MEDICAL PARIS OF TO-DAY.

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IX.

ACTUAL STATE OF FRENCH SURGERY: SOME OF THE SURGICAL WARDS OF PARIS.

The Revolution wrought by Antiseptic and Aseptic Methods.—Special Hospital Installations.—Surgery of the Cranium and the Brain.—Ocular Grafting.—Statistics of Staphylopyorrhaphy.—Naso-pharyngeal Polypus.—Inter-crico-thyroid Laryngotomy.—Mammary Ablation.—Gastrostomy.—Radical Cure of Hernia.—Ovariectomy.—Hysterectomy.—Inversion and Prolapse of the Uterus.—Cauterisation of Fistula.—Transperitoneal Nephrectomy.—Suprapubic Lithotomy and Cystotomy.—Internal Urethrotomy.—Urethral Anaplasty.—Excision of Varicocele.—Hennequin's Extension Apparatus.—Pseudarthrosis.—Preliminary Ligature in Disarticulations.—Osteo-plastic Amputation of the Foot.—Resection, with Osseous and Periosteal Suture.—Osteo-clasis.—Tendon-grafting.—Autoplasty.—Hæmostatic Forceps.

WHEN one compares the science and art of surgery as it is practised at the present moment in Paris, and especially in the hospitals of the city, with what it was a dozen years ago, important progress may be noticed of an interesting character; and it may be said that surgical habits, methods, and materials have been transformed almost to the extent of a revolution. This revolution is confessedly largely due to the general adoption of the principles and the execution of the rules of the Listerian antiseptic methods, but not less so to the more accurate idea which the majority of surgeons have formed of the very spirit and science of that method. For a long time hardly any of the Paris surgeons have entertained any doubt of the necessity and efficiency of antiseptic or aseptic precautions. But in the first period of the new era which the labours of Lister opened there was too great a tendency to consider that the principle of the antiseptic method resided in the employment of one or another agent, such as carbolic acid, corrosive sublimate, iodoform, or of a particular form of dressing, or in certain special practices, such as the habit of operating only under the carbolised spray. Many operators, trusting solely to the employment of these methods—useful, no doubt, but only factors in the realisation of complete antiseptics—did not adequately hold in view the very principle of the method, and, contravening its most elementary rules, failed in a number of indispensable precautions, and were astonished that they did not reap from its application the benefit which they had expected from it. It may now be easily seen that a great majority of the surgeons of the French hospitals have arrived at a just notion of the antiseptic theory. They recognise the field of operation, or the wound, as a territory which cannot be surrounded with too many precautions against the infection of septic agents. They no longer think it sufficient to disinfect the wound more or less completely during and after the operation by washing with an antiseptic solution and covering it with a dressing reputed to be protective. Before, during, and after the operation they are at pains to protect it from all infective contact, or in other words, to operate on an aseptic region, which is kept so throughout the period that the wound is protected by dressings and until it is healed. Hence great attention is now paid to the surroundings of the patient, the materials of operation, the installation of the services and the methods of conducting the dressing, and the habits of the nurses and dressers.

First, as to the installation and material. Although it has been said that a surgeon thoroughly imbued with the principles of the aseptic method is capable of performing an antiseptic operation even on a dunghill, it is none the less true that the primary idea of the conditions desirable for protecting the patient operated upon from infection is to be sure of the surroundings of the operation. In the earlier days to which I have referred the most serious operations were performed in dusty amphitheatres, serving also for clinical lectures and for storing all sorts of surgical apparatus, bedding, clothing, etc. There were no means of effecting and maintaining asepsis of instruments, often no adequate supply of hot water, and it was not unusual to see pathological preparations

brought on to the operating-table from which the professor illustrated matters relating to his operation.

Now, not only some of the new installations fulfil all the desirable conditions of cleanliness, asepsis, or antiseptics, but many of the arrangements for major surgical operations have been specially prepared with that view. Dr. Lucas-Championnière should be mentioned as a pioneer in this direction. One of the first installations arranged was that by Dr. Périer, in 1887, for laparotomies and ovariectomies, in a part of the buildings of the Salpêtrière, of which he was then surgeon, and this installation has been still further improved by M. Terrier, who at present occupies that post. On leaving the Salpêtrière for the Bichat Hospital, M. Terrier obtained the provision of similar arrangements suitable for abdominal surgery, and this service is well provided with apparatus for disinfection, heating-stoves and filters, and he has carried on here a succession of successful operations in abdominal surgery which have done much to raise the character of French surgery in a department in which for a time it had fallen back. Elsewhere similar improvements have been made; the most complete, perhaps, is that which has been arranged by Dr. Périer at the Lariboisière Hospital, of which I hope to be able to find room for a special account, so well is it devised and so successful in its working.

The surgical arrangements of the Hôpital Tenon, the Hôpital Bichat, and the Hôpital Broussais have been successfully reconstituted in this sense, and each surgeon possesses the facilities for carrying on his treatment in conformity with modern scientific principles and under the conditions of cleanliness and suitable isolation. They are simply arranged, but provided with Pasteur filters, ovens, autoclaves for disinfecting the instruments, suitable injecting and washing apparatus for antiseptic solutions, and the various necessary applications. Some of the arrangements for maintaining all the instruments and appliances in a state of absolute asepsis are so ingenious as to deserve a further description than I can give at present. The instruments, ligature threads, drains, sutures, sponges, are all carefully secured against contamination, and in all these respects the surgical service of Paris shows a remarkable progress during the last twelve years over their previous condition, which had up to a relatively recent date remained almost without modification as they were in the time of Dupuytren.

The influence of Listerism, as it is everywhere called in France, is frankly recognised by the general body of Paris surgeons, and they have profited by it with scientific zeal, and with much accuracy and logical application of its principles in detail.

Passing to a separate review of the various departments of surgical practice as now carried out in Paris, and comparing it, as I wish to do, with the surgery of twenty years ago, it may be noted that the studies of Hitzig, Ferrier, Broca, Hughlings Jackson, Gratiot, and Charcot on the physiology, pathology, and topography of cerebral localisation have had their full influence in modifying the surgical treatment of affections of the cranium and of the brain. Trephining took a new departure after the establishment of the doctrine of cerebral localisation. Proust and Terrillon were, perhaps, the first in France to carry out this operation on the sole basis of the investigation of physiological disturbance depending on fracture. Their observations were the subject of learned reports by M. Gosselin at the Académie de Médecine, and by M. Le Dentu at the Société de Chirurgie in 1877, and cases of the kind have since multiplied beyond enumeration. These indications, whether from the point of view of the right opportunity for intervention or from the point of view of the seat of application of the trephine, have been the source of a great number of communications, amongst which should especially be mentioned that of Chauvel on trephining in suppurative encephalitis consecutive to median otitis. This surgeon insists on the necessity of promptly opening the cranium, and describes the methods which he employs of reaching the abscess formed in the temporal lobe of the brain. Also should be mentioned here the paper of M. Lucas-Championnière describing his excellent results from the application of the trephine in epilepsy. Among other operations practised in Paris on the cranium, mention should be made of the extirpation of voluminous cirrroid aneurysms of the scalp performed by M. Verneuil by the aid of forced-pressure of the afferent arterial vessels and the afferent veins.

In operations on the face should be cited the attempts by M. Chibret to perfect ocular grafting. In 1885, after extirpating

a staphylomatous eye, he succeeded in implanting in the place of it, in the conjunctival *cul de sac*, the eye of a rabbit, which he fixed by suture. The transplanted eye did not mortify; but although the immediate result appeared satisfactory, complete atrophy reduced the eye, which at first seemed likely to live, to nothing. Similar essays were made, with partial success, by M. Terrier and others, and numerous experiments on animals were undertaken, among others, by MM. Bohmer and Barabom at Nancy. Though the result of these researches and clinical efforts have shown that it is not possible at present to count on ocular transplantation to replace prothetic apparatus, it has nevertheless been shown that grafting of a complex organ borrowed from an animal may be accompanied in man with a survival of that organ and its temporary acclimatisation, followed, nevertheless, by rapid atrophy. Thus far, however, this has an interest rather from the experimental than from the surgical point of view.

