

BURETTE ARRANGEMENT.

BY E. M. JOHNSON.

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THE burette arrangement here shown has been found very satisfactory and convenient in a metallurgical laboratory where a number of standard solutions are in use every day. The glass tube *B* is connected direct to the three-way burette by a short rubber tube *A*. This connection should be made so as to bring the ends of the glass tubes very near to each other, practically doing away with any contact between the standard solution and the rubber. There is no pressure on the rubber connection, consequently no leakage, as is the case when the burettes are filled by force of gravity. The burette is held in place by an ordinary bird cage spring *C*, and can be easily detached and cleaned by disconnecting the connection *A* and unhooking the spring. It is easier to replace an empty standard solution bottle than is the case with other devices. This is done by simply disconnecting at *A* and running the glass tube *B* up high enough to put in a full bottle. The glass tube *B* should slide with ease through the rubber stopper. The surface of the glass plate next to the table may be painted white, or some suitable white material placed under it. It is very easy to keep the glass plate clean.

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A GENERATOR FOR HYDROGEN SULPHIDE.

BY J. N. SWAN.

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OF the making of apparatus for the generation of hydrogen sulphide there is no end. One would think that out of the more than 200 acetylene generators on the market a machine might be chosen which would at least approximate perfection as a generator for hydrogen sulphide. If one generates the gas on the large scale and uses a gasometer with pipes leading to the places where the gas is to be used there are machines which give satisfactory results. If, however, it is desired to use the gas in fairly small quantities as, *e. g.*, with an ordinary class in qualitative analysis, there is still something to be desired in the way of a machine that will give satisfactory results in every particular.

The machine herewith illustrated has been used for such work