

58½ cm., girls 56·75. The following conditions were found to be present: Adenoids in 20 boys and 7 girls; swollen glands, 103 cases each; 30 boys and 18 girls had rickets; 7 children had organic heart disease; 12 boys and 35 girls suffered from goitre; 9 boys and 14 girls from myopia; 6 boys and 2 girls had herniæ; 39 boys and 27 girls had an apical lesion with a negative Pirquet test; whilst only 3 each had positive Pirquet. Enlarged tonsils were found in 34 boys and 19 girls, 4 boys and 16 girls were deaf, whilst 12 boys and 27 girls had scoliotic changes and 7 boys were hydrocephalic. The number of backward cases amongst older school children was found sufficiently large to justify the establishing of special classes for them. It appears to be necessary very early to pay special attention to defects of the vertebral column; faulty sitting in school is not so much to blame for scoliosis or flat breast, but an organic change, manifest already in very early life. Gymnastics are required to control such conditions. Also myopia and deafness are often the result of a previous disease or disposition, and not necessarily only due to the traumatism of school teaching. Glands in children are only of importance if they appear in the supraclavicular region—mostly associated with pathological changes in the apices of the lungs.

March 9th.

## The Services.

### ADDITIONAL PAY FOR OFFICERS ON COMMITTEES.

AN Army Order provides that a field officer on full pay who is appointed to serve on a committee or to act as its secretary in virtue of possessing special scientific knowledge not acquired as part of his normal military duties will receive 15s. of additional pay for each day on which such committee sits. A captain or subaltern serving in similar circumstances will have additional pay of 10s. a day.

### ROYAL ARMY MEDICAL CORPS.

Lieut.-Col. E. A. Bourke is placed on retired pay on account of ill-health contracted on active service.

Temporary Captains relinquishing their commissions and retaining the rank of Captain: J. Anastasi and A. G. Wright.

### TERRITORIAL FORCE.

Lieut.-Col. J. H. Harris, T.D., resigns his commission and retains the rank of Lieutenant-Colonel, with permission to wear the prescribed uniform.

Capt. P. J. Gaffikin to be Major.

Capt. and Bt. Major R. E. Barnsley, R.A.M.C., to be Adjutant of the R.A.M.C. School of Instruction, Northern Division (T.F.).

Lieut.-Col. A. B. Lyon is appointed to command 1st London Casualty Clearing Station.

Major J. R. Benson resigns his commission and is granted the rank of Lieutenant-Colonel.

Major A. W. French and Capt. W. T. P. Meade-King resign their commissions and are granted the rank of Major.

Major A. C. Roper resigns his commission and retains the rank of Major.

Capt. (Bt. Major) E. G. Smith resigns his commission and retains his rank.

Captains resigning their commissions and retaining the rank of Captain: C. F. Backhouse, A. J. H. Iles, S. L. Brimblecombe, C. E. M. Jones, C. H. Maskew, A. V. Maybury, C. F. Glinn, G. C. F. Robinson, B. Dyball, R. V. Solly, R. Jaques, H. Andrew, C. D. Lindsey, W. L. Pethybridge, J. L. Wright, C. Lamplough, J. E. F. Palser, A. W. Power, M. H. Way, and C. H. Saunders.

4th Southern General Hospital: Lieut.-Col. J. E. Square resigns his commission and retains the rank of Lieutenant-Colonel. Major (Bt. Lieut.-Col.) J. W. Gill resigns his commission and retains his rank.

5th Southern General Hospital: Major N. E. Aldridge resigns his commission and retains the rank of Major.

### TERRITORIAL FORCE RESERVE.

Lieut.-Col. C. A. Lees, from 2nd London (County of London) General Hospital, to be Lieutenant-Colonel.

LITERARY INTELLIGENCE.—Messrs. W. B. Saunders Company announce for early publication Keen's "Surgery," volumes seven and eight, which will complete the work.—The Williams and Wilkins Company, of Baltimore, U.S.A., announce the early appearance of the first number of the new *American Journal of Tropical Medicine*, of which the annual subscription price, net postpaid, to British subscribers is 23s. The journal, which will appear six times a year, is edited by Dr. H. J. Nichols, Major, U.S.M.C., Army Medical School, Washington, D.C.

## Correspondence.

"Audi alteram partem."

### VANISHING TYPHOID IN PHILADELPHIA.

To the Editor of THE LANCET.

