ON THE EFFECTS OF THE CONTAGIOUS DISEASES ACT IN CALCUTTA.

By ARTHUR J. PAYNE, M.D., Surgeon-Major and Superintendent-Commissioner.

AN account of the working of the Contagious Diseases Act in the town and suburbs of Calcutta will, I think, possess particular interest for those concerned with the subject. The large area and population embraced, the contemplated inclusion of the entire civil population without restriction to districts frequented by the soldiery, the difficulties belonging to a large commercial port and a city with extensive inland communication, and to the many varieties of prostitution and concubinage, and the marked results achieved by means confessedly inadequate, all seem to me to lend a peculiar value to the evidence afforded by the history of the past five years in Calcutta.

The population of Calcutta, town and suburbs, is about 750,000. The garrison of Fort William occupies a central position. The Contagious Diseases Act came into force on April 1st, 1869.

The administration of the Act was entrusted to the commissioner of police. Two special inspectors of police were selected, and, with 36 subordinate policemen (natives), were the only paid officers employed in this particular duty, which fell therefore largely on the inferior grades of police as an unprofitable addition to their labour. A medical superintendent and a staff of subordinates were appointed and specially paid for the examination and hospital duties.

1869. In a few months, upwards of 9,000 women were registered. Many were subsequently exempted, and more were reported as having absconded. At the end of the first year, 6,551 were supposed to be under control, but 5,348 only attended the examination dépôt. There were 356 cases of disease under treatment at the end of 1869. The hospitals were three in number. In the Civil Medical Institution of Calcutta, the annual admission for all diseases and for venereal disease had previously ranged as follows:

	New cases of all kinds.			Venereal of all kinds.		
1865	...	...	182,266	...	...	11,853
1866	...	...	192,165	...	...	13,152
1867	...	...	181,348	...	...	13,083
1868	...	...	169,765	...	...	11,153
1869	...	...	177,778	...	...	10,103

This showed with nine months of the Act a fall in venereal cases attending a rise in the general number of patients during the year; a fall however, which, being within the range of previous fluctuation, though encouraging, was inconclusive.

From the military records, figures relating to the European garrison were obtained; showing that at Fort William the ratio per cent. of venereal cases to the mean strength of garrison was, in 1859, 33.79; in 1860, 45.66; in 1861, 39.20; (1862, wanting); in 1863, 28.19; in 1864, 27.32; in 1865, 31.43; in 1866, 23.23; in 1867, 33.56; in 1868, 25.06; in 1869, 25.08. Of the last figures, 8.7 were admitted during the three months preceding the introduction of the Act, and 16.38 during the nine months of its operation. A new regiment had arrived in Calcutta, and much disease had come with them from Bangalore. The facts of the successive months were encouraging, but the general result was inconclusive. It was found that the class of women visited by the soldiery was difficult to reach.

1870. By the end of 1870, there were 6,625 women under examination. The admission into the civil hospitals during the year were, new cases of all kinds, 181,261; venereal of all kinds, 8,339. These figures would be more serviceable, if the population supplying them could be given for the several institutions. This cannot be done, and the general number is useful only as showing that the course of the venereal figures does not depend on a fall in the general resort of the people to the hospital. There is a rise in the general attendance over that of the previous year, and a large reduction of venereal cases; but the vast quantity of work still undone is forcibly indicated. Closer insight into the life of the town leads to the inference that at least one half of the public prostitutes of the lower orders remain unregistered. In the European garrison, the ratio per cent. of venereal cases to mean strength fell to 14.40. Here then seemed, as in the civil institution, to be *prima facie* evidence of effective work. The range in other years had shown decrement nearly as great as that of 1870, but they had followed exceptionally high figures in the preceding years. The fall of 1870 was not a mere return to an average, it produced a figure considerably lower than any in the list. But there were certain other facts to be

noticed this year as conducing to a low number. The regiment was not changed, and, assuming that Calcutta had become less productive of disease, although there was importation by drafts and other parties joining the battalion, some effect of importation may be regarded as lost. Moreover, two companies stationed at Dumdum had contracted disease there, as had been the case in former years, and this came to be distinguished towards the end of the year, as disease arising beyond the limits of the Act. Eight cases which would have been included in the total of the earlier years were omitted on this account from the reckoning of 1870.

It now became interesting to ascertain the proportion in which syphilis and gonorrhœa respectively contributed to the admissions; and though no figures were procurable for the earlier years, those which could be obtained showed satisfactory results.

The total numbers of cases admitted, the strength of the garrison being the same, were as follows:

	Syphilis.			Gonorrhœa.		
1868	...	...	89	...	...	67
1869	...	...	79	...	...	91
1870	...	...	49	...	...	68

There seemed on the whole to be, in the experience of 1870, good ground for hopefulness but none for exultation.

1871. At the close of 1871, there were 6,748 women under inspection, and now the great improvement that had taken place in the health of the women themselves came into prominent notice. The Lock Hospital admissions had fallen from 4,474 in 1870 to 2,037. This was partly due to a change of practice in respect of doubtful vaginal discharges, but reduction of the more serious diseases was very striking. It appears in the following table.

