medical Society, held at the Ship, Greenwich, on the 12th inst., seven new members were elected, and £270 voted to six annuitants; the largest amount being £60, the lowest £40.

Medical Appointments.

- BRAYNE, J.**, F.R.C.S.E., has been appointed Medical Officer for the Dilwyn District of the Weobley Union, Herefordshire.
- BRACEY, C. J.**, M.B., M.R.C.S.E., has been appointed an Acting Medical Officer to the Hospital for Women, Birmingham.
- BRIGHT, S.**, L.R.C.S.I., has been appointed Medical Officer for the Thornley District of the Eastington Union, Durham, vice **John E. L. Macdonald**, L.R.C.P.Ed., resigned.
- CALVEY, T. W.**, M.R.C.S.E., has been appointed a Surgeon to the Devon and Exeter Hospital, vice **Kempe**, resigned.
- CAMPBELL, W. M.**, M.B., has been appointed Junior House-Surgeon to the Northern Hospital, Liverpool, vice **G. Andrew**, L.R.C.P.L., M.R.C.S.E., resigned.
- CAWTHRE, Mr. J. E.**, has been appointed Medical Officer for the Staniland District of the Halifax Union.
- DONOVAN, D. D.**, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Physician to the Cork General Dispensary, vice **C. Armstrong**, M.D., F.R.C.S.I., deceased.
- DUKE, B.**, M.R.C.S.E., has been appointed Resident House-Surgeon to the Brighton and Hove Dispensary, vice **J. D. Mason**, M.R.C.S.E., resigned.
- EDWARDS, H. J.**, M.R.C.S.E., has been elected a Surgeon to the Teignmouth Infirmary, vice **E. B. Hammond**, M.R.C.S., resigned.
- FRYMAN, Mr. C. G.**, has been appointed Assistant-Surgeon to the 1st Kent Artillery Volunteers.
- GRIFFITH, Mr. I.**, M.R.C.S.E., has been appointed Ensign in the 3rd Osn (Banbury) Rifle Corps.
- JACKSON, W.**, M.R.C.S.E., has been reappointed Medical Officer and Public Vaccinator for District No. 5 of the Lunesdale Union, Lancashire.
- JORDAN, W. K.**, M.R.C.S.E., has been appointed an Acting Medical Officer to the Hospital for Women, Birmingham.
- KEMPE, A.**, F.R.C.S.E., has been appointed Consulting Surgeon and an Hon. Governor to the Devon and Exeter Hospital, on resigning as Surgeon.
- LEE, E.**, M.R.C.S.E., has been elected House-Surgeon to the Leicester Infirmary and Fever House, vice **W. Field Flowers**, M.B., M.R.C.S.E., resigned from ill-health.
- LING, J. M.**, M.R.C.S.E., has been appointed Medical Officer to the Hantspill District of the Bridgewater Union, vice **J. Rayner**, L.R.C.P.Ed., M.R.C.S., resigned.
- MURRAY, J.**, F.R.C.S.E., has been elected President of the Sussex and Brighton Medico-Chirurgical Society.
- NICOLSON, Dr. D.**, has been appointed Assistant Medical Officer to H.M.'s Invalid Prison at Woking.
- PAGE, D. M.B., C.M.**, has been appointed Medical Officer and Public Vaccinator for Districts Nos. 3 and 4 of the Lunesdale Union, vice **J. C. Smith**, L.R.C.P.Ed., L.F.P. & S. Glas., and **E. Tatham**, L.R.C.S.Ed., on expiration of appointment.
- ROPE, H. J.**, M.R.C.S.E., has been appointed Resident House-Surgeon to the Salop Dispensary, Shrewsbury, vice **R. W. O. Withers**, L.R.C.P.L., M.R.C.S.E., resigned.
- SAVAGE, T. M.D.**, L.R.C.P.L., has been appointed an Acting Medical Officer to the Hospital for Women, Birmingham.
- TAIT, L.**, L.R.C.P.Ed., F.R.C.S.E., has been appointed an Acting Medical Officer to the Hospital for Women, Birmingham.
- TATHAM, G.**, M.R.C.S.E., J.P., has been elected a Vice-President of the Sussex and Brighton Medico-Chirurgical Society.
- TURNER, T. H.**, M.R.C.S.E., has been appointed Medical Officer for the Sowerby District of the Halifax Union.
- WATSON, W.**, M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for District No. 2 of the Lunesdale Union, vice **J. B. Notgate**, M.R.C.S.E., on expiration of appointment.

Births, Marriages, and Deaths.

BIRTHS.

- ANSTIE.**—On the 11th inst., at Wimpole-street, the wife of **F. E. Anstie**, M.D., of a daughter.
- BRATHWAITE.**—On the 7th inst., at Leighton Buzzard, the wife of **H. Brathwaite**, Surgeon, of a son.
- COTTER.**—On the 24th of May, at Jamestown Barracks, St. Helena, the wife of Staff Assistant-Surgeon **S. K. Cotter**, M.B., M.C., of a daughter.
- LOUGHER.**—On the 4th inst., at Longcross House, Routh and Castle-roads, Cardiff, the wife of **Dr. Richard Lougher**, of a daughter.
- STEEL.**—At Yeovil, the wife of **Charles D. Steel**, Retired Staff Surgeon Royal Navy, of a daughter.

