interesting example of ophthalmoplegia externa, for which no cause could be assigned. The patient was a florid, healthy-looking lady, aged 33. Her features, teeth, and complexion were as far as possible removed from those suggestive of inherited syphilis. She was single, and there was not the slightest reason for suspecting that she had ever suffered from the acquired disease. Her father came with her, and in answer to a direct question assured me that he had never had any suspicious disease. He had a large, healthy family.

Miss —'s symptoms were remarkable for their symmetry and evenness. Both eyelids drooped so as to almost cover the pupils. She could move both eyeballs a very little in all directions and almost equally in all. It was exceedingly little. I could not detect any squint, and she had seldom or never been troubled with diplopia. A very remarkable point was that her pupils acted fairly well, and that she could still use her accommodation. Her pupils were of normal size and equal. As she was myopic there was a fallacy as to the accommodation, but with glasses which enabled her to see well in the distance she could still see to read. I had not time to test this in detail. She was accustomed to read a good deal, and was able to see downwards well in spite of the drooping lids. Two photographs produced showed that the ptosis was commencing three years ago, and that it was quite absent ten years ago. She believed that from girlhood she had been accustomed to turn her head when others would turn their eyes. It had been, she said, a matter of remark by her companions. Her father did not, however, know anything of this.

Miss — had no other symptoms of nervous disorder. Dr. Moxon informed me that her knee-jump was good. She had never had any lightning pains. The only ailment which she would confess to was occasional very severe headaches. To these she had been liable from childhood, and was sometimes laid up for a day by them.

I do not think that I have ever seen a syphilitic case of ophthalmoplegia externa in which the symptoms were so regular. Almost always one or more of the ocular muscles escapes paralysis to a large extent.

(I know nothing as to the sequel of this case. I never saw one quite like it, and should be very glad to know the result if any of my readers can give the information.)

XXXVI.—DIPHTHERITIC PARALYSIS OF ACCOMMODATION AFTER A SORE THROAT SO SLIGHT THAT IT HAD BEEN FORGOTTEN.

I believe that it is well known that paralysis of the muscle of accommodation, such as is usually described as "diphtheritic," may occur after very slight forms of sore throat. I have myself seen and recorded several such cases, in which the sore throat had been so slight and transitory that it had been forgotten, and one such is at present under my observation. A healthy-looking girl ten years old was brought to me on account of failure of sight, which I at once found to be paralysis of accommodation. I inquired as to the sore throat, and was told by her mother that the child had not been ill in any way. At the second visit, however, two facts were remembered which had been at first forgotten. One month before coming to me the child had been in company with a little boy who had been suffering from a bad sore throat, and some time ago had had diphtheria. Three weeks prior to this, however, the child herself, while staying at Sandown, had had a three days' sore throat; it had not been bad enough to necessitate medical advice. Such were the very trivial, but I have no doubt really important, facts. The child, under treatment, recovered perfectly in about three weeks, and had no other symptoms of paralysis. I cannot doubt that the failure of sight was of the nature of diphtheritic paralysis. Does the case prove that true diphtheria may occasionally be so slight as to be overlooked, and yet be efficient to the production of paralysis as a sequela? This is my own belief, and it seems to me to establish a very important fact with reference to the natural history of the disease. I believe that it is generally acknowledged that the severity of diphtheritic paralysis is not usually in ratio with the severity of the throat affection. I have never, however, myself seen general paralysis after a slight form of sore throat like that described above; but, on the other hand, I have seen many in which the eye only, or the eye and palate only, have been affected.

PRESENTATION.—Dr. Walter Kent has been presented with a valuable medical chest and an illuminated address by his friends and patients, on leaving Biddulph, Staffordshire, for America.

NOTES ON THREE YEARS' OVARIOTOMY WORK IN THE SAMARITAN FREE HOSPITAL: EIGHTY-TWO CASES WITHOUT A DEATH.

By GEORGE GRANVILLE BANTOCK, M.D., F.R.C.S.ED.,
Surgeon to the Samaritan Free Hospital.

ON March 21st, 1885, a widow, aged 56, the mother of seven children, was admitted under my care into the Samaritan Free Hospital. She was very thin, and had lost flesh rapidly of late. The abdomen was considerably distended; and this distension, added to some chronic bronchitis, caused difficulty of breathing and a troublesome cough. On the evening of admission the temperature was 99.4°, and was probably due to the mechanical irritation of the numerous adhesions which were subsequently found. With the view of relieving the breathing and cough, and of giving the patient some sleep by enabling her to lie down, I removed twelve pints and a half of a dark-coloured fluid by aspiration on the 23rd, and on April 1st I performed double ovariectomy, removing a tumour of the right ovary weighing thirteen pounds, and the left ovary, which was as large as a hen's egg. The pedicle was twisted until its vessels were strangulated, and subsequent or consequent hæmorrhage into the large cyst accounted for the dark colour of its contents. There were very extensive adhesions involving the parietes wherever the tumour came into contact with them, the omentum, uterus, and other pelvic structures, and about two feet of small intestine with its mesentery. About twenty ligatures were applied to bleeding points in omentum, mesentery, intestine, back of uterus, and in the parietes, where the bleeding points were so numerous, and the difficulty of applying ligatures or even pressure forceps so great, that I was induced to try the thermo-cautery of Paquelin, but without success. Finally, I washed out the peritoneal cavity with warm water, inserted a drainage-tube, and closed the wound. After the operation there was an aggravation of the bronchial symptoms and cough, and the patient died on the sixth day. *Post-mortem* examination revealed some peritonitis and extensive pulmonary congestion. I may remark that the operation lasted an hour and a half, and it will be gathered from the foregoing that the case was altogether a desperate one and gave little hope of a successful result.

