amœbic infection and in the hopes that it might influence the hepatic pain. It did so very effectually, as, after a few doses, the pains disappeared and did not return. Here, again, there was not the slightest effect on the filarial embryos. We have not put the record of

TABLE I.
A. Number of filarial embryos in 20 c.mm. of blood.
B. Number of grains of tartar emetic injected, these being given in the afternoons between 4 and 5 P.M.
The examinations were made at 11.55 P.M. on every occasion.

Date in 1920.	A.	B.	Date in 1920.	A.	B.	Date in 1920-21.	A.	B.
Oct. 18	42	—	Nov. 16	30	—	Dec. 16	25	2½
19	36	—	17	22	—	17	20	—
20	46	—	18	15	1	18	15	—
21	2	—	19	12	—	19	20	—
22	0	—	20	21	—	20	20	2½
23	3	—	22	16	1	21	24	—
24	5	—	23	28	—	22	15	—
25	10	—	24	25	—	23	19	2½
26	9	—	25	26	1½	24	19	—
27	51	—	26	18	—	25	11	—
28	20	—	27	10	—	26	19	—
29	32	—	28	12	—	27	13	2½
30	33	—	29	26	1½	28	24	—
31	44	—	30	27	—	29	13	—
						30	18	2½
						31	10	—
Nov. 1	20	—	Dec. 1	23	—	Jan. 1	20	—
2	32	—	2	17	2	2	22	—
3	27	—	3	20	—	3	15	2½
4	47	—	4	16	—	4	10	—
5	25	—	5	29	—	5	20	—
6	46	—	6	15	2	6	12	—
7	29	—	7	30	—	7	20	—
8	21	½	8	40	—	8	12	—
9	37	—	9	30	2½	9	15	—
10	32	—	10	30	—	10	—	—
11	22	—	11	29	—	11	—	—
12	51	1	12	20	—	12	—	—
13	44	—	13	17	2½			
14	26	—	14	22	—			
15	25	½	15	20	—			
								31 gr.

these doses upon the chart so as not to complicate it, but for those who are interested it may be stated that emetine hydrochloride injections were begun on Nov. 19th, and continued nightly—with the exception of the days when antimony was given—until Dec. 4th, 12 doses of 1 gr. each being administered in all.

CASE 2.—History: A. T., a native of India, was born near Madras and lived in that neighbourhood all his life till he came to England to study in July, 1920.

Previous illnesses: Enteric, no malaria, dysentery as a boy; again two years ago; cured by emetine injections.

Present illness: A month ago (November, 1920) pain developed in front of the internal malleolus of left leg. This was worse on walking. A Scott's dressing was applied and the pain disappeared. About the same time some slight oedema was noticed over the left tibia. Patient, a doctor, suspected filarial infection and examined his night blood. Embryos of *F. bancrofti* were found.

Examination: Systems nothing abnormal. Legs: left calf (14") bigger than right (13"); slight oedema along tibia. No enlargement of the glands in femoral or inguinal regions. Never had any inflammatory trouble in either leg, is definitely certain of this. No other signs of filarial infection.

Urine: No albumin, blood, or sugar.
Blood: R., 5,000,000; W., 6600; Hb, 100 per cent. Differential: P.M.N., 65 per cent.; L.M., 3 per cent.; L., 27 per cent.; E., 2 per cent.; T., 2½ per cent.; M., 8 per cent. No malarial parasites. Blood looks quite normal. No eosinophilia. Sample of night blood—not measured—15 *F. bancrofti* embryos in a small film.

Diagnosis: Commencing elephantiasis without precedent inflammation. A rare condition; vide description by one of us (G.C.L.) (Journ. of Trop. Med. and Hyg., March 15th, 1911).

It was resolved to try antimony injections (tartar emetic) in this case also, but owing to the impossibility of the patient lying up completely extensive counts and examinations of the blood were not available. What

TABLE II.
Descriptions of A and B. as Table I.
Examinations at 11.55 P.M. on every occasion.

Date in 1920.	A.	B.	Date in 1920.	A.	B.	Date in 1921.	A.	B.
Dec. 9	55	½	Dec. 23	20	2	Jan. 3	38	2½
13	41	1	27	31	2½	6	35	2½
16	40	1	30	60	2½	10	60	2½
20	45	1½						
								18½ gr.

was done was as follows. The patient came into hospital about 4 P.M., had his injection, stayed in the night—so allowing of his midnight blood being taken—

and then went out to his work next morning. Table II. gives the result of the blood counts (measured quantities) and the dosage of antimony employed.

It will thus be seen that in this case also there was no beneficial effect from the antimony injections, and after the careful study of these two cases it is difficult to see how the drug can be of any use at all in such infections.

