

(No Model.)

J. H. JONES.
PENCIL SHARPENER.

No. 429,689.

Patented June 10, 1890.

Fig. 1

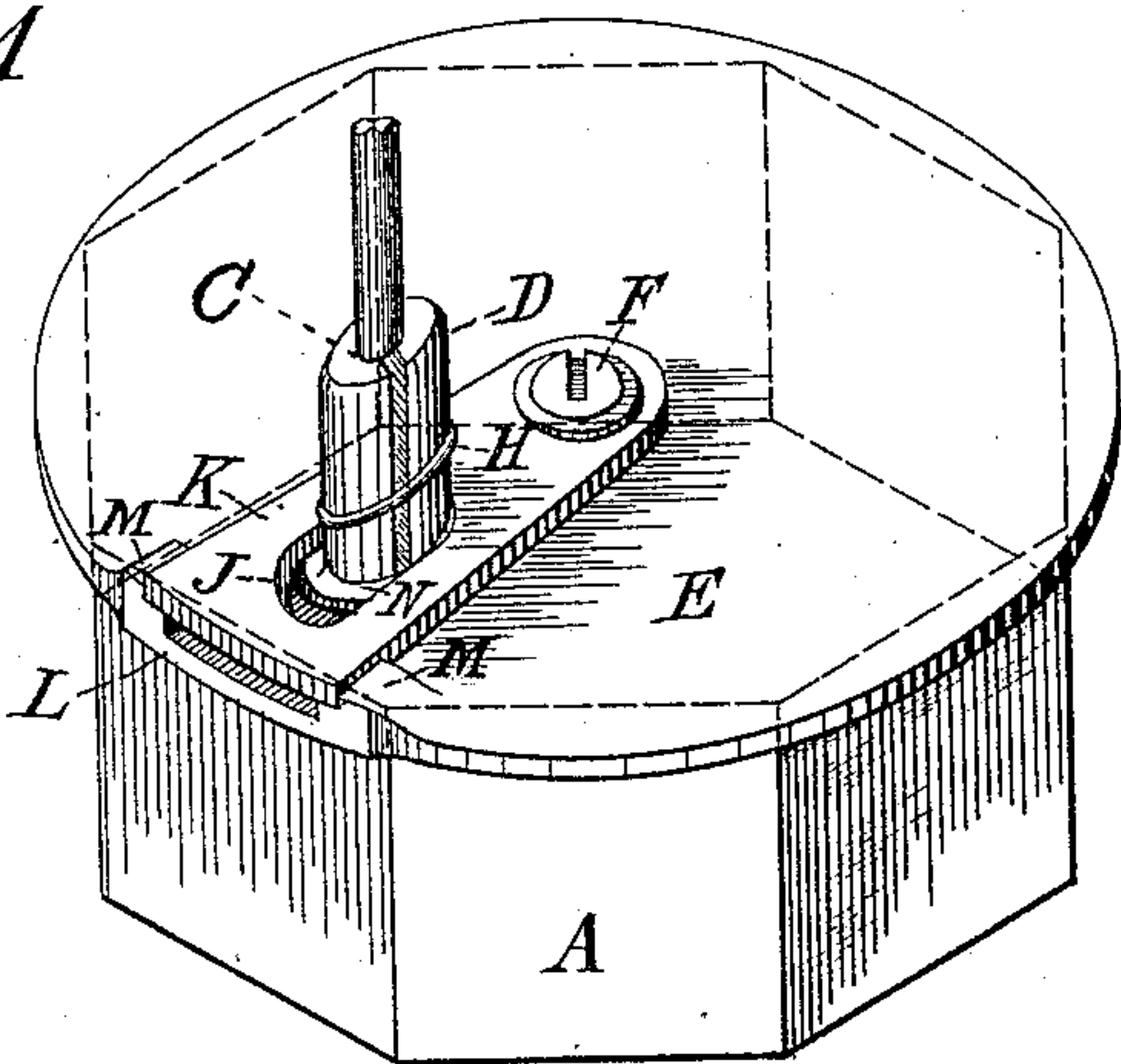