From the middle of April, 1885, to the corresponding date this year I have performed 82 ovariectomies in the Samaritan Free Hospital, and all the patients have recovered.

On the whole the cases have been of a rather severe character, as the following details will show. Thus, in more than one-half—47—there were adhesions properly so called; in small proportion the adhesions involved the parietes only or omentum only; in large proportion both these structures were involved at the same time; in considerable number the tumour was adherent to the pelvic organs to a varying extent, and in a few instances to the intestines also. In one of parietal adhesions only the patient had just completed seven months of her first pregnancy, in the course of which she had been twice tapped. (This case was published in the JOURNAL, February 11th, 1888, p. 296.)

Excluding all these cases of adhesions proper, there were 6 cases in which there was no pedicle, and the tumour had to be enucleated. In one of these the cyst was in a state of suppuration; in another nine stout ligatures were required to arrest the bleeding from the torn structures left after removal of a tumour involving the left broad ligament and left side of the uterus, and in the last case of this kind operated upon, the last but one of this series, the operation was so severe that when the patient was put into bed, the pulse could scarcely be counted at the wrist. In yet another the tumour apparently involved both ovaries, and when the enucleation was completed the uterus was so bereft of support, in addition to being extensively injured, that I was compelled to remove it also at the level of the internal os in my usual way.

Thus, of the 82 cases there were adhesions or their equivalent in about two-thirds or 54, leaving 28 in which there were no adhesions and there was a pedicle capable of being treated by ligatures. In one of these 28 cases there was a serious complication in the form of a large umbilical hernia, measuring over 4 inches across. After removing an ovarian tumour of ten pounds (right side), I slit open the hernial sac by continuing the abdominal incision, applied several ligatures to, divided the adherent omen-

tum, and then dissected off the peritoneum from the various pouches, cutting away the redundant and thinned skin and peritoneum. In closing the wound I first brought the peritoneal edges together in the region of the hernia by closely applied silk-worm gut sutures, of which the ends were cut off short, and then the skin and intervening tissues by deep sutures running along under the raw surface, and not going through the peritoneum. The remainder of the wound, in which the fatty layer measured nearly two inches in depth, midway between the umbilicus and pubes, was closed in the usual way. Convalescence was uninterrupted, and the hernial sac was completely obliterated.

As further evidence of the severity of the cases I may point out that the drainage-tube was used in more than one-half, or 45, and in these, with few exceptions, the peritoneum was washed out with warm water.

In 34 cases the second ovary was more or less diseased, and was accordingly removed. It is sometimes very difficult to decide whether the ovary is sufficiently diseased to justify its removal. In a large majority of the cases there was no difficulty whatever, and a very recent case induces me to believe that I shall find less difficulty in the future by requiring less distinct evidence than hitherto. I removed an ovarian tumour of 9½ lbs. eleven years ago. The other (left) ovary appeared to be quite healthy, and this view may be said to have been confirmed by the fact that within two years the patient gave birth to twins (one of each sex). But there is pretty conclusive evidence that it did not long remain healthy, for there is a history of gradual increase in the size of the abdomen for several years, and I have recently removed this second ovary, forming a tumour of 18 lbs. In this instance I was asked why I had not removed the second ovary at the first operation.

In all there were 9 cases of dermoid tumours, and in one of these both ovaries were diseased, the one containing skin and hair, and the other containing teeth. This is the second instance of double dermoid disease I have seen. The other was a private case. In only 4 of these cases were there adhesions; the remaining 5 were free, though in one the pedicle was twisted. The absence of adhesions in this instance was to be explained by the fact that the circulation through the pedicle had not been sufficiently interfered with to set up degenerative changes in the tumours.

In 8 cases the pedicle was twisted, and 3 of these belonged to the dermoid variety. In all but one there were more or less extensive adhesions, and in these 7 the peritoneum was washed out and drained.

There were 5 cases of ruptured cyst, in all of which the whole peritoneal cavity was thoroughly washed out and a drainage-tube was used.

