results of a collection of some 7800 cases in the other large gaols in Bengal published in the Administration Report for 1896 are practically identical with the above formula. I have purposely avoided parts of an inch. Mr. Havelock Ellis¹ has shown this to be useless. I must note that these figures have all been taken from prisoners of the peasant class, chiefly from the Behar portion of the Province of Bengal, and are confined to adult men of the ages of from twenty-five to forty years. They do not apply to hill men, Burmese, aboriginal tribes, or to the tall, well-made Rajputs, but are representative of the average Behar and Bengal peasant.

Height.	Weight.	Number of observations.	Percentage.
5 ft.	100 lb.	1863	6.5
5 „ 1 in.	102 „	2069	7.2
5 „ 2 „	106 „	5226	18.0
5 „ 3 „	109 „	5787	20.0
5 „ 4 „	112 „	6107	21.3
5 „ 5 „	115 „	3040	10.0
5 „ 6 „	118 „	2498	8.7
5 „ 7 „	122 „	1389	4.8
5 „ 8 „	125 „	623	2.1
5 „ 9 „	129 „	220	0.7
5 ft. 10 in. to 6 ft.	—	51	0.1

A glance at the second column in the above table will show how closely the weights for height correspond with my formula given above. It will also be seen that one inch in height practically means 3 lb. increase in weight. Lombroso's rule for Italians, beginning with 5 ft. = 110 lb., gives an increase of about 5 lb. per inch for his countrymen; Allen's table of heights and weights for Englishmen gives also about 5 lb. per inch above 5 ft.; that given by Liharzik varies from 3 lb. to 7 lb. These are all the observations of this kind I can lay my hands upon at present. The above table also shows that, taking the Bengal prison population, which fairly represents the peasant classes generally, the vast majority of them are of short stature. Taking, with Mr. Havelock Ellis, heights between 5 ft. 4 in. and 5 ft. 9 in. to be medium, below that short, and above it tall (these of course are European ideas) we find that from an European point of view 51 per cent. would be classed as short, an almost equal number as medium, and almost none as tall. For out of 28 863 men measured I could only collect 51 (0.1 per cent.) of 5 ft. 10 in. and above. I have frequently had prisoners of this height, but they were generally Rajputs, or men of better social position than the average prisoner. I have also found that the average weight of this large number of men was 109 lb. In calculating relative diet scales² I took 110 lb. as the average, which is now shown to be practically correct. T. Lewis, F.R.S., put the average weight of the Bengali as 105 lb. The above figures are sufficiently large, I think, to draw safe conclusions from. It is not meant that these figures can be applied accurately to every individual case, but they furnish as accurate as possible a standard for healthy men of this class. Apart from their use in gaols they can be used, as has been the case during this year of famine, to compare the relative health and physique of persons of this class in unhealthy or famine years compared with normal conditions. It is much to be regretted that anthropological figures are not more frequently collected in India.

Buxar, India.

¹ The Nineteenth Century, July, 1897.
² THE LANCET, May 2nd, 1896.

LITERARY INTELLIGENCE.—The *American X Ray Journal* is the name of a new monthly journal devoted to the medical and surgical applications of the Roentgen rays. It is published in St. Louis and is edited by Dr. Heber Roberts.

DR. J. ASHBURTON THOMPSON, President of the New South Wales Board of Health, has been elected an honorary Fellow of the Incorporated Society of Medical Officers of Health of Great Britain.

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

A CASE OF ANEURYSM.

By F. W. THURNAM, M.B., C.M. EDIN.