It is, however, by the intravenous route, that we must hope for future success, and we are now considering the possibility of trying other drugs in a similar manner. The arsenical group also appears to be useless, so unless some of the other metals prove efficacious little remains to be done and the treatment of filariasis will remain in its present unsatisfactory condition. Emetine, as we have shown in Case 1, also had no effect upon the infection.

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

A CASE OF ACUTE ASCENDING PARALYSIS OCCURRING AS A COMPLICATION OF MEASLES AND TERMINATING IN RECOVERY.

By C. R. BOX, M.D., B.Sc. LOND., F.R.C.P.

THE following case seems worthy of record on account of its rarity. The cord inflammation present was evidently either toxæmic or infective in character, ascending in type, and, from the dissociated character of the accompanying anæsthesia, presumably situate in the central grey matter. The case was under the care of Dr. R. W. Rix, of Sudbury, who made the notes.

A girl of 14 was taken ill on April 20th, 1920, and was kept in bed. On the 24th measles declared itself. The temperature was 103° F., the rash of average intensity, and the child was not more ill than is usual with measles. Two days later the temperature had fallen to 99°, and the patient appeared well on the way to recovery, but next day the temperature rose again to 103°, although no pulmonary complication could be detected.

During the night the child attempted to get out of bed and found that she could not stand. After this she had a constant desire to micturate but could not pass water properly, a few drops only coming away at each attempt. The next day when examined there was paralysis of all the muscles of both legs except the hamstrings and the flexors and extensors of the great toes; these muscles were extremely weak. The muscles of the abdominal wall were acting, although feebly. Tactile sensation seemed intact, but loss of appreciation of heat and cold came to light in a curious manner; the abdomen was painlessly burned by a hot-water bottle during an attempt to stimulate the bladder. The knee-jerks and abdominal reflexes were absent. The bladder was obviously distended and overflow incontinence occurred on coughing. The temperature was 102° and moist sounds were audible in the lungs. Later in the evening 20 ounces of urine were withdrawn by catheter, and the administration of urotropine in 10 gr. doses every four hours was commenced. The next day the recti abdominis were paralysed and the cough ineffective, although the intercostals were still working. The legs were quite helpless.

On the 30th—six days after the appearance of the measles rash and the fourth day of paralysis—I saw the patient. With the exception of very slight power of extension of the left foot the legs were completely paralysed; so also were the recti abdominis. The intercostals appeared weak and cough was ineffective. The patient also complained of slight loss of power in the left arm, which she discovered on attempting to use a small nail-file. Up to the level of the sixth dorsal segment appreciation of pain and of heat or cold was absent, although tactile sensation appeared to be intact. Sense of position was present; there was no limiting zone of hyperæsthesia. No definite loss of power and no defect of sensation could be found in the arms. The ocular fundi were quite healthy and there was no cranial nerve paralysis. The right knee-jerk was absent, the left very sluggish. The abdominal reflexes were in abeyance. During the period from the 27th to the 30th the temperature varied between 101° and 102°.

On May 1st there was evidence of commencing recovery, the cough becoming much stronger and the temperature lower. The next day the temperature became normal and voluntary movement of the toes appeared, followed later by movements of the ankles. From this time improvement was continuous. Recovery took place in the following order: Rotators of hip-joint and sensation of slight discomfort when pricked on the 4th. Abduction and adduction of both thighs with slight power of extension of knees, flexion of right knee and return of left knee-jerk on the 5th. On the same day the patient for the first time complained of the discomfort of the burn on the abdomen and the sense of heat and cold returned to the front of both legs. All movements of the legs were present on the 6th, and heat and cold sense had returned everywhere. On this day the patient passed water naturally for the first time since April 28th

The abdominal muscles contracted voluntarily two days later and the feet could be lifted off the bed. The knee-jerks returned and the plantar reflexes, the latter being doubtfully extensor. By June 8th the patient walked well with the exception of slight foot-drop on the left side. The knee-jerks gradually became exaggerated and the plantar response was extensor in type. For some time the bladder remained irritable, possibly on account of the urotropine. It was discontinued on the 13th. During the whole period of paralysis the patient was aware when the bowel was going to act, but at first could not control it; after May 29th, however, control was gradually re-established.

At the time of sending this report, seven months after the commencement of her illness, the only evidences of what the patient passed through are visible exaggeration of the tendon-jerks in legs and arms, absence of the superficial abdominal reflexes, and a very doubtful extensor response in one foot. Over a small area of skin at the back of the left knee she experiences a sensation of what she terms numbness where there is slight impairment of appreciation of heat and pain. Micturition is at times somewhat imperative and her legs easily become tired.

Reference to similar cases will be found in Sir Dawson Williams's article on measles in Sir Clifford Allbutt's "System of Medicine," and recovery appears to be the rule rather than the exception. Sir Thomas Barlow has recorded a case in which disseminated myelitis was found in a case of measles which proved fatal.