	1870.			1871.		
Hard chancre	...	...	437	...	...	138
Indurated bubo	...	...	53	...	...	12
Soft chancre	...	...	937	...	...	662
Suppurating bubo	...	...	94	...	...	28
Phagedenic sore	...	...	30	...	...	8
Sloughing sore	...	...	35	...	...	5
Secondary syphilis	...	...	187	...	...	71

In 1871, the admissions of the civil hospital showed further progress. The general attendance had again advanced, and venereal cases still further receded. The figures stood thus: new cases of all kinds, 201,059; venereal of all kinds, 7,305. It seemed to me there could no longer be any mistake about the efficacy of the work. No previous fluctuations could be adduced in disproof of the progressive removal of disease, nor could any other cause for it be discovered. In the third year of the Act's operation, the number had fallen from 11,153 to 7,304, while the general hospital attendance had risen largely. At the same time it was ascertained that the admissions from primary syphilis had ranged as follows: in 1865, 5,367; in 1866, 5,879; in 1867, 5,943; in 1868, 4,648; in 1869, 3,753; in 1870, 2,736; in 1871, 2,154. During this year, several medical officers had taken the trouble to note, as far as the fact could be ascertained, whether their patients had contracted disease within or beyond the limits of the Act's operation. The inquiry extended over 3,480 cases, whereof it appeared that 2,146 had originated in Calcutta and its suburbs, and 1,334 elsewhere; a fact which illustrates the difficulty of purifying a large city and port.

In the European garrison, the ratio per cent. of venereal cases had fallen to 8.10, comprising 2.7 of syphilis, and 5.4 of gonorrhœa. The figures are strictly comparable with those of 1870. A new regiment arrived at the end of the year early enough to bring a small accession to the cases of local disease, but the full effect of this was not realised until the following year. The garrison admissions from syphilis reached only 22 in the year, and those from gonorrhœa 44.

1872. In December 1872, there were 6,417 women under inspection. The year shows further improvement in the health of the civil population. There were admitted into the hospital, new cases of all kinds, 206,022; venereal of all kinds, 6,529; and the record of primary syphilis, taken from the same institutions as before, gives only 1,845 cases. The activity of the police had waned a little during the year. Prostitutes who had at the outset left Calcutta were known to have returned in large numbers; nevertheless the registers showed a falling off upwards of three hundred. This had not yet produced any effect on the hospital admissions as a whole, but the locality of infection was noted in 2,320 cases, whereof 1,960 were ascribed to the area of the Act, and only 1,270 were imported.

The garrison of Fort William in 1872 illustrated the worst effects of a newly arrived regiment bringing disease to those sections of the town which the soldiers frequent. At the close of 1871, the men of

the 19th Foot left Calcutta, after two years' residence, almost without a case of syphilis. The head quarters wing of the 114th Regiment took its place, coming from Cawnpore, where the men had suffered heavily from the disease. *They were not inspected on arrival.* From their arrival to the end of April, there were many cases admitted into hospital. The neighbourhoods visited by soldiers and other Europeans of their class are circumscribed, and the women a small and in some degree a distinct community; so that the general improvement in the town was not impeded, but the soldiers who, in previous years, under special attention paid to this section, had benefited even more than their neighbours, now fell back, while the town continued to advance.

By the end of April the mischief was arrested, and from May 1st to December 31st, only 13 cases of Calcutta syphilis were recorded against 29 in the first four months of the year. The events of the last eight months compare favourably even with those of the previous year with regard to syphilis, but the entire returns of the year afford a ratio of 13.9 per cent., comprising 5.7 of syphilis and of 8.2 of gonorrhœa, based on 48 cases of syphilis and 69 of gonorrhœa.

1873. During the following year, the number of women under control again fell considerably; there were in December only 5,978 in attendance. At the same time, there was much reason to believe that the prostitute population had increased rather than otherwise. The civil hospitals presented the following entries: new cases of all kinds, 196,294; venereal of all kinds, 6,931. There had been a rapid growth of factories along the river bank, with large intercourse of unprotected populations, and the hospital records showed a great increase of imported disease, and particularly of syphilis. In one hospital alone the difference was sufficient to cover the total increase in this affection.

I am unwilling to credit these differential statements of locality with great accuracy for several reasons, until they shall be more comprehensive and shall extend over a sufficient number of years to make their errors self corrective. There was probability of increased importation in 1873, and certainty of decreased activity of the police in Calcutta itself. The cases of primary syphilis in the civil hospitals rose to 2,459.

The health of the garrison forcibly exemplified all that has been said here and elsewhere of the effect of the movement of troops. I had ventured to predict that the year 1873 would find the 114th Regiment as free from disease as their predecessors had become. The event fully justified the prediction, and, on the arrival of the 3rd Buffs, our former experience was utilised by the regimental authorities. There were 12 or 13 venereal cases under treatment at the time, and at my suggestion an *inspection of the entire battalion was held.* It resulted in the detection and removal to hospitals of between 30 and 40 cases, and no new cases occurred for months afterwards. Nothing could be more conclusive than comparison of this state of things with that which followed the arrival of the 114th Regiment.