In 3 cases the disease was malignant, and in 2 of these the malignancy was recognised at the time of the operation. In the first case the patient died in about fourteen months with extensively disseminated cancer. In the second the patient made a rapid and uninterrupted recovery, leaving the hospital on the twentieth day. In a few weeks more a small tumour formed in the region of the pedicle, painful and tender, without any rise of temperature or increase of pulse, and accompanied with rapid emaciation, and she died on July 6th. In the third case there was great oedema of the lower extremities, gastric irritation with frequent vomiting, and considerable distension of the abdomen by free fluid. At the operation twenty-five pints of free fluid were removed together with a sarcoma of the left ovary weighing 6 lbs., and another of the right ovary weighing about ¾ lb., and the pelvic and lumbar glands were already infected. The peritoneum was well washed out and drained, and she recovered without a bad symptom. The disease, however, made rapid progress, though there was no more ascites; the gastric irritation, relieved by the operation, returned in a few weeks along with the oedema of the lower extremities, and she died in seven weeks.

All these 82 operations were done without the use of any so-called antiseptic substance. Warm water—not specially prepared—was freely employed in washing out the peritoneal cavity whenever the contents of the cyst had escaped into it, either by spontaneous rupture before operation, or when, through the breaking down of extensive adhesions, there was any effusion of blood and serum amongst the intestines, rendering the "toilet of the peritoneum" very difficult by any other method. In all these cases the drainage-tube was also employed. In not one single instance was any opium or alcohol administered.

In the year 1882 a comparison was instituted between the results obtained in the Samaritan Free Hospital under the Listerian

and non-Listerian methods, the latter being wholly confined to my practice. That comparison was very much to my disadvantage, and deductions were drawn which even the results of the following year tended to upset, and which those of succeeding years have actually tended to reverse. Again, that comparison was made on the results of only one year. A comparison of results extending over several years will be a more reliable guide, and I now present those for the three years 1885, 1886, and 1887, in the following tables:

Dr. Bantock's Cases.			Listerian Cases (3 Operators).		
Total.	Recovered.	Died.	Total.	Recovered.	Died.
79	78	1	121	110	11

But in September, 1887, Mr. Doran abandoned the Listerian and adopted my method of practice, and if his 3 cases be added in the one table, and subtracted in the other, the following result is obtained:

Dr. Bantock's Cases.			Listerian Cases (3 Operators).		
Total.	Recovered.	Died.	Total.	Recovered.	Died.
82	81	1	118	107	11

If, again, the results for the three years over which the preceding 82 cases extend, namely, from April, 1885, to April, 1888, be taken, the following is the result:

Dr. Bantock's Cases.			Listerian Cases.		
Total.	Recovered.	Died.	Total.	Recovered.	Died.
82	82	0	116	104	12
Plus Mr. Doran's Cases.			Minus Mr. Doran's Cases (3 in 1887 and 1 in 1888).		
Total.	Recovered.	Died.			
4	4	0			

Giving 86 cases without a death, as against 116 cases with 12 deaths, or a mortality of 10.34 per cent.

NOTES ON THREE CASES OF UTERINE FIBROIDS UNDER TREATMENT BY APOSTOLI'S ELECTRICAL METHOD.

By W. J. TIVY, F.R.C.P.E., F.R.C.S.E.,
Clifton.

CASE I.—S. W., unmarried, aged 40, consulted me first in 1884 for an abdominal swelling and metrorrhagia. She was a tall, slight, very anæmic woman; she said her abdomen had been increasing in size for two years; her menses were most profuse, lasting ten or twelve days; she suffered no pain. At this time (1884) I detected three separate, hard, solid tumours; the largest and hardest nearly filled the right side of the abdomen, was freely movable, and extended to the umbilicus; the smallest was in the centre, and on the left side was a third tumour nearly as large as the right one, and also movable. By modified diet, rest, and the use of ergot, the growth of the tumours seemed checked for a time. In 1887, however, in spite of this treatment, I found that the abdomen measured forty inches and a half in circumference, a much larger size than it had been in 1884, and that the tumours were also larger.

In October I commenced Apostoli's treatment, applying the positive pole to the interior of the uterus, which was five inches in depth. By using at first twenty cells of Coxeter's battery I obtained eighty milliampères; little pain was felt, and the patient was about the next day and after each subsequent electrification. I gradually increased the strength to twenty-five cells, and 140 to 160 milliampères, and after each application found the abdomen smaller and the tumours reduced. After eleven electrifications the abdomen measures only thirty-four inches in circumference, the tumours are reduced by fully one-half, and the last four menstrual periods have been quite normal.

CASE II.—Mrs. J., aged 53, past menopause two years. She has never been pregnant. She consulted me June, 1887, for a large abdominal tumour nearly filling the whole abdomen; it arose in the right side, was very movable, and extended three inches to the left of the umbilicus; the tumour was solid, round, and very hard. The patient suffered no actual pain, and her menses had always been normal. The tumour was evidently a pedunculated sub-peritoneal fibroid.

On December 1st, 1887, her abdomen measured forty-one inches and a half in circumference. The sound passed five and a half inches in depth. I applied the negative pole internally for ten minutes, and obtained 80 to 90 milliampères, using twenty cells; this process I repeated every ten or twelve days, gradually increasing the strength to 140 milliampères. After eight applications the circumference of the abdomen is thirty-five inches; the