A MAN, aged fifty-four years, married, but having no children, decorator, consulted me on Feb. 15th, 1897, complaining of "rheumatic" pains at the back of the head, side of the neck, and towards the right shoulder, with slight cough. There was no history of syphilis, and beyond helping to lift a heavy case of goods three months before, which had been followed by an attack of faintness, there was no history of exertion. He was said to have had gout (or rheumatism) many years back. He was ordered a mixture containing salicylate of soda and compound tincture of camphor and a liniment of turpentine and acetic acid. He was allowed to go for a week's change to Epping Forest during the first week in March. No mention had been made to me of a "sensation of internal tumour behind the collar-bone," neither had any swelling been noticed, though looked for, by himself or his wife during the three weeks of its existence. While away, on the evening of March 9th, his neck, shoulder, and upper part of the right chest were rubbed with the liniment by a relative, and though there was much pain no enlargement was seen. Next morning, however, a tumour was clearly visible above the sternal end of the right clavicle. On the 12th over the region of the right sterno-clavicular articulation was a swelling the size of a goose's egg, pulsating and indistinctly expansile, without bruit over the tumour or along the vessels; pain was felt over the site, up the neck, and down the arm, which was somewhat œdematous; the heart's apex was in the fifth space, displaced out to the nipple line; the sounds were faint; there were no murmurs; both the radial arteries wereatheromatous; and there was no appreciable difference in their pulses. There were a troublesome hacking cough, some difficulty in swallowing, and alteration in the voice. My diagnosis was aneurysm of the innominate artery. A mixture containing iodide of potassium and tincture of opium was given. On the 15th the patient was seen in consultation with Dr. H. B. Carter, and, to exclude the possibility of abscess, disease of the joint or other growth, an exploratory aspiration was made with a hypodermic needle, but it showed no pus and only withdrew blood. A red blush over the swollen area, with increased fluctuation in the centre, gave the impression that the skin was much thinned. There was exophthalmos of both eyes, more particularly of the right, the pupil of which was more dilated as compared with the left. The ophthalmoscope showed the vessels of the right retina to be more distended than those on the left side. The laryngoscope showed no laryngeal paralysis. The cough was due to irritation by compression of the right recurrent laryngeal nerve. On the 31st the patient was admitted to the London Hospital, under the care of Mr. Hurry Fenwick, to whom my thanks are specially due for the summary of the notes taken during the patient's stay there of one week. "Rapidly growing innominate aneurysm; inoperative; doubled its size while in hospital." On April 7th the patient was discharged from the London Hospital, where an ice-bag had been used which was continued intermittently, as well as the iodide and opium mixture. There was no œdema of the arm at that time. There was slight delirium at night. In May the prominence and extent of the aneurysm seemed to vary; it was generally fuller at night; there were frequent convulsive twitchings of the arm and leg, more so during sleep. The appetite was fairly good, but capricious. As little fluid as possible was allowed in his diet. In June the aneurysm was increasing in size and extending to the left across the episternal notch. There were frequent attacks of sickness and diarrhoea, alternating with constipation. There was more pain in the neck and arm. The patient was confined to bed throughout. In July the position of the right clavicle had become much more pushed downwards than its fellow, and, partly owing to

more tenderness and erythema over the sac, no articulation with the sternum could be made out. In August there were increasing asphyxia, loss of power, and pain in spite of pushed doses of opium, chloral, and bromide, as well as belladonna locally. For the last three days of life there were oedema of both hands and much sweating. His florid complexion was maintained till the morning of his death, for two hours before which there were marked pallor and complete unconsciousness.

Necropsy.—The post-mortem examination was made on Aug. 12th, eleven hours after death. An examination of the chest only was allowed. The aneurysm was of the arch of the aorta, saccular, not diffuse, and there had been no rupture of it. The sac was the size of two fists and extended upwards to above the cricoid cartilage, and, having destroyed the right sterno-clavicular joint, depressed the clavicle and overlapped the right half of the sternum to below its junction with the second rib, the sternal end of the clavicle and the outer and posterior upper portion of the manubrium being completely eroded. The aneurysm commenced just internally to the origin of the innominate artery, which, beyond compression by the sac, was scarcely, if at all, implicated in it.

Remarks.—The points of interest in this case are the sudden appearance of the aneurysm, its rapid growth, and peculiar distribution. The possibility of its being aortic was not lost sight of: but certainly at the time of diagnosis and, indeed, until the extension of the enlargement to the left, two months later, all the symptoms pointed to its having an innominate origin. The one point of consolation is that no operative interference was resorted to.

New Cross, S.E.

TWO CASES OF PHTHISIS IN WHICH KOCH'S NEW TUBERCULIN WAS TRIED.

By F. M. SANDWICH, M.D. DURH., M.R.C.P. LOND.,
PHYSICIAN TO KASR-EL-AINI HOSPITAL, CAIRO.

CASE 1.—The first patient was a German who for four years has had tubercle of both lungs. Koch's instructions were followed in all particulars, and the initial injection was $\frac{3}{10}$ milligramme, or two micro-milligrammes. The patient's temperature taken at 7 A.M. and 7 P.M. ranged before treatment from 97.8° to 99.4° F., but the injection was invariably followed by a reaction, sending the evening temperature up to 100.2° or 101°, and after three micro-milligrammes had been injected the evening thermometer showed 101.4° and 101.6°. But the morning temperature never rose above 97.8°, showing that the reaction only lasted a few hours. The injections were all made at 10.30 A.M. For the first two days the expectoration notably diminished, but then increased, especially at night. After three weeks the injections had to be discontinued because of slight pleurisy and hæmoptysis. From the previous history of the patient I do not think that either of these complications were due to the tuberculin TR. The pulse and respiration rate hardly changed in spite of the temporary rise of temperature, being always 70 and 13 to 14 in the mornings and 97 and 20 to 22 in the evenings.

