at least this has been due to infection from the bowel, as in two cases recorded by Mr. Bland-Sutton. In this instance the physical signs and appearances were those of a malignant tumour. Many examples of the origin of sarcomatous growths from uterine fibroids have been recorded (W. Williams, Doran, Langenhans, Leopold, &c.), although this is undoubtedly rare. Microscopically, the malignant growth is usually a spindle-celled sarcoma or shows embryonic spindle cells of connective tissue or myomatous origin. Cases of primary sarcoma occurring in the broad ligament are also recorded. I am not aware that as yet any case of broad ligament myoma becoming sarcomatous has been described, but judging from analogy with uterine tumours there is a possibility of this occurring occasionally.

The development of chylous ascites in this case is also an unusual feature. Chylous ascites is in itself very rare. In a recent paper by Dr. Halliday Croom² he was only able to collect 63 recorded cases, but no doubt many more have occurred. Under this heading some cases have been placed in which the fluid was not chyle but milky-looking fluid in the peritoneal cavity due to the presence of cellular elements of a malignant growth. In true chylous ascites there is obstruction to the lymphatic circulation. This is rarely due to obstruction of the thoracic duct; more commonly it is the result of contraction of the smaller lacteals close to the mesenteric attachment of the bowel. This may be brought about by the development of small nodules of malignant growth in the mesentery. In other cases it may be the result of cicatricial contraction of the mesentery, as in some forms of chronic adhesive peritonitis due to tubercle or secondary to chronic irritation of the peritoneum. Very rarely in England filaria is found as a cause of chylous ascites. It is of interest to note that in two cases at least³ tumours of the broad ligament have been met with associated with chylous ascites. In one case recorded by Dr. J. Fenwick double papillomatous cysts of the broad ligament were found accompanied by numerous secondary growths in the abdomen and marked shrinking of the mesentery with adhesions between the parietal and visceral layers of the peritoneum. In a case recorded by Dr. F. J. Smith,⁴ although tumours were present in the broad ligaments the physical signs were rather those of very chronic adhesive peritonitis, due primarily to irritation of a carcinoma in the region of the gall-bladder.

The influence of the operation in this case is a question of great interest. No satisfactory explanation has yet been given of the fact that atrophic changes undoubtedly occur in certain tumour formations as a result of abdominal section. Mr. F. Treves in recording some cases of this nature considered that the explanation may be found in questions of intra-abdominal pressure, a subject on which little is known at present. It has been observed that in most of these cases the tumours have been of connective tissue origin, to be classed therefore as sarcomata. These tumours, composed of embryonic connective tissue, have apparently in many instances a somewhat low vitality, and the slight inflammatory changes set up as the result of operation are sufficient to check active growth or even to cause their absorption. These tumours are comparable to the infective granulomata such as tubercle, which, especially in the abdomen, is well known to atrophy and even to disappear after abdominal section with or without drainage. In this present case, since four and a half years have elapsed since the operation without any increase in growth, it is obvious that the operation in some way inhibited the further development. The chylous ascites was probably attributable to a chronic adhesive peritonitis resulting from the irritation of the tumour and producing by shrinkage and adhesions obstruction of the lacteals. This process was also inhibited and now, at any rate, there is no lacteal obstruction; this is probably due to the development of fresh lymphatic channels. The growths in the abdomen have not disappeared. They are still present though causing no symptoms, and it is, of course, possible that at some future time renewed activity may commence in them.

Manchester.

² Transactions of the Obstetrical Society of Edinburgh, March, 1900.

³ Fenwick: Brit. Med. Jour., vol. ii., 1891, p. 598.

⁴ Transactions of the Pathological Society of London, 1891.

UNIVERSITY COLLEGE, CARDIFF.—By his will the late Professor Alfred Hughes has bequeathed several interesting specimens, models, and diagrams to University College, Cardiff.

Clinical Notes : MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A NOTE ON THE RESULTS OBTAINED BY THE ANTI-TYPHOID INOCULATIONS IN THE 15TH HUSSARS, MEERUT, INDIA.

By A. E. WRIGHT, M.D. DUB.,

PROFESSOR OF PATHOLOGY, ARMY MEDICAL SCHOOL, NETLEY.

THROUGH the kindness of Lieutenant-General Sir George Luck, commanding the Bengal army, I am permitted to publish the following officially compiled statistical statement dealing with the effects of anti-typhoid inoculations in the case of the 15th Hussars :—

From Oct. 22nd, 1899, to Oct. 22nd, 1900.

