

o'clock in the morning till past eleven o'clock at night (except a short interval at dinner) in seeing patients and in writing answers to letters."

*The Edinburgh Medical Journal.*—Dr. D. Berry Hart describes the use of plaster moulds as a basis for models in gynaecology and obstetrics. The patient being in the lithotomy posture, sheets of strong paper are so arranged between the table and the outer aspects of the thighs as to form a space into which plaster can be poured. Casts are then taken from the moulds thus obtained and after thorough drying are coated with boiled linseed oil and coloured with oil paint; they are very useful to teachers. Dr. Logan Turner shows that the interior of the larynx and trachea can be examined without a laryngeal mirror by the use of an instrument called the autoscope, which depresses the tongue and carries a small electric lamp. Considerable experience is necessary for success in this method of observation which was introduced by Dr. Alfred Kirstein of Berlin. Dr. J. W. Ballantyne continues his articles on Teratogenesis and Dr. J. G. McNaughton of the Birmingham City Hospital contributes an account of seventeen cases of diphtheria, all of which were treated with antitoxin and made good recoveries.

*Cornhill's* first number under its new editor is a good one. Mrs. Ritchie has a delightful paper upon the first number of "Cornhill" with many reminiscences of its then editor, her father. Thackeray's idea was that every man could write something about his profession which no one else could say, and so he asked Sir Henry Thompson "to describe cutting off a leg as a surgical operation, and do it so that a ship's captain at sea, who had not a doctor on board, would be able to take a man's leg off by reading your description." Is it Tom Cringle who describes a captain cutting off a man's legs with the "chart"—i.e., an anatomy book—propped up on the patient's chest, or is the incident narrated in Michael Scott's other novel? We are glad to see that Thackeray, great as he was, could lose MSS., as is apparent from a note of Sir H. Thompson to the present editor.

*The Journal of Laryngology, Rhinology, and Otology.*—Dr. Norris Wolfenden discusses Dr. Smith's report on Diphtheria and School Boards, a subject upon which we have given an opinion in our issue of May 23rd, 1896. Dr. John Macintyre's address at the demonstration given before the British Laryngological Association is a very interesting one. As far as we have seen Dr. Macintyre's work with the newly-discovered rays is far ahead of any other at present carried out in this country, but we fancy, although we have not actually seen Dr. Macintyre's results, that the new tube demonstrated in our office by Dr. Oscar Levy gives even better results than Dr. Macintyre has obtained.

*The Pall Mall Magazine.*—Mr. Arthur Griffiths has a rather good story about a nurse of Spanish beauty who, like her celebrated prototype, the Marchioness Brinvilliers, used to poison her patients and, finally, on being found out, poisoned herself. Mr. Griffiths is to be commended for the accuracy of his medical details, but he should not introduce the name of a living medical man.

## ROENTGEN RAYS.

PHOTOGRAPHY OF RENAL CALCULUS; DESCRIPTION OF AN ADJUSTABLE MODIFICATION IN THE FOCUS TUBE.

By JOHN MACINTYRE, M.B., C.M. GLASG., F.R.S. EDIN.

DURING the past four months I have, at the request of several physicians and surgeons, tried to photograph some cases in which the presence of renal calculus was suggested by the symptoms present. A control experiment was first undertaken at the request of Dr. Finlayson, who gave me a

prepared specimen of renal calculus. With one minute's exposure, using a three-inch spark coil and the ordinary form of Newton's tube, an excellent negative was obtained showing the structure and outline of the organ and in the centre the calculus. The experiment was made with the view of testing whether renal calculus itself could be photographed. The next step was to try the experiment in the living subject. Five different patients suspected of having renal calculus were photographed with negative results. In most instances more than one negative was taken, and while the outline of the body, the deep-seated muscles, with fasciæ, ribs, pelvis, and spine, could all be made out (in one or two cases a faint indication of the kidney itself), no negative showed anything like a calculus. The question naturally arose, What value was to be placed upon the negative evidence which was obtained? It will be at once admitted that a positive result under the same conditions or as nearly the same conditions as possible would aid considerably in arriving at a conclusion. This I obtained last month. Dr. James Adams of the Glasgow Royal Infirmary asked me to photograph a patient upon whom he had previously operated for renal calculus. The photograph was taken with twelve minutes' exposure, a six-inch spark coil, and the plate was one of Paget's XXXXX. In this instance, at the correct situation, a picture of an obliquely placed elongated deposit was obtained. Having communicated this fact to Dr. Adams I suggested that he would not obtain a well-formed stone. I have just learned from Dr. Adams that he has operated successfully in the Glasgow Royal Infirmary and that the deposit was quite in accordance with what he had seen in the photograph. At the deepest portion of the old cicatrix an ill-defined mass was found and removed with the spoon. Details of the case will most likely be published in due time by Dr. Adams himself.

### MODIFICATION IN THE FOCUS TUBE.

In some previous communications to THE LANCET I pointed out that a mercury interruptor was valuable, but in one instance a too heavy current was transmitted to the cathode, which caused destruction of the tube. I suggested to some of the instrument-makers that it would be advisable to fuse in several strands of platinum for the cathode instead of one, as is usually done, in order that a heavier current might be transmitted with safety. On placing this suggestion before Dr. Bottomley he informed me that in some experiments made previously to Roentgen's work, where he had desired to pass heavy currents into the interior of a vacuum tube, he had fused six strands of wire into the glass, and a specimen of this was given to Mr. Müller (Glasgow), who has made the tube. The concave cathode was made of aluminium about one inch and a half in diameter, and the square platinum disc was made thicker than usual. A special adjustment was arranged for the latter. Those who read Mr. Crookes's original papers will see that as far back as 1879 he had tried a similar experiment for other purposes.

In making tubes the instrument-maker does not always hit off the exact distance between the cathode and platinum plate. In this case the cathode occupies the usual position, but at the other end of the tube; directly opposite a narrow glass tube supports the platinum. The latter was joined to a short straight piece of copper wire, round which a few turns of thin aluminium wire were wound, so as to form a slight spring. The copper wire was slipped into the glass tube and could be drawn up and down as required. After exhausting the tube in the ordinary way if we tapped it, holding the cathode downwards, the platinum fell towards the aluminium disc. If, on the other hand, the position of the tube were reversed the platinum could be tapped downwards and so the distance was increased. The anodal connexion was made independently of the platinum disc at one side of the tube. With such a tube one can obtain the very best effects by adjusting while the results are observed on a fluorescent screen.

**SOCIETY OF MEDICAL OFFICERS OF HEALTH (MIDLAND BRANCH).**—At the meeting of the above branch, held in the Council House, Birmingham, on July 2nd, Dr. T. Ridley Bailey was unanimously chosen as President-elect for the ensuing year. Dr. Bailey, who is also President-elect this year of the Staffordshire Branch of the British Medical Association, has for many years been medical officer of health for Bilston.