The ratio per cent. of venereal cases to mean strength of garrison in 1873 was 7.4, contracted in Calcutta. There were total numbers of 13 syphilis, and 56 gonorrhœa. Still more satisfactory than the general reduction was the fact that the percentage contained only 1.4 of syphilis. The causes noted as affecting the general health of the town are inoperative in the military section. The garrison felt no effect from them, as in the earlier year the town had not suffered from disease imported by the troops.

1874. Last year brought about events which serve by an inverse process very pointedly to connect the working of the Act with the venereal health of the town. We have seen that growing importation and failing activity of the preventive officers had led to retrogression. The registers had not been kept up, and many women, who failed to attend when they were diseased, in order to escape detection and custody, had been left at liberty, and the natural consequences followed. In 1874, there was actual suspension of work brought about by the serious illness and ultimate death of both police inspectors. Practically, no work was possible to either of them after the middle of April, and in their absence nothing effectual could be looked for from native subordinates. The ground lost in registration could not be recovered until late in the year; but, by exertion during the last four months, the number of women rose at the end of December to 6,351.

The civil hospitals recorded a large increase of general attendance and a considerable rise in venereal cases. The numbers stood thus: new cases of all kinds, 214,428; venereal of all kinds, 7,941. When work was resumed, the disease detected was large in quantity and severe in character. The cases of primary syphilis rose to 2,675, but of these, it must be said, that the increase took place mainly in the Mayo Hospital, the resort of the river-side and floating population, and of the victims of unregistered women.

Command over the central military sections of the town was fortunately maintained. The garrison record is as follows. The ratio per

cent. of venereal cases was 9.4. There were again only 13 cases of Calcutta syphilis in the year, or 1.4 per cent. of mean strength; and 77 cases, or 8 per cent. of gonorrhœa.

The Lock Hospital accommodation was insufficient during the year from several causes, and admission of cases capable of producing gonorrhœa was restricted. The cases of syphilis were all slight. Some scarcely deserved the name, and, unsolicited by me, the medical officers drew attention to the fact that, throughout the year, not a single case of infecting chancre had been contracted in Calcutta.

Summarising the foregoing results, we arrive at the following general statement.

Civil Hospitals and Dispensaries.

New cases of all kinds.			Venereal of all kinds		
1865	...	182,266	...	...	11,853
1866	...	192,165	...	...	13,152
1867	...	181,348	...	...	13,083
1868	...	169,765	...	...	11,153
1869	...	177,778	...	...	10,103*
1870	...	181,261	...	...	8,339
1871	...	201,059	...	...	7,305
1872	...	206,022	...	...	6,529
1873	...	196,294	...	...	6,931
1874	...	214,428	...	...	7,941

In the civil hospitals and dispensaries, the admissions for primary syphilis were: in 1867, 5,943; in 1868, 4,684; in 1869, 3,753 (Act introduced in April); in 1870, 2,736; in 1871, 2,154; in 1872, 1,854; in 1873, 2,549; in 1874, 2,675.

European Garrison, Fort William. Ratio per cent. to Mean Strength.

Venereal of all kinds.		Primary Syphilis.	
Average from 1859 to 1864		34.43	
1865	31.43		
1866	23.23		
1867	33.56		
1868	25.06	10.0 nearly	
1869	25.08	9.0 nearly	
1870	14.40	6.0 nearly	
1871	8.10	2.7	
1872	13.09	5.7 new regiment not inspected	
1873	7.04	1.4	
1874	9.04	1.4 new regiment inspected	

European Garrison, Fort William. Total Primary Cases Contracted in Calcutta.

Syphilis.		Gonorrhœa.	
1868	89	67	
1869	79	91	Act in force April
1870	49	68	
1871	22	44	
1872	48	69	new regiment not inspected
1873	13	56	
1874	13	77	new regiment inspected

The figures given in this paper have all been carefully scrutinised by unbiassed critics from year to year, and the utmost care has been taken to eliminate all sources of fallacy that were known or suspected, and especially to guard against unduly favourable conclusions.

It has been said, that there is a natural tendency to abatement of venereal disease in towns, which impugns all inferences as to special causation. In Calcutta it is not so. The women newly brought on the registers from year to year, taken from the general prostitute population, fairly represent the prevalence of disease among the women not subject to the Act, and this shows no tendency to fall.

The following comparative table is significant.