Fig. 2

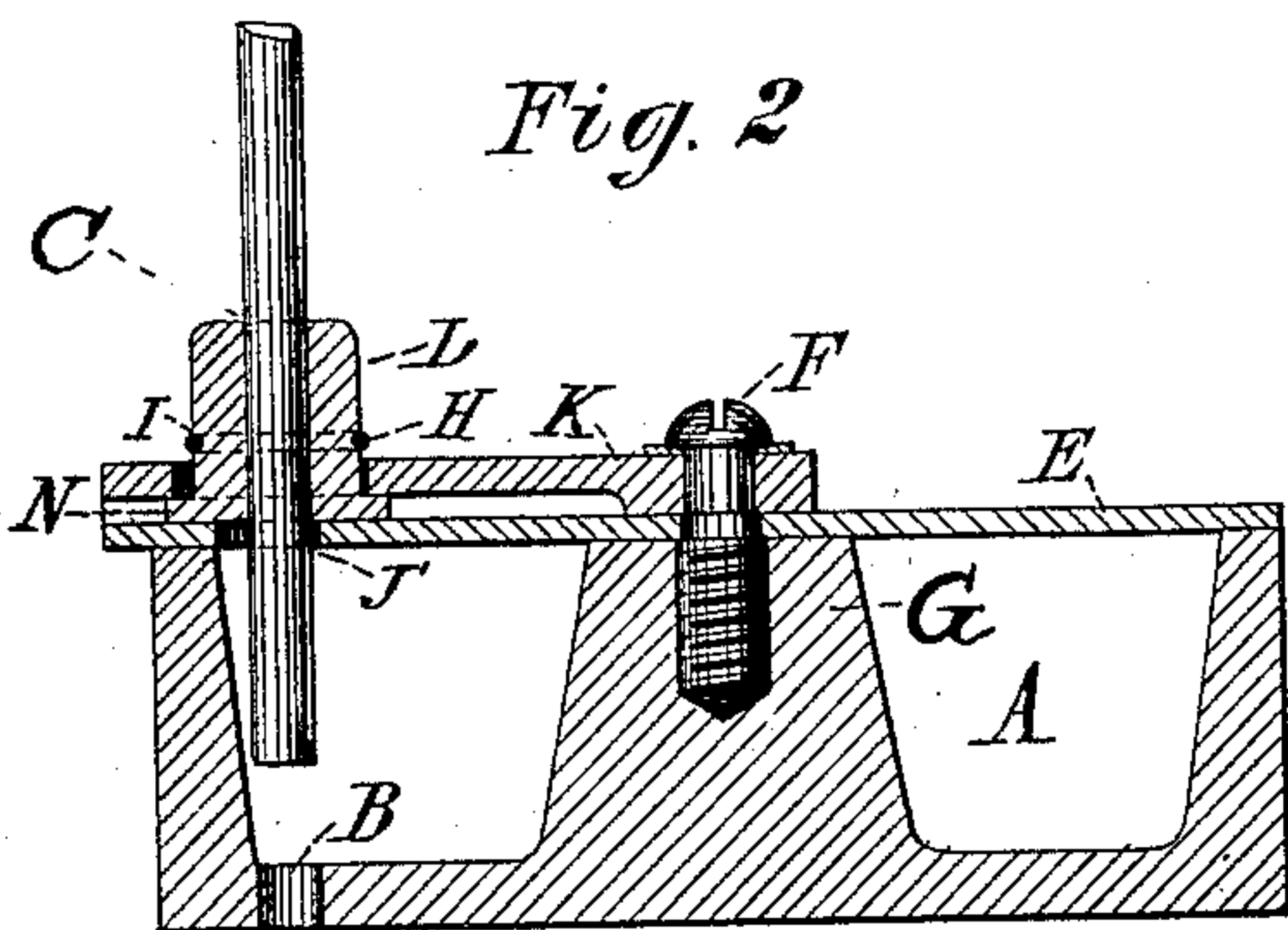


Fig. 3

