whether the disease will be harmless in its results, or likely to lay the foundation of organic stricture. The endoscope, however, alters all this. By its aid the urethra can be seen and minutely examined from its orifice to the neck of the bladder, and after the eye has had some considerable practice in the use of the instrument, each single speck of disease can be seen, and, if need be, subjected to precise local treatment. My experience of the endoscope is almost confined to its employment in diseases of the urethra. I have a few times used the lantern for illuminating the ear, in which I have found it very useful, but having, within the last few years, sent my ear cases to Dr. Proudfoot, lecturer on diseases of the eye and the ear in Bishop's University, I have not had opportunity for its application in this way. There is, however, no portion of the human body into which a straight tube can be introduced, in which it will not be found of service. Dr. Cruise claims that with it the interior of the bladder may be thoroughly investigated; calculi examined, and information gained as to their size, figure and number, also whether loose or encysted. The rectum has been several times examined by me with the endoscope, far beyond the reach of the finger, upon one or two occasions, Dr. Drake, of this city, assisting me. The number of cases where I used it to examine the rectum was too small to give any great results, but it revealed considerable ulceration in one case, and I can conceive of its employment being useful in this locality. The instrument has also proved useful in examining the interior of the uterus. Let me now describe the instrument. In the first place there is a tube, or speculum, which is introduced into the cavity to be examined. At one extremity of this, a mirror of polished silver, perforated in the centre, is placed at an angle of 45°. The function of this mirror is to reflect the light which is placed laterally into the tube, so as to illuminate it to the end. As the tube is very small in calibre, a most brilliant light is required, and in order to obtain the best effect it is made to converge slightly on the mirror. This convergence is attained by interposing between the light and mirror a plano-convex lens of suitable focal length. The light being sufficient, the lens properly adjusted, the mirror bright and correctly placed with respect to the tube, it becomes a matter of facility for the eye, looking through the perforation in the mirror, to see clearly to the bottom of the speculum. The description I have given in most particulars would serve almost as well to describe the endoscope of Desormeau, as that of Cruise of Dublin. But Desormeau's endoscope was deficient in illuminating power, and this is the point in which Cruise claims his instrument to excel. In experimenting with polarized light, he became aware that one of the brightest illuminations which can be obtained is that given off by the thin edge of the flat flame of an ordinary petroleum lamp. Morever, the intensity and steadiness of the light he found much increased by adding ten grains of camphor to the ounce of petroleum. The camphor increases the quantity of carbon in the petroleum, but the draught being good its combustion is ensured. To obtain the best effects from the light, a few precautions are necessary. The room in which the examination is made, as far as possible should be darkened; the lantern must be held steadily in a vertical position, whatsoever the position of the exploring tube may be. A variety of specula are required for the exploration of the different regions of the body. For general use the urethral tube, which I now show you, is the one generally employed. It consists of a narrow portion, about the size of a large catheter, and just six inches in length; the remainder gradually dilates to form the part which fits into the receiving locket of the lantern. A wire stilette, surmounted by a plug, which can be inserted into the tube, is used to facilitate its introduction into such narrow canals as the urethra. At one side there is an opening, wide above and narrow below, intended to admit probes, carrying either cotton wadding or sponge to wipe the parts under examination, or to apply caustics if deemed necessary. Three or four sizes of these urethral tubes are required, and I have several sizes, as you will perceive. They answer very well for other situations, such as the uterine cavity and nasal fossæ. In the latter situation, the instrument has several times been enabled to locate exactly the attachment of a nasal polypus. A tube is also provided for examination of the rectum, which I now show you.

The most useful field for the employment of the endoscope is the urethra. By its aid diseases of this part, otherwise merely subjects of con-