(No Model.)

W. H. HAMILTON.

OBSTETRICAL FORCEPS.

No. 451,930. Patented May 12, 1891.

Fig. 1.

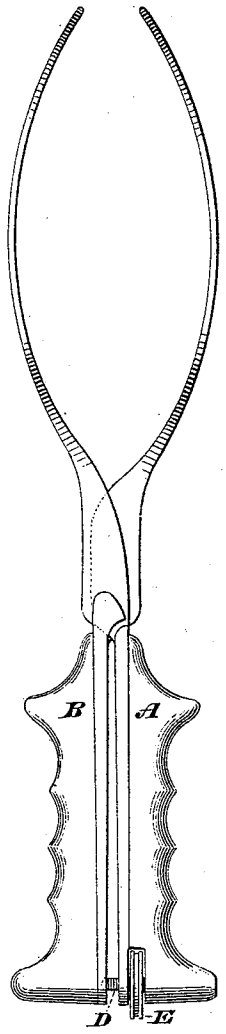


Fig. 2.

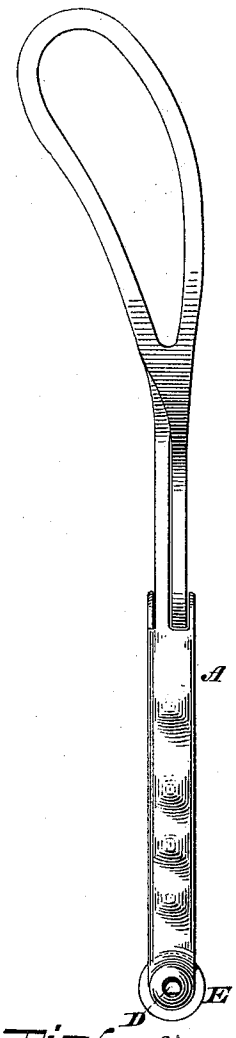


Fig. 3.

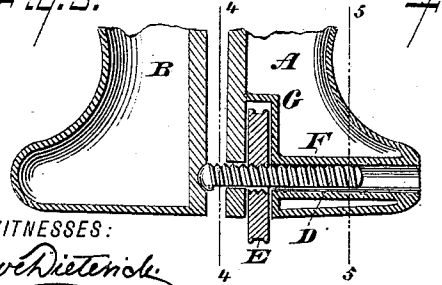


Fig. 4.

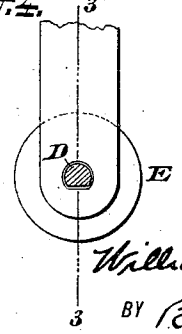
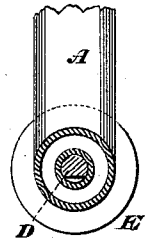


Fig. 5.



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OBSTETRICAL FORCEPS.

SPECIFICATION forming part of Letters Patent No. 451,930, dated May 12, 1891.

Application filed March 2, 1891. Serial No. 383,402. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. HAMILTON, residing at Brooklyn, county of Kings, and State of New York, have invented an Improved Obstetrical Forceps, of which the following is a specification.

My invention relates to that class of obstetrical forceps in which the clutch of the blades is regulated by an adjustable screw; and it consists in providing in such forceps the improved detail in construction hereinafter clearly shown and described.

The object of my invention is to so construct a pair of forceps that perfect cleansing will be possible, thereby eliminating all danger of transmission of disease-germs which might cause septicæmia.

My invention is illustrated by the accompanying drawings, in which—

Figure 1 is a face view of a pair of forceps of my construction. Fig. 2 is a side view of Fig. 1. Fig. 3 is a longitudinal section, on an enlarged scale, of a portion of the handles of my forceps. Figs. 4 and 5 are cross-sections on the lines 4 4 and 5 5, respectively, of Fig. 3.

Similar letters refer to similar parts.

A B are the two hollow handles of a pair of obstetrical forceps, each handle being provided with a suitable blade and each part interlocking with the other in the well-known manner, which allows the blades to be instantly separated.

D is a regulating-screw carried by the handle A, and adapted to be moved in or out by a rotating thumb-nut E, which is carried near the end of the handle and held in place by the screw D, upon which it is hung, said screw passing through a hole in the inner side of the handle A and bearing against the opposite handle B. This screw D should be chamfered on one side, as in Fig. 4, so that by bearing against a lug in the side of the hole it is prevented from being turned by the action of the nut E, which when turned will now cause the screw to either advance or retreat. In all cases where these adjusting-screws are used and the handles are hollow the danger of septic matter being retained within the hollow handle is very great.

Since in the use of this class of instruments a great flow of blood often occurs, which is very likely to run into the hollow handle through the spaces around the nut and the screw, I provide a device that will thoroughly guard against this objectionable feature and which will allow the perfect cleansing of this portion of the instrument. This device consists of a tube F, open at both ends and having a smooth bore large enough to receive the shank of the screw D, which tube is placed transversely through the handle A, and supported at one end by the outer casing of the handle and at the other end by a partition G, between which partition and the inner casing of the handle the thumb-nut E is carried. It will be seen that by this construction when the screw and nut are removed the remaining parts are easily cleaned, making it impossible for any septic matter to be secreted in any inaccessible portion of the instrument. The smooth-bored tube F is readily cleaned. Heretofore the shank of the screw entered directly into the hollow chamber of the handle A, and this hollow chamber could never be properly cleaned.

The invention is equally applicable to forceps having solid handles, in which case a tubular passage open at the ends is or can be used in place of the tube F.

Having described my invention, I claim—

In an obstetrical forceps, the combination of the handle A with the open-ended transverse smooth-bore tube F therein, and with the partition G, screw D, nut E, and handle B, substantially as herein shown and described.

WILLIAM H. HAMILTON.

Witnesses:

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