MARRIAGES.

- DE LISLE—BLAIR.**—On the 11th inst., at the Church of St. Peter Port, Jersey, **Frederick Irving De Lisle**, L.R.C.P., &c., late Royal Navy, only surviving son of the late **Dr. De Beauvoir De Lisle**, grandson of the late Colonel **John De Lisle**, and nephew of the late Major-General **Sir Isaac Brock, K.B.** ("the hero of Canada"), to **Lucy Caroline Josephine**, daughter of the late **Lt.-Col. Blair, C.B.**, 10th Bengal Cavalry.
- HASLEWOOD—ASHTON.**—On the 5th inst., at Castleton Church, **Albert O. Haslewood**, Surgeon, of Castleton, Derbyshire, son of the late **W. Haslewood, M.D.**, to **Mary How**, younger daughter of the late **Robert How Ashton, Esq.**, of Castleton.
- LING—CHAPMAN.**—On the 22nd inst., at Weston-super-Mare, Somerset, **John Mitford Ling**, Surgeon, of Hantspill, Somerset, to **Kate**, eldest daughter of **Ralph Chapman**, Solicitor, of Weston-super-Mare.
- SHAW—DUNKIN.**—On the 11th inst., at Ryhope Church, **Charles Shaw**, M.D., L.R.C.S.Ed., to **Janet Dunkin**, younger daughter of the late **Robt. Dunkin, Esq.**, of North Shields.

DEATHS.

CURRAN.—At Dublin. Henry Curran, L.K.Q.C.P.I., L.R.C.S.I.
DUNVILLE.—On the 8th inst., Arthur W. Dunville, F.R.C.S.E., of Ardwick-
green, Manchester, aged 58.
HESTER.—On the 1st of May, at Wangaratta, Australia, J. Hester, M.D.,
second son of J. T. Hester, F.R.C.S.E., of Hastings.
MAY.—On the 5th inst., Willoughby May, L.R.C.P.Ed., M.R.C.S.E., of
Teignmouth, aged 31.
MORTON.—On the 6th inst., at Alpha House, Fairview, Dublin, T. Morton,
Deputy Inspector-General, late of the 27th Regiment.
RUSSELL.—On the 5th inst., Robt. C. Russell, L.R.C.S.Ed., of New Machar,
Aberdeenshire, aged 67.

Medical Diary of the Week.

Monday, July 17.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, July 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPEDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Wednesday, July 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CARDS HOSPITAL.—Operations, 2 P.M.

Thursday, July 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPEDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.

Friday, July 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, July 22.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHAIRMAN-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

QUININE IN AGUE.

Our contemporary, the Indian Medical Gazette, has lately contained some
interesting communications on this subject, which are worthy of note.
Dr. J. Butler Hamilton, for example, as the result of his observation of
cases, has arrived at the conclusion that quinine, issued as a prophylactic
during the months of August, September, October, and part of November,
is of considerable value. Several authors have furnished the results of
their experience of the hypodermic injection of quinine. That the drug
administered in this way possesses great therapeutical powers there can
be little doubt; but it unfortunately happens that the practice is open to
several objections. It is tedious, painful, may cause abscess and ulcers,
and in one case, which is no doubt to be regarded as among those very
exceptional accidents which may attend any operative procedure, how-
ever small, the hypodermic injection of quinine was followed by tetanus.
It is extremely likely that some soluble form of quinine may yet be found
that shall be free from any irritating properties. With this object, we
believe that Professor Maclean has been making some experimental trials
of different preparations of the alkaloid at Netley. In very intense cases of
malarial poisoning, or where great irritability of the stomach is present,
as well as in cases of isola-tion, the administration of quinine will re-
quire to be effected by subcutaneous injection; but under other circum-
stances the ordinary method will probably be preferred.

PROSTITUTION IN SHANGHAI.