Proportion of Venereal Cases among

Women newly registered.		Women in regular attendance.	
Per cent.		Per cent.	
1870	26.0	...	2.7
1871	14.0	...	0.9
1872	25.3	...	1.6
1873	27.4	...	1.5
1874	27.8	...	1.0

The Act has not been more successful here than elsewhere against gonorrhœa, nor is it, I think, likely to be so. One of the first proceeds of Lock Hospital experience, is a conviction that the cases of

* The Act was introduced in April.

recognisable gonorrhoea in women are few compared with those of the uterine and vaginal discharge which, though it cannot form any definite character, be pronounced infective, is so in a large but indeterminate number of persons. These persons cannot justly be detained in hospital. They remain at liberty, and gonorrhoea will be reduced or not according to the numerical proportion they bear to the palpable cases removed. If this proportion be very large, there may be even increase of gonorrhoea under the Act, without anomaly or paradox; for, by the removal of syphilitised and palpably gonorrhoeal women, the men who consort with both groups are driven to the women remaining at large. There being many of them gonorrhoeally infective, it is easy to see that a number of gonorrhoeal cases, even larger than before, may, in certain numerical conditions, coexist with perfect immunity from syphilis; and, though it be a direct consequence of the operation of the Acts, few can regard it as seriously impairing its utility. Such fluctuations as have occurred in the prevalence of gonorrhoea in Calcutta, have fallen well within the range which such an influence might produce.

Calcutta, April 6th, 1875.

Facts have come forward from time to time, showing that the number of men who, under certain circumstances, may be infected by a single woman in a single night, would be incredible if it were not known. This disposes at once of the argument that it is unjust to subject women to control and leave men at liberty. It would be as rational to refrain from cleansing a cesspool until we can arrest specific germs of disease on their way to it.

The cost of administering the Act and working the hospitals in Calcutta may be approximately stated at fifteen shillings a head annually for women in attendance. The saving from disease prevented can only be conjectured.

THE SURGICAL CONGRESS IN BERLIN.

THE fourth session of the German Surgical Association was held in Berlin on April 7th and following days.

The first subject discussed was the Mechanism of Hernial Strangulation. Dr. Busch explained his views on the subject as follows. If a loop of intestine be filled with some force with fluid or gas, the pressure is naturally transmitted in all directions; and, as the convex side of the loop is greater than the concave, it receives also a greater amount of pressure, and there is a tendency to straighten the loop. But, if the loop pass through a ring less wide than itself, the intestine is nipped at the part where it presses on the ring, and thus may become perfectly impermeable. In applying the taxis, one or the other of the two limbs of the loop is stretched straight, so that the contents can be pressed back into the abdomen. According to Lossen, nipping takes place, but it affects only the efferent limb.—Dr. Roser remarked that incarcerated umbilical herniæ are only more tightly strangulated if the anterior abdominal wall be pressed inwards during the trial of the taxis; while reduction is easily effected if the terminal ring be drawn forward and a little apart by means of two blunt hooks.

Professor Esmarch described the manner of applying his method of producing Artificial Anæmia to exarticulation at the shoulder-joint. He carried the India-rubber tubing over the back and the sound shoulder. In operation on the male genitals, the method had been repeatedly used; it appeared to be of special value in castration, as it enabled the spermatic cord to be divided layer by layer, and each vessel to be found and tied before being cut. In exarticulation and resection of the hip-joint, compression of the aorta was always of advantage; but it was necessary to empty the patient's bowels beforehand in order to enable the compressor to be securely applied. Artificial anæmia was kept up for half an hour in a case of necrosis of the tibia, without any subsequent inconvenience to the patient.

On the second day, practical demonstrations took place in the wards of Drs. von Langenbeck and Bardeleben. Drs. Thiersch and Hirschberg (of Frankfurt) showed successfully treated cases of Epispadias and Defect of the Anterior Wall of the Bladder. Dr. Thiersch also showed a case of Artificial Hypospadias, by which certain inconveniences following amputation of the penis were happily avoided. The amputation was performed very near the root of the penis; the scrotum was then slit up, and the remains of the urethra dissected out from the corpora cavernosa; the perineum was perforated with a trocar, and the urethra was fixed in the puncture. Healing rapidly took place under antiseptic treatment; there was no subsequent contraction of the urethral orifice, and the scrotum was not wet with the urine. The cicatrix at the point of amputation was scarcely visible; the two halves of the scrotum had united, and behind the scrotum lay the opening of the urethra.

Professor Volkmann showed a model for demonstrating the cause of the impossibility of supination which sometimes remains after Fracture of the Forearm. It was shown that, when the arm was fixed in the state of pronation, slight bending easily took place at the point of fracture; if the arm were brought into the position of supination, a slight bending of the bones at the part was attended with widening of the interosseous space to such an extent that the interosseous ligament appeared to be much too short. Such cases were successfully treated by fracture of the callus and complete supination of the arm.

Dr. Roser showed diagrammatic representations of cysts on the neck and of ranula.

The second meeting of the Congress was devoted to a discussion on Bacteria. Dr. Arnold Hiller described some experiments which, he said, proved that from energetically septic bacteria others could be produced which had no septic action. A long communication was also made by Dr. Klebs, who advocated the doctrine of the causal connection of minute organisms with disease.