Devonshire-place, W.

PERCENTAGE AND FRACTIONAL DILUTIONS.

BY WILLIAM FLETCHER, M.D. CANTAB.,

BACTERIOLOGIST, INSTITUTE FOR MEDICAL RESEARCH, KUALA LUMPUR, FEDERATED MALAY STATES.

My excuse for writing this note, which may appear puerile and unnecessary to those who have had a mathematical training, is that most medical men have but little knowledge of figures, and I have seen them toiling, with knitted brows and well-sucked pencils, in their efforts to discover how to prepare, for instance, a 33 per cent. from a 50 per cent. solution; while well-known text-books devote several pages to tables for the purpose of making higher from lower dilutions.

The average civilised man can count two quite easily; for instance, he knows how to prepare a 40 per cent. solution from one of 80 per cent. by taking one part of the latter and making it up to two parts by adding an equal quantity of the diluent. This is the same thing as taking 40 parts and adding sufficient diluent to make 80. What is not generally realised is that all other dilutions can be prepared on the same principle; for example, a 30 per cent. solution can be made from one of 50 per cent. strength, by taking 30 parts of the latter and making it up to 50; or a 40½ per cent. solution can be prepared from one of 79½ per cent. by taking 40.25 c.cm. of the latter and adding sufficient diluent to make 79.5 c.cm. That is to say, an x per cent. solution can be prepared from a y per cent. solution by taking x c.cm. of the latter and diluting it sufficiently to make y c.cm.

The preparation of other fractional dilutions is equally simple. As everyone knows, a 1 in 10 (written 1/10) solution can be made from a 1 in 5 (1/5) solution by taking 5 parts of the latter and diluting it up to 10 parts, but it is not generally known that all dilutions can be prepared in the same way; that, for instance, a 1/97 dilution can be made from a 1/8 dilution by taking 8 parts of the latter and making it up to 97. In short, a $1/x$ solution can be prepared from a $1/y$ solution by taking y c.cm. of the latter and adding sufficient diluent to produce x c.cm.

By this method the medical man can not only calculate quickly but do it "in his head."

A TRI-ORCHID.

BY V. R. SUNDARESA AYYER,

CAPTAIN, I.M.S.; COMMANDING NO. 15 SANITARY SECTION, KARACHI.

THE following note may be of interest, since I can find no record of a similar case in the medical literature at my disposal.

The patient, R., was an enrolled follower, aged 19, a native of the Trichinopoly District, in South India. He arrived at the Followers' Central Depot, Kirkee, in August, 1918, and was medically examined when about to proceed in a draft for overseas service in October, 1918. A third testis was found

above the left normal one, with a separate globus major and minor and a separate cord, distinctly traceable alongside the normal left cord up to the left internal abdominal ring. It was moored to the left wall of the left sac of the scrotum

above the normal left testis. The component parts of the third cord were easily felt, and the "testicular feel" on pressure over this gland was the same in every way as that over the other two normal glands.

The after-history of the patient is not recorded, as his present whereabouts cannot be traced.

Medical Societies.

ROYAL SOCIETY OF MEDICINE.

CLINICAL SECTION.

EXHIBITION OF CLINICAL CASES.

A MEETING of this section of the Royal Society of Medicine was held on Jan. 14th, Sir ANTHONY BOWLBY, the President, being in the chair.

Several interesting cases were shown, among which the following were included.

After-results of Ligature of Left Subclavian Artery for Aneurysm.

Mr. W. G. SPENCER showed a patient in whom the first part of the left subclavian artery was ligatured for aneurysm in 1899. When admitted to hospital at the age of 43 there was an aneurysm of the second and third part of the left subclavian artery the size of a duck's egg. He had had syphilis 14 years previously, and three years before admission he had been in a hospital for ten months suffering from (? syphilitic) bronchitis with profuse hæmoptysis, which was, however, diagnosed as incurable phthisis. He had a gumma on the left leg and another on the left thigh. In April, 1899, the first part of the left subclavian artery was ligatured, but pulsation in the aneurysm recurred and in the following June the vertebral and inferior thyroid arteries were tied by reopening the previous wound upwards, and the third part of the subclavian was tied through the axilla. The patient had now been readmitted complaining of pain along the course of the sixth to ninth left intercostal nerves. He was now 65, and he had a markedly emphysematous, rigid chest. There was no sign of the former aneurysm except the scars. A skiagram of the chest and also auscultation had failed to find positive evidence of a thoracic aneurysm.

The PRESIDENT remarked upon the successful issue of the operation, and said that the usual happening after ligature of the larger vessels for aneurysm was the subsequent development of intrathoracic aneurysm beyond the reach of further operative treatment.—Dr. F. PARKES WEBER said that he was interested in the fact that this patient must have had syphilitic disease of the lung at a time when its existence was denied.