We have received a very interesting and able report on this subject from
the pen of Dr. Edward Henderson. Shanghai has long had a most un-
enviable notoriety among merchant seamen, in consequence of the great
prevalence there of venereal diseases. To show the importance of the
subject which he is investigating, Dr. Henderson quotes the census taken
in March, 1870, which estimates the foreign non-resident floating popula-
tion at 1101. Prostitution is lamentably rife, the last return showing a
total of 463 brothels and 1612 prostitutes; and as the "native women, who
infect the settlement, and who are the chief sources of danger to foreigners,
place themselves almost exclusively under the care of Chinese doctors—
whose notions with regard to contagion are utterly vague, and whose de-
tection or treatment of disease cannot in the least be relied upon,"—it is
no wonder that all attempts to keep venereal diseases in abeyance have
hitherto proved futile. Dr. Henderson places the brothels of Shanghai in
three classes—1. Houses frequented entirely by natives; this class comprises
382 houses, containing 1389 women. 2. Houses frequented by foreigners
only; this comprises 27 houses, containing 92 women. 3. Houses fre-
quented by natives and foreigners indiscriminately; this class includes
35 houses and 131 women. These classes are perfectly well defined and
distinct; but as there is often an interchange of prostitutes between
houses of two different classes, the condition of the women in any one
class of house is a matter of great importance to natives and foreigners
alike. With regard to the houses which are frequented by both natives
and foreigners, and which are the ones which prove the most damaging
to the health of our sailors, Dr. Henderson says "they are the most disre-
putable of all the brothels in the settlement, and contain, without excep-
tion, the most degraded specimens of the native prostitute. No Chinaman
of any pretension to respectability visits such houses, and yet, I regret to
say, it is to these dens the sailors belonging to our naval and mercantile
services principally resort." A greater source of danger even than the
recognised prostitutes would seem to be the native washerwomen and
needlewomen, who are permitted to visit the ships in search of employ-
ment. These women are, in reality, prostitutes of the most dangerous
kind, and use their professed employments merely as a means to an end.
In August, 1869, a "Home" was established, to which all native pros-
titutes suffering from venereal disease were to be sent by a native doctor,
who was employed at a fixed salary to inspect the brothels. The native
doctors, however, proved to be so ignorant, and there were so very few
applications for admission to the "Home," that it was deemed expedient
to close it altogether in September last. The evidence with regard to the
prevalence of venereal disease at Shanghai is strangely conflicting; but
this is not, perhaps, to be wondered at when one calls to mind the amount
of fact which is necessary on the part of naval captains and surgeons for
obtaining the necessary information. What one man regards almost in
the light of a crime deserving of punishment, another will consider merely
as a misfortune meriting consolation, and hence, we take it, come the dis-
crepancies in the statistical tables. To our mind the bulk of the evidence
undoubtedly goes to show that venereal disease is very prevalent at
Shanghai, and that active measures are needed for its suppression. At
the conclusion of his report, Dr. Henderson shortly proposes a scheme
for the supervision and medical care of the prostitutes, which is sensible,
and we should say feasible. The report refers to many matters which we
have not space to enter upon, but which will well repay anyone who has
half an hour to spare, and is lucky enough to possess a copy of Dr. Hen-
derson's interesting document.
Dr. Barclay's communication shall be inserted next week.

RIGHT-HANDED PRE-EMINENCE.

To the Editor of THE LANCET.

SIR,—I was much struck by the ingenuity displayed by the reasoning of
Dr. Ogle in his paper on "Dextral Pre-eminence," read before the members
of the Royal Medical and Chirurgical Society on June 27th. The author
states his belief in the hereditary disposition of left-handedness, and infers
that there must be some structural change in the brain to account for it.
He then shows that in right-handed persons, the left hemisphere has a
natural predominance over the right hemisphere, and vice versa. Then he
proceeds to show by the post-mortem examinations of the brains of two left-
handed subjects (specimens exhibited) that, "while the left hemisphere is
the more complex in right-handed persons, the contrary is the case in left-
handed individuals." Then he gives the very tangible reason for the cause
of the greater development of the hemispheres—viz, the freer circulation of
the blood in the vessels of that hemisphere which is the most fully devel-
oped, causing greater nutrition. I was delighted with this explanation till
I reflected upon the case of one of my own sons, the history of whom I give
below.

Out of a large family of some generations, I never remember one having
been left-handed. My second son, soon after his birth, was obliged to be
brought up by a wet-nurse, who was left-handed, and she continued to be
his nurse until he was five years old; and during this time he was left-
handed in everything he did. After the attendance of the nurse was no
longer required, the boy gradually forsook his left-handed ways, and has
been right-handed ever since.

I must confess this case shakes the theory of the structural change in the
brain, unless Dr. Ogle is prepared to show me that in a few months a child's
brain of five years of age can increase in one hemisphere and diminish in
another at a child's will, and that the vessels will proportionately extend or
sink in conformity with the change.

The inference I draw from this case is: the child's impulse from ex-
ample, and its practical nature may be the means of carefully constructing
a left-handed theory upon a firmer basis. Yours truly,
Halstead, Essex, July, 1871. W. H. BORNHAM.

E. Astie,
wife of H.
a, the wife
ther.
castle-roads,
geon Royal
eter Port,
late Royal
le, grand-
Major-
y Caroline
al Cavalry.
Albert O.
W. Hasle-
bert How
rset, John
dander
les Shaw,
late Robt.

THE REGISTRARS AND VACCINATION.

We regret to find ourselves in error as to the payment of the registrars for sending in the list of defaulters. They ought to be paid 1d. for each return, and they had better suggest this to Mr. Forster or other member of the Government.

R. G.—The usual course is to have all such questions arranged by contract. In the absence of this precaution, they must be decided by reason and good feeling on both sides. A. should make the charges, as best knowing the rules of the practice, and sufficient time should be given to B. to allow the receipts to be taken in the ordinary course of things.

Pneumothorax.—The election is in the hands of the guardians exclusively.

UNQUALIFIED ASSISTANTS.

To the Editor of THE LANCET.

SIR,—The objections which are often raised against the employment by medical practitioners of "unqualified" assistants have received a practical answer in the recent sensible decision of the Medical Council in the case of Mr. W. H. Kempster. It confers an official sanction upon the use, of course in a restricted and subordinate degree, by principals, of assistant who, not possessing a legal title to practise by themselves, have yet acquired sufficient knowledge and experience to enable them to render much valuable ancillary service to the hard-working general practitioner. This principle is acted upon in the case of medical students, who considerably assist the work of hospitals, dress wounds, apply bandages, treat minor ailments, and attend midwifery before they are "qualified" in a technical sense to act at all in a professional capacity. The students who undertake these duties are generally much younger, and far less trustworthy, than the men employed as unqualified assistants. Nearly all of the latter class, in addition to much subsequent experience, have had a preliminary training at a medical school; but have either been prevented from completing their studies, or have failed to satisfy the requirements of examiners, these failures usually being in the more recondite subjects. In times of special need the Government has recognised the employment of such men in the Royal Navy as surgeons' assistants.

