

(Model.)

H. REINHOLD & A. SCHREIBER.  
Fleam.

No. 236,084.

Patented Dec. 28, 1880.

Fig. 1.

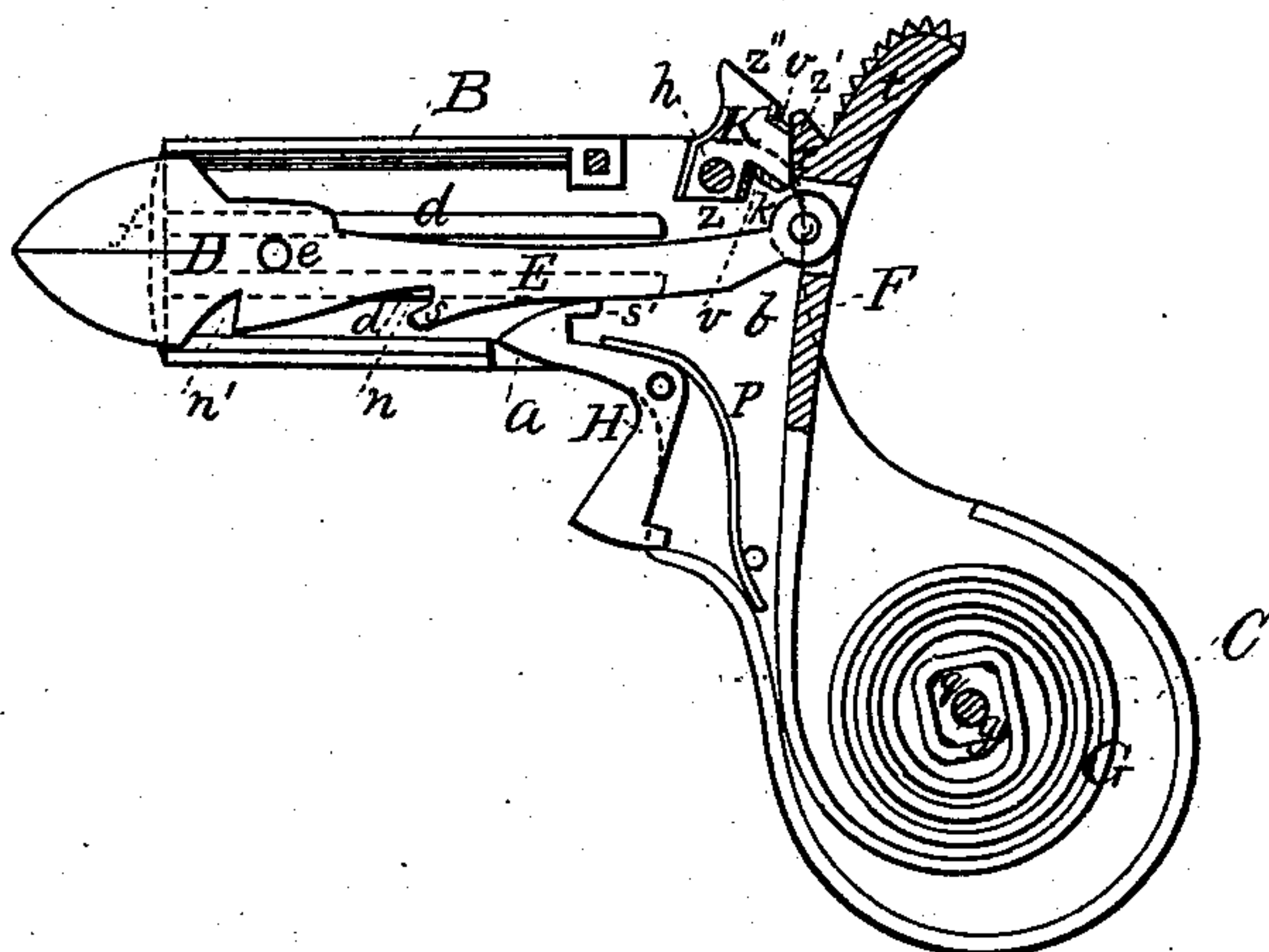


Fig. 2.