The series of communications and the successful results of M. Trélat in France have notably advanced the question of the restoration of the palatine vault, which, when I first published notes on the surgical *cliniques* of Paris, some twenty-five years ago, was in a very backward state as compared with that which prevailed under the influence of Fergusson and Pollock in London. Professor Trélat has especially aimed at determining the precise dimensions which should be given to the flaps in bringing together the divided parts of the cleft palate, and at inventing a number of new instruments which facilitate manual operation. I propose to speak of these separately in a paper on M. Trélat's *clinique*. M. Ehrmann, at the congress of French surgeons in 1888, described a number of operations which he had performed on very young children. Of forty-one children on whom he had performed urano-staphylorrhaphy, ten were under 2 years of age; in six cases there was complete success, two were unsuccessful, and two died. Twenty similar operations performed between the ages of 2 and 6 gave him sixteen successes, one failure, and two deaths due to diphtheria—an accidental complication which can hardly be put to the debit of the operation itself; eleven patients operated on between 7 and 10 years of age gave ten cures and one failure due to intercurrent measles, without death. Here, too, perhaps I should mention the proceeding of MM. Duplay and Berger, who in obliteration of one of the nasal fossæ from hypertrophy of the turbinate bones—an affection which is not uncommon, although often not recognised—hollowed out with a special osteotome a veritable tunnel in the corresponding nasal fossa.

It seems that in France surgeons are more and more renouncing the great operations and resections which were once much in vogue there for the cure of naso-pharyngeal polypus. This operation used to cause very considerable mortality from secondary hæmorrhages and cerebral complications, of which M. Verneuil has reported many examples. The course now pursued is rather that which M. Trélat has brought into repute at the Paris hospitals, namely, limited resection of the palatine arch, as described by Nélaton, followed by destruction of the polypus by electrolysis, or by the actual cautery, or chloride of zinc, the various prolongations of the polypus being thus attacked and the risk of relapse considerably diminished.

With the view of simplifying the operative treatment of the affections of the nasal fossæ, M. Duplay has introduced a speculum nasi, which is much approved, and which allows a thorough illumination of the nasal cavity, and the visual investigation of the polypus and its seat of implantation.

Although of pathological rather than of operative interest, a word should be said of the very complete researches by M. Lannelongue on congenital cysts of the neck, and especially those of branchial origin. In his museum at the Hôpital Trousseau (of which I shall give some further account) is a very interesting series of preparations illustrating his work on the subject, which is classic in France, and which includes a most complete bibliography of the subject.

Among operations on the throat may be mentioned here that of inter-crico-thyroid laryngotomy, brought into prominence by the works of Krishaber, Gouguenheim, and Richelot. This operation is now generally preferred in France for tracheotomy in adults, being singularly facilitated by the well-known cannula of Krishaber, of which it is unnecessary to give description.

M. Le Fort, I may add, to complete this part of my notes, has recently performed, once more with success, ligature of the two common carotids, for the cure of communication of the cavernous

sinus with the internal carotid—that curious variety of aneurysm which was described by Nélaton and by Delens.

Among important operations on the thorax in which French surgery has intervened, that of Letiévant-Estlander occupies a prominent place. The operation devised by Estlander for obtaining by resection of portions of the ribs obliteration of a persistent purulent sac after empyema, has been much approved by Letiévant and other French surgeons, and has given them excellent results. One among them, M. Le Dentu, owes to it, I believe, his own recovery. Nor should I omit to refer to the good work done in France by M. Verneuil (following foreign precedents, however, I conceive) in insisting, as an absolute principle in amputation of the breast performed for cancer of that organ, on the necessity of the total ablation of the gland with all its prolongations, even when healthy in appearance, and with the aponeurosis of the pectoralis major, as well as on the necessity of opening the axilla, and, as it were, emptying it of its glands even when these do not present any apparent enlargement. This practice, urged as a rule some years since in an excellent memoir by M. Kirmisson at the Society of Surgery, is now rigorously adopted by all the Paris surgeons. Statistics were communicated to the Congress of Surgery in 1888, showing that the operation thus practised notably delays recurrence, and affords to the patient a fair prospect of survival not only for two, three, or four years, but even for six, eight, ten, and eleven years without apparent recurrence.

In abdominal surgery surgeons remember well the extraction of a fork from the stomach by M. Leon Labbé, which was much talked of at the time; and the gastrostomy by M. Verneuil, which opened the way for subsequent operations now more in vogue elsewhere than in France, for the removal of tumours of the stomach. This latter operation is very rarely performed in Paris, while gastrostomy in cases of cancer or of stricture of the œsophagus and gastrostomy in cases of foreign bodies are frequently practised, and with good success. Lately M. Le Dentu, on a patient whom I saw shown at the Académie de Médecine, opened the belly in search of a large wooden kitchen spoon which had passed into the stomach, and not finding it in that viscus, explored the abdomen, and withdrew it from the peritoneal cavity, this foreign body having traversed the gastric walls. The patient made a good recovery. I have full notes of this interesting case for separate publication. The merit of Verneuil and Labbé was in attracting anew attention to the possibility of reaching the stomach for surgical operation, which Sédillot had already attempted with but slight success, and in indicating good procedures for cutting down on and incising these organs.

The great question of laparotomy in cases of penetrating wound of the abdomen, and especially of wounds from firearms, has been a subject of much attention in Paris. Immediate laparotomy has suggested itself there, as elsewhere, as being indicated with a view of uncovering and closing intestinal wounds; but thus far it has given bad results, except in one or two cases; while, on the other hand, the method of expectation has succeeded remarkably in some well-tested cases of bullet wounds of the digestive tube. The practice of most French surgeons is still to operate immediately if the wounded person presents imminent and urgent symptoms calling for it, but to wait unless the indications are of an absolute and most urgent character.

The open operation for the radical cure of hernia has of late been performed with good results. M. Lucas-Championnière has just published a series of 120 operations performed by him with one case of death; but it is held by many that this method of treatment should be limited to cases of hernia, which, in the words of M. Trélat, "cannot be easily, completely, and constantly retained by a truss."

In respect to the *technique* of the operation, Paris surgeons concern themselves less than most of our English surgeons with suture of the rings. They limit themselves to removing with great care and very completely the hernial sac, dissecting it away, and tying its pedicle even above the neck, as high as possible in the abdomen. They then place a series of catgut sutures, cut off and left *in situ*, in the fibrous soft parts, without concerning themselves much about the rings, and they close the superficial wound. They do not like the methods of Wood, Macewen, and Ball, and seek especially to obtain solid union of the inguinal canal. The course of time will show whether this be necessary or not, and whether it is enough to be content with complete extirpation of the sac, and ligature of its neck.

The treatment of epigastric hernia and of hernia of the linea

alba has especially arrested the attention of M. Terrier. These hernias are often painful. The fatty hernia, it is stated, often contains a small peritoneal diverticulum. M. Terrier dissects these hernias, excising the peritoneal diverticulum or sac after ligaturing its neck with catgut, and then sutures the abdominal wall by a suture *à étages*. This operation has given him numerous successful cures. I need not dwell longer on abdominal surgery and hysterectomy, as everything in this department is already well known.

M. Terrier, who has done much to popularise the intra-peritoneal treatment of the pedicle in ovariectomy in France, has published complete statistics of his early operations, including six series of twenty-five cases each, 150 operations in all, of which he has minutely analysed the results; these include twenty-nine fatal cases, and this relatively high mortality he has explained by the gravity of the cases in question, the rapid development of the cysts, the advanced age of the patients, the size of the tumour, intestinal adhesions, complications such as albuminuria, and other like causes.

M. Terrillon has published the results of four series of thirty-five operations performed by him at the Salpêtrière. In these 140 cases he has only had to regret seventeen deaths. His method of operating is not quite the same as that of M. Terrier. The latter uses instruments sterilised by heat and then plunged into carbolic solution. M. Terrillon boils his instruments in water ten minutes before operation, and then places them in boiled water. After the operation he washes out the peritoneum with boiled water, to free the abdominal cavity from blood and clots.

In abdominal hysterectomy M. Terrier gives the preference to elastic ligature of the uterine pedicle after tying separately with carbolised silk the vascular pedicles which terminate in the uterus, and which contain the uterine and utero-ovarian vessels. The uterine pedicle, strangulated by the elastic ligature, is left in the lower angle of the wound, and covered with iodoform. Various instruments have been introduced by MM. Segond and Terrillon and M. Marraud for fixing the caoutchouc band at the point of its crossing. Latest and simplest is a very short forceps with fenestrated beak, the branches of which are kept in place by a strong lever.

I will only mention fixation of the uterus to the anterior abdominal wall by suture for the purpose of remedying uterine prolapsus (ventro-fixation or hysteropexia), performed, I believe, for the first time by Kœberlé, and taken up again by M. Terrier after Olshausen had recourse to it by a somewhat different method. M. Terrier and the French surgeons who adopt this operation do not any longer fix the angles of the uterus, but its anterior surface, to the anterior abdominal wall by several points of catgut suture. This operation appears to have given a considerable number of good results; a case which ended in septic peritonitis and death was, however, communicated this year to the Société de Chirurgie by M. Pollaillon.

