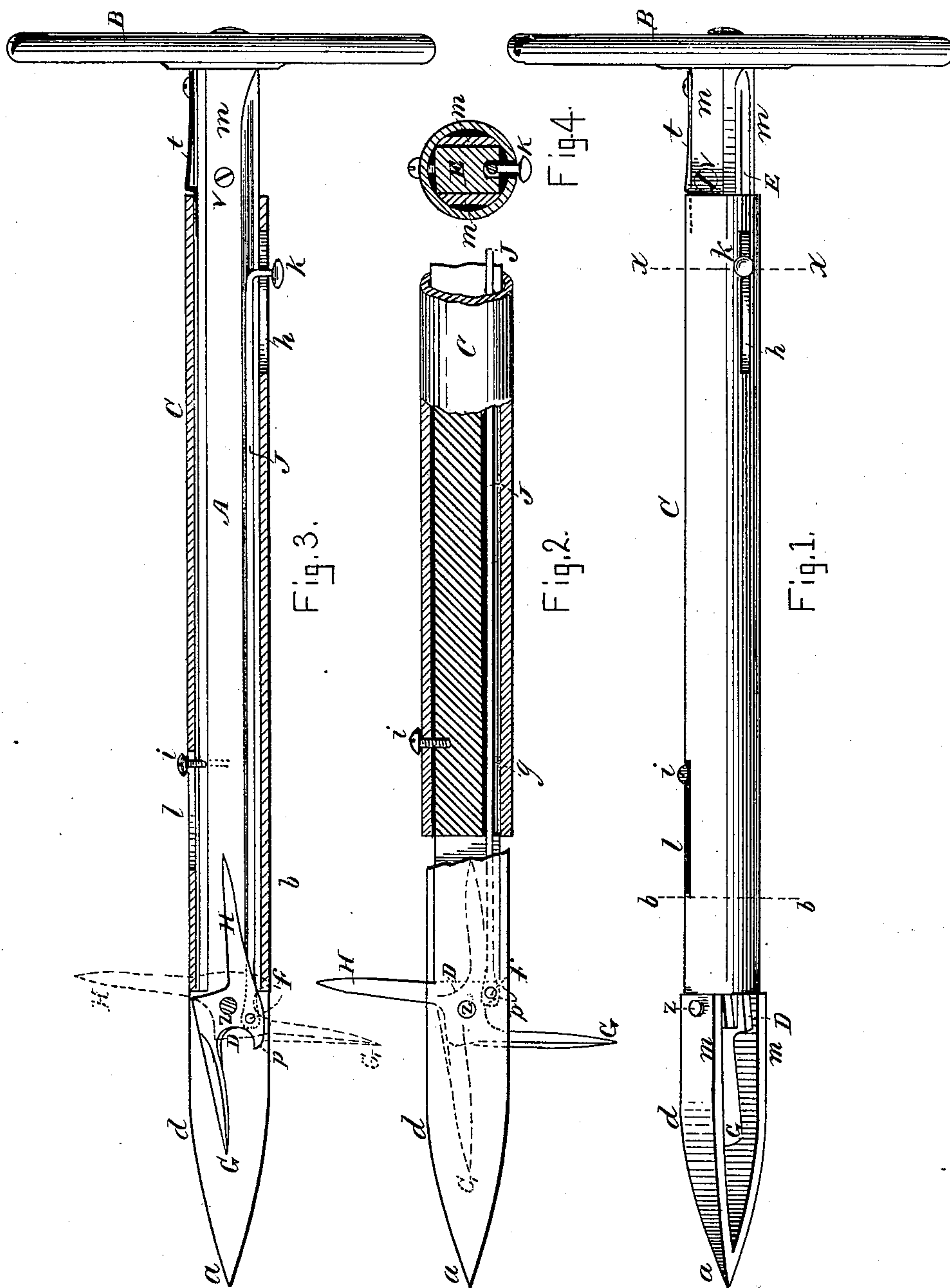


(No Model.)