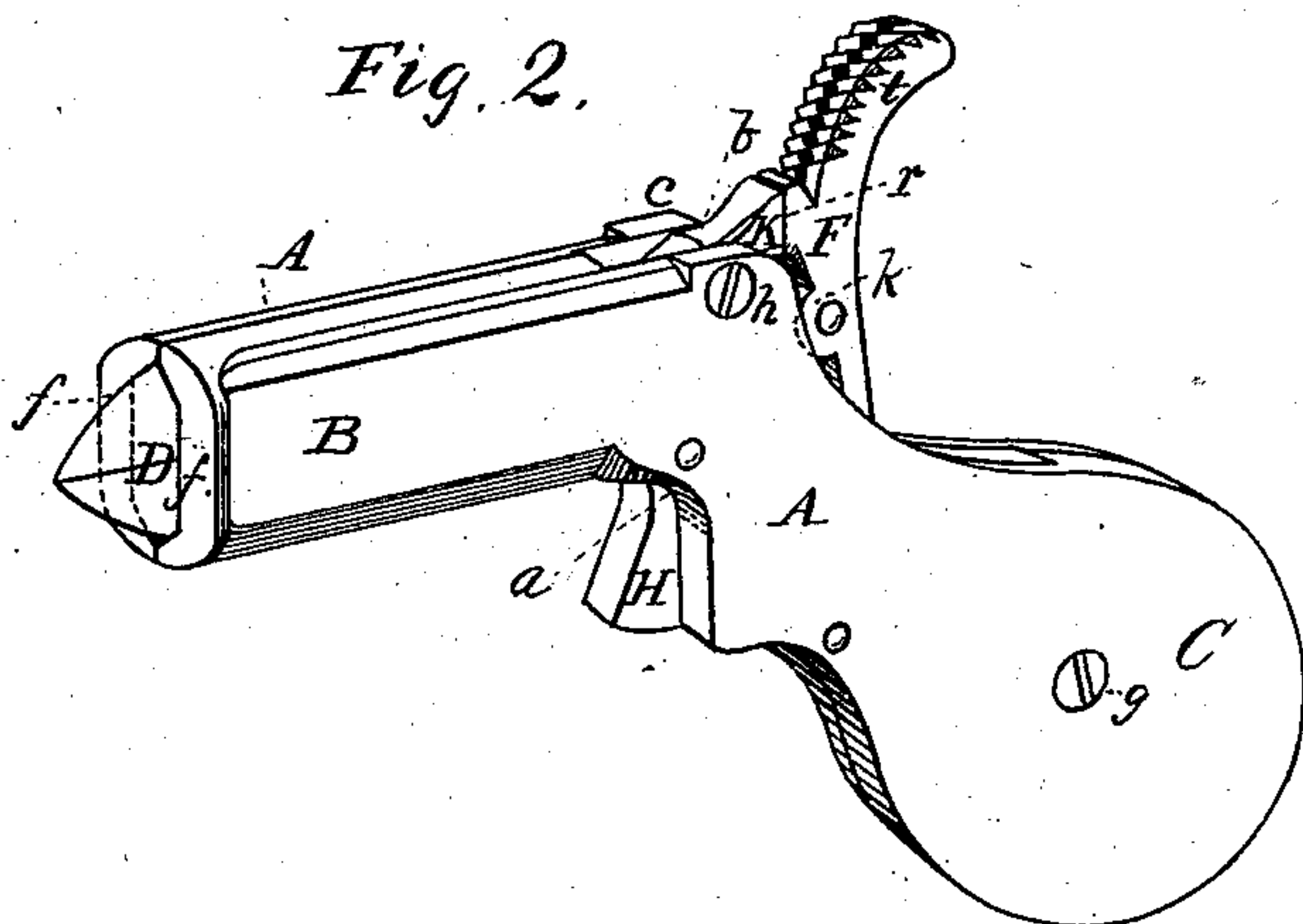
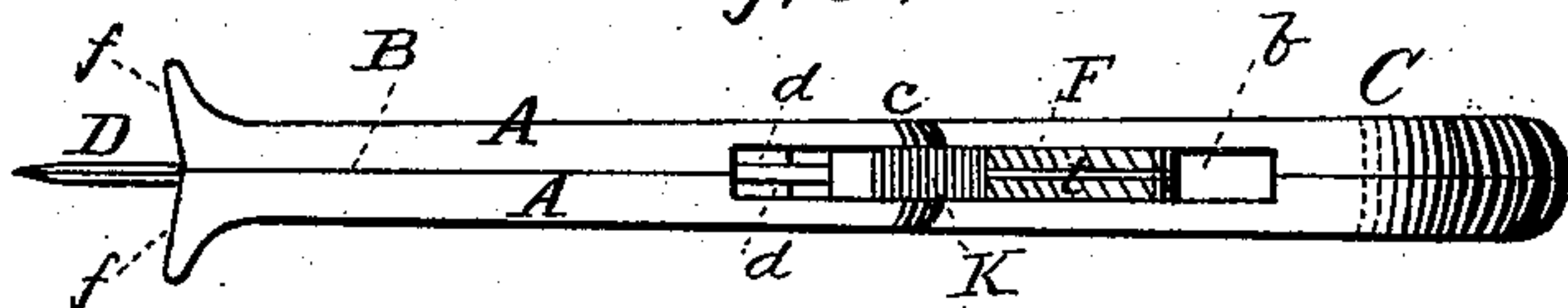


Fig. 3.



WITNESSES

*Villette Anderson.*  
*Philip C. Massi*

INVENTORS

*Hermann Reinhold*  
*August Schreiber*  
by *E. W. Anderson*  
*their* ATTORNEY



# UNITED STATES PATENT OFFICE.

HERMANN REINHOLD AND AUGUST SCHREIBER, OF DAVENPORT, IOWA.

