

No. 757,843.

PATENTED APR. 19, 1904.

I. M. ROSE.
GRINDING OR SHARPENING DEVICE.

APPLICATION FILED JAN. 26, 1904.

NO MODEL.

Fig. 1.

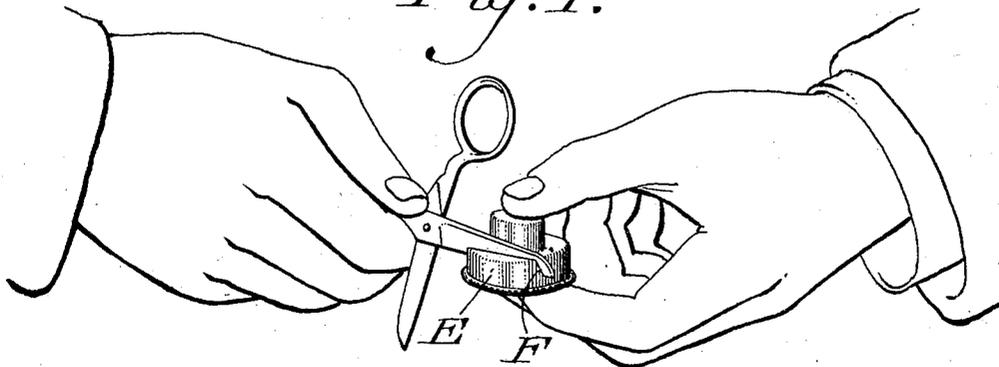


Fig. 2.

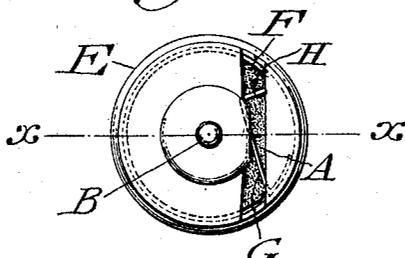


Fig. 3.

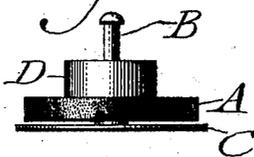
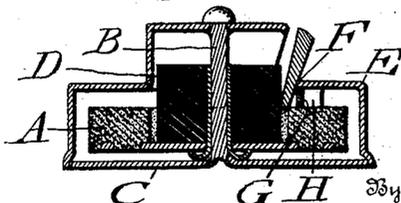


Fig. 4.



Witnesses

P. F. Nagle.
L. Douville.

Inventor
Israel M. Rose
Gledensky + Fairbanks
Attorneys

UNITED STATES PATENT OFFICE.

ISRAEL M. ROSE, OF PHILADELPHIA, PENNSYLVANIA.

GRINDING OR SHARPENING DEVICE.

SPECIFICATION forming part of Letters Patent No. 757,843, dated April 19, 1904.

Application filed January 26, 1904. Serial No. 190,676. (No model.)

To all whom it may concern:

Be it known that I, ISRAEL M. ROSE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Grinding or Sharpening Devices, of which the following is a specification.

My invention relates to an improvement in a grinding and sharpening device embodying a stone or wheel and a bed for rotating said wheel by the reciprocation thereagainst of the article, such as scissors, to be sharpened, said article thus constituting the motor of said wheel while in contact with said bed.

The invention consists in providing the cap or casing of the device with a passage adapted to receive a blade of the scissors and placing the same at a proper angle to the grinding and sharpening device relatively to the bevel of the cutting edge of said blade.

It further consists of a spring connected with the cap or casing of the device for pressing the scissors against said bed.

Figure 1 represents a perspective view of a grinding and sharpening device embodying my invention. Fig. 2 represents a top or plan view thereof on an enlarged scale. Fig. 3 represents a side elevation thereof, certain parts being removed. Fig. 4 represents a vertical section on line *x x*, Fig. 2, on an enlarged scale.

Referring to the drawings, A designates an emery or other grinding or sharpening wheel which is rotatably mounted by the pivot or axis B on the base C. Connected with said wheel is the cylinder D, formed of pliable or elastic material and having portions of its body inside of and projecting above the wheel, so as to form a bed or abutment against which the side of the blade of a pair of scissors may be pressed and rested, while the bevel of the cutting edge of said blade contacts with the adjacent face of said wheel, as shown in Fig. 4, it being noticed that said cylinder D is of less diameter than that of the wheel A and that it preferably extends at approximately a right angle with the face of said wheel.

E designates a cap which covers the wheel and cylinder and is connected with the base C, one end of the pin or axle B being secured to

said cap to hold the same, it being noticed that said cap has a slot or passage F, which extends at an inclination or obliquely downwardly and leads from the exterior of the cap to the upper face of the wheel A and receives the scissors-blade and directs it to the face of said wheel and the periphery of the cylinder D, as shown in Figs. 1 and 4. Within the cap is the spring or spring-plate G, one end of which is secured to said cap and its other or free end adapted to press toward the periphery of the cylinder D and yield laterally or outwardly therefrom, said free end being deflected or bent, forming the shoulder H, which in the normal position of the spring forms a closure or obstruction in the passage F at said free end of the spring.

The operation is as follows: The device is held firmly by the left hand and the scissors in open condition with the right hand. A blade of the scissors is then inserted into the passage F and bearing against the inner inclined side of the spring G causes the latter to yield, the side of said blade now resting upon the periphery of the cylinder and being then pressed thereagainst by said spring, while the beveled edge of the blade contacts with the face of the wheel. The blade is now drawn to and fro, so that reciprocating rotary motions are imparted by the same to the cylinder, and consequently to the wheel, the latter thus occasioning the grinding or sharpening of the blade, which is in contact therewith, as has been stated. Owing to the shoulder H, which extends across the passage F, should the blade be improperly inserted in said passage at the farther end thereof its point will contact with the shoulder H and so stop the blade, the effect of which is evident.

Various changes may be made in the details of construction shown without departing from the general spirit of my invention, and I do not, therefore, desire to be limited in each case to the same.

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

1. In a grinding or sharpening device of the character stated, a sharpening-wheel, a bed of less diameter than said wheel extending axially therefrom, the periphery of said bed be-

ing approximately at a right angle with the face of said wheel, and a cap covering said wheel and bed and having a passage therein leading to said periphery and face.

5 2. In a grinding or sharpening device of the character stated, a sharpening-wheel, a bed of less diameter centrally thereon and connected therewith, a cap having therein a slot or passage leading from the exterior of said cap to
10 said wheel, and a spring within said cap adjacent to the periphery of said bed and within the path of said passage.

15 3. In a grinding or sharpening device of the character stated, a cap having a passage therein, a spring within said cap connected at one end and having its other end free and arranged adjacent to the side of said bed and in the path of said passage.

4. In a grinding or sharpening device of the character stated, a sharpening-wheel, a bed 20 centrally thereon and connected therewith, a cap having a passage therein leading to said wheel, and a spring at one end within said cap having a stop at the free end thereof.

5. A grinding or sharpening device consist- 25 ing of a rotatable sharpening-wheel, a shaft therefor, a bed of less diameter rising centrally from said wheel, and an inclosing case for said wheel and bed, the same having an inclined passage leading to said wheel and a
30 spring within said casing in the path of said passage and adjacent to the side of said bed.

ISRAEL M. ROSE.

Witnesses:

JOHN A. WIEDERSHEIM,
S. R. CARR.