In vaginal hysterectomy the French surgeons have substituted for ligature of the broad ligaments the application of long, curved forceps, for continuous pressure on the folds of the membrane, these forceps being intended to ensure hæmostasis, and left *in situ* for twenty-four or forty-eight hours. This practice, due to M. Péan and M. Richelot, is considered to have considerably simplified the manual proceeding in an operation on the value of which opinions are not yet decided.

Périer has made an ingenious application of the elastic ligature to the ablation of the fundus uteri, in cases of inversion of that organ. The fundus uteri is strangulated by a loop of thread, on which an india-rubber ring exercises continual pressure by means of a metallic stalk, provided with a rack (*à crémaillère*) on which this ring is fixed, and which acts as a sort of *serre-nœud* in tightening the knot and making elastic traction.

Finally, in the treatment of uterine prolapsus, M. Le Fort practises an operation for antero-posterior *cloisonnement* of the vagina. On the anterior and posterior surfaces of this canal in its whole length he pares the mucous membranes. The uterus being reduced, he brings together by numerous sutures the anterior and posterior walls of the vagina, along the line of incision, and obtains a sort of solid column of support for the uterus. To this he adds an operation for restoration of the perineum. This operation, which interferes with the function of the genital apparatus, is only applicable to women who have passed the middle age, and who are suffering from complete prolapsus. It is simple in its application and efficacious.

To terminate, in respect to operations on the genital organs of

the female, let me mention that M. Verneuil, in operating on vesico-vaginal fistula, substitutes cauterisation of the fistula, followed by scraping of the granulations developed as the result of the cauterisation, for paring with the bistoury. This method of secondary reunion is capable, he considers, of rendering good service, especially when previous paring and suture have partially failed.

Among operations and therapeutic methods relating to the organs of urinary secretion should be mentioned, first perhaps, the proceeding of transperitoneal nephrectomy, performed by M. Terrier. After having opened the abdomen by laparotomy, he incises the capsule of the kidney, or extirpates that organ according to the ordinary rules; and, after its ablation, fixes to the lips of the abdominal incision the borders of the solution of continuity of the capsule of the kidney which he drains. This method is especially applied to very voluminous tumours of the kidney, projecting towards the anterior region and accessible with difficulty from the lumbar region.

Modifications of operation for stone in the bladder have been especially studied by M. Guyon, who, for the last fifteen years, has carried on at the Hôpital Necker, in the wards formerly under the charge of Civiale, numerous studies of the treatment of affections of the urinary passages. In addition to his own work, much has been done by his pupils, among whom the best known are Curtis, Reverdin, Segond, Henriët, Campenon, Bazy, Hartmann, and others. Their publications, many of which are well-known in Europe, treat of the symptomatology and diagnosis of lithiasis and tumours of the bladder, cystitis, prostatic hypertrophy, as well as therapeutic proceedings. There is a considerable series of pathological specimens in the museum of the hospital which illustrate many of these researches and on which the latter were based. M. Guyon became at an early date a partisan of litholapaxy by Bigelow's method, and he has introduced several instruments for facilitating it. This surgeon adopts almost exclusively suprapubic lithotomy, when lithotripsy is not practicable. He lays special stress on drainage of the bladder after that operation, and for this purpose fixes by suture to the lips of the abdominal incision two large india-rubber tubes, the parallel arrangement of which allows of a double current, by which the bladder may be relieved as often as desired of pathological contents and of the urine.

It is especially in the removal of vesical tumours that suprapubic cystotomy renders the greatest service. After opening the bladder above the pubes, and securing with threads the two lips of the vesical incision, so as not to let them slip away, the interior of the bladder may be explored with the electric light, and extirpation of the tumour and its processes may be carried on as if the surgeon were acting on the surface of the body. Guyon has employed also suprapubic incision in the treatment of painful cystitis; in the female it is replaced successfully by vaginal incision, on which Hartmann has especially insisted, and for which he uses a grooved catheter, which allows the bladder to be got at without the parallelism of the incisions being disturbed.

Suprapubic cystotomy is also employed for the purpose of permitting retrograde catheterism of the urethra when traumatic rupture of the urethra, or impassable stricture, or hypertrophy of the prostate renders the passage of the sound absolutely impossible. This operation, which was first practised by Verguin at Toulon in 1757, has been employed with much success and recommended by Duplay, Rohmer, Boeckel, Tillaux, and Vigo between 1883 and 1888.

Internal urethrotomy, performed with Maisonneuve's instruments, is still the mode of treatment most used in strictures of the urethra which are rebellious to dilatation, but only under those circumstances. M. Guyon related to the Société de Chirurgie in 1886 the results of his practice in this respect. He had had 457 urethrotomies in twenty years, with 20 cases of death, of which 17 only were attributable to the operation. In these 17 cases the patients were all suffering from grave and old renal lesions. It is, however, considered that the harmlessness of the operation has greatly increased since the employment of anti-septic precautions. The sound is left in for twenty-four or thirty-six hours after the operation.

Urethral anaplasty has been the subject of some interesting work on the part of MM. Duplay and Anger. The former lays down the rule of operating on hypospadias in several stages by re-forming the anterior portion of the canal, leaving the patient to urinate by the posterior part of the cleft, as through a fistula; and, finally, by reuniting the posterior urethra to the new canal, and so obliterating the abnormal orifice.

Without going over all the extensive field of the practice of French surgeons in the treatment of the male genital organs, I may cite the interesting contribution of Horteloup to the procedure for the cure of varicocele. This surgeon seizes with curved forceps and excises in a mass the packet of varicose veins and a

they prefer to lumbar colotomy in cases of cancer or other growths in which linear rectotomy is not practised, and in which the extirpation of the disease is impossible.

I now come to surgical affections of the limbs and the operations performed on the extremities. In the treatment of fractures must be mentioned the general use made of the extension apparatus of Dr. Hennequin in fractures of the femur. This is an apparatus of great simplicity, and generally employed in the Paris hospitals, giving almost always a cure, without shortening and without noticeable stiffness of the knee. A padded bandage is applied to the foot, leg, and knee; the limb is slightly flexed, to avoid oedema of the limbs. Extension is made by means of a cravat, the middle of which is placed on the anterior surface of the thigh a little above the knee, and the ends of which are crossed under the calf and tied in a knot in front of the anterior tuberosity of the tibia. To this knot is fixed a cord, which is reflected over a pulley placed at the foot of the bed, supporting a weight of from four to ten pounds, which exercises traction on the limb. The knee being semiflexed, the mattress is slightly hollowed out so as to provide a depression in which the foot is comfortably placed. The thigh is simply placed in a little iron hollow splint, to which it is lightly fastened and buckled. No counter-extension is necessary, the weight sufficing. This apparatus is used for fractures both of the shaft and neck of the femur and for hip-joint disease. This apparatus has been successfully used by Berger to obtain thorough straightening without shortening, after previous osteotomy, in pseudarthrosis of the femur due to defective union. In the treatment of this condition M. Berger has successfully had recourse to the following proceeding. He makes cuneiform resection of each of the two fragments in such away that the upper fragment represents the projection of the V, which enters the two branches of a corresponding V cut into the extremity of the lower fragment. The two fragments are sutured in position with strong aseptic platinum wire the ends of which are cut off flat and hammered on to the bone, and left *in situ*, the wound becoming united by first intention. Two patients treated by this method were shown at the Académie de Médecine.

In fracture of the patella, notwithstanding the strong advocacy in some quarters of suture of the bone, French surgeons still employ Malgaigne's hooks, which have been advantageously modified in form by M. Duplay, to bring the fragments together.

The only contribution to the treatment of dislocations which I shall mention is the very ingenious and convenient instrument invented by M. Farabeuf for the reduction of dislocations of the thumb. This instrument is, I think, tolerably well known in England, but not so well, perhaps, as it deserves. It is an exceedingly useful addition to the surgical *armamentarium*.

Fig. 1.—Hennequin's Extension Apparatus.

Fig. 2.—Hennequin's Extension Apparatus for Fractured Femur.

no'able extent of the skin of the scrotum. Then he brings the edges together by suture. This operation he has repeated a great number of times with excellent results.

In the treatment of affections of the anus and rectum the French surgeons for the most part adhere to iliac colotomy, which

Fig. 4.—Cartilaginous Tumour of Shoulder.

Fig. 3.—Cuneiform Resection and Junction of the Fragments with buried metallic sutures in cases of false joint following fracture. (Berger's method.)

Fig. 5.—The same patient after removal of the whole of the upper limb with the scapula after partial resection of the clavicle and ligation of vessels.