## FLEAM.

SPECIFICATION forming part of Letters Patent No. 236,084, dated December 28, 1880.

Application filed August 18, 1880. (Model.)

*To all whom it may concern:*

Be it known that we, HERMANN REINHOLD and AUGUST SCHREIBER, both of Davenport city, in the county of Scott and State of Iowa, have invented a new and valuable Improvement in Fleams; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical central section of this invention, showing one-half of the case. Fig. 2 is a perspective view of the fleam entire. Fig. 3 is a top view.

This invention has relation to fleams; and it consists in the construction and novel arrangement of the two-part case, its inside blade-guides, and flaring inclined lips; of the long blade-shank, its guide-pin, let-off notch, and spurred protection-notch; of the spurred trigger, the coiled operating spring having a hammer end; and of the pivoted gage having three beveled facets adjustable in position for cuts of different degrees of depth, all as hereinafter shown and described.

In the accompanying drawings, the letters A A designate the right and left halves of the two-part case, each of which is recessed inside to form, when the two parts are put together, a hollow case having a flattened barrel portion, B, and a disk-shaped handle portion, C, of somewhat circular form. In the inner angle of this case the trigger-slot *a* is arranged, and in its outer and rear portion is the hammer-slot *b*, extending over the angle *c* of the case for the reception of the pivoted gage. Along the interior and central portion of each wall of the barrel are formed guide-ribs *d*, there being two on each side, parallel with each other, and adapted to receive the guide-pin *e* of the blade D, whereby the blade is kept true in its stroke and prevented from twisting. At the mouth of the barrel flaring lips *f* are formed, with beveled faces inclining somewhat forward and having acute angular edges, to prevent slipping when the mouth of the instrument is applied to the surface of the part to be bled. The halves of the case may be riveted together or connected by screws, as indicated at *g* and *h*.

The blade D is usually of dart form, double beveled on each side, and having its point directly forward, in line with the center of the barrel and with the direction of the stroke. It is provided with a long shank or stem, E, flattened from side to side and extending rearwardly in the barrel, being pivoted, by its rear end, between and to the lugs *k* of the hammer end F of the operating-spring. Two notches are formed in the under edge of the blade-shank, the first or protection notch *n*, nearest the trigger, being provided with a spur, *s*, to engage the spur *s'* of the trigger when the hammer portion of the spring is drawn back sufficiently to draw the point of the lance within the case. In this position the spurs *s* and *s'* are interlocked, and the instrument cannot be operated by pulling the trigger. It can therefore be carried in the pocket with safety. The second or let-off notch *n'* is angular in form, its rear wall being a little inclined backward and outward to engage firmly with the trigger H. A small spring, *p*, is attached to the trigger to hold the latter upward against the shank of the blade.

The coiled operating-spring G is attached by one end to a squared lug, *q*, of one-half of the case, formed at the central portion of the circular handle part C. The attachment is usually made by bending the end of this spring in square form to fit this lug. The coil of the spring winds around this lug, and the outer end, F, is enlarged and constructed in hammer form, having a striking-face, *r*, and a serrated lug, *t*, whereby it may be pulled backwardly, increasing the tension of the spring and retracting the lance until the trigger engages with one or the other of the notches in its shank.

The gage K is of angular form, having three beveled facets, *z*, *z'*, and *z''*, arranged at different distances from the pivot *h*, as shown in the drawings. These facets are at right angles to the radius of adjusting motion, and receive the hammer-face squarely, adjusting themselves under the stroke if not exactly true. The position of the gage at the angle of the case is such that it can be easily manipulated, and it is provided with small notches *v*, to facilitate turning it around when the adjustment is being changed.

Having described this invention, what we claim, and desire to secure by Letters Patent, is—

1. The two-part fleam-case having the flattened barrel portion B, the rounded handle portion C, containing the spring, the guide-ribs *d*, and the flaring inclined lips *f*, substantially as specified.

2. In a fleam, the combination, with the guide-ribs *d* of the barrel, the operating-spring G, and the trigger H, of the blade-shank E, having the let-off notch *n'*, and the protection notch *n*, spurred at *s*, substantially as specified.

3. In a fleam having a reciprocating blade, D, the coiled operating-spring G, seated in the handle portion, and having an enlarged ham-

mer end, F, pivoted to the end of the shank E of the blade, substantially as specified.

4. In a fleam, the combination, with a reciprocating blade, D, a coiled operating-spring, G, and a hammer portion, F, pivoted to the end of the shank of the blade, of the pivoted adjustable gage K, having beveled facets *z z'* *z''*, substantially as specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

HERMANN REINHOLD.  
AUGUST SCHREIBER.

Witnesses:

H. ABEL,  
HENRY SCHROEDER.