On the third day of meeting, Dr. Linhart demonstrated some preparations in illustration of his researches on the production of Fracture of the Neck of the Thigh-bone. It appeared to him probable, that fracture of the neck of the femur was often produced in overstretching of the joint by laceration of the cortical substance of the anterior surface of the neck of the bone, the ligamentum teres resisting the stretching. In the experiments, laceration of the cortical substance was readily produced by a slight stroke with a chisel. The experiments have been described in an essay published by Dr. F. Riedinger (Linhart's assistant).

Dr. Linhart also showed some stumps after Chopart's and Pirogoff's amputations, and a preparation to demonstrate his method of resection of the inferior dental nerve, by laying the nerve bare by chiselling away the external cortical layer of the ramus of the lower jaw.

Dr. von Langenbeck showed some cases of recovery after resection of the wrist (with somewhat impaired power of flexion of the radius).

Dr. Thiersch showed a forceps which he had for some time used with advantage in the Galvano-caustic Puncture of Angioma. Each blade of the forceps ended in a quadrangular plate; one of the plates was perforated with holes. If, for example, the angioma were seated in the cheek, it was compressed between the blades of the forceps and rendered bloodless; the galvanic cautery could then be introduced between the perforations in one of the plates without any hæmorrhage. If the tumour could not be taken between the blades, the perforated blade was applied firmly during the operation to the surface of the tumour.

A simple contrivance was shown for gradually pressing back the projecting Intermaxillary Bone in cases of Double Hare-lip. It consisted of two pear-shaped pieces of linen spread with adhesive plaster, the small ends being united by a short India-rubber band. The broad parts of the plaster were fixed to the cheek, while the India-rubber band, somewhat stretched, pressed on the intermaxillary bone. In a case where the deformity was of a rather high degree, this apparatus pushed the projection back in six weeks.

Dr. Schmidt showed an extirpated larynx. Dr. Heine showed a patient in whom he had removed the anterior half of the larynx, in consequence of the calibre being obstructed by thickening of the cartilage. The communication between the trachea and pharynx was maintained by means of an artificial larynx, the tube of the apparatus leading from the tracheal opening upwards was compressed from before backwards. This modification was said to facilitate deglutition. In one case, Heine was able to introduce his index-finger into the larynx from the mouth; this was done without much difficulty, the larynx being raised by means of a sharp hook introduced beneath the cricoid cartilage and the patient's head bent somewhat forward.

Dr. Thiersch read a paper on the use of Salicylic Acid in place of carbolic acid. Among the specimens of dressing shown, was some jute impregnated with salicylic acid; its price was low, and the secretions from the wound escaped readily between the fibres.

Dr. Bardeleben read a paper on the practical results of the Antiseptic Method, and gave a summary of the cases of severe injury and important operation which had been under his care in the Charité Hospital. He did not follow Lister strictly, but used—for the sake of cheapness—a watery solution of carbolic acid as a moist dressing. In 38 cases of complicated fracture, he had 5 deaths. Of these, 2 occurred among 14 cases of fracture of the leg; neither of them from pyæmia. The causes of death were concussion of the brain, hæmorrhagic inflammation of the dura mater, delirium tremens (a very frequent complication in Berlin), collapse, and marasmus. Of 38 cases of amputation, 8 died: two were cases of double amputation, both being fatal. The causes of death were in three cases marasmus; in each of two other cases, senile gangrene and phthisis; and in three others pyæmia, two of the patients having been already affected with this disease before

admission into hospital. Healing occurred with remarkable rapidity in cases of abscess after mastitis. In 26 cases, the abscesses were opened under antiseptic treatment, and the average duration of time occupied in healing was ten days. All the cases of ligature of arteries, including a ligature of the femoral artery in its continuity, were done with carbolised catgut; and in no case was anything further seen of the ligature.—Dr. Volkmann reported that, for two and a half years, during which he had strictly carried out Lister's instructions in his wards, his results had been remarkably improved. During the last year, among the cases of complicated fractures subjected to conservative treatment (including twenty-one of the leg), there was not a single death; nor did a death occur among penetrating wounds of the joints, if they came early under treatment. In three of these cases, the patella was smashed, and in all three recovery took place with a movable joint. There had not been a case of pyæmia after this injury for nearly two years. Hygroma of the prepatellar bursa was laid open by Dr. Volkmann in five cases, and healing took place in all by the first intention under the use of the compressive bandage: when the incision was left open, healing took place by granulation. Similar treatment was used with a like result in hydrocele; but here the tunica vaginalis was sewn to the skin. Erysipelas was observed less frequently than before by Dr. Bardeleben and Volkmann, and its course was milder. Dr. von Langenbeck remarked that, in his practice also, erysipelas had been less frequent and milder, and that this could not be ascribed to the antiseptic method, as he used open dressing.

Dr. Mosengeil showed a Magneto-electric Induction Apparatus constructed by Siemens, which, originally intended for electro-magnetic illumination, could be readily adapted to galvano-caustic purposes. A few turns of the handle were sufficient to raise the platinum wire to a white heat. The advantages of the apparatus were, that it could be put into action at any moment without preparation; that there was no occasion for using chemicals; and that, therefore, the cost of keeping it in order was *nil*. The drawbacks were: its high price; its weight; and the fact that, after continued rotation, the temperature of the wire always fell.