S. SLATER.
CRANIAL PERFORATOR.

No. 262,489.

Patented Aug. 8, 1882.



Witnesses:

O. Herbert Chagler
Alex. Scott

Inventor:

Stephen Slater,
per C. C. Shaw,
attor

UNITED STATES PATENT OFFICE.

STEPHEN SLATER, OF NORTH SMITHFIELD, RHODE ISLAND.

CRANIAL PERFORATOR.

SPECIFICATION forming part of Letters Patent No. 262,489, dated August 8, 1882.

Application filed June 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN SLATER, of North Smithfield, in the county of Providence, State of Rhode Island, have invented a certain
5 new and useful Improvement in Cranial Perforators, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which
10 said invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation, showing the perforator with the blades closed; Fig. 2, a sectional view, showing it with the blades open
15 and a part of the sheath or case removed; Fig. 3, a vertical longitudinal section, showing it with the blades closed; and Fig. 4, a transverse section taken on the line *x x*, Fig. 1.

20 Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to that class of perforators which are employed in obstetrics for performing the surgical operation known as "craniotomy;" and it consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which
25 a more effective device of this character is produced than is now in ordinary use.

In the drawings, A represents the body, B the handle, C the sleeve or sheath, and D the knife or cutter.

The body is composed of two flat bars of
35 steel, *m m*, equal in width, securely fastened in the handle, and arranged parallel to each other and to the section *d*, from which they are tapered and converge, uniting to form the solid point *a*. Between the bars, and extending
40 from the handle to the dotted line *b b*, there is a piece or strip of wood, E, secured in position by the screws *v v*, and forming a part of the body of the implement.

The knife D is pivoted or journaled at *z* between the bars *m m* of the body A, and is provided with two rigid blades or cutters, G H,
45 projecting laterally therefrom in opposite directions, as best seen in Figs. 2 and 3.

Connected with the knife by the joint *f* there
50 is a sliding rod, J, fitted to work between the bars *m m* and in a groove, *g*, in the wood E,

the end of the rod opposite the knife being bent at right angles outwardly through the slot *h* in the sheath C, and terminating in the button or knob *k*. The sheath C surrounds the body
55 A and rod J, and is fitted to slide thereon longitudinally, being kept from rotating by the screw *i* and inner end of the rod J, which pass respectively through the elongated slots *l* and *h*.

In the use of the improvement the knife is
60 shut by having its blades G H turned down between the bars *m m*, as shown in Fig. 1, the sheath C being pushed forward to cover the blade H, and held in this position by the spring-catch *t*. The implement is now grasped by
65 the handle B and forced through the cranium or skull into the head of the foetus. The sheath C is then withdrawn until its inner end strikes the handle B, when the knife D is turned or
70 partially rotated on its axis by means of the knob *k* and rod J, causing the blades G H to stand at right angles to the body A, as seen in Fig. 2. The sheath is then again pushed forward until it strikes the blade H and the shoulder or projection *p* on the knife D, where it is
75 firmly held by the catch *t*. The implement is now rotated to the right, causing the blades to cut up or bisect the parts with which they are in contact in a manner which will be
80 readily understood by all conversant with such matters without a more explicit description. The sheath C is then slipped back against the handle, the blades closed by the rod J, and the implement withdrawn preparatory to using a
85 cranial tractor.

The blades G H are so arranged on the body of the knife D as to revolve in different planes, and have their cutting-edges facing in opposite directions, as best seen in Figs. 2 and 3.

Having thus explained my invention, what I
90 claim, is—

The improved cranial perforator described, the same consisting of the body A, terminating in the point *a*, and provided with the pivoted knife D, rod J, sheath C, and handle B,
95 constructed and arranged to operate substantially as and for the purpose specified.

STEPHEN SLATER.

Witnesses:

WM. H. SANDFORD,
LOUIS E. REMINGTON.