CASE 2.—The second patient was a Greek, also suffering from chronic tuberculous lung disease. In his case there was also a temporary rise of 1° F. after injections of two, and again later after injections of three, micro-milligrammes. In his case there was also some local reaction, as shown by the appearance of pain and some diminution of swelling in a tuberculous epididymis. His lung symptoms seemed to improve under treatment. It is of course quite likely that Koch himself would have thought these two cases unsuitable for his new discovery.

The tuberculin TR contains not the toxin but the components of the bacilli themselves, and will probably be found very useful for lupus without complications. If all lung cases react as easily as mine, the injections might be used as a method of diagnosis more delicate and less dangerous than the old tuberculin. At present one is a little shy of a remedy which is to be increased in dosage from $\frac{3}{10}$ milligramme to 20 milligrammes—i.e., the minimum dose is 10,000 times smaller than the maximum. To become popular the new remedy must be made easy to obtain, less costly, and must be diluted in a less cumbersome way, if "the dilution is

always to be prepared at the time it be used." The tuberculin itself is painless, but the glycerine in the solution causes a little stinging.

Cairo.

A CASE OF CÆSAREAN SECTION FOR OXYESIS COMPLICATED BY MALIGNANT DISEASE OF THE RECTUM.

By ALBERT J. RIDDETT, M.R.C.S. ENG., L.R.C.P. LOND.,
LATE OBSTETRIC HOUSE PHYSICIAN, MIDDLESEX HOSPITAL.

ON Aug. 3rd, 1897, I was hastily summoned by a midwife to see a patient, aged thirty-seven years, who according to the account given me had been in labour twenty-four hours. I found the patient in a marked degree of prostration, the pulse 120 and occasionally intermittent; she had also vomited two or three times. On abdominal palpation I found the foetus lying transversely with the cephalic extremity to the right side of the pelvis; per vaginam the posterior vaginal wall was found to be pushed forwards, and a hard irregular mass could easily be made out blocking up the pelvic outlet. The true conjugate diameter only measured two and a half inches. Per rectum about four and a half inches from the anus a hard nodular swelling was felt, which bled even on careful manipulation. Uterine contractions were frequent and strong, so I at once gave a quarter of a grain of morphia hypodermically; this was at 6 A.M. and effectually stopped the contractions. From the cachectic appearance of the patient, the evident wasting, a history of occasional diarrhoea, together with the presence of a tumour and the patient's age, I had no doubt that it was a case of malignant disease of the rectum, which had taken on a rapid growth during the later weeks of pregnancy. This was, I learnt, the sixth confinement, the five previous ones having been quite normal. I put it to the patient's friends that either craniotomy or Cæsarean section must be performed, strongly advocating the latter, inasmuch as I thought craniotomy would be dangerous, probably causing sloughing of some portion of the growth and consequently septic mischief. I saw the patient again at 9 A.M., when, as the uterine contractions were recommencing, I gave another injection of morphia (quarter of a grain), and had her prepared for operation, the patient and her friends having given me permission to perform Cæsarean section. Ether having been administered I opened the abdomen by the ordinary laparotomy incision; then my friend, Dr. Owen Williams, who kindly assisted me at the operation, firmly compressed both broad ligaments, thus effectually controlling the blood-supply to the uterus; the latter organ was quickly opened by a median longitudinal incision, sponges having been placed on either side to prevent escape of liquor amnii into the peritoneal cavity; the foetus was extracted, and the placenta (which was on the posterior uterine wall) with the membranes expressed. There was but an insignificant quantity of blood lost. The uterus contracted well under the stimuli of pressure and hot sponges. The muscular wall of the uterus was closed by twelve deep silk sutures, which did not include the mucous membrane; superficial Lembert's sutures were next inserted, so that the peritoneal surfaces accurately approximated. The Fallopian tubes were next tied and divided. The uterus, which had been partly withdrawn from the abdominal cavity, was now replaced and the abdominal wall sutured in three layers—(a) the peritoneum with catgut, (b) the sheath of the rectus with silk, and (c) the skin and superficial tissue with silkworm gut.

I may say that the case resembles somewhat one Dr. Wm. Duncan had whilst I was his house physician at the Middlesex Hospital, and in the operation I have recorded I endeavoured to follow as closely as possible Dr. Duncan's methods. The patient is now practically convalescent and has had an uninterrupted recovery save slight vomiting which commenced about twelve hours after the operation; this was stopped by means of iced champagne. The child (a male) is alive and doing well.

Leicester.

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE,
Newcastle-on-Tyne.—The prizes and scholarships will be presented at the opening of the Winter session by the Right Honourable Lord Barnard.