No. 748,369. PATENTED DEC. 29, 1903.

J. R. HARE.

KNIFE SHARPENER.

APPLICATION FILED APR. 25, 1903.

NO MODEL.

Fig. 1.

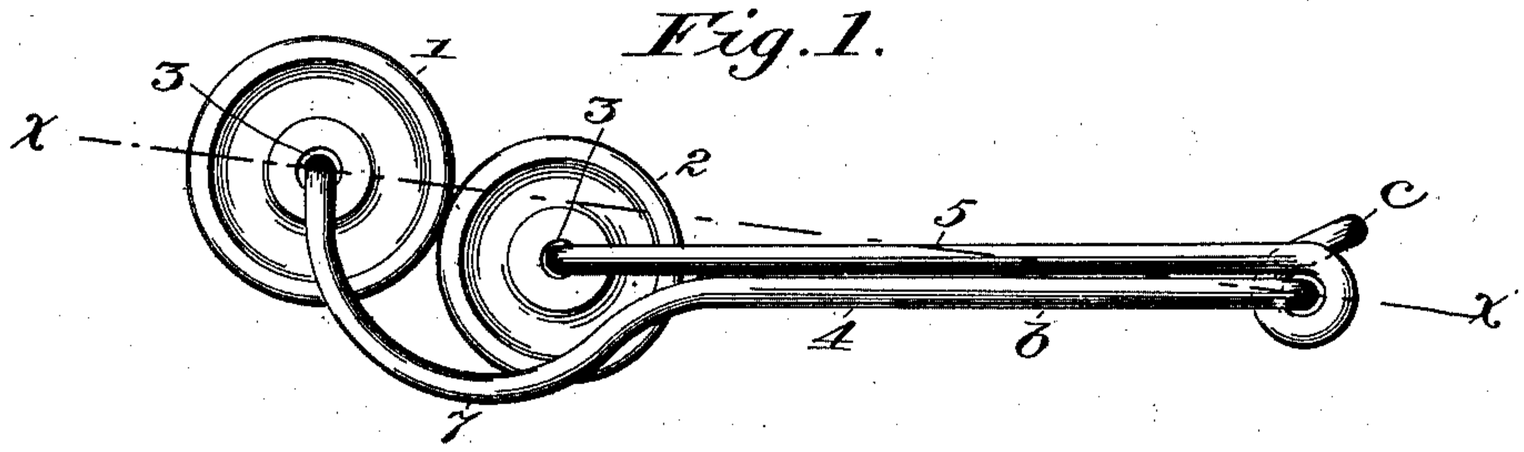
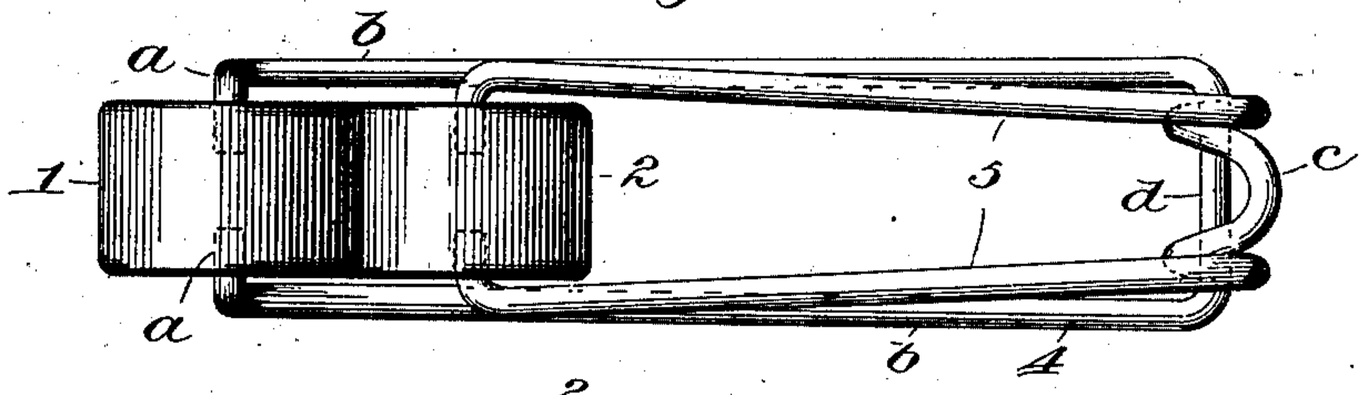


Fig. 2.