	Strength.	Number inoculated in England.	Admissions to hospital for enteric fever.	Deaths from enteric fever.	Number not inoculated.	Admissions to hospital for enteric fever.	Deaths from enteric fever.
Officers	22	19	0	0	3	0	0
N.C.O. and men	481	317	2	1	164	11	6
Women	36	24	0	0	12	0	0
	539	360	2	1	179	11	6

It would thus appear that the incidence of enteric fever in the inoculated was represented by 0.55 per cent. and the mortality by 0.27 per cent., while the incidence in the uninoculated was 6.14 per cent. and the death-rate 3.35 per cent. Netley.

A NOTE ON AUSTRALIAN BITTER BARK (*ALSTONIA CONSTRICTA*) IN INFLUENZA.

By J. GORDON SHARP, M.D. EDIN.

ONE of the drugs of the new Addendum to the Pharmacopœia is *Alstonia constricta* F. v. M., known as bitter bark, fever bark, or Australian bitter bark. It belongs to the same order as strophanthus—namely, *apocynaceæ* or the dog-bane order, and is a native of Queensland and New South Wales. It contains, perhaps, four alkaloids, one of which alone possesses any importance from the clinician's point of view, and it is known as alstonine. My specimen of alstonine is a dark brown amorphous body costing 3s 9d. a gramme (15½ grains). For the present, then, alstonine is only known in the laboratory and it must become much cheaper before it comes within the domain of practical therapeutics. Both bark and alkaloid are intensely bitter and the former has been employed by foreign brewers to add bitterness to their ales. In the Australian colonies a decoction is said to be employed and is called by the name "bitters." Preparations of the bark have been employed as a general tonic and in certain stages of typhoid fever. The drug appears to act on the skin and kidneys as well as on the nervous system. The peculiar property of this bark appears to be that it resembles both quinine and strychnine. Physiologically it does not act on frogs like strychnine, but, like quinine, the alkaloid alstonine paralyses and finally kills amoeba, paramœcium, and vorticella, but it is weaker than quinine.

The drug has been brought to notice by Dr. Joseph Bancroft of Brisbane, by Dr. Bixby of Detroit, U.S.A., and more recently in the *Pharmaceutical Journal* of July 8th, 1899, by Mr. J. H. Maiden, Government botanist at Sydney, New South Wales. *Alstonia constricta* must be distinguished from *Alstonia scholaris* R. Br., known as dita bark, or devil

bark, and belonging to the same order, and a native of India, of the Malay Archipelago, and of tropical Australia.

For over 18 months I have employed a tincture of the bark as a general tonic and more particularly in influenza. I start with it as soon as the feverish stage is over and give from five to 10 minims in chloroform water four times a day, preferably some little time before meals. Acting as it appears to do on the skin and kidneys it can be administered with safety even before convalescence has set in, seeing that it helps in the elimination of the poison. I can confidently recommend its use as a valuable agent in the treatment of influenza. Like every other drug it does not act in every case, but generally speaking one finds it useful. The Addendum dose of the tincture is from a half drachm to one fluid drachm. This is too much for a start, and I prefer to start with 10 minims or even in many cases with five minims, and, as I have said, chloroform water is the best vehicle.

Leeds.

DIPHTHERIA ANTITOXIN USED SUCCESSFULLY BY THE MOUTH.

BY W. CAMPBELL M'DONNELL, M.R.C.S. ENG.,
L.R.C.P. LOND.

IT being thought that the antitoxin of diphtheria must for successful exhibition be hypodermically injected the following may be useful.

A girl, aged 14 years, having both tonsils covered with a soft white pellicle and with no symptoms but a sore-throat, very slight enlargement of the related lymph glands, and a temperature of 38.2°C ., at 11 A.M. on Nov. 12th, 1900, was given 1500 units of antitoxin by the mouth on the second day of the illness. The antitoxin had been issued by Burroughs and Wellcome in the dry state and was 20 months old. One patch yielded the diphtheria bacillus, as was certified by the medical officer of health. Within 20 hours of giving the antitoxin the right tonsil was quite clear. No application was made nor was any gargle used to the throat. On the third day there was no pellicle to be seen and at 11.30 A.M. the temperature was 35.8°C . On the fourth morning the temperature was 37°C . On the tonsil which was at first the most affected was seen a slight recurrence of pellicle. For this another 1500 units of the dissolved dry antitoxin were given by the mouth. She recovered uneventfully and as quickly as possible.