Dr. Hüter reported that he had obtained gradual improvement from parenchymatous injection of carbolic acid in cases of canceroid with ichorous discharge; the discharge ceased, and the surface of the sore became covered with healthy granulations, although there was no tendency to healing. He recommended this method as a palliative in cases unfit for operation.—Dr. Hirschberg spoke of the advantage of scraping the surface in such cases.

Dr. Mosengeil read a paper on *Massage*; and described an experiment in which he injected into the knee-joint of rabbits Indian ink suspended in water, and in a few minutes found it in the lymphatic vessels of the thigh, especially when pressure was made with the hand in a centripetal direction from the knee, as is done in *massage*. He had seen good results follow this treatment in cases of sprain, of chronic synovitis, and in paresis of the muscles arising from inaction.—Dr. Es-march said that he used *massage* with advantage in neuroses of the joints, always after the application of a shower douche.—Dr. Volkmann said that he had made similar observations in articular neuroses and sprains.

Dr. Schönborn made a communication on a new method of Staphyloraphy, or more correctly staphyloplasty, employed by him. In some cases, only a slight improvement of speech has been obtained by staphyloraphy, so that it has been necessary to subsequently fasten the velum to the posterior wall of the pharynx by sutures, in order to lessen the nasal twang of the speech. Dr. Schönborn forms a longish flap from the mucous membrane of the posterior wall of the pharynx, corresponding to the defect in the palate; its base looks downwards, and the upper part is loosened and stitched to the freshened edges of the cleft in the soft palate, so that at the same time the palate is united and is fixed to the posterior wall of the pharynx. In one case, Dr. Schönborn performed the operation at the same time with uranoplasty; the result was good, inasmuch as speech was intelligible, although a nasal twang remained.—Dr. von Langenbeck remarked that he had obtained numerous very good results by simple staphyloraphy; and he therefore advised that this operation should always be performed first, and, in case that the speech remained very defective, the operation described by Dr. Schönborn should be done.

On the fourth day of the meeting, Dr. Klebs showed microscopic preparations; and clinical demonstrations were given in Dr. Bardeleben's wards. Preparations of T-shaped Fracture of the lower end of the Humerus or the Femur, produced on the dead body, were exhibited in order to demonstrate the mechanism of this form of fracture. The researches in question, made by Dr. Madelung, showed that the attempt was unsuccessful to produce transverse fractures with a fissure running from them into the joint; but that a blow on the olecranon in the direction

of the long axis of the humerus, the elbow being bent, produced a short longitudinal fracture through the trochlea, and at the same time split off transversely the lower end of the humerus (in two fragments). The action of a blow on the patella when the knee was bent was similar; both condyles of the femur were broken off, and were separated one from the other by a longitudinal fracture. Dr. Madelung explained this by supposing that the projecting ridge in the greater sigmoid notch of the ulna acted, in the case of a blow or fall, like a wedge, in producing the longitudinal fracture; and that the continued action of the violence produced the transverse fracture. He held also that the patella acted in the same way on the lower end of the femur by means of the projection between its two facets.

At the last meeting, Dr. Jäsche read a paper on the Etiology of Purulent Infiltration of the Areolar Tissue after Lithotomy.

Dr. von Langenbeck reported that the Committee on Surgical Statistics appointed by the Congress resigned their functions, since material of statistical value had been supplied by only a small number of institutions.

It was resolved to place the surplus funds of the Congress at interest, in order at a later date to forward the object of the Society, and to publish the proceedings of the Congress, from next year, separately (and not in the *Archiv für Klin. Chirurgie*); and at the next Congress to give more time to clinical demonstrations.

Dr. Hagedorn showed a Loop for Galvano-caustic purposes; and reported that he had amputated two legs and one thigh by the galvanic cautery, without using the ligature, and without any secondary hæmorrhage.

Dr. Schönborn showed Splints of Gypsum and Hemp for the treatment of simple fractures. The splints were made of bundles of hemp dipped in thick mixture of gypsum, and laid side by side on the limb, which had been previously wrapped in flannel. The splint was then fixed to the limb, while moist, by a bandage, and in five minutes it was so firm that it could be removed, and finished by the removal of small unevennesses. In simple fractures, a single splint is sufficient.

Dr. von Langenbeck spoke of the Total Extirpation of the Tongue in Carcinoma. He rejected the operation by the mouth (after ligature of the lingual artery), since in it the commencement of infection of the lymphatic glands was easily overlooked. Regnoli's method, a modification of which was frequently employed and praised by Billroth, had this disadvantage, that the larynx sank downwards after the division of the muscular structures by which it was held up, and that hence the secretion from the wound flowed inwards and gave rise to a putrid bronchitis. Langenbeck believed that he avoided these disadvantages by a plan which he had followed in three cases in which he had operated with success. On the side where there was most disease, an incision was carried from the angle of the mouth straight back to the thyroid cartilage; the lower jaw was then sawn through between the first and second molars, and the shorter portion of the jaw turned outwards and upwards; the removal of the diseased part was then effected without difficulty, even when it was necessary to take away also a portion of the arch of the palate. The reunion of the jaw after its division was always attended with some difficulty; it was most surely effected by using ivory pegs pointed at both ends, the points of which were inserted in corresponding holes bored in the sawn surfaces of the bone.