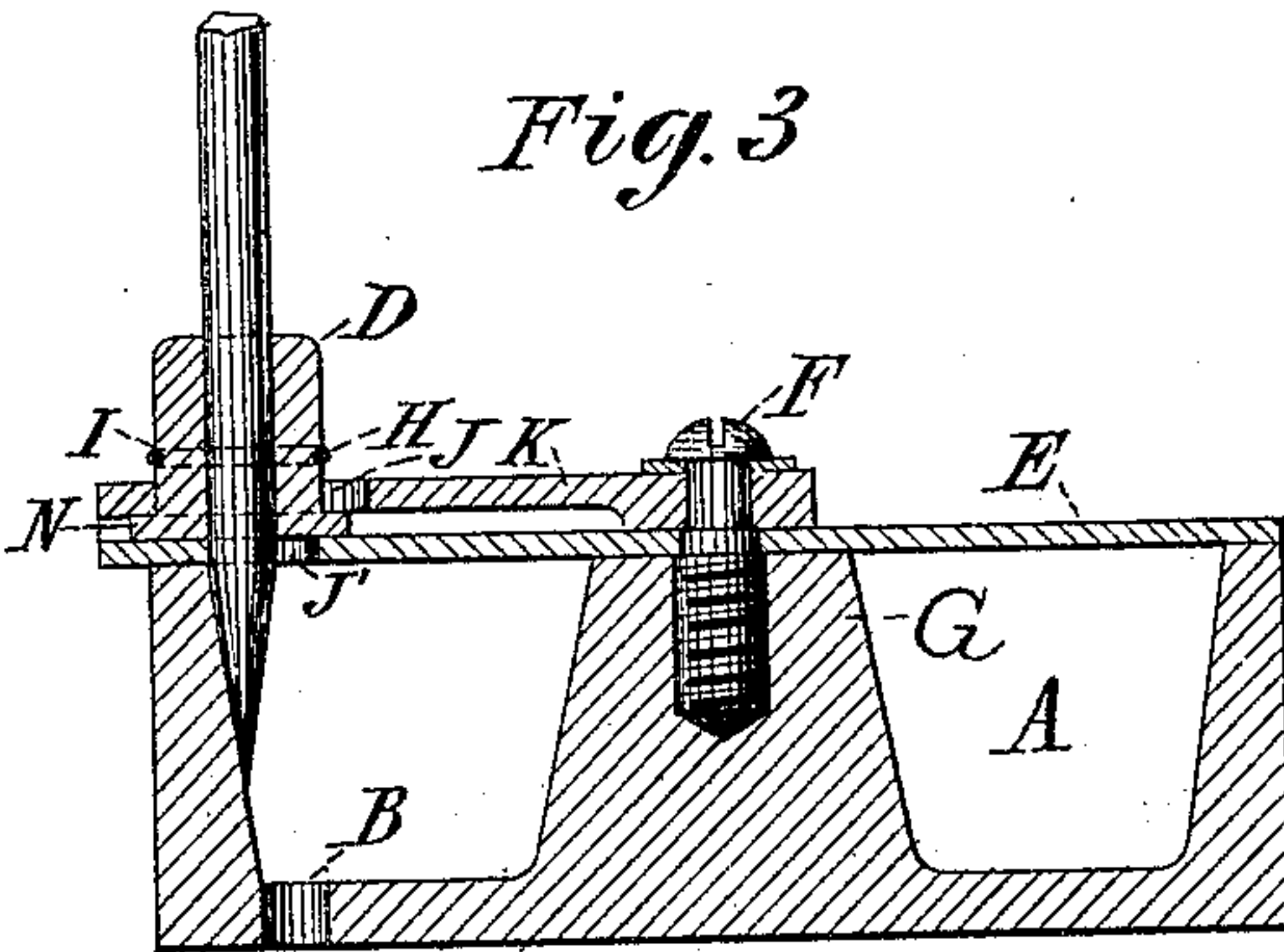
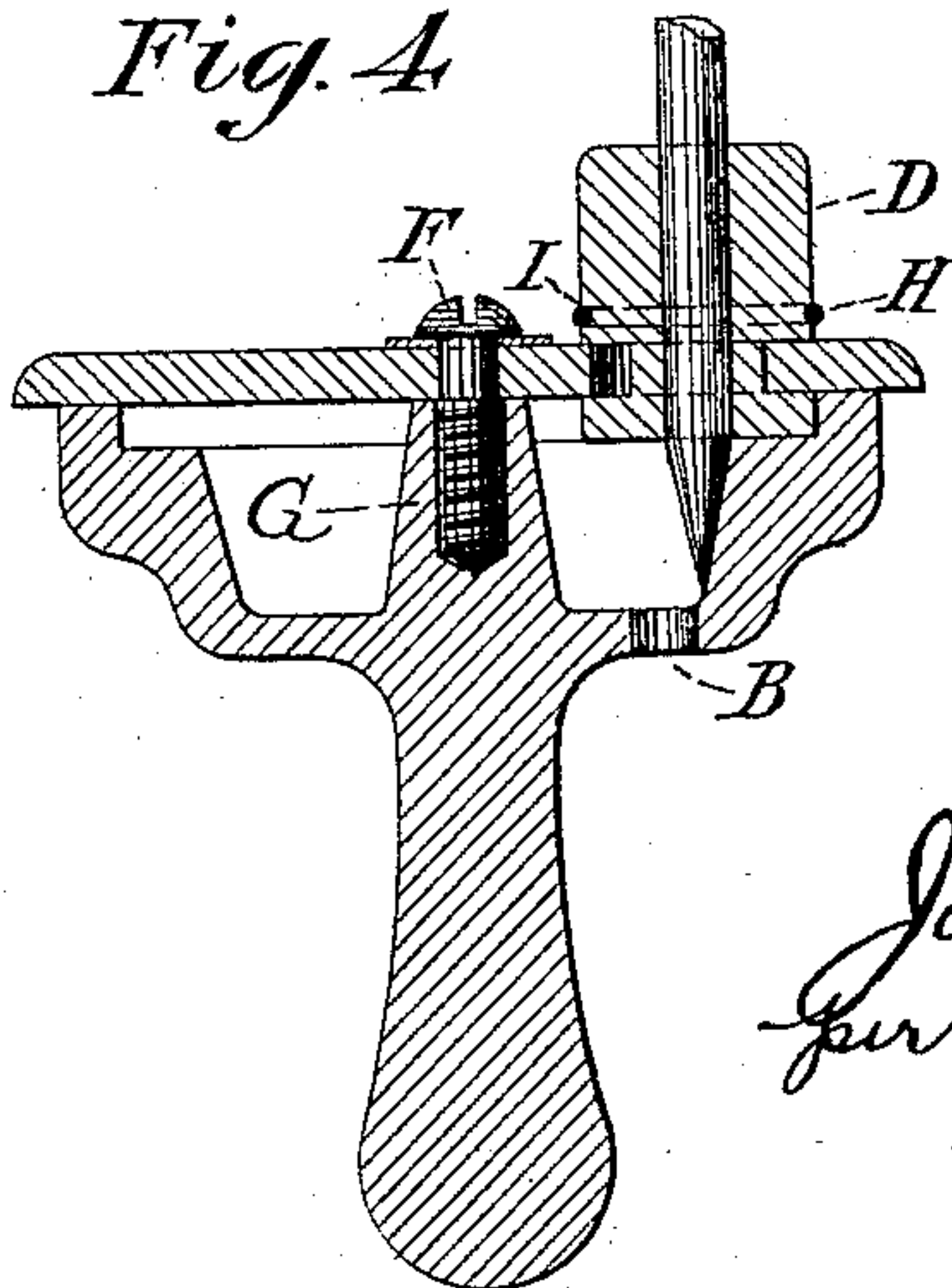