A few words as to certain amputations. The *technique* of these operations has been everywhere much advanced by the employment of Esmarch's band, but amputations performed at the root of the limbs do not always benefit by this invention. M. Verneuil, to remove all risks of hæmorrhage from coxo-femoral disarticulation, employs in this operation preliminary ligation of the femoral artery and veins. For this purpose he has recourse to a racquet-shaped incision, the handle of the racquet or tail of the incision corresponding to the origin of the femoral vessels which allows of their being exposed and tied in the first stage of the operation, which is then finished without fear of any notable loss of blood. M. Berger employs a similar proceeding in complete amputation of the upper limb with removal of the scapula. He first resects the median part of the clavicle, and with the aid of this resection ties the transverse cervical artery and vein as well as the superior scapular vessels. The rest of the operation is rapidly performed without loss of blood, and in the case in which he first employed it, the arm, scapula, and a cartilaginous tumour, weighing 33 lbs., were removed by an oval incision, dividing all the muscles passing from the trunk to the upper limb. The patient is living, and for the last six years has fulfilled the duties of postman, thanks to a prosthetic apparatus constructed by Collin.

An interesting operative modification is the osteo-plastic amputation of the foot described by M. Fort. This operation resembles that of Pirogoff, but it is the inferior surface of the calcaneum which is left adherent to the heel-flap by separating it with the saw from the other bones of the foot, which are removed. It is fixed by osseous suture, or, better, by an ivory peg to the surface of the tibia, with which it unites. This bony prominence affords an excellent surface of support in walking. Ollier, of Lyons, gave in France a considerable impulse in favour of resections, and his remarkable work on this subject will soon be completed. With the aid of antiseptic methods and only a few dressings, these

operations are giving excellent results in a great number of cases in which formerly they failed, or were followed by relapse. In resection of the knee-joint, osseous suture and periosteal suture, with catgut and union by first intention, have given excellent success. It was practised especially by Boeckel and Lucas Championnière, and recognised by all antiseptic surgeons in France. Ollier insists especially on the advantage of letting the wound heal completely under the dressing applied immediately after the operation. His cases of resection of the wrist-joint are particularly interesting, and fully verified his opinions.

William Adams's operation for subtrochanteric osteotomy in ankylosis with permanent flexion has also been successfully applied; and in orthopædic practice resection for the treatment of club-foot has taken a prominent place. Two operations which have the preference in France are the simple extirpation of the astragalus and resection of the greater process of the calcaneum. This latter operation is much employed by Gross (of Nancy) and Schwartz, as being applicable by preference to those cases of club-foot in which the inversion of the foot is more marked than the equinism. On the other hand, osteotomy has lost favour in France in the treatment of genu valgum. Since the numerous and very successful cases of straightening shown by MM. Mollière and Robin, of Lyons, from the employment of their osteoclast, and since the introduction of Collin's apparatus, which permits the exact limitation of the line of fracture produced in order to obtain the straightening of the limb, osteoplasty has come more into favour than osteotomy. Some curious cases of orthopædic resection have been brought forward by M. Kirmisson, who has resected a certain length of the bones of the leg to allow cicatrization of the soft parts with loss of substance, and where the condition prevented repair.

Fig. 6.—Transplantation of a flap with pedicle from the arm to the eyelid in a case of cicatricial ectropion. (Berger's modification of the Italian method, 1888.)

Among many reparative operations may be mentioned the successful efforts of MM. Monod and Peyrot in grafting the tendons of a rabbit, in the case of a loss of substance of one of the flexor tendons of the finger. And, while speaking of plastic surgery, it may be noted that the Italian method of autoplasty has again come to the front. Ten years ago M. Berger employed this method, which had fallen somewhat out of use, notwithstanding the efforts of Graefe to restore it to favour, and reconstituted the

eyelid in a case of cicatricial ectropium by means of a flap taken from the arm, and left three weeks adherent by its pedicle to the place of origin. Encouraged by all these cases, he has since done a considerable number of other operations of a like kind, and there is at the present moment in the Lariboisière a young patient whose lower lid has been restored by means of a flap taken from the arm and left thirteen days adherent by its pedicle, which was divided at the end of that time.

Other similar operations have been successfully directed to repairing loss of substance, extensive ulcers, and the cure of retractile cicatrices of the knee-joint or elbow. Suitable retentive apparatus need, of course, to be devised and employed in each case. These flaps appear to distinguish themselves from simple epidermic grafts in the perfect maintenance of their nutrition, so that they do not retract, and may even acquire a greater dimension than that which they originally had under the influence of the traction exercised by the neighbouring structures. These operations are always of some rather curious interest, and I annex illustrations from three photographs of the cases in question which I obtained from M. Berger.

Fig. 7.—Transplantation of skin-flap from forearm for a cicatricial ulcer (Berger's modification of the Italian autoplasmic method, 1886). Over the region of the bend of the elbow another flap is seen, which was taken from the thorax at a previous operation, and which has become perfectly attached in its new place. The above is from a photograph taken eighteen days after the operation, immediately before division of the pedicle of the flap, which has become well attached.

I shall speak elsewhere of the extensive use of *forçi-pressure* forceps, or *pincès hæmostatiques*, so much employed by Péan and Kœberlé. In this summary review I have hardly at all referred to French studies of general pathology, such as the recent works of Verneuil on tetanus and tuberculosis; of Guyon, on the urinary passages; of Lannelongue, on congenital cysts and osteomyelitis. I may find an opportunity of doing so in another letter. Neither have I the pretention to measure what French surgery has afforded

as its contingent of progress; I have only endeavoured to indicate by a few examples that the present position is one of continuous advance, likely to afford materials of much interest to

Fig. 8.—Transplantation of a skin-flap with pedicle from the left leg to an ulcer of the right leg (Autoplasty by Berger's modified Italian method, 1888.)

the surgical visitors who may be led especially to visit Paris this year. It will be seen that Nélaton and Velpeau have some not unworthy successors in the present generation of French surgeons.

DRAFT BILL TO AMEND THE CONSTITUTION OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, AND TO DECLARE AND EXTEND THE RIGHTS OF MEMBERS THEREOF.

WHEREAS the Royal College of Surgeons of England is an ancient free Corporation, which has existed as a Society, Guild, Company, or Fraternity of persons practising Surgery under various names from very early times by virtue of several Royal Letters Patents and Acts of Parliament; and whereas it is expedient to declare and regulate the ancient rights of the Members of the Royal College of Surgeons of England, and to amend the constitution thereof, and to provide certain new regulations relating to the government thereof in lieu of and in addition to those now provided by Letters Patent and Acts of Parliament relating to the same, and to amend and alter certain by-laws:

Be it enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal and Commons in the present Parliament assembled, and by the authority of the same, as follows:—

1. At the next and every succeeding election of members of the Council of the College, the persons elected shall hold office for three years only, but shall thereafter be eligible for re-election subject as hereinafter provided.

2. From and after the passing of the Act, the Presidents and Vice-Presidents of the College shall be elected in manner hereinafter provided, and shall hold office for one year only, but shall be re-eligible, provided that the term of office of any of them shall not exceed three years consecutively.

3. Whereas it was part of the ancient constitution of the College and Corporation that all the Members thereof were eligible to the offices of Masters and Governors thereof, be it declared and enacted that from and after the passing of this Act it shall at any such election of a President or Vice-President be lawful to nominate as a candidate any Member of the College duly registered as hereinafter provided who shall on the day of election be of more than twenty years' standing as a Member of the College.

4. Whereas by the ancient constitution of the said College and Corporation all the Members thereof were in right of their membership entitled to meet together for their common affairs, and to attend and vote at the customary annual meeting, and at all other general meetings of their said Society; and whereas by reason of the partial disuse of some of the said rights questions have arisen thereon which it is expedient to determine by the authority of Parliament; and whereas certain regulations and by-laws have been made in the premises which it is expedient to alter and amend, be it declared and enacted that on and after the passing of this Act the Members of the College are and shall be entitled to meet together within the hall of their College or elsewhere, at all reasonable times, for the consideration of the affairs of the College, and to propose resolutions and to vote thereon at every general meeting of the College, and to vote at any election of President, Vice-President, and members of the Council of the College (subject as hereinafter provided), and at any meeting to appoint committees for special purposes, and to adjourn any meeting to another place and time, and it shall not be deemed to be necessary to obtain the previous permission of the President and Council for the holding of any such meeting, or for the proposal of any business therein.

5. It shall be the duty of the Council to call a general meeting of the Members at least twice in each year, and to call at any time a special general meeting within one calendar month after the receipt of a requisition signed by twenty Members of the College; and if any special business be named in any such requisition, notice thereof shall be included in the advertisement convening any such meeting.