In an earlier case, where the struggling on attempting to hypodermically inject the antitoxin of diphtheria made that method impracticable, the antitoxin was rectally injected. The benefit was equal to that in the case described above. In this case, however, diphtheria was not bacteriologically proved, but clinically it was certain.

Stoke Newington, N.

A TUMOUR SIMULATING EPITHELIOMA WHICH APPEARED TO FOLLOW THE STING OF AN INSECT.

BY EDWARD J. WOOLLEY, M.B., B.C. CANTAB.

THE following case is of interest chiefly on account of the appearance of an uncommon causation, the tumour itself presenting no characteristics to differentiate it from epitheliomata from commoner causes and in more usual positions.

The patient was a labourer, 54 years of age. He was thin almost to emaciation, but said that he had always been so and that he had noticed no loss of flesh in the last few months. In July, 1900, he was stung, or bitten, on the external surface of the forearm by an insect which he described as "a green fly." A swelling of the size of a common nut appeared at the site of the sting and the patient rubbed it and attached no importance to it, thinking that it would go down. This, however, was not the case. Six weeks after the injury there was considerable itching in and about the swelling. The patient poulticed it and bathed it frequently with hot water. He noticed at this time that the swelling was getting larger. He continued his poultices and bathings until Dec. 14th, when he came to me. The tumour was then circular in shape and of about one inch in diameter, being raised above the surface of the surrounding healthy skin not

more than one-sixteenth of an inch. The centre of the growth was hollowed out slightly and had the appearance of a dry ulcer. There was some hardness, but not the hardness to be expected in a malignant growth; and there was no pain. The glands in the axilla and the supra-condylar gland were not enlarged. The skin in which the growth was situated was freely moveable on the subcutaneous tissues. Although the history and the appearance of the growth were not strictly those of epithelioma, they seemed sufficiently so to call for its excision and on Dec. 20th I removed it, under ether, by an elliptical incision. I found the growth to be confined exclusively to the skin, and the tissues under it to be quite healthy and not at all adherent to the tumour. A microscopical examination showed the tumour to be a squamous-celled epithelioma with well-developed cell-nests—a typical epithelioma of the skin. I should add that no members of the patient's family on the male or female side have suffered from cancer.

Kingston-on-Thames.

A Mirror OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Proœmium.

LONDON HOSPITAL.

A CASE OF HYDATID CYST OF THE LIVER RUPTURING INTO THE TRANSVERSE COLON.

(Under the care of Dr. F. J. SMITH.)

EVACUATION of the contents of a hydatid cyst of the liver into the bowel is not a common occurrence; more frequently the cyst makes an opening into the general peritoneal cavity, or through the diaphragm into the pleural cavity, or into the bronchial tubes of an adherent lung. When, however, the intestinal route is chosen by the hydatid, suppuration generally occurs in the cyst, and recovery is often complete and permanent. For the notes of the case we are indebted to Dr. H. N. Clarke.

A man, aged 32 years, was on April 2nd, 1900, admitted into the London Hospital with jaundice. He stated that he had been quite well until November, 1899, when he had an attack of "biliousness" and "constipation." Ten days later he had severe pain across the lower part of the chest; the pain was sufficient "to double him up" but did not make him vomit; the next day he became jaundiced. These signs all cleared up in about a week. Since then he had had five attacks, all the same in character—viz., pain first and then jaundice. He described his stools as being "like white putty" during the attacks. His family history was good; there was no history of syphilis or gonorrhœa. He had always been a temperate man.

The patient was admitted to hospital during his sixth attack of jaundice; he was deeply jaundiced and was much wasted, but he did not know how much weight he had lost. On examination the heart was found to be normal; there was a good deal of general bronchitis, and there was some fulness of the upper part of the abdomen. The liver was enlarged and the edge could be felt about two and a half inches below the costal margin; the organ was tender and a rounded smooth lump three inches across could be felt in the epigastrium, rather more to the left than to the right of the middle line; there was no œdema of the abdominal wall. On palpation the lump gave the sensation of deep fluctuation. The stools were white and clay-like. The urine contained a trace of albumin; the specific gravity was 1040 and bile was present.

Three days after admission—viz., April 5th—the patient had a rigor; the next day he was seen by Mr. Mansell Moullin who advised an exploratory laparotomy. It was decided that this should be done as soon as the bronchitis had cleared up sufficiently to allow the administration of a general anæsthetic. On the morning of April 7th the lump in the epigastrium was observed to be much smaller, and