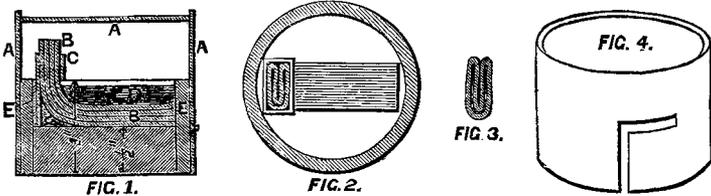


VII.—Description of a new form of Blowpipe Lamp, especially suitable for travellers.

By C. LE NEVE FOSTER, B.A., D.Sc.

THIS Lamp is shewn half size in figs. 1 to 4. Fig. 1 is a section of the whole lamp; fig. 2 a view from above; fig. 3 shews the mode of folding the wick; and fig. 4 the tinplate cover, which serves as a stand while the lamp is in use.



AA is the tinplate cover; EE the gas pipe forming the body of the lamp; BB is the wick which is best if of the "Freiberg" kind, broad, thin, and folded; C is the wick-holder of tinplate, soldered on to E; D is the wax or composition.

It is provided with a "bayonet" slot, which works over the little pin shewn in fig. 1, so as to keep the cover in place when it is put on over the lamp.

The body of the lamp is made from a piece of iron or lead gas pipe, $1\frac{1}{2}$ in. internal diameter, to one side of which the wick holder is soldered. I find that "night light" grease suits admirably—ordinary composite candles do very well.

Mr. W. Lombardi, of 4, Argyll Place, Regent Street, London, has used roughly made lamps of similar construction for the last fifteen years, using cocoa nut oil, colza oil, or tallow, and a large mouth blowpipe for soldering and melting. In using the lamp, it is well, after lighting the wick, to direct the flame over the wax or tallow for a little, so as to melt it before proceeding to use the lamp. After use, and while the wax is melted, the wick should be pulled up about $\frac{1}{8}$ of an inch with a pair of tweezers before the wax solidifies, otherwise the wick will be too short to allow of trimming before the next operation.