needles used with this syringe are of larger gauge than were formerly employed, and the long cannulae, as shown in the illustration, are also of correspondingly larger calibre. The needles do not corrode so quickly as the smaller ones and therefore can be used many times. The needles and cannulae are contained in two metal tubes. The syringe and fittings are all nickel plated and are fitted into an aseptic case. The whole of the apparatus can be sterilised whenever necessary. The instrument has been tested very exhaustively in several large military hospitals during a period extending over six months and has given complete satisfaction. The cost of the syringe complete in case is 45s.

F. J. W. PORTER, Major R.A.M.C.

THE "CLIMAX" HYGIENIC GAS STOVE.

THE general principle upon which this stove works will be understood from an inspection of the section illustrated below. The stove represents an attempt to utilise gas as the source of heat and at the same time to avoid the contamination of the air with the injurious products of combustion and more particularly sulphurous and sulphuric acids. This attempt succeeds since a forced draught effected by a current of steam carries the products of combustion through a steam pipe or condensing tube away from the atmosphere of the room to the outside air. Assuming that this action is effectually done it matters little what is the nature of the products of combustion which a given gas burner may yield. A glance at the illustration will show that the stove consists practically of a boiler with a steam space at the top which is heated at the bottom by a small gas burner. The lid on the top is loose but its weight serves to allow a small pressure to accumulate in the boiler. The excess of steam escapes through a steam or condenser tube carrying by the action of injection the products of combustion away from the jacket (F F) in which they rise. This tube also serves to distribute the heat of the steam evolved. There is a glass water gauge (E) which enables the level of the water in the boiler to be seen, and also a tap (K) for drawing off hot

water. At M is a tee joining a ball valve tank so that a constant level of water in the boiler can be automatically obtained. The cock J is three way, so that steam may be turned on direct from the boiler to the jet or to the condensing tube. In this way the stove automatically removes the products of combustion and at the same time preserves a state of humidity of the air up to any point desired. The three-way cock also can never be shut off, so that there is always an outlet for the steam and there can be no danger of high pressure. The loose cast iron lid (D) is another safety valve, as is also the open water gauge E. It is stated that the stove has been used in rooms in which were placed plants that are known to be very sensitive to the destructive action of the combustion products of coal gas. The plants thrived, and this we can well believe since we found the steam escaping from the condensing tube to contain a considerable amount of sulphuric acid. The condensed liquid obtained during one hour's running contained nearly two grains of sulphur in the form of sulphuric acid. There can be little doubt that a

further quantity of sulphur is carried away in a gaseous form, but even the condensed sulphur amounted to about 50 per cent. of the total contained in the gas before burning. This fact seems to us to warrant the statement that the stove is adapted for use in conservatories. In the dwelling room, too, it is an obvious advantage that sulphur compounds and other products of combustion should be kept out of the air that is breathed. The damaging effect of sulphurous products on picture frames, book covers, and so on, is well known. One other application of the stove should be mentioned, and that is for the purpose of evaporating antiseptic vapours. It is now recognised that disinfection can only be complete when the air and the surfaces it is required to disinfect are kept moist. The stove is the invention of Mr. James Rigg, engineer, of 11, Queen Victoria-street, London, E.C.

Looking Back.

FROM

THE LANCET, SATURDAY, April 18th, 1829.

TESTS OF ADULTERATED QUININE.

THE adulteration of quinine is carried to a greater extent than is generally supposed, while the necessity of having it genuine is most important. The high price it obtains, renders it a source of successful imposition to sellers, and of corresponding disappointment to consumers; and this is most probably the cause of the various degrees of benefit with which it has been used in the same complaint. The adulterations most frequently used, are, a peculiarly fine preparation of crystals of spermaceti, starch, and the gentiana, a preparation partaking in a great degree (when carefully made) of the appearance of quinine, but cheaper and quite useless. For the detection of the latter, I am not aware of any infallible test, excepting that of a delicate taste, difficult to be explained, and only to be acquired by constant practice. A sure test to detect the presence of spermaceti, is to heat a piece of highly-polished iron to a dull red-heat, and to throw on it a few grains of the quinine. Should there be any spermaceti, the oiliness will become apparent; and if adulterated with starch, the heat will cause the quinine to adhere, which it will not do if unadulterated, but will exhibit a sparkling brown appearance, and a crispness to the touch. Another test is to mix the quinine with infus. rosæ, in which it should speedily dissolve; but if intermixed with starch, or spermaceti, or both conjoined, it will present, after having been allowed to stand a short time, a flocculated curdy appearance, and will not dissolve. The last is a beautiful and sure test, and the facility with which it may be made is another recommendation.

Islington.

E. MOORE.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—A quarterly court of the above society was held on April 10th, Sir Thomas Smith, Bart., Vice-President, being in the chair; 13 directors were present. Proposals for membership of the society were read from three candidates and they were duly elected. Since the last court two members had died. The report and balance-sheet for 1906, to be submitted at the annual general meeting, were read and approved. Applications for relief were received from two widows of deceased members and grants at the rate of £50 per annum each were voted. One widow who was left in very indigent circumstances had been made an immediate grant of £10 10s. over and above the annual one. Eight letters had been received from the widows of medical men during the past three months asking for relief, but this had in each instance to be refused as their husbands had not been members of the society, relief only being given to the widows and orphans of deceased members. Any registered medical practitioner residing at the time of his election within a 20-mile radius of Charing Cross is eligible for membership. Full particulars and proposal forms may be obtained from the secretary at the offices of the society, 11, Chandos-street, Cavendish-square, London, W. The annual general meeting will be held on May 9th, at 5.30 P.M.