

(No Model.)

J. H. WILEY.
SURGICAL INSTRUMENT.

No. 251,014.

Patented Dec. 13, 1881.

Fig. 1.

Fig. 2.

Fig. 3.

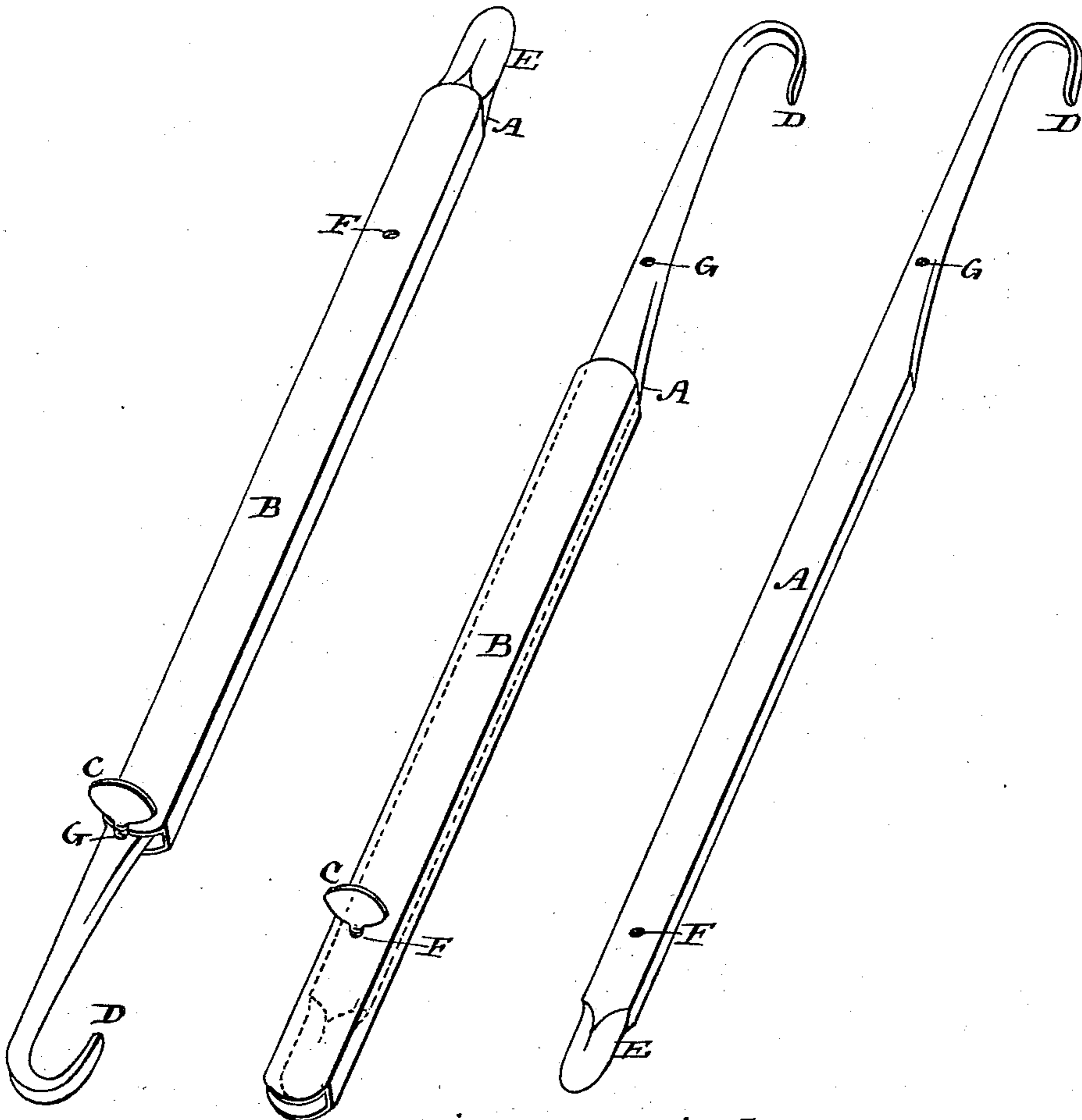