SIR,—Thirty years ago Philadelphia had a death-rate from typhoid fever of 63·9 per 100,000 inhabitants. Last year it was 3·3 per 100,000. The reason is—filtered water. Just how consistently the fall occurred during the installation of the filtration system is well worth noting. This system was commenced in 1899, was completed in 1912, and cost about 28 million dollars. It has been estimated that if the same rate of mortality had held in 1920 as averaged from 1898 to 1908 there would have been 900 deaths and about 6000 prostrated from typhoid; instead of this the total deaths in the entire city were 60, and almost one-half of these were traceable to outside sources of infection. Considering the population of 1,837,924 on July 1st, 1920, this is a wonderful showing. Philadelphia is certainly trying to answer the historic question: If preventable, why not prevented? During the period 1862–1870 there occurred the very high average of 79·9 per 100,000; the next decade showed 58·1 and the rate of 45·2 in 1901 to 1910 suddenly broke to 12·5 in 1912, when all the water was filtered. The recent years show the following rates: In 1914 the rate was 7·5; in 1917 it was 6·2; in 1918 it was 4·8; in 1919 it was 4·4; and in 1920 it was 3·3. Incidentally the death-rate from diarrhoea and enteritis has fallen 40 per cent. in eight years and the mortality of children under 1 year 20 per cent.

Philadelphia takes her water-supply partly from the Delaware river and partly from the Schuylkill river. Higher up on both these rivers are active manufacturing cities such as Trenton and Norristown, but the problem seems to have been solved to render the water pure notwithstanding this handicap. When the filtered water was first sterilised it was accomplished by the use of hypochlorite of lime; but since 1914 liquid chlorine has supplanted the hypochlorite, and is applied as required to the effluents of all filter stations. The quantity of liquid chlorine is determined by results of daily analyses of effluents. Thus Philadelphia fortunately provides for all its inhabitants water that is sterilised after filtration.

I am, Sir, yours faithfully,

GUY HINSDALE, M.D.

Hot Springs, Virginia, March 12th, 1921.

\* \* Dr. Hinsdale's letter provides a pendant to the annotation on water-borne typhoid in our issue of March 12th.—ED. L.

### GRAVES'S DISEASE.

To the Editor of THE LANCET.

SIR,—In the recent discussion on Graves's disease at the Royal Society of Medicine, reported in recent issues of THE LANCET, it seems strange that so little was said as to the danger of removing, or interfering with the blood-supply to, the parathyroid glands, for it is a very real risk. Sir William Stokes removed one-half of an enlarged thyroid from a girl of 18 years; the case did well; three and a half months later he removed the remaining half; in 11 days there occurred mental torpidity, slowness of speech, swelling of eyelids, face, and hands, and also dilatation of pupils, disturbances of respiration, and rapidity of pulse and death occurring 21 days after operation. There is little doubt that the latter group of symptoms and the fatal termination were due to the removal of the parathyroids. It is clear that in partial operations the complication is rare, and it seems natural to think that the best operation in Graves's disease would be, as Crotti recommends, to remove the front part of both lobes and the isthmus, avoiding the back part of the lobes where the parathyroids and recurrent laryngeal nerves lie; but the number and distribution of the parathyroids vary and the danger cannot be wholly avoided; we are

therefore indebted to Dr. W. S. Halsted for informing us how to recognise and treat the symptoms. A patient under his care on the eighth day after a thyroid operation had several attacks of numbness commencing in the lips and extending to the face and arms. The patient said the attacks were indescribably awful and that she would sooner die than have many more of them. Dr. Halsted was so confident of the cause of the symptoms that he immediately sent to Dr. W. G. MacCallum for dried parathyroids of beeves; the effect of parathyroid exhibition was almost instantaneous and most marvellous; it is stated that an equally good result can be obtained by the administration of calcium salts. In experiments on the lower animals in which the parathyroids have been removed, in a minority of cases the animals can be kept alive for weeks and months and even years by putting them on a diet consisting solely of milk. This is the best way to exhibit calcium, for 10 gr. of the lactate of calcium only corresponds to 2 oz. of milk, which would probably have no effect. Equally good results, it is said, can be obtained by the salts of strontium, and also by those of magnesium and barium, but as these last two are poisonous they cannot be used; thus there are three specific remedies for aparathyroidea—namely, parathyroids and the salts of calcium and strontium.

It is said there is no specific treatment for Graves's disease, but Dr. Lockhart Gillespie cured three children of about the age of 10 years by giving them each 10 gr. of the iodide and 5 gr. of the bromide of strontium three times a day, in 33, 21, and 30 days respectively.<sup>1</sup> Further, we cannot be sure that the improvement which occurs in cases of Graves's disease when kept in bed and fed on a diet into which milk enters largely is not due in part to the specific action of the calcium in the milk.

There is a connexion between Graves's disease and diabetes; it is therefore interesting to note that Dr. A. S. Donkin, in a farmer with diabetes, by placing him on a diet solely of skimmed milk in 16 days, reduced the amount of sugar in the urine from 25 gr. to the ounce to nil, and this notwithstanding the large amount of sugar in 8 pints of skimmed milk.

I am, Sir, yours faithfully,

WALTER EDMUNDS.

Carlton-road, Putney, S.W., March 19th, 1921.

## THE PATHOLOGY OF RELAPSING FEVER.

To the Editor of THE LANCET.

SIR,—In an account of the discussion following Lieutenant-Colonel J. C. Kennedy's paper on this subject, read at the Royal Society of Tropical Medicine and Hygiene and published in THE LANCET on March 12th, I am quoted as having said with reference to relapsing fever in Mesopotamia "the case mortality among Arabs was 8 per cent., among Indians 1 per cent., &c." The figures given by me related to a series of cases in 1917 and 1918, and were: "The case mortality among Indians was 8 per cent., among Arabs 1 per cent., &c."