In general practices, particularly among the poor, many cases, surgical and otherwise, are constantly occurring which can be committed to the care of men whose professional education is incomplete. During the temporary absence of the principal, such an assistant is able to treat accidents, at least provisionally, to arrest hemorrhage, and to adopt measures in emergencies which might else have to remain unattended to in remote districts for several hours; for, be it remembered, a practitioner is not necessarily forced to the alternative of keeping a qualified assistant if he be debarred from the services of an unqualified one. In midwifery, more particularly, unqualified assistants, from their greater age and experience, are often much superior in the diagnosis, and more skilful in the management, of a labour than young men who have just "passed." Again, if a practitioner's lot happen to be cast in what is called a low neighbourhood, his late calls and night alarms are sure to be numerous. He is the medical referee of the district, and in all drunken brawls, screaming hysterical attacks of excited women, broken heads, &c., philanthropic volunteers, on Sydney Smith's principle of when A. sees B. in distress he immediately wishes C. to relieve him, rush off and ring up the unfortunate doctor. In nine cases out of ten these sensational summonses are unnecessary annoyances. He goes but to see a noise that he has heard, and, like Bottom the weaver, comes back feeling that he is an ass for his pains, that he has been of no real service to anyone, and has had his rest broken in a way which will tell injuriously upon him the next day. Now, an unqualified assistant is quite able to attend to cases of this kind, and in the exceptional instances in which he finds himself in the presence of real, imminent danger, he can exercise his discretion, and send for his principal.

There are also cogent reasons against the employment of legally qualified men with many practitioners. The average value of medical practices, taking the country throughout, is probably less than £300 a year. The extra salary asked by a qualified man is often positively prohibitive, since it would be a too heavy addition to the working expenses of a poor practice, which, though small in its pecuniary returns, may yet be large in its claims upon the time and labour of the incumbent.

Again, the same false sentiment which is lifting our domestic servants above their homely occupations is to be found in higher spheres of labour. The proud possessor of a modern tail of manifold articulations, M.D., M.C., L.R.C.P., &c., is apt to turn up his nose at the work he is expected to do, and at the old-fashioned M.R.C.S. and L.S.A. he is required to assist. He has served no apprenticeship, and is generally very ignorant of pharmacy and the conduct of a practice. Dispensing and matters connected with the management of a surgery are considered to be *infra dig.*, and "posting the books" is a nuisance to be neglected or carelessly performed. When not visiting patients he rises superior to the realms of rhubarb and magnesia, and dwells apart, like the Lucretian gods, in a calm and lofty indifference to the sordid details of the practice and its interests.

"Semota ab nostris rebus, sejunctaque longe."

Despising the common-place duties of the state of life into which it has pleased God to call him, he perhaps satisfies his aspirations by peering through a microscope at infinitesimal foraminifera, or by watching the wiggles of an entomostracou, and imagines he is engaged in scientific pursuits, when, in reality, he is only amusing himself. The very things which his employer wishes to be relieved of are just those which he objects to do. What is a principal to do? These secondary duties must be done by some one. He cannot alter his practice to accommodate it to the superficial notions of the young medical man of the period. It is, let us say, no more to remove a dispensing practice; he cannot afford to keep, neither is there work enough for, both a dispenser and a visiting assistant; he must either do without assistance altogether, and get through the work as he can, or he is almost compelled to fall back upon unqualified men, who are able and willing to undertake and perform pleasantly the necessary duties of such a practice. I can see nothing wrong in a practitioner availing himself of services which he knows will be efficiently rendered, and it would be a most arbitrary enactment which should debar him from making use of them. Like other institutions, the employment of unqualified assistants is open to abuse; but this must be left as a question of individual ethics.

I am, Sir,

Manchester, July 10th, 1871.

ONLY A GENERAL PRACTITIONER.

THE MISERIES OF THE BRICK-FIELDS.

ENGLAND is full of paradoxes and puzzles. In no other country are the contrast and separation between the rich and poor so marked. The upper classes are so ignorant of the doings of the lower, that gross wrongs may be perpetrated without anyone being the wiser except the powerless sufferers themselves. It seems scarcely conceivable that the sketch afforded by Lord Shaftesbury of the condition of young children employed in brick-fields should have any foundation in fact, and yet there is every reason to believe that the picture he has drawn is in no degree exaggerated. His Lordship quoted from Elihu Burritt and others, to the effect that a little girl, for example, was employed ten or twelve hours daily in balancing 25 lb. of clay upon her head, while carrying an equal weight of the same substance in front of her, and in conveying both to a bench about a rod distant. Elihu Burritt might have been puzzled to account for a child's growth under such conditions. "Certainly not an inch could be added," he says, "to her stature in all the working days of her life. She could only grow at night and on Sundays." The physical are not by any means the only evils present, for the practice of employing children of both sexes in the way that is done is demoralising to a degree. Were it not for philanthropists like Lord Shaftesbury, cruelties such as these would go on without hope of remedy. To his credit be it said, he has always practically cared for those who have none else to help them, and we earnestly hope that, by his efforts in bringing the wrongs of these children to light, a system worse than an Egyptian bondage may be for ever put an end to.