6. At all meetings of the Members of the College the President shall be entitled to take the chair, and the Chairman shall take the sense of the meeting upon all resolutions proposed by any Member of the College after three days' notice in writing, and upon all proper amendments thereof.

7. Section XVII of the by-laws of the College is hereby repealed, and whereas doubts have arisen as to the validity thereof, it is further hereby enacted that it shall not be lawful for the President or Council of the College to take or continue any action against any Member of the College for any alleged infringement thereof, or to continue or enforce any penalties or liabilities which before the date of the passing of this Act may be declared, or imposed, or attempted to be imposed, in respect of or arising out of any past alleged infringement thereof.

8. If any resolution relating to the expenditure of the revenues of the College is passed at any general meeting of the Members, by a majority of two-thirds of the Members present and voting, the said resolution shall forthwith be binding on the Council and on any Finance Committee thereof; and any subsequent expenditure in contravention thereof shall be disallowed on any subsequent audit.

9. If, and when the Council shall deem it desirable to incur any extraordinary expenditure to the amount of £1,000 or upwards, the President shall forthwith convene a meeting of the Members of the College, and shall take the sense of the said meeting on the said proposed expenditure; and no resolution of the Council sanctioning the same shall be valid unless or until the same resolution shall have been ratified by a meeting of the Members of the College.

10. The College Hall and Museum, and all other lands and hereditaments, and all the property whatsoever the said College is or may be possessed, are and shall be deemed to be vested in the President or Council in trust for the Members of the College.

11. No such meeting of the Members of the College, as hereinbefore mentioned, shall be entitled to alter the subjects or standards of any examination which the College is empowered to conduct, or to review any judicial act of the Council relating to the professional misconduct of any Member of the College.

12. The accounts of the receipts and expenditure of the College shall be open to the inspection of any Member of the College at all reasonable times.

13. A proper balance-sheet shall be prepared by the Council in the month of October in each year, and shall be audited by an independent auditor, and published to the Members of the College on or before the first day of November, and the said published balance-sheet shall be authenticated by the signatures of the President and Auditor.

14. An annual meeting of the Members of the College shall be convened in the month of November in each year, to which the annual report of the Council and the published balance-sheet shall be submitted.

15. No formula for a by-law or for the alteration of any existing by-law shall be finally passed and ordained by the Council until the same shall have been submitted to a meeting of the Members of the College after due notice thereof, and approved by them.

16. At the next and every succeeding election to fill any vacancy in the Council of the College, any Member of the College shall be eligible to be nominated as hereinafter provided, on the same condition as to standing as if he were a Fellow of the College; but all existing provisions as to the standing necessary for eligibility for election as a Member of the Council shall be subject to be altered from time to time by by-law.

17. No Member of the College shall be disqualified from holding any office in the College by reason only of his not being a Fellow of the College.

18. No Member of the College shall exercise the right of voting at any election of a President, Vice-President, or member of the Council of the College, unless or until he shall be duly registered on the Electoral Register of the College for the time being, in manner hereinafter provided.

19. From and after the passing of this Act, the Secretary of the College shall act as Registrar for the purposes of all elections in the said College, and it shall be a part of his duty to make and correct an Electoral Register of the College in manner hereinafter provided.

20. As soon as may be after the passing of the Act he shall prepare and publish a revised addition of the "Alphabetical Register of the Fellows," and "List of Members," contained in the last Calendar of the College, in which he shall insert in one list the names, present addresses and dates of admission of all the Fellows and Members in such calendar mentioned in alphabetical order, with the following exceptions:

1. All persons as to whom he shall be satisfied that they are dead, or that they have ceased to be Members of the College.

2. All persons as to whom it shall appear that they have no permanent address in the United Kingdom.

3. All Members not being Fellows who have been admitted to membership since the first of June, 18

21. As soon as may be, the said revised edition shall be published in the College Hall, and in the *London Gazette*, and in two medical papers, together with a supplementary list of the persons whose names have been omitted on any of the grounds hereinbefore mentioned, and a notice that if any of the persons have been erroneously omitted, they are required to claim personally or by letter that their names should be reinstated within one calendar month.

22. After the lapse of the limited time the Registrar shall embody all necessary corrections forwarded to him in a final copy of the Electoral Register, and shall publish the same in manner aforesaid, as being the Electoral Register of the College for the year 1890, and the same shall thereafter be the Register in force at the annual or any other election until the first of January, 1891.

23. The Registrar shall, not later than May 15th in each succeeding year thereafter, publish a notice in manner aforesaid requiring all persons claiming to be registered, or objecting to any entry in the Electoral Register of the College, to lodge a written notice with him within one calendar month, together with such proof as the Council shall from time to time direct by by-law; but it shall be his duty, without any special notice, to insert in the next following Electoral Register the names of all Members and Fellows admitted during the twelve months next following the said June 1st, 18

24. If the Registrar is not satisfied as to the matters contained in any such notice he shall forthwith inform the claimant by registered letter that his claim is not admitted, and the claimant shall thereupon be entitled to appeal to the Council, whose decision shall be final.

25. The Registrar shall in like manner publish a list in each year of all persons entered on the then existing Electoral Register whom he believes to be dead or to have ceased to be Members of the College, or to have ceased to have an address in the United Kingdom, together with a notice that the names of

the said persons will be omitted from the next following Electoral Register unless a claim is lodged by them in manner aforesaid, and the Registrar shall so soon as may be thereafter cause the revised Electoral Register to be published as the Register in force for the year ensuing.

26. The entry of any Member's name upon the current Electoral Register shall be conclusive of his right to vote at any election during the period to which that Register applies, which shall be from January 1st in each year till January 1st following, unless he shall have ceased to be a Member of the College.

27. From and after the passing of this Act all elections for vacancies in the Council of the said College, or for the office of President or Vice-President thereof, shall take place upon the first Thursday in July of each year.

28. At the next and all future elections of a President or Vice-President of a College, the same shall be elected by a majority of the votes of all persons who shall be then entitled under the provisions of this Act to vote in the election of Members of the Council of the College, and shall be duly registered as herein provided.

29. No member of the Council of the College who shall be elected after the passing of this Act shall be liable to pay any fees upon or by reason of his election.

30. The Council shall in each year, at least thirty days before the said annual day of election, publish in the *London Gazette* and in two medical papers a notice of the forthcoming election and of the number of vacancies to be filled up.

31. Any member who is desirous of nominating a fit person at any such election to be a President or Vice-President or member of the Council of the College, shall deliver to the Secretary of the College within ten days after the date of the publication of such notice a nomination paper in the form provided by the Schedule hereto, or as near as may be, containing the name and description of the person to be nominated for one of the said vacancies and signed by the Member nominating the said person and by three other Members of the College, duly registered in manner herein provided, and then entitled to vote at the said election. Every such nomination paper shall contain a declaration by the nominating Member that he has obtained the consent of the person whom he proposes as a candidate.

32. No exception shall be taken to any such nomination paper, or to the eligibility of any person so nominated otherwise than by a protest in the form in the Schedule provided, signed by ten Members of the College, duly registered as herein provided, and if any such protest shall within fifteen days after any such person has been declared to be elected be delivered to the Secretary of the College, he shall intimate the same forthwith to all the members of the Council inclusive of all persons (other than the persons objected to) who have been declared elected at the same election and shall convene a special meeting of the Council constituted as aforesaid, at which the signatories to the said protest shall be heard in such manner as the said special meeting may determine, and the person whose election is challenged, or the person nominating him, shall in like manner be heard in reply, and the said special meeting shall forthwith determine the matter in the said protest complained of, and shall either declare any person whose election is challenged to be duly elected, or shall declare his election to be void, and direct a supplementary election to the vacancy so created, to be held on a day not later than six weeks thereafter, and the rules and provisions for the purposes of any such supplementary election shall correspond as far as may be with the rules and provisions hereby enacted concerning the annual election.

33. On the eleventh day after the date of publication of notice of the said annual or other election, the Secretary shall cause the names of all the candidates nominated for election, together with the offices to which they have been nominated and the Members nominating them in each case, to be published in the Hall of the said College and the *Times* newspaper, and shall so soon as may be thereafter cause the same to be published in the *London Gazette*, and in two medical papers, and every such advertisement shall state which of the said candidates, if any, are proposed for re-election, and shall give notice of the place, day, and hour at which the meeting to proceed with the said election will be held, and shall state that any person duly registered as herein provided is entitled to obtain from the Secretary a form of voting paper for the purposes of the said election, and that he may vote thereat in person, or by returning his voting paper signed by him, so that the same shall reach the College not later than the hour appointed for the commencement of the said meeting for election.

