ignited charcoal-points, and electric heat, all of which either have some disadvantage or are ineffectual. I believe nitric acid to possess these advantages as a caustic in uterine practice. It requires no special preparation, and is always at hand; it cannot affect the system as may a salt of mercury; it does not spread like potassa cum calce, nor is its action so deep; it produces little or no pain, and no hæmorrhage. These advantages are trivial compared with the fact that, when it has once been properly applied, in the majority of cases no further interference is necessary, and thus that opprobrium of our branch of the profession—the frequent use of the speculum—may be done away with. When the second examination is made, it should be after the lapse of a month; and it will then sometimes be found that there is a small spot requiring a fresh application of the acid, but often the sore is seen to be quite healed, or healing satisfactorily. The eschar separates slowly, and the resulting sore has a very strong tendency to heal. The fresh mucous membrane which forms is not cicatricial in appearance, and, when healing is going on satisfactorily, has a sharply defined edge, and, being of a pale rose colour, contrasts strongly with the bright red colour of the sore. The contraction is greater than follows the use of any other caustic; but this is a great advantage, for, on account of the relaxed state of the tissues, it is just what is required to insure the permanence of the cure. The acid is best applied by means of a small and tightly rolled piece of cotton-wool, which is to be placed by means of an ordinary speculum-forceps in contact with successive portions of the surface, until the whole is covered with a white eschar. In a case of chronic endocervicitis, the acid should be applied to the interior of the open cervical canal; and, if it be not open, the case is not one suitable for this treatment. The contraction which accompanies healing is only to a healthy and natural state, provided the caustic has been used with ordinary prudence. I have never seen anything but good follow its use, and the ease with which a chronic case of cervical catarrh with ulceration or erosion may be cured by it is something marvellous. The bulk of my cases have been hospital out-patients, and the comfort the use of nitric acid has been in their treatment is very great, both in certainty of result and in saving of time. Without local treatment, very little can be done for these patients, for hygienic treatment is generally impossible, and medicinal treatment alone is useless. I shall not take up your time by details of cases, although I have copious notes of about forty, as by trial of the remedy you will soon prove your own opinion of its value.

The use of nitric acid as a caustic is so familiar to us all, especially in diseases of the rectum, that I have had some hesitation in bringing the subject before you, and should not have done so, but that I believe it is only used by two or three medical men engaged in the treatment of diseases of women. It is mentioned incidentally at the conclusion of a paper by Dr. Lombe Atthill, upon its application to the interior of the uterine cavity, that he uses it habitually in the diseases in question; and Dr. Roe of Dublin, in an analysis of the cases of uterine disease (*Dublin Journal of Medical Science*, August 1872), relates a case of extensive ulceration in which he employed it. Mr. Robert Ellis has recommended the use of a saturated solution of nitrate of silver in nitric acid; and I believe Dr. Bennet has mentioned its use. But these writers are exceptions to the general rule. It is not mentioned by Tilt in his admirable work on *Uterine Therapeutics*, nor by any other of our standard authors upon diseases of women, all of whom recommend nitrate of silver, or mention its use as the usual practice.

ON A NEW DOUBLE STETHOSCOPE: "THE HEAD-SPRING STETHOSCOPE".

By R. HARVEY HILLIARD, M.D.

THE object of this design is to produce a flexible double stethoscope which is free from the objections that apply to other instruments of this class. The advantages of a double flexible stethoscope are apparent in a moment's consideration. The ease to the auscultator, who may be seated at his patient's bedside, and with comfort to himself and his patient, to apply the instrument to all parts of the body without painful pressure or other inconvenience to the patients on the one hand, or unnecessary straining to himself on the other, is very plain; and if this can be done without loss of conduction of sound, and with an instrument as conveniently carried in the pocket as the ordinary wooden stethoscope, the superiority of the double instrument would be granted by medical practitioners, and eagerly welcomed as a boon long sought for. The objections, however, have been that instruments of this class are too bulky for ordinary practice, and that the acoustic results have been less perfect than the simple wooden stethoscope in almost universal use.

These objections I believe I have overcome by the instrument I now present to the profession.

The "head-spring stethoscope" consists of two simple tubes of finest India-rubber, very smooth, and equal in calibre, from their attachment to the chest-piece (or pieces) to the well adapted "ear-nipples", which are held in the ears by means of a low spring hinged in the middle for greater convenience of carriage in the pocket, which, by its elasticity, retains its position when carried over the head or under the chin. When it is desired to use the instrument as a differential stethoscope (Fig. 1),

the ends of the tubes, which bear suitable mounts, are screwed into separate collectors or cups; but when a binaural stethoscope (Fig. 2), with single chest-piece, is required (which, for most purposes, is the preferable combination), one of the cups alone is used, to which are attached the tubes by means of a branched body-piece which bears corresponding screw-adjustments. These changes can be made at pleasure and almost immediately. Fig. 3 shows one of the tubes fitted with cup and "ear-nipples" for use as a single flexible stethoscope. I have used the instrument for two years with increasing satisfaction; and I believe that experience will prove that I have not overrated its merits.

Messrs. Arnold and Sons of West Smithfield are the manufacturers; and they have bestowed great pains in executing my instructions.

CHRONIC POISONING BY ARSENIC.

By ARTHUR T. HARRY KERR, L.R.C.S.I., Preston.

THE following case of poisoning by arsenic in the manufacture of cotton is, I consider, of importance from a toxicological point.

John L., aged 28, a weaver, commenced to weave, about the end of September last, a green material. About the 25th of October, he first complained of being ill. At the end of October, his symptoms were loss of appetite, nausea, colicky pains, constipation, headache, emaciation, sleeplessness, strangury, inflammation of the conjunctivæ, with intolerance of light. There was no cutaneous eruption, nor local paralysis, which are usually found in chronic poisoning by arsenic. Taking these symptoms into consideration, and the fact that the others employed at the same material were affected similarly, I was led to suspect arsenic as the cause. Accordingly, I obtained some of the green yarn, and made an analysis of it; and I found it to contain a large amount of arsenite of copper (Scheele's green).

This patient was treated by emetics in the first instance; subsequently, by the moist peroxide of iron, albuminous and mucilaginous drinks. The symptoms of poisoning have now disappeared. As he is still weak, he is at present taking tonics.

The habit which weavers have of biting the ends of cotton before knotting has, I have no doubt, been the principal way in which the poison in this case was taken into the system. The absence of skin-eruption and diarrhoea in this case is unusual.