according to the rate of the air revolutions through the heating chamber below.

A more complete description must be reserved for a further note after the scheme, if approved, has undergone any improvements recommended by the Royal Army Medical Department.

We are, Sir, yours faithfully,

WILLIAM EWART.

Upper Brook-street, W., Dec. 19th, 1915. CHARLES EWART.

RETENTION OF URINE IN THE ADULT, WITHOUT APPARENT CAUSE, AS A PATHOGNOMONIC SIGN OF TUBERCULOUS MENINGITIS.

To the Editor of THE LANCET.

SIR,—Dr. D. W. Keiller Moody's interesting article in your issue of to-day on retention of urine as a symptom of tuberculous meningitis recalls a paper by Dr. S. Vere Pearson, which appeared in the *Clinical Journal* in December, 1902, entitled "Tuberculous Meningitis in Adults Occurring as a Terminal Event in Chronic Pulmonary Tuberculosis." Though Dr. Pearson's paper deals primarily with tuberculous meningitis in connexion with pulmonary tuberculosis, his remarks also have reference to meningitis complicating tuberculous lesions other than pulmonary. He divides the cases into three classes: Those in which the signs of tuberculosis are: (1) Well recognised and advanced; (2) recognised but not advanced; and (3) indefinite or absent. Dr. Moody's article is chiefly concerned with the cases which fall under the third heading, which is the most important one from a diagnostic standpoint. For the onset of meningitis is a matter of grave concern when it occurs in a patient who is enjoying good or even moderate health, whereas its appearance in a patient with advanced pulmonary tuberculosis merely hastens the end. He gives notes of four adult patients, who subsequently developed tuberculous meningitis, in whom there was retention of urine without apparent cause, and he has come to look upon it as a pathognomonic sign of tuberculous meningitis in adults.

Dr. Pearson came to the same conclusion, for he writes:—

Retention of urine occurring in a patient with chronic pulmonary tuberculosis, whether the disease is advanced or only slight, should always suggest tuberculous meningitis where no local cause for the retention can be found, for it is often one of the earliest symptoms of the disease.

Both authors also state that the importance of the symptom resides in the fact that the ordinary evidences of meningitis are usually absent in the tuberculous meningitis of adults, at all events in the early stages of the disease. Thus two observers, working independently, have described an association which should prove of much value in diagnosis; and the publication of Dr. Moody's article will lead to a greater confidence in accepting its significance.

I am, Sir, yours faithfully,

H. E. SYMES-THOMPSON.

Cavendish-square, W., Jan. 1st, 1916.

* * In another column the sad news is announced of the death of Surgeon D. W. K. Moody on H.M.S. *Natal*.—ED. L.

ILLUMINATION IN OPERATIONS.

To the Editor of THE LANCET.

SIR,—In his letter on this subject in THE LANCET of Dec. 4th, 1915, Mr. J. L. Aymard points out the advantage of a concentrated light in a partially darkened room as contrasted with a diffused light which is only partially concentrated. I think most

surgeons will agree that a properly concentrated light is the ideal one for operating theatres, but there has hitherto been some difficulty in obtaining a suitable light. The fault to be found with the illumination in most operating theatres at present is that the light is either not sufficiently concentrated upon the operating field, or else that it is too easily obstructed by the surgeon and his assistants. The disadvantages of a powerful light just over the operating table (the most usual form of lighting) are that the heat from such lights is exceedingly uncomfortable to the surgeon, and that dust may easily be shaken off the pendant into the wound. The use of a powerful arc light fixed outside the theatre, the rays from which are reflected by mirrors, to some extent solves this difficulty, but has the serious objection of being very complicated and easily put out of order.

I believe by far the most suitable light is that of the type which we have installed at St. Mark's Hospital. It consists of three motor-boat headlights of 50 candle power each, fitted in the ceiling, two of them being in the corners of the ceiling at one end of the room and one half-way between the two corners of the ceiling at the other end of the room. The beams from all three are made to converge on to a circle about 1½ feet in diameter at the operating table. The lamps are fixed and the table is moved to get the light in the correct position. The light is intense, resembling brilliant sunlight, and is cold and without shadows. As the rays come down from the ceiling at an angle of about 45° the surgeon and his assistants can move about freely without obstructing the light. The rest of the room is in semi-darkness. This is an ideal arrangement, giving an intense light where it is wanted without worrying the eyes, since only the operating field is illuminated. The lamps are air-tight, and the reflectors only require cleaning once a year, while the lamps require no attention. The light is controlled by ordinary switches. The installation is quite simple, all that is required being three good motor headlights which give a parallel beam of light, and a transformer to cut down the current to 6 volts. The latter is necessary on account of the extremely small filaments required to enable the whole of the light to be brought within the focus of the reflectors. The whole system only cost about £20. It has now been in use at St. Mark's Hospital for 18 months, and has proved an entire success.

I am, Sir, yours faithfully,

Jan. 1st, 1916.

J. P. LOCKHART-MUMMERY.

THE DEMAND FOR LOCUM-TENENTS.

To the Editor of THE LANCET.

SIR,—May I through your columns appeal to practitioners requiring a locum-tenent during their absence at the front or otherwise not to be misled by representations that owing to the scarcity of men they will have to pay 9 or 10 guineas a week to secure a deputy. As a matter of fact, owing to the generous way in which retired and elderly practitioners have come forward, to a certain number being available on return from the front, and to others ineligible for military service, the supply of locum tenents is at present in excess of the demand, and trustworthy men can be had at 7 guineas a week. Those requiring help should refuse to pay the excessive fees in some cases demanded, especially by men who ought to be doing their duty with the army.—I am, Sir, yours faithfully,

PERCIVAL TURNER.

Adam-street, Adelphi, London, W.C., Jan. 3rd, 1916.