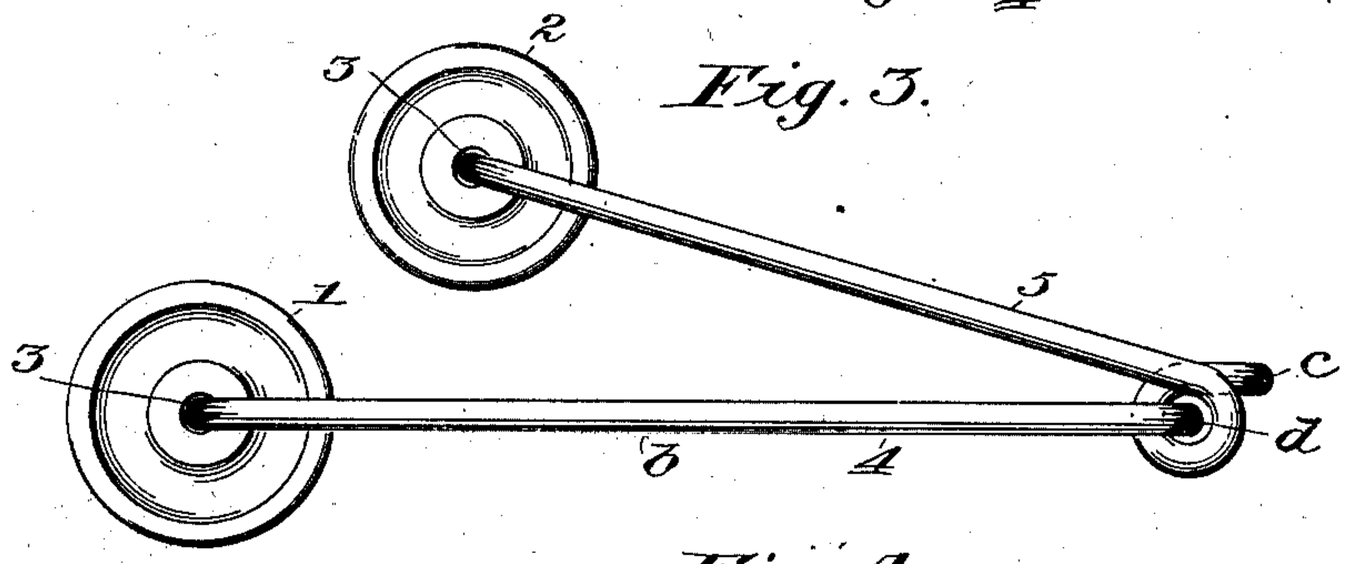


Fig. 3.

Fig. 4.

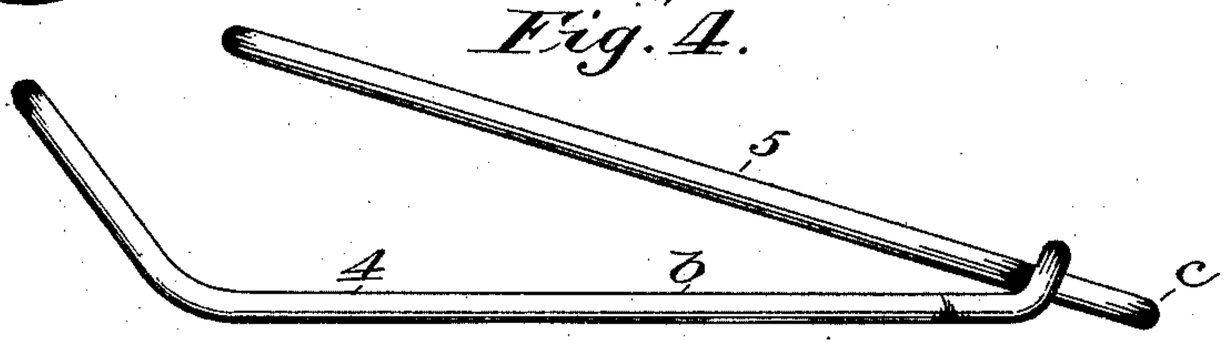
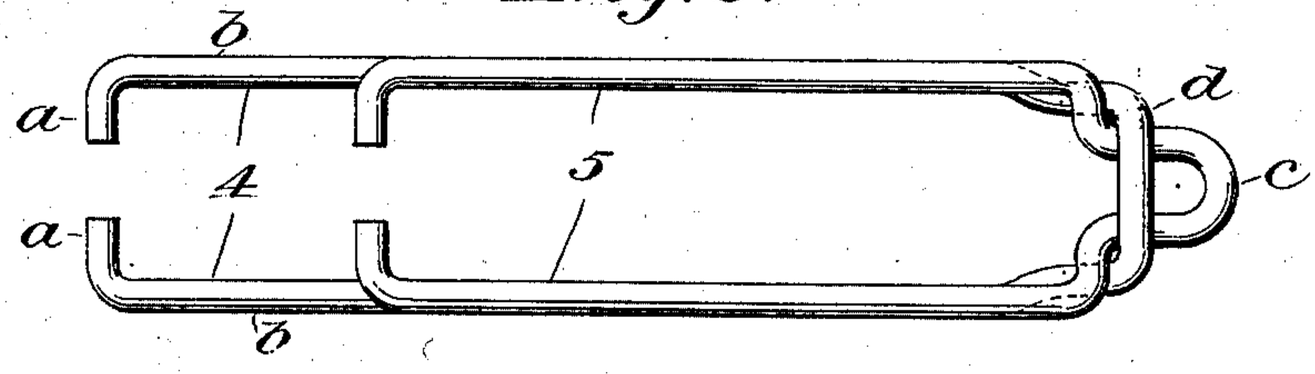