A. B.—Next week.

ON LIMB-SUSPENDERS.

To the Editor of THE LANCET.

SIR,—I have to-day read Mr. Gamgee's communication in your issue of last week on the above subject, and, having spent many years in devising apparatus for the treatment of fractures, I feel constrained to say a word or two on the appliances he has now brought before the notice of the profession.

The "fracture-swing" of Mr. Restall is imperfect so far as it goes, and also on account of its incompleteness. The cross-bar should be the highest part of the apparatus, so that the fall of the bedclothes over the side of the bed may not be interfered with. Instead of sliding on a pillar, the bar should project from the top of a telescope pillar. The feet should be supplied with castors, to prevent any dragging on the floor in the event of an accidental displacement of the bedstead. In 1864 the Messrs. Weiss made, under my direction, a suspender, consisting of a telescope pillar, reaching to the floor, and having a screw-clamp for fixing it to the bedstead, and an overhanging arm at the top for carrying traversing-gear, from which suspension was to be made. As this contrivance did not answer my purpose, I discarded it, and, after a number of experiments, I adopted the plan set forth in my communication to THE LANCET, Feb. 24th, 1866. Since that period I have made further improvements in the apparatus, and in April last I sent Mr. Gamgee a photograph of it, at the same time mentioning the chief advantages embodied in my invention. These are far more numerous than it is possible to obtain in the simple "fracture-swing" figured in your issue of last week. Suspension, as there described, is certainly better than no suspension at all, as the dead-weight of a limb would be thereby removed; but this advantage would be insufficient in cases of severe comminuted fractures or of inflamed joints. I have not time at the present moment to discuss this subject; but for some of my arguments I would beg to refer your readers to a letter of mine in THE LANCET of May 29th, 1866. It should be borne in mind that a limb slung from a point unconnected with traversing-gear is frequently subjected to a certain amount of strain, as the voluntary or involuntary movement, horizontally, is checked and thwarted, and a check signifies strain. Instead of moving horizontally, the limb describes an arc of a circle, and is thus exposed to the opposing force of gravitation and the restraint of the suspending medium.

As regards Mr. Restall's other contrivance, a "leg-rest," I think it is admirably adapted for nursing a gouty limb and such like purposes. It should, however, be furnished with castors to run on the floor.

I am, Sir, yours obediently,

Wymouth, July 11th, 1871.

HENRY GREENWALD.

Enquirer.—The gentleman referred to was connected for some time with the General Dispensary.

M.R.C.S.—Not without first communicating with the friends.

AGUE.

To the Editor of THE LANCET.

SIR,—In answer to your correspondent, Dr. Curry, of Ilington, who asks for a remedy for a case like ague, I beg to suggest that, in the first instance, he should give an emetic, and then follow it up by half-drachm doses of wood charcoal, given four times a day. This plan has cured similar cases.

Yours, &c.,

HENRY KENNEDY.

Dublin, July 8th, 1871.

Dr. C. S. White suggests to our correspondent who has given quinine, iron, and arsenic in a case of apparent ague, the trial of strychnine, and falling this, bromide of potassium.

OUT-PATIENT HOSPITAL REFORM.

To the Editor of THE LANCET.

SIR,—Will you allow me to report in your columns that at a meeting of the Committee held last week my balance-sheet was audited and the accounts examined, from which it appears that the total receipts amounted to £49 18s. 4d., and the total expenditure to £49 4s. 10d., leaving a balance in hand of 13s. 8d., almost which there are some petty expenses due to the Secretaries of about 30s.

I will not trouble your readers with any further appeal.

Your obedient servant,

ALFRED MEADOWS, M.D.

George-street, Hanover-square, July, 1871.

HON. TREASURER.

CONTAGIOUS DISEASES ACTS.

A CORRESPONDENT has forwarded us an extract from a local journal, containing an account of a case under the Contagious Diseases Acts that lately came before the magistrates at Plymouth. A young woman applied to have her name erased from the books of the local metropolitan force, who have the working of the Acts. It was a subject of complaint that the police went to the house where the girl resided with her married sister after an application had been made to the magistrates to have the case adjudicated by them. This was calculated to distress the girl, as well as to injure the character of her married sister. The girl was alleged to have abandoned her mode of life, and to have been received by her mother, who attended as a witness, and declared that her daughter had been reclaimed. The mother complained of the persecution to which the girl had been subjected by the police. She also alleged that she had come from Bideford for the express purpose of reclaiming her daughter, and that she had at first made many ineffectual attempts to find the unfortunate girl at the house where she was then staying. She refused to take the girl with her to Bideford, because "the police would be following her if she were not free from the Acts first." Owing to some information given as to the girl's condition, the magistrate directed that she should be discharged on producing a certificate of good health, which has, it seems, since been done. Briefly, this embraces the main facts of a case about which our opinion has been requested. We assume, of course, that the report is correct, although it must in fairness be allowed that we have not heard the facts from the stand-point of the police. The inspector seems to have acted very injudiciously, to say the least, in going to the married sister's house after the application had been made to the magistrates for the removal of the girl's name from the list of prostitutes. Beyond that, however, there seems little ground of complaint against the police. The complaint of the mother that she went a great many times to the brothel, and was denied her daughter, does not tell against the police. Probably had she applied to the inspector, he would have helped her to get the girl out of the place. The mother's dread that the police would follow her if she took the girl away to Bideford, existed only in her own imagination; as they have no power to do so under the Act. We should be very glad if some other agency could be substituted for the police in the working of the Acts; but we do not see our way to this being done, and we must not forget that not a single case of abuse of power on the part of the police was substantiated before the Royal Commission.