Dr. von Langenbeck also made a communication on the Regenerative Power of the Periosteum and the Value of Regenerated Periosteum for Operative Purposes. He said that the value of the regenerative power of the periosteum was shown in plastic operations, in which flaps of doubtful viability could be strengthened, and the danger of their death diminished, by leaving the periosteum in connection with them. This was especially the case in operations on the face.

Dr. Reyher related a case of Narrowing of the Larynx.

Dr. Busch spoke of some cases of Backward Dislocation of the Humerus which he had observed. With regard to upward dislocation, he remarked that the conditions necessary for its production were fracture of the coracoid process and disruption of the insertion of the subscapular muscle.

This concluded the business of the Congress.

DIPSOMANIA.

THE following is a copy of a draft petition drawn up by "The Habitual Drunkards' Committee" of the Birmingham and Midland Counties Branch of the British Medical Association, and presented to the Branch at their meeting on April 8th, 1875.

"The petition of the undersigned members of the Birmingham and Midland Counties Branch of the British Medical Association sheweth, that:

"Habitual drunkenness is a crying evil which permeates every class of society in this country, and calls loudly for redress.

"Habitual drunkards bring ruin and destruction, not only on themselves, but on their families and all connected with them by social or domestic ties.

"Habitual drunkenness is a disease closely approximated in a great number of cases to insanity, and susceptible of successful treatment. Its evil effects, which only those familiar with the facts and details can fairly appreciate, extend to future generations, the children of drunkards being for the most part people of low bodily and mental condition, who, in their turn, often inherit a tendency to drink. In this way, habitual drunkenness deteriorates the standard of the race.

"There is no means under the existing law of exercising over habitual drunkards the control which your petitioners think necessary for their personal safety, for the protection of their families, and for the welfare of society.

"In the year 1872, a Select Committee of the House of Commons was appointed 'to inquire into the best plan for the control and management of habitual drunkards'. The late Mr. Donald Dalrymple was the Chairman.

"The Report of the Select Committee was very favourable to legislation upon the subject. It declared, 'that there is entire concurrence of all the witnesses in the absolute inadequacy of existing laws to check drunkenness, whether casual or constant; rendering it desirable that fresh legislation on the subject should take place, and that the laws should be made more simple, uniform, and stringent'.

"The Report likewise recommended, 'that sanatoria or reformatories for those who, notwithstanding the plainest considerations of health, interest, and duty, are given over to habits of intemperance so as to render them unable to control themselves, and incapable of managing their own affairs, or such as to render them in any way dangerous to themselves or others', should be provided.

"In the year 1873, a Bill 'for the better care and management of habitual drunkards' was brought in by the late Mr. Dalrymple and others. Owing to the adjournment of the House consequent on Mr. Gladstone's resignation, the Bill, which was then down on the list for second reading, was postponed to so late a day as to render any effort to carry it useless for that Session.

"Your petitioners, regarding the question as one of a very pressing nature, now pray for immediate legislation, upon the basis of the Report of the Select Committee, for the control and management of the class of persons known as habitual drunkards or dipsomaniacs."

ASSOCIATION INTELLIGENCE.

EAST YORK AND NORTH LINCOLN BRANCH.

THE annual meeting of this Branch will be held at the Hull Infirmary on Wednesday, May 26th, at 1 P.M.: J. DIX, Esq., President, in the Chair.

Gentlemen intending to read papers or show cases, are requested to give notice to
ROBT. H. B. NICHOLSON, *Hon. Sec.*
Hull, May 5th, 1875.

STAFFORDSHIRE BRANCH.

THE next meeting will be held in the Board Room of the Mines Drainage Offices, 22, Darlington Street, Wolverhampton, on Thursday, May 27th, 1875. The Chair will be taken at 3 o'clock P.M.

Papers.—1. A Discussion upon Puerperal Fever will be opened by Dr. Totherick.

2. The Provident Dispensary System considered as a remedy for Hospital Abuses. By Mr. Clendenning.

3. Remarks upon a Case of Thyroid Tumour. By Mr. Spanton.

4. A few observations on certain Convulsive Disorders. By Dr. Day.

VINCENT JACKSON, } *Honorary Secretaries.*
RALPH GOODALL, }

May 17th, 1875.

SOUTH EASTERN BRANCH: WEST SUSSEX DISTRICT.

THE next meeting will be held at Horsham, on Tuesday, June 8th. The Chair will be taken by THOMAS B. GREENWOOD, Esq., of Two-Mile-Ash.