34. At the time appointed for the commencement of any such meeting for election, the Secretary shall produce publicly to the President, or other person presiding at the said meeting, in the first place a copy of the Register of persons entitled to vote at the said election, and then the whole of the nomination papers which shall have been delivered to him in manner aforesaid, together with a copy of the advertisement thereof which he has caused to be published, and the said advertisement shall be read from the chair; after which it shall be competent for any person who shall be duly registered as herein provided to apply to the Chairman for a ballot paper stating publicly his name and the date of his admission as a Member of the College, and if the said name appears upon the said copy of the Register delivered to the Chairman, he shall be entitled to have a ballot paper delivered to him forthwith; provided always that if any Member of the College shall make objection to him as a person not qualified to vote, he shall be called upon before receiving such ballot paper to sign a declaration in the form in the Schedule provided, and the ballot paper then delivered to him shall have the word "objection" stamped or printed upon the back thereof.

35. The ballot papers shall be forthwith marked by the persons to whom they have been delivered, and deposited by them in a ballot box, which shall be and remain in front of the Chairman for at least one hour from the commencement of the said election, and for so long thereafter as any persons claiming to be qualified shall present themselves, provided that the Chairman may at any time thereafter give notice publicly that he intends to close the election, and if during the fifteen minutes following upon such notice no person shall demand a ballot paper, the Chairman may leave the chair and declare the said election closed.

36. At some time during the continuance of said election, the Secretary shall produce to the Chairman the whole of the signed voting papers received by him down to the time of the commencement of the said election, and the whole of the requests for such voting papers received by him, enclosed in two sealed packets, and shall sign and deliver to Chairman a declaration in the form in the Schedule provided.

37. Upon leaving the chair, the Chairman shall name three persons, not

being members of the Council, to be scrutineers, and they shall forthwith proceed, in the presence of any of the candidates or their nominators who may desire to be present, to count the votes given for each candidate by ballot, and shall open the said sealed packets and shall count the voting papers in like manner. Any voting paper may be objected to, and if so shall be marked with the word "objection," and when the said scrutineers have agreed upon the totals of the said votes the Chairman shall forthwith declare the numbers publicly in the College Hall, and the persons having the highest number of votes shall be declared to be elected.

38. If the number of objections taken is sufficient in any case to invalidate, if they should be sustained, the election of any of the candidates so declared to be elected, the candidate having the next largest number of votes shall be entitled to enter a protest, which shall be forthwith decided on in the manner hereinbefore provided.

39. From and after the passing of this Act all vacancies occurring in the Court of Examiners shall be publicly notified in two medical papers, at least one calendar month before the date of the meeting at which the Council proceeds to elect examiners.

40. Any Member of the College, not being at that time a member of the Council, shall be eligible for election as Examiner, and any ten Fellows or Members of the College may propose the name of a fit person in writing to the Secretary within ten days after the date of such advertisement, and if any such nominations are received they shall be printed and circulated with the agenda of the meeting of the Council at which it is proposed to proceed to election.

41. Any fit person eligible as aforesaid, whether so nominated or not, may be proposed by any member of the Council present at the said meeting, and after all the nominations have been received, the Council shall proceed to elect by ballot.

42. In respect of all casual vacancies occurring in the Council between the date of one annual election and another, the Council may co-opt a Member of the College to hold office, but such Member shall in that case hold office until the day of such next annual election only.

43. *Interpretation Clause.*—In this Act the expression "Member of the College" shall include all Fellows of the College as well as Members of the College not being Fellows. The expression "medical papers" shall mean

The expression "extraordinary expenditure" shall mean

44. This Act may be cited as the "Royal College of Surgeons Act, 1889."

THE REFORM OF THE ROYAL COLLEGE OF SURGEONS.

AFTER considering and approving the draft Bill which is printed at page 553, the meeting of Fellows and Members of the Royal College of Surgeons, held on February 28th, a Committee was appointed to take steps to promote the Bill in Parliament, the Committee to have power to accept or make reasonable modifications therein, and to convene an adjournment of this general meeting by advertisement in two medical papers at any time and place they may select, should they think fit. The Committee consists of the following:—Robert Collum, M.D.; W. A. Elliston, M.D.; Joseph Smith, Samuel Smith, George Danford Thomas, M.D.; Dr. Macdonald, Lawson Tait, F.R.C.S.; R. Davy, J. Tweedy, C. M. Jessop, Warwick C. Steele, M.D.; W. Ashton Ellis, J. Holmes, G. Pollock, Sir Guyer Hunter, Sir William Moore, Dr. Farquharson, R. Abud, M. G. Biggs, G. H. Cable, W. G. Dickinson, T. Stretch Dowse, Ralph Gooding, E. Hartley, Jabez Hogg, J. R. Kemp, J. W. B. Mason, C. Royston, W. Donald Smallpiece, John C. Smith, W. Wynn Westcott, with power to add to their number.

The following resolution, proposed by Mr. GEORGE BROWN and seconded by Sir WILLIAM MOORE, was adopted:—

That this meeting of the Fellows and Members of the Royal College of Surgeons of England approves of the conduct of the Central Committee of the Association of Members of the said College in endeavouring to recover the lapsed rights of the Members of the College, and hereby resolves to support them in any legitimate steps they may take to assert the same.

The following resolution, proposed by Dr. MARK TANNER and seconded by Mr. W. H. DENHAM, was adopted:—

That this meeting thoroughly approves and endorses the course taken by Messrs. W. C. Steele and W. A. Ellis in commencing proceedings in the Chancery Division against the President and members of Council of the Royal College of Surgeons of England.

Carried with one dissident.

On the motion of Mr. JOHN H. PUGH seconded by Dr. H. ELLERY TREWHELLA, it was resolved:—

That this meeting of the Fellows and Members of the College of Surgeons of England do now stand adjourned to a day and place to be named and fixed by the Parliamentary Committee this day appointed.

CONTRIBUTIONS BY THE STATE DURING
1888-89 TO HIGHER EDUCATION.*From the Estimates of 1888-89.*

INSTITUTIONS.		Received from Exchequer.	Paid into Exchequer.	Net Receipts from Exchequer.
		£	£	£
<i>England:</i>				
London University ...	Towards payment of staff etc. ...	13,652		
	Towards maintenance of buildings, etc. ...	2,936		
		16,588	11,500 (fees)	5,088
Victoria University ...	Grant ...	2,000		2,000
		Total for England...		
				7,088
<i>Wales:</i>				
University College of North Wales ...	Grant ...	4,000		4,000
University College of South Wales ...	" ...	4,000		4,000
University College at Aberystwith ...	" ...	4,000		4,000
		Total for Wales ...		
				12,000
<i>Scotland:</i>				
University College of St. Andrews... ..	Grant ...	2,205		
University College of Aberdeen	" ...	3,811		
University College of Glasgow	" ...	3,465		
University College of Edinburgh	" ...	9,544*		
		19,025		
	Towards maintenance of buildings, etc. ...	13,291		
		32,316		32,316
		Total for Scotland...		
				32,316
<i>Ireland:</i>				
Queen's College, Belfast	Grant ...	1,600		
Queen's College, Cork	" ...	1,600		
Queen's College, Galway	" ...	1,600		
	Augmentation of salaries of professors (grant) ...	228		
	Equivalent of fees paid into Exchequer (grant) ...	5,500		
		10,528		
	Towards maintenance of buildings, etc. ...	5,708		
		16,236	5,000	11,236
Royal Irish Academy ...	Grant ...	2,081		
	Towards maintenance of buildings, etc. ...	346		
		2,427		2,427
		Total for Ireland ...		
				13,663
		Grand total ...		
				65,067

* This sum includes £840 to Edinburgh Observatory, and £2190 to Botanic Garden.

OTOLOGICAL CONGRESS.—The fifth International Congress of Otology will be held at Florence in 1892, under the presidency of Dr. Vittorio Grazi, of that city. Among the members of the "International Committee," we observe the names of the following well-known aurists: Dr. De Rossi (Rome), Dr. Cozzolino (Naples), Dr. Brunetti (Venice), Dr. Urban Pritchard (London), Mr. Cresswell Baber (Brighton), Sir W. B. Dalby (London), Dr. T. Barr (Glasgow), Dr. P. McBride (Edinburgh), Mr. Swanzy (Dublin), Dr. Stone (Liverpool), Drs. Gellé, Ménière, Baratoux (Paris), Dr. Moure (Bordeaux), Dr. Politzer (Vienna), Dr. Zaufal (Prague), Dr. Guye (Amsterdam), Dr. Lucae (Berlin), Dr. Moos (Heidelberg), Dr. Hartmann (Berlin), Dr. Suné y Molist (Barcelona), Dr. de la Sota y Lastra (Seville), Dr. C. Blake (Boston), Dr. Burnett (Philadelphia), and Dr. St. John Roosa (New York). Dr. Bobone, of San Remo, is the secretary to the committee. The questions proposed for special discussion are: 1. The Pathological Anatomy of Inflammation of the Internal Ear. 2. The Diagnosis of Cerebral Abscesses caused by Diseases of the Ear. 3. The General Therapeutics of Diseases of the Ear.