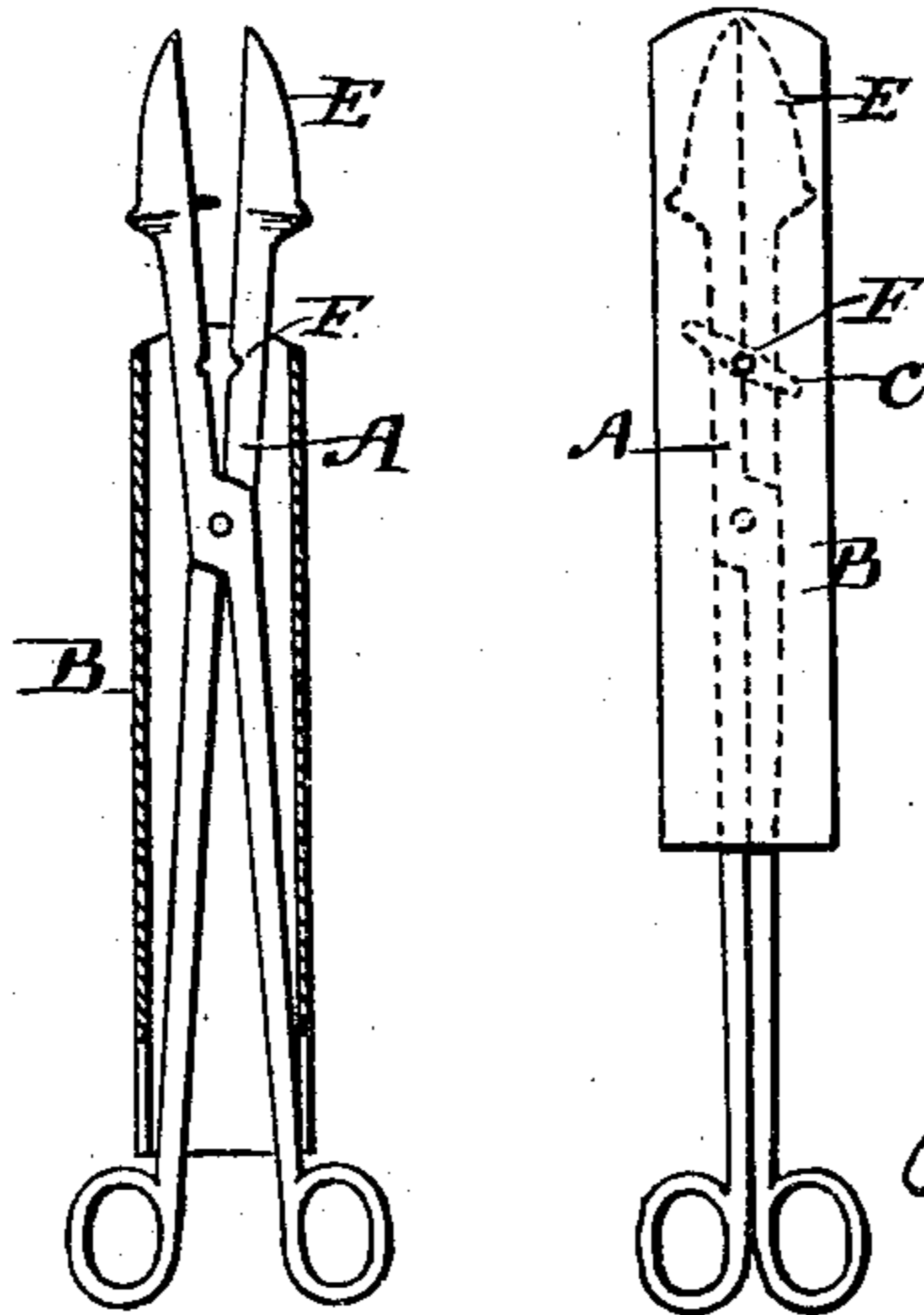


Fig. 4.

Fig. 5.



Witnesses:
C. J. Hedrick
E. E. Masson

Inventor:
John H. Wiley by
A. Pollok his atty.