Temper.—One part in sixty of water would be strong enough to begin with.

HYDRATE OF CHLORAL.

To the Editor of THE LANCET.

SIR.—The remarks of Dr. Mauro in your impression of the 1st instant induce me to forward the following cases in which I have used the hydrate of chloral.

In the first case the chloral was given by the advice of an eminent surgeon, after an operation, in a twenty-grain dose. The patient, who was exceedingly nervous, slept well for six or seven hours, and was so much pleased with its effects that on the following night a similar dose was given. But this time the symptoms were very different. She seemed almost immediately to fall into a state of stupor, the breathing became hurried, and altogether the symptoms were so alarming that ammonia was readily had to administer red to revive her. It was not thought advisable neither did I think it wise, to administer it again to this patient.

The second case was one of advanced puerperia. The chloral was given for several consecutive nights in twenty-grain doses for sleeplessness. The lady slept for six hours each time, but was bathed in profuse perspiration, and on awakening said she felt the whole time as if the house was tumbling piece by piece upon her. She was so exhausted that I deemed it advisable to discontinue its use. In this case I have since given opium in the form of compound soap pill, four grains, without any bad symptoms.

In the sleepless-sweats of insanity I have given the chloral in different doses, and for a lengthened time, with very gratifying results. In several cases where the hydrate of chloral or morphia alone has not acted satisfactorily, I have found that ten grains of chloral combined with a quarter of a grain of morphia have induced refreshing sleep, without any exhaustion, excitement, or other bad results. Yours truly,

Adelaide-road North, July, 1871. WM. H. PLATT, L.R.C.P., &c.

One who Murders for the Murders committed upon Thousands of the Children of the Poor of Manchester.—We have no doubt there is much truth in our correspondent's statements; but we could only insert carefully given particulars that could be vouched for on the subject.

Alpha.—Some allusions to the matter will be found in Dr. Myles's lately published work on Midwifery.

OPERATIVE MIDWIFERY.

To the Editor of THE LANCET.

SIR.—In reading lately in your and other journals the various letters and communications regarding the great German medical schools, and more especially that of Vienna, I have not observed any allusion to a course which I and all those especially interested in obstetrics must consider of eminent value. I allude to that on Operative Midwifery (on the cadavers) given in the Vienna Hospital, in connexion with Prof. Braun's *disquis*, by his assistant, Dr. Rokitsansky. During a recent sojourn in Vienna, I can testify to the value put upon this course by all those who have had the privilege of attending it. I sincerely trust that some of our obstetric teachers may take well aware, and institute a similar course. One of the main difficulties, I am well aware, would be want of material (of which there is such abundance at Vienna) at some of our schools; at all events at the Dublin School of Midwifery no such difficulty stands in the way.—Yours, &c.

Burntland, July 3rd, 1871. JAS. CARMICHAEL, M.D.

TRAINED NURSES.

THE Daily News of Wednesday last contained an article with the above heading, which was highly laudatory of a particular nursing institution, situate in Henrietta-street, Covent-garden. For aught we know to the contrary, the establishment in question is perfectly worthy of all the flattering comments which the writer makes upon it; but it strikes us as rather a lopsided, not to say unfair, proceeding for the writer to profess, as the heading of his article would lead us to suppose, to treat of the whole subject of trained nurses, and then limit the remarks entirely to one institution. Has the writer of the article never heard of St. John's Home, of All Saints' Home, of the Nightingale, and other similar institutions, which for years past have done, and are still doing, much excellent work by applying trained nurses for private patients? From the tone of his article, one would suppose not. We are surprised to find that there exists in London a staff of trained midwives who are capable of undertaking "operations." We were not before aware of it. The scope of the Henrietta-street institution is certainly wide enough, embracing, as it does, medical, surgical, monthly and "wet" nurses (all warranted not to gossip), male and female attendants for lunatics, and midwives of the highest grades of excellence.

Philosopher.—Only by courtesy.

C. Z., (Weymouth).—We think our correspondent cannot do better than consult Captain Galton's little work on Hospitals, published by Macmillan; but we are not acquainted with any book that will furnish him with the necessary information regarding eye hospitals. The modifications necessary to meet the requirements of such an institution can be best understood by inspecting those already in existence.

CAPILLARY TUBES.

To the Editor of THE LANCET.