THE TREATMENT OF LOCOMOTOR ATAXY BY
SUSPENSION.¹

UNDER the above title, Dr. A. de Watteville has translated and edited the paper in which Professor Charcot describes the method of treatment of locomotor ataxy, and other spinal diseases, at the Salpêtrière, of which some account was first given in our pages in the letters on "Medical Paris of To-day." So much interest has been shown by our readers in this subject, and so many inquiries have been received, that we publish subjoined that part of Dr. de Watteville's pamphlet which relates to the practice of the methods of treatment and its details. He writes as follows:

As was to be expected, some persons have already endeavoured to improve upon the method, such as, for instance, by advising the adjunction of plaster spinal supports that are, to say the least of them, entirely superfluous under the circumstances, at any rate in cases of true ataxy.

Professor Charcot has thought it advisable, therefore, to publish the following technical details, suggested by an experience acquired in the course of over 800 suspensions, practised under the supervision of his chief assistant, in the cases of forty patients. For, though the operation is, in itself, very simple indeed, it yet requires a certain skill that is more easily acquired with the assistance of definite rules, than by the sole experience of entirely original experiments.

The apparatus used is that contrived by Sayre, of New York, for the application of plaster jackets used in cases of spinal deviation. Though pretty extensively known, we shall give a short description of the form of it used in Professor Charcot's *clinique*. A transverse piece of iron, about eighteen inches in length, is suspended by means of a central ring to the pulleys which are used to lift the patient from the ground. Each extremity of the bar ends in a hook, intended to support the ring, which carries the straps intended to give support under the armpits. Several notches on the upper aspect of the bar serve to fix the rings from which hangs the head-piece. The latter consists mainly of two broad strips of leather, elongated oval in shape, moulded to receive the chin and the occiput respectively. These are connected above with the rings just mentioned, and are held in position by means of a strap sewn to the posterior flap, and fixed to buckles carried by the chin-piece, so as to hold the head-support in place when the patient is suspended.

Much depends upon this strap, which must be tightened enough to prevent any slipping, and yet not sufficiently to cause compression of the blood-vessels of the neck, and thereby unpleasant head-symptoms. It must be provided with a sufficient number of holes to accommodate itself to the varying thickness of the neck among those to be suspended. In case of need, which is not often, a soft body, such as lint or cotton-wool, may be inserted so as to prevent undue pressure of the strap or broad pieces upon the skin. It is necessary to exercise much care in fitting the head-piece and padding, so as to suit the peculiarities of each subject. The size of the head determines the notches into which the rings of the head-piece are to be fixed, the larger the head the wider apart they must be, of course.

When the head is duly disposed of, the shoulder-pieces are slipped under the armpits. Though they may appear of minor importance, they really play the part of regulators during the period of suspension. For it is necessary that whilst lifted off the ground the patient should not be entirely supported by the head-piece, for then the traction would become, in some cases at least, absolutely intolerable. But though the weight of the body must be distributed upon other points, this additional support must not be so effectual as to prevent as complete an extension of the spinal column as possible.

The shoulder-pieces consist of elongated cylindrical padded cushions, terminating in straps provided with a series of holes so as to suit, by appropriate lengthening or shortening, the requirements of each patient. This adaptation is very important; for if too short, the shoulder-pieces exercise such a pressure upon the axillary vessels and nerves as to compel the operator to bring the suspension to an abrupt and premature termination. If, on the other hand, they are too long, the traction on the structures of the neck may become too painful to be tolerated, and interfere likewise with the treatment.

¹ Translated from the French of Professor Charcot, and edited by A. de Watteville, M.A., M.D., B.Sc., Physician to the Electro-Therapeutical Department of St. Mary's Hospital. With 4 illustrations and notes. London: D. Stott, 370, Oxford Street.

Careful trials are necessary to determine the exact length of the several straps; but after three or four operations it becomes easy to decide the arrangement suitable for each case.

When all is ready, the physician orders his assistant—with some practice he may do without one—to apply traction upon the cord, very gently and slowly, so as to avoid jerks, and to accustom gradually the muscles and ligaments to the unusual tension to which they are going to be submitted. The patient is to be cautioned not to make any movements whatever whilst he feels himself being lifted off the ground, for they would give rise to unpleasant lateral and rotatory displacements.

As soon as the toes cease to touch the floor, the operator holds the patient lightly, so as to check any oscillation or torsion of the cords, and carefully watches the number of seconds that elapse, so as to regulate minutely the length of each suspension. During this period the patient is made, at intervals of fifteen or twenty seconds, to raise his arms laterally away from the body, so as to transfer more weight upon the headpiece, and so render the traction upon, and elongation of, the vertebral column still more complete, as complete as is tolerated by each individual. Much care and vigilance is to be bestowed upon the proper performance of these abductions of the arms, both by patient and physician. As a rule, the longest time of suspension must not go beyond four minutes, three minutes being taken as the average duration. Half a minute is enough at the outset, the maximum being gradually reached during the first six or eight applications of the treatment.

Here again it is essential to take into account certain individual susceptibilities or physical peculiarities, among which stands foremost the body-weight of the patient; for whilst a person weighing from about 130 to 150 pounds may be suspended forthwith during two minutes or more, the case is quite different in the case of those whose weight reaches 180 pounds or more. In the latter, the tension to which the structures of the neck are subjected may become very severe and painful, and be felt sometimes for a whole day afterwards—an occurrence which must be avoided if the treatment is to be correctly carried out.

It is well to note that certain patients have such a wish—a very natural wish—to get better, that they think themselves bound to stand any amount of pain without complaining; but this circumstance is positively detrimental to the success of the treatment, which must be accompanied with but trifling discomfort at the most, without real pain or fatigue, lest it should defeat its own ends.

The maximum length of the suspension must, therefore, be suited to the requirements of each patient; it is obvious that in the case of heavy persons the effect on the spine must be very thorough and effective, owing to the greater traction to which it is subjected. Suspension must not be carried out oftener than once on alternate days, otherwise it may become more hurtful than beneficial. The time of the day is indifferent, but regularity in the operations is to be observed.

When the full time has elapsed, the operator very gradually lets the rope loose, so as to avoid every trace of jerking during the descent. The patient is to be supported whilst being freed from the apparatus, and made to rest awhile in an armchair brought near for the purpose.

The patient, before the operation, should divest himself from his coat, so as to give freedom to the arms, and his neck must be free from any pressure from the collar, so as to avoid any trouble or discomfort from compression about the neck. Sayre's original apparatus usually comprises a movable tripod, to the top of which the upper pulleys are fastened by means of a hook. This tripod is not to be used for suspending ataxics, who, being often deficient in power to sustain their equilibrium, are apt to seize convulsively its legs in order to steady themselves, and in so doing would knock down the whole apparatus, and injure themselves and the bystanders. As shown in the figure, the suspensory apparatus must be fixed to an iron ring firmly screwed in the ceiling.

"The results obtained by Professors Eulenberg and Mendel at the Berlin Clinic for Nervous Disease in the cases of twenty ataxics, fully confirm, so far as can be judged from the comparatively recent introduction of the new treatment, the encouraging outlook sketched out in Professor Charcot's communications. The improvement observed bears chiefly upon the walking power, the equilibration, the lightning pains, and, in a few cases, the bladder troubles. Moreover, no bad symptom whatever has been observed, even in the case of the female patients who are undergoing the regular course of suspensions. At the same time, the

most sanguine observer must acknowledge that it is entirely premature to come to any definite conclusions upon a point of such deep perplexity as the question of the possibility of absolute cure in locomotor ataxy. Physician and patient alike must beware from falling into the temptation of conceiving exaggerated hopes as to the final results, in the presence even of effects as incontrovertible as those testified by so many able and critical observers."

Dr. de Watteville, in an appendix, describes what he considers

Figure showing patient suspended and performing arm-movements. (As used in Paris.)

to be the best form of Sayre's suspension apparatus he is acquainted with in England. "The maker of it, Mr. Hawkesly (357, Oxford Street), has skilfully carried out several improvements upon the old form, in order to suit it better to the requirements of the new suspensory treatment. As a rule, Sayre's apparatus is made too slightly to bear the weight of adults, especially if they happen to be of large size. Moreover, the neck and chin pieces are not always cut so as to give comfortable rest to the parts when the whole weight of the body rests upon them. The ears often get into the way of the strap, and must be protected by leather flaps. All such points must be sedulously attended to before the treatment can be carried out fully, and success be reasonably anticipated.