Fig. 4



Witnesses
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UNITED STATES PATENT OFFICE.

JACOB H. JONES, OF PITTSBURG, PENNSYLVANIA.

PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 429,689, dated June 10, 1890.

Application filed February 1, 1890. Serial No. 338,881. (No model.)

To all whom it may concern:

Be it known that I, JACOB H. JONES, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Pencil-Sharpeners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has reference to rotary sharpeners for slate-pencils.

It is well known that pencil-sharpeners have been provided in which the pencil has been held and made to revolve against the inclined interior surface of a cylindrical shell.

The object of my invention is to improve such devices by providing an adjustable pencil-holder which will grasp the pencil more firmly and at the same time permit it to be inserted and withdrawn with greater facility.

A further object is to produce a device which will limit the extent of grinding, so that too much of the pencil cannot be ground away and wasted.

A still further object of my invention is to produce means for the easy removal of a broken portion of the pencil and also the pencil-dust that accumulates within the interior of the cylinder.

A still further object is to so construct the exterior of the sharpener that a child can grasp and hold it with greater certainty while rotating the pencil.

With these ends in view my invention consists in the peculiar features and combinations of parts more fully described hereinafter, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a perspective view of my device; Fig. 2, a vertical section in which the pencil is shown just commencing to be sharpened; Fig. 3, a similar view showing the operation completed, and Fig. 4 a modification.

A represents a hollow body or box having an octagonal exterior to form an uneven surface, whereby the operator can obtain a better purchase or hold upon it. The bottom of the box is entirely closed, with the exception of a small hole B, placed so as to register with

the vertical aperture C through the pencil-holder D, mounted in the rotary cover E above. This cover is secured to rotate upon the box by means of a screw or other suitable axis F extending through the center of the cover and entering a column G.

The pencil-holder D consists of a split block having a round exterior to serve as a handle and being embraced by a contracting-ring H, which fits within the annular groove I. The resiliency of this spring gives it a constant tendency to contract, whereby the pencil is held securely within the aperture of the holder, at the same time permitting it to be withdrawn and inserted with facility. The holder passes through a radial oblong slot J in the free end of the bridge K, secured to the top or cover by means of the fastening-screw F. The free end of the bridge rests upon a seat L, and is held thereon by the lugs M. The pencil-holder is held within the slot by means of a flange N upon the bottom.

The oblong slot J' through the cover registers with the slot J in the bridge K. These slots enable the pencil-holder to move toward and from its axis to accommodate wearing away of the point. The outer end of the slot J and the holder are so arranged relatively to each other as to arrest the outward movement of the holder when the pencil has been reduced to a sharp point, thereby preventing needless wear, waste, and labor.

In using my invention the operator first inserts the pencil within the vertical aperture in the split holder, and the resiliency of the ring will hold the pencil securely therein throughout the sharpening operation. The pencil is in proper adjustment within the holder when its inner end rests upon the bottom of the box at the base of the grinding-surface, and when so placed the operator grasps the irregular surface of the box with one hand and the holder with the other and rapidly rotates the latter, which carries the cover with it. As the pencil becomes worn down to a point, the holder gradually moves within the radial slot away from the axis of the cover until its periphery reaches the outer walls of the oblong slot, whereupon the pencil will be sharpened.

In Fig. 4 a modification is shown in which

a handle is secured to the bottom of the box, and the bridge K is dispensed with. The pencil-holder is also provided with a flange, which is arranged to come in contact with the interior wall of the box, the same as the periphery of the holder comes in contact with the outer wall of the radial slot at the completion of the point upon the pencil. It is also evident that many other slight changes which might suggest themselves to a skilled mechanic could be resorted to without departing from the spirit and scope of my invention. Therefore I do not limit myself to the exact construction shown.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a pencil-sharpener, a box or body portion provided with a grinding-surface, in combination with a rotary cover provided with a radial slot and a holder located within said slot and movable toward and from the axis of the cover, in the manner and for the purpose substantially as described.

2. In a pencil-sharpener, the combination of a box or body portion provided with an annular grinding-surface, a rotary pencil-holder arranged to move toward and from the axis of the circle in which it travels, said holder being provided with a contracting ring, and means, substantially as described, for limiting the outward movement of the holder when the point is finished, as set forth.

3. In a pencil-sharpener, a box or body provided with an annular grinding-surface, in combination with a pencil-holder arranged to rotate above and hold the pencil against said surface, said holder having outward limited play, whereby its movement will be arrested when the point is finished, in the manner substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB H. JONES.

Witnesses:

JOHN PHELAN,
J. H. ARMSTRONG.