SIR.—The article on "Revaccination," by Dr. Robt. Farquharson, I read with considerable interest, as I was only waiting for additional material to what I now possess for the formation of a similar paper. The number of cases which I have revaccinated this summer, and of which I took careful observation, are but a few short of 250, and the results obtained are very similar to those described by Dr. Farquharson, with one marked exception. He describes 36 failures on first operation out of 256 cases. I only experienced 3 out of 236 cases, 2 of which were successful on repeating the operation; and he attributes his failure to the very same cause to which I attribute my success—viz, the use of lymph preserved in capillary tubes. Now in every case in which I could not vaccinate direct from an infant, and these were the majority, I used tubes; and my object in writing is more especially to defend what I consider the most effectual method we possess of preserving lymph, if properly managed, and this is effected in the following way:—The tube should be at least three inches and a half long; it should never be filled to a greater extent than one-third; the lymph should be driven to the centre of the tube by gently tapping one end on the table, and the ends at once sealed with a wax tasta; the lymph should be clear like water, perfectly free from cloudiness or colour, and none other used, and only that taken which exudes from the vesicle immediately after its puncture; and a tube that has been once used should be thrown away, and never refilled. If these precautions in charging the tube are adopted, the heat must be intense indeed to injuriously affect the contained fluid; for we know what a bad conductor of heat glass is; and I consider this far superior to the clumsy expedient of closing with sealing-wax. I have now been a public vaccinator for nine years, and at first preserved my lymph on ivory points; it was in consequence of the frequent failures by that method that I was induced to use tubes, and it is now a very rare thing for me to find the result registered as unsuccessful, although I have on several occasions used lymph which has been preserved in a tube for months.

I am, Sir, yours obediently, THOMAS FRANKLYN.

Aldborough, Norwich, July 10th, 1871.

To the Editor of THE LANCET.

SIR.—Will you allow me space for a few words in reference to a portion of the paper on "Revaccination," by Dr. Robert Farquharson, published in your last issue.

I allude to the remarks on the use of capillary tubes for the preservation of vaccine lymph. Dr. Farquharson appears to have been singularly unfortunate in his experience of these tubes. The result in twelve or fifteen cases in which they were used was, he says, invariably unsatisfactory. Now, Sir, I have used some dozens of these tubes, and without a single failure attributable to their use. At one time I vaccinated by making four simple punctures. Of these occasionally only three succeeded, and in one or two cases only two. For the last few years I have adopted the scratching method, which I have used in upwards of 150 cases without a single failure. In nearly all these cases lymph was used from tubes, and in some of them after it had been kept for months. In fact, I regard lymph thus preserved as the nearest attainable approach to lymph taken fresh from the vesicle. Nor have I ever found any difficulty about the necessary manipulations. Dr. Farquharson says: "In applying the flame of a candle to occlude the capillary orifice, one of two things is very apt to happen—either the glass expands into a delicate globe, which is speedily broken, or the end is not sufficiently heated and is not closed at all." With all due deference, I venture to say that if the tube be properly charged and sealed, neither of these disasters will happen. The lymph in the tube is first to be shaken to the middle. The end of the tube should then be inserted not more than the eighth of an inch into the flame, and raised there until thoroughly melted; the tube being held at the other end by the thumb and forefinger only. If too large a grasp be taken of the tube by the thumb and finger, and too large a portion of it be plunged into the flame, the air in the tube, expanded by the warmth of the hand, will dilate the opposite end into a thin and fragile bladder. When this has unfortunately happened, the bladder should be detached, and the operation commenced anew. The method of sealing suggested by Dr. Farquharson, by plunging the tube into hot sealing-wax, would probably prove useless. There would be no adhesion of the wax to the glass, and air would not be excluded from the tube.

I am, Sir, your obedient servant, WILLIAM DATE.

Crewkerne, July 10th, 1871.

THE PLYMOUTH GUARDIANS AND THEIR MEDICAL OFFICERS.

The following memorial, signed by most, if not all, of the medical gentlemen in Plymouth, has been forwarded to us for publication.

To the Honourable the Poor-law Board.

The memorial of the undersigned sheweth:

1. That John Nicolls Stevens has been the surgeon to the Plymouth Workhouse Hospital for twenty-three years without ever having had a cause of complaint preferred against him.

2. That Thomas Harper has been the medical officer of Charles district, Plymouth, continuously since the 2nd day of February, 1838, without ever having had any complaint against him.

3. That both of the above-named medical officers have been and are still able actively to carry out the duties of their appointments, from which they have recently been discharged by the Plymouth Board of Guardians.

4. That your memorialists are informed that the above-named medical officers were (on the Plymouth Incorporation coming under the orders of your honourable Board in 1853) elected without any limitation as to time, and for some years never sent in any application for re-election, but were afterwards induced, at the request of the guardians, to send an application for re-election annually, which has been continued to the present time, never thinking they would be discharged without good cause.

5. That your memorialists are instructed that by the minutes of the guardians the resolutions originally appointing the above-named John N. Stevens and Thomas Harper, as medical officers, state no limit as to time. Your memorialists, therefore, believe that, in conformity with the orders of your honourable Board, "unless a certain time be specified," they hold their appointments until death, resignation, or legal disqualification.

6. That your memorialists think no subsequent act of the Board of Guardians, or of the medical officers themselves, can in any way break through the legality of the resolutions, which have been duly recorded in the minute-book for Plymouth.

7. Your memorialists, therefore, petition your honourable Board to protect the above-named medical officers from what is thought to be a great act of injustice, and solicit your honourable Board to make an inquiry, trusting that you will see justice done by reinstating them in the offices from which they have been so unexpectedly displaced.

8. Your memorialists beg to enclose the report of the meeting of the Plymouth Board of Guardians, and desire to direct your special attention to the remarks made by Mr. Matthews, the legal adviser of the Board of Guardians for Plymouth.