Fig. 5.



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No. 748,369. Patented December 29, 1903.

UNITED STATES PATENT OFFICE.

JOHN R. HARE, OF BALTIMORE, MARYLAND.

KNIFE-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 748,369, dated December 29, 1903.

Application filed April 25, 1903. Serial No. 154,265. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. HARE, of the city of Baltimore, and State of Maryland, have invented certain Improvements in Knife-Sharpeners, of which the following is a specification.

This invention relates to certain improvements in that class of knife-sharpeners which comprises two abrading-wheels which are locked in contact with each other and between the circumferences of which the knife to be sharpened is drawn; and it consists in a construction of a spring-holder whereby the abrading-wheels are held together and locked, as will hereinafter fully appear.

In the further description of said invention which follows reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure 1 is an exterior side view of the improved knife-sharpener in a locked condition, and Fig. 2 a top view of the same. Fig. 3 is a view similar to Fig. 1, showing the abrading-wheels as unlocked. Figs. 4 and 5 are respectively a side and top view of an alternative construction of the spring-holder.

Referring now to Figs. 1, 2, and 3 of the drawings, 1 and 2 are the abrading-wheels, formed of wood covered with emery or of any other material having a hard abrading-surface. The said wheels have each a central hole 3, which preferably extends entirely through it.

4 is the lower member of the spring-holder, consisting of a U-shaped wire with its ends *a* bent inward at a right angle with the side wires *b* and sprung into the hole 3 of the wheel 1, to form pivots about which the said wheel may be rotated when not locked in contact with the other wheel 2, as hereinafter described.

5 is the other and upper member of the spring-holder, which, like the one, 4, is U-shaped and having its ends *a* inserted in the hole 3 of the wheel 2.

The connecting-wire *c* of the holder 5 is bent around the corresponding wire *d* of the member 4 to form a hinge.

In order that the wheels 1 and 2 may be held firmly together without the employment of any extraneous mechanism, the reach of the member 5, including its wheel 2, from the center of the connecting-wire *d* is made slightly greater than the distance between the circumference of the wheel 1 and the said connecting-wire, and the side wires *b* are provided with loops 7, which allow of the wheel 1 being sprung outward as the one, 2, passes to below the dotted line *x x*, Fig. 1, in the locking operation, which is completed when the side wires of the member 5 come in contact with the corresponding wires *b* of the member 4.

It is not intended that the wheels 1 and 2 shall rotate when locked, and the sharpening operation consists in drawing the knife lengthwise of and between the stationary wheels.

When the surfaces of the two wheels become by use so smooth as to be ineffective as sharpening devices, the wheels are unlocked or placed in the position shown in Fig. 3 and slightly turned, so as to present new surfaces to the knife when relocked.

Referring now to Figs. 4 and 5, it will be seen that the two members of the locking holder are not permanently connected together; but the locking operation is performed in the same manner as that described in connection with Figs. 1, 2, and 3.

I claim as my invention—

In a knife-sharpener, a pair of abrading-wheels, combined with a spring-holder for the same which consists of two hinged members, one of which is extensible and resilient, and the other practically rigid, the said members being relatively arranged so as to come in contact near their ends as the abrading-wheels are brought together, substantially as, and for the purpose specified.

JOHN R. HARE.

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