I am, Sir, yours faithfully,

W. H. WILLCOX.

Welbeck-street, Cavendish-square, W., March 21st, 1921.

## VENEREAL INFECTION IN RHINE ARMY.

To the Editor of THE LANCET.

SIR,—I have always found the War Office records regarding venereal disease to be kept most accurately and stated (for public consumption) most confusingly. What we want to know is: (1) What is the V.D. contraction rate for each month, calculated at the rate per 1000 per annum for the Rhine Army, from Jan. 1st, 1919, to Jan. 31st, 1921? (2) What is the average strength of the Rhine Army and the average number of V.D. cases under treatment in hospital or otherwise?

To show how the same facts may be presented in a most misleading manner let me set out the following: On p. 111 of Dr. E. B. Turner's evidence before the

National Birth-Rate Commission (Special Enquiry) in November last:—

"In Cologne the numbers varied, hovering about 12,000 men. When I was there the 25th General Hospital, Venereal Disease, with 500 beds, was full, and in addition there were those who were being treated at E.T. centres for mild cases."

And Dr. Turner also told the Commission (I was present at the time) that there was a "waiting list" of V.D. patients. Now if the number of cases actually under treatment, in hospital or otherwise, was 600 for 12,000 troops that would be a rate of (for hospital, plus, say, 100 E.T. cases) 500 per 1000 per annum. This is not an unbelievable rate, because the American Forces in Paris had for January, 1918, a rate of 480 per 1000 per annum. That fact is stated by Lieutenant J. E. Moor,<sup>1</sup> who was the M.O. i/c of the American Medical Report Centre, Paris District. Then disinfection was thoroughly applied, some 72 prophylactic stations being ultimately established, and enormous quantities of calomel tubes were distributed officially and unofficially, and the rate at the end of 1918 for the American forces in Paris district had dropped to 94.6 per 1000 per annum, a great tribute to the American medical officers and the American Red Cross, hampered as they were by public ignorance and mistaken opposition. Later they were misguided also by certain English officials, and began to rely only on depôt disinfection, and hence in the beginning of 1919 their rate had risen to 148 per 1000 per annum. The rate for all troops in U.S.A. (with depôt disinfection) for six months ending Dec. 27th, 1918, was 150.62 per 1000 per annum, and the rate given in the National Birth-Rate Commission's report for American troops on the Rhine in 1920 averages 142 per 1000 per annum.

Now what is the rate for the British Army on the Rhine? Dr. Turner's figures work out at 500 per 1000 per annum. Sir Archdall Reid, giving evidence in the same place, suggested the rate was from 200 to 250 per 1000 per annum, and we have the following official statements:—

1. "The records show that in our Army on the Rhine, which numbers from 11,000 to 12,000 men, the percentage of troops suffering from V.D. is 2.6."—*Evening Standard*, March 6th, 1921.

2. Sir L. Worthington-Evans told Parliament on March 8th, 1921, that "the monthly average of admissions for V.D. to hospital was 1.4 per cent. of the total strength" for period Jan. 1st, 1920, to Jan. 31st, 1921.

These statements are not necessarily contradictory, but they are certainly confusing, not to say misleading. If "the percentage of troops suffering from V.D. is 2.6" for 12,000, then 312 men are in V.D. Hospital. (But Dr. Turner says there were 500 plus E.T. cases!) The figure quoted by Sir L. Worthington-Evans—1.4 per cent. per month—is equal to 168 per 1000 per annum. If that is the average number of V.D. cases, how can 2.6 per cent., or 312 men, be correct? Still less correct is Dr. Turner's statement of 500 in hospital.

I called on the Rev. Talbot Hindley, of St. John's Vicarage, Upper Holloway, to get his evidence as to the facts (free from the angry and unwarranted criticism to which this gentleman has been subjected, mainly because of something he did not say), and he tells me that he gave five Gospel lectures in the Venereal Disease Hospital at Cologne; that many of the patients were not appealed to by his Mission; but that he was officially informed that over half the patients in the hospital did attend his lectures on each occasion, and that on each occasion his audience numbered over 200 men; thus there would be at least 400 men in the V.D. Hospital, besides those receiving out-treatment, of which he knew nothing. All the men who attended his lectures were hospital patients in blues. If this statement is correct, Dr. Turner's evidence is corroborated and Sir L. Worthington-Evans's statement is contradicted.

Finally, on page 233 of the National Birth-Rate Commission's Report there is published a letter from the War Office stating that the rate for June quarter, 1920, was 53.79 (contraction rate); for September quarter, 1920, 38.38. This means that the rate for the June quarter of 1920 was 215 per 1000 per annum, or

<sup>1</sup> Brit. Med. Jour., Oct. 8th, 1898.

<sup>1</sup> Journal of the American Medical Association, 1920, lxxiv. p. 1158.