"It will be noticed that I do not use any adjustment straps,

and that the lengthening and shortening of the supports of the shoulder and head pieces are managed by an arrangement of strings simply pulled through a hole in an iron disc, and held in place by a contrivance well known to sailors, I believe. The convenience of this little apparatus will be readily appreciated by everyone who tries it after the old strap system. I am personally inclined to think that the introduction of a spring balance between the pulley and the transverse bar, as shown in the figure, is an advantage. It enables the operator to ascertain the weight of the patient, and it also breaks any possible jerk whilst the patient is being lifted off or deposited upon the ground by means of the pulleys.

"I wish particularly to waive any claim on my part to innovations in these trifles, but am led to mention these details in order to facilitate the selection of an apparatus by any of my professional brethren anxious to obtain a new one. Any old-fashioned 'Sayre' may, if sufficiently firm, and if managed with due care, fulfil all the indications laid down in the preceding pages; but it cannot be expected to suit all cases with equal comfort.

"I may add that I become more and more convinced that, in many cases at least, the essential road to success in the treatment by suspension is minute and personal attention on the part of the physician to all the details of the operation. It is a monstrous thing, if the report be true, that in any English hospital patients should be entrusted into the hands of mere underlings for the purpose of suspension. A trained and careful medical man should always supervise each and every performance; for, though perfectly harmless when properly carried out, I have reason to say that suspension may prove an unsafe operation if carried out in a bungling and inattentive manner, at least in the case of sensitive patients."

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1889. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 17th, July 10th, and October 16th, 1889. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 28th, June 20th, and September 26th, 1889.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

THE series of Maps forming the Report of the Collective Investigation Committee on the GEOGRAPHICAL DISTRIBUTION OF RICKETS, ACUTE RHEUMATISM, CHOREA, CANCER, AND URINARY CALCULUS are deposited in the Library of the Association, and are open to the inspection of members. A descriptive commentary appeared in the JOURNAL of January 19th, 1889.

An inquiry into the ORIGIN AND MODE OF PROPAGATION OF EPIDEMICS OF DIPHTHERIA is in progress.

Memoranda and forms for communicating observations may be had on application to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH-WESTERN BRANCH.—An intermediate meeting of this Branch will be held at the Gerston Hotel, Paignton, on Tuesday, March 12th, at 2.30 p.m. Members proposing to read papers, or to show cases, specimens, etc., are requested to intimate the same to the Honorary Secretary. Luncheon will be provided at 1.45 p.m., at 2s. 6d. per head, and members who propose to attend the luncheon are requested to communicate with Dr. Alexander, Paignton, a few days before the meeting. The following papers have been already promised: Dr. A. G. Blomfield (Exeter): Case of Cerebral Syphilis. Mr. J. D. Harris (Exeter): Case of Pulmonary Cavity Successfully Treated by Drainage. — P. MAURY DEAS, Honorary Secretary, Wonford House, Exeter.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, March 14th, at 5 p.m. Dinner at 5.30 p.m. The question settled by the Council to be discussed after dinner is, "What is your Experience of the Use of Digitalis and Strophanthus in Heart Disease?" Members having cases or communications to bring before the meeting kindly communicate with W. M. KELLY, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of the above District will be held at the Board Room, Town Hall, Sittingbourne, on Thursday, March 14th, at 3.15 p.m., Dr. T. Vincent Bell, President of the Branch, in the chair. The dinner will take place at 5.30 at the Bull Hotel, price 6s. (exclusive of wine). Any members wishing to send papers, etc., should at once communicate with the Honorary Secretary. Agenda.—Dr. Isambard Owen will exhibit the series of Maps illustrating the Geographical Distribution of Rickets, Acute Rheumatism, Chorea, and Urinary Calculus in the British Islands, constructed by the Collective Investigation Committee. Dr. J. V. Bell: (1) A Case of Ovariectomy for Parovarian Cyst, with bowel obstruction, simulating intussusception; (2) A Case of Laparotomy for Long-continued Bowel Obstruction. Dr. Tyson: On the Berlin Clinics.—W. J. TYSON, Honorary Secretary, 10, Langhorne Gardens, Folkestone.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this District will take place at the Gravesend Hospital on April 11th, C. E. Robbs, Esq., in the chair. Gentlemen who wish to read papers or exhibit specimens, etc., are requested to inform the Honorary Secretary of the District, A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than March 23rd. Further particulars will be duly announced.—A. W. NANKIVELL, Honorary Secretary of District.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—A meeting of this District will be held on Thursday, March 14th, at 4 p.m., H. J. Pringle, Esq., of Anerley, in the chair. Dinner at 6 p.m.; charge, 7s. (exclusive of wine). The following papers will be read:—Dr. Bristowe: On the Direct Influence of the Heart on the Action and Sounds of the Lungs. Mr. Bernard Pitts: Some Cases of Foreign Bodies in the Air-passages. Mr. C. Wray: On Euphoria and Internal Strabismus. Mr. J. Sidney Turner: (1) A Case of Hysterectomy; (2) A Case of Calculous Cystic Right Kidney, with Absence of Left Kidney; (3) A Case of Ovariectomy. Dr. H. Hetley: A Case of Hysterectomy. Members desirous of communicating specimens or notes of cases will please write to the Honorary Secretary, P. T. DUNCAN, M.D., Croydon.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above Districts will be held at the Grand Hotel, Brighton, on Thursday, March 28th; Dr. Whittle will preside. Dr. Mackey will read Cases of Cerebral Aneurysm, Abscess, and Tumour, with remarks. Gentlemen desirous of reading papers or cases should communicate with one of the Honorary Secretaries, T. JENNER VERRALL, 97, Montpellier Road, Brighton, or W. A. GOSTLING, M.D., Barningham, West Worthing.

NORTH WALES BRANCH.—The intermediate meeting will be held at the Royal Hotel, Llangollen, on Tuesday, March 19th, at 2 p.m.; E. J. Lloyd, M.D., President. After the usual formal and routine business, the following papers, etc., will be read: James Craig, M.B., Llandudno: Notes of Cases. A. W. Hughes, M.B., Flint: Some Hints as to the Treatment of Joint-diseases, with the view of preventing Ankylosis. T. Eytton Jones, M.D.: Notes on Strophanthus. Rob. Jones, Liverpool: Tests of Recovery from Joint-disease. Wm. Jones, Ruabon: A case of Tetanus. F. Imlach, M.D.: Four cases of Renal Calculus treated by Nephrotomy. Lawson Tait, F.R.C.S.: On the Best Anæsthetic, and Method of its Administration. W. Williams, M.D., Liverpool: A Valvular Tube Hermetically Sealed to the Chest for Empyema, with Cases. — W. JONES-MORRIS, Honorary Secretary, Portmadoc.

STIRLING, KINROSS, AND CLACKMANNAN BRANCH.

THE first meeting of this Branch was held at the Stirling District Asylum, Larbert, on Tuesday, February 26th, at 4 p.m. Dr. JAMES MACLAREN, President of the Branch, was in the chair, and there was a large attendance.

Officers and Council.—The minutes of the former preliminary meeting were read and approved, from which it appeared that the following gentlemen had been unanimously chosen as office-bearers of the Branch:—*President:* Dr. MacLaren, Larbert. *Vice-President:* Dr. Strachan, Dollar. *Honorary Treasurer:* Dr. Haldane, Bridge of Allan. *Honorary Secretaries:* Dr. Lewis, Stirling; Dr. Peake, Falkirk. *Members of Council:* Dr. Leslie, Falkirk; Dr. Linton, Grangemouth; Dr. Spence, Dollar.

The resolution of the Council of the Association recognising the formation of the Branch was communicated to the meeting.

President's Address.—Dr. MACLAREN then delivered his presidential address on "The Practical Aims and Objects of Branch Associations." After expressing his sense of the honour done him by electing him as the first President of the new Branch, he said the credit of its establishment was due to Dr. Haldane, who had been its real promoter. The services of the Secretaries, Drs. Lewis and Peake, had also been most valuable; these gentlemen would bring to the early career of the Branch and to the work of its development all that could possibly be desired in energy, culture, and loyal devotion to duty. The President went on to say that the Branch was not a scientific society; it was an association of gentlemen in the active practice of their profession, and its aims and objects must be practical. It was sad to think