- H. S. MAY, Surgeon to the Plymouth Public Dispensary.
- T. PEARSE, M.D.
- F. W. P. JAGO, M.B. Lond.
- W. DALE, M.D. Lond.
- R. H. CLEBY, M.D.
- C. WHIFFLE, Surgeon to the South Devon and Cornwall Hospital.
- W. SQUARE, JUN., F.R.C.S.
- E. THOROLD, M.D.
- J. WHIFFLE, Consulting Surgeon to the South Devon and Cornwall Hospital.
- E. R. RENDLE, Surgeon to the Royal Eye Infirmary.
- F. FOX, Surgeon to the South Devon and Cornwall Hospital.
- E. RENDLE, M.D.
- T. A. SEWART, M.R.C.S.E.
- J. H. ECCLES, Surgeon to the Plymouth Royal Eye Infirmary.
- WILLIAM PEARSE, M.B.C.S.E.
- J. H. HICKS, M.R.C.S.E.
- H. GREENWALD, M.R.C.S.E.
- E. C. LANGFORD, M.R.C.S.E.
- W. SQUARE, Surgeon to the South Devon and Cornwall Hospital, and Royal Eye Infirmary.
- T. B. FORSTER, M.D.
- S. WOLFFERTAN, M.R.C.S.E.
- C. B. FRANCE, M.D., Physician to the South Devon and Cornwall Hospital.
- G. H. ECCLES, Surgeon to the Royal Eye Infirmary.
- E. MORRIS, Surgeon to the South Devon Militia.
- T. LITTLETON, M.B., Physician to the Plymouth Public Dispensary.

Judex.—We do not recommend an appeal to the law in the case. Such matters are far better settled by mutual concessions.

STRUGGLING.

To the Editor of THE LANCET.

SIR,—Mr. Paget has been telling you his case. Why not listen to mine? Ten months old, I am the junior of twin boys. My father, through domestic discomfort inclined to drink, receives 1s. 4d. a day, and 2s. 4d. a week lodging money. We have one room, costing, without fuel, half a crown a week; my mother, living mostly on tea and rations, rarely gets a glass of beer, and has other children. My toothless brother and I are kept simultaneously to each breast for ten minutes about five times a day; bread and water allowed in the interval. My brother, very fractious, remains in the maternal arms all night; whereas I, being comparatively quiet, sleep alone (such is the reward of virtue), without any refreshment, from 6 P.M. until 6 A.M. the next day; my stomach very painful, very cold, and very empty. "Would it surprise you" to hear that I am wasting? But what does it matter? I am, July, 1871. ONLY A SOLDIER'S CHILD.

Quarrens had better make application to her Majesty's Consul at the port named.

"BONE-SETTING, ITS NATURE AND RESULTS."

To the Editor of THE LANCET.

SIR,—May not the case mentioned by your correspondent, Dr. J. G. Reed, be explained by supposing that the capsular ligament of the joint was stretched by a momentary displacement of the head of the humerus, and a small fold of it "snapped" between that bone and the glenoid cavity, and only became freed when the bone-setter "snapped" the joint? If the ligament was ruptured, might not muscular fibres have been forced in, and retained there in a similar manner? If either or both of these theories be true, the explanation of like cases is certainly made easier.

Yours obediently,

A. GARDNER BROWN.
St. Thomas'-street, London-bridge, July 6th, 1871.

THE TREATMENT OF GONORRHEA.

To the Editor of THE LANCET.

SIR,—As Dr. Paterson seems to have misunderstood part of my letter, and as others may have done so, will you allow me to explain myself more clearly.

Dr. Paterson expresses his surprise that an injection containing two grains of sulphate of zinc to the ounce of water should invariably have been unattended with pain or inconvenience. What I said was this, that I had never found the use of the injection attended with pain or inconvenience, and that I generally found that formula answer very well. I did not mean to imply that I always used that injection, or that an injection of such a strength would always be proper. I believe that gonorrhoea, like other complaints, can be most successfully treated, not by always following any routine practice, but by accommodating our means to the requirements of each individual case; and with this view I am in the habit of prescribing injections of great variety both in strength and character. I am perfectly aware that cases do sometimes present themselves where the inflammation runs so high that it is not prudent to have immediate recourse to injections. Cases of this kind I treat as I should any other case of local inflammation, upon general antiphlogistic principles, until the violence of the symptoms has sufficiently abated, and then by injection. During the acutely inflammatory stage of such cases, Dr. Paterson's warm-water injections would, I think, be very beneficial; but these cases are, according to my own experience, decidedly exceptional.

My object in writing was not to advocate any particular kind of injection, but to express my firm conviction, based upon considerable experience, that gonorrhoea can be cured much more rapidly, and with much less danger of permanent injury to the part, by local than by general remedies.

Leeds, July 9th, 1871.

PHILIP FOSTER.

EVERY communication, whether intended for publication or otherwise, must be authenticated by the name and address of the writer. Papers not accepted cannot be returned. Articles in newspapers, to which attention is sought to be directed, should be marked. Communications not noticed in the current number of THE LANCET will receive attention the following week.

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Journal de Médecine, Montrase Review, Food Journal, Plymouth Gazette, Redruth Times, Isle of Wight Chronicle, Shield, Western Daily Mercury, Stock Exchange Review, Brighton Guardian, Co-operator, and Newcastle Chronicle have been received.

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