Gentlemen who wish to read papers, are requested to communicate with the Honorary Secretary by Saturday, May 29th.

WM. J. HARRIS, *Honorary Secretary.*

13, Marine Parade, Worthing, May 17th, 1875.

BRITISH MEDICAL ASSOCIATION: FORTY-THIRD ANNUAL MEETING.

THE Forty-third Annual Meeting of the British Medical Association will be held at Edinburgh, on Tuesday, Wednesday, Thursday, and Friday, August 3rd, 4th, 5th, and 6th, 1875.

President.—E. COPEMAN, M.D., Senior Physician to the Norfolk and Norwich Hospital.

President-elect.—Sir ROBERT CHRISTISON, Bart., M.D., D.C.L., LL.D., F.R.S.Ed.

An Address in Medicine will be given by JAMES WARBURTON BEGBIE, M.D., F.R.C.P.Ed.

An Address in Surgery will be given by JAMES SPENCE, F.R.C.S.Ed., F.R.S.E., Professor of Surgery in the University of Edinburgh.

An Address in Physiology will be given by WILLIAM RUTHERFORD, M.D., F.R.S.E., Professor of the Institutes of Medicine in the University of Edinburgh.

The business of the Association will be transacted in Six Sections, viz.:

SECTION D. PUBLIC MEDICINE.—*President*: Right Hon. Lyon Playfair, M.P., C.B., F.R.S. *Vice-Presidents*: Inspector-General Smart, M.D., C.B.; Dr. Arthur Mitchell. *Secretaries*: Dr. Andrew Smart, 24, Melville Street, Edinburgh; Dr. Fraser, Knutsford.

SECTION A. MEDICINE.—*President*: Dr. Quain, F.R.S., London. *Vice-Presidents*: Professor W. T. Gairdner, Glasgow; Dr. Grainger Stewart, Edinburgh. *Secretaries*: Dr. Claud Muirhead, 7, Heriot Row, Edinburgh; Dr. Stephenson, 33, Buccleuch Street, Edinburgh.

SECTION B. SURGERY.—*President*: Professor Lister, F.R.S. Edinburgh. *Vice-Presidents*: Professor Pirrie, Aberdeen; Professor Macleod, Glasgow. *Secretaries*: Thomas Annandale, Esq., Charlotte Square, Edinburgh; Dr. John Duncan, 8, Ainslie Place, Edinburgh.

SECTION C. OBSTETRIC MEDICINE.—*President*: Dr. Matthews Duncan. *Vice-Presidents*: Dr. Keiller; Professor Simpson. *Secretaries*: Dr. Peel Ritchie, 16, Hill Street, Edinburgh; C. J. Cullingworth, Esq., 260, Oxford Street, Manchester.

SECTION E. PSYCHOLOGY.—*President*: Dr. Lowe, F.R.S., Edinburgh; *Vice-Presidents*: Dr. Sibbald; Dr. Clouston. *Secretaries*: Dr. Brown, Royal Asylum, Edinburgh; Dr. Saundby, Saughton Hall, Edinburgh.

SECTION F. PHYSIOLOGY.—*President*: Dr. Burdon Sanderson, F.R.S., London. *Vice-Presidents*: Dr. McKendrick; J. Dewar, Esq. *Secretaries*: Dr. Lauder Brunton, F.R.S., 23, Somerset Street, Portman Square, London; Dr. Caton, 18, Abercrombie Square, Liverpool.

Honorary Local Secretaries.

Dr. John Batty Tuke, Edinburgh.

John Chiene, Esq., Edinburgh.

Dr. J. G. McKendrick, Edinburgh.

Dr. J. Bishop, Edinburgh.

Tuesday, August 3rd.

1 P.M.—MEETING OF COMMITTEE OF COUNCIL.

3 P.M.—MEETING OF THE COUNCIL, 1874-75.

8 P.M.—GENERAL MEETING.—President's Address; Annual Report of Council; and other business.

Wednesday, August 4th.

9.30 A.M.—MEETING OF COUNCIL, 1875-76.

11.30 A.M.—SECOND GENERAL MEETING.

11.30 A.M.—ADDRESS IN MEDICINE.

2 P.M.—SECTIONAL MEETINGS.

9 P.M.—SOIRÉE.

Thursday, August 5th.

9 A.M.—MEETING OF THE COMMITTEE OF COUNCIL.

10 A.M.—THIRD GENERAL MEETING.—Reports of Committees.

11 A.M.—ADDRESS IN SURGERY.

2 P.M.—SECTIONAL MEETINGS.

6.30 P.M.—PUBLIC DINNER.

Friday, August 6th.

10 A.M.—ADDRESS IN PHYSIOLOGY.

11 A.M.—SECTIONAL MEETINGS.

1.30 P.M.—CONCLUDING GENERAL MEETING.

Gentlemen desirous of reading papers, cases, or other communications, are requested to forward the titles to the General Secretary, or to one of the Secretaries of the Section in which the paper is to be read. All papers should be forwarded to one of the above named officers at as early a date as possible.