UNITED STATES PATENT OFFICE.

JOHN H. WILEY, OF OSKALOOSA, IOWA.

SURGICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 251,014, dated December 13, 1881.

Application filed October 31, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. WILEY, of Oskaloosa, in the county of Mahaska and State of Iowa, have invented a new and useful Improvement in Surgical Instruments for use in Producing Craniotomy, which improvement is fully set forth in the following specification.

This invention relates more particularly to the instrument used by physicians in obstetrical practice for producing craniotomy, and known as a "perforator."

The object of the present invention is, first, to improve the construction of the perforator by providing a shield to protect the cutting-edges; and, second, to combine what is known as the "blunt hook" in one instrument with the perforator.

The perforators heretofore used are objectionable on account of the danger of cutting the vagina or uterus in inserting or withdrawing the instrument.

In the present invention a shield is combined with the perforator proper, so as to protect or cover the cutting edge or edges during the introduction and withdrawal of the same, the said shield being drawn back when it is desired to expose the perforating end of the instrument for cutting the child's head. This shield is preferably adapted to slide on the shank or body of the instrument, and a stop is combined therewith to limit its backward movement, so that the perforator cannot be thrust too far beyond the end of the shield. The blunt hook is formed on the opposite end of the instrument. When the hook is used the shield above referred to is slid forward so as to cover the cutting-edges, and is there secured in position by suitable means, such as a holding-screw.

In the accompanying drawings, which form a part of this specification, Figures 1 and 2 are perspective views of an instrument embodying the invention, showing it in different positions; and Fig. 3, a perspective view of the same without the shield; and Figs. 4 and 5 are views in sectional elevation and elevation, respectively, showing the instrument well known as "Smellie's perforator" provided with a shield in accordance with the first part of the

invention. Fig. 4 shows the instrument open, 50 and Fig. 5 the same closed.

A is the perforator proper, with cutting-edges E; B, the shield, and C a holding-screw. The shield B surrounds the body of the perforator A, and is capable of sliding thereon. 55 When the instrument is not in use the shield B is moved forward so as to cover the cutting-edges E, and is held in place by the screw C, as shown in Figs. 2 and 5, the screw passing through a threaded opening, F, in the 60 shield and perforator.

To use the perforator the screw C is removed and the instrument is inserted, the shield still covering the cutting-edges E. After introduction the perforator is thrust forward into the position shown in Figs. 1 and 3, 65 so as to bring the cutting-edges into action. When the cutting has been performed the perforator is drawn back into the shield and the whole is removed. With the instrument shown 70 in Figs. 1, 2, and 3 the screw C is placed in a threaded opening, G, near the hook end of the perforator, and forms a stop to prevent the cutting-edges from being thrust too far out of the shield. The eyes for the insertion of the operator's fingers in the Smellie's perforator, Figs. 75 4 and 5, serve a similar purpose.

In order to use the blunt hook D, the shield is secured over the cutting-edges E by the screw C, as shown in Fig. 2, so that it serves 80 as a firm handle, and also prevents the possibility of the operator's cutting his hand.

It is obvious that the shield could be combined with other forms of perforators—as, for example, with those known as "Bedford's" and 85 "Garland's" perforators.

Having now fully described my said invention and the manner of making and using the same, what I claim is—

1. In an instrument for producing craniotomy, the perforator with exterior cutting-edges, combined with a shield for covering or protecting the said cutting-edges, the said shield being and operating substantially as described. 90

2. The combination of the perforator having exterior cutting-edges, the shield formed of a rectangular case capable of sliding on the body 95

of said perforator, so as to cover or expose the said exterior cutting-edges, and the stop for limiting the movement of the shield with relation to the perforator, substantially as described.

5 3. An obstetrical instrument comprising the perforator, the blunt hook connected with said perforator, and the movable shield, adapted to form a handle for using the blunt hook, and
10 in using the perforator to protect the cutting-

edges while inserting or withdrawing the same, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN H. WILEY.

Witnesses:

JOHN LOFLAND,
C. E. LOFLAND.