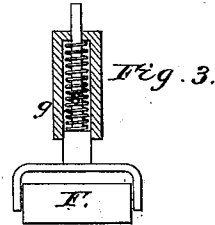
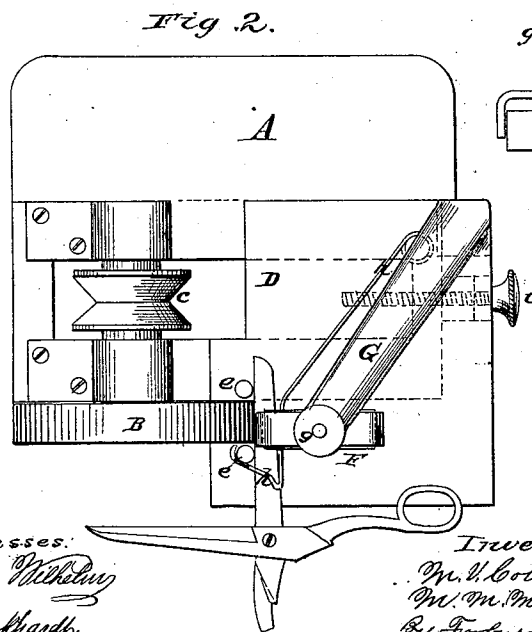
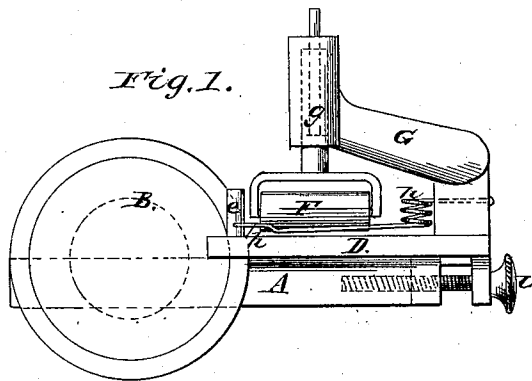


Morse & Collins,
Edge-Tool Grinder.
No 79,240. Patented June 23, 1868.



Witnesses:
Edward Wickham
J. Burkhardt

Inventors,
M. V. Collins.
M. M. Morse.
By Forbes & Hyatt attys.

United States Patent Office.

MELVIN M. MORSE AND M. V. COLLINS, OF BUFFALO, NEW YORK.

Letters Patent No. 79,246, dated June 23, 1868.

IMPROVEMENT IN SHEARS-SHARPENERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, MELVIN M. MORSE and M. V. COLLINS, of the city of Buffalo, in the county of Erie, and State of New York, have invented certain new and useful Improvements in Shears-Sharpener Machines; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure I is a side elevation,

Figure II is a plan thereof, and

Figure III is a vertical section of the sleeve, showing the spring which renders the pressure-roller self-adjustable.

Like letters of reference designate corresponding parts in all the figures.

The invention consists—

First, of an adjustable gauge-plate, provided with suitable stops, against which the blade of the shears is applied, and thereby enabled to be more easily held and uniformly sharpened by the action of the grinding-wheel so which it is subjected.

Second, a self-adjustable pressure-roller, used in combination with said gauge-plate, for the purpose of keeping the blade of the shears in proper contact with the gauge-plate, while it readily permits requisite movement of the blade back and forth while being sharpened.

Third, the combination and arrangement of a spring, to press against the back of the blade, and keep it in proper contact with the emery or other wheel.

In the drawings, A is any suitable bed-plate or frame, for supporting the parts, in which is mounted an emery or other suitable grinding-wheel, B, preferably provided with a pulley, c, by which motion may be imparted to the wheel by means of a treadle. D is a gauge-plate, arranged on top of the frame, with a suitable notch or recess to receive the edge of the emery-wheel. e e are two guide-pins or stops, on each side of this recess, in line parallel with the face of the wheel B, against which the edge of the blade of the shears is held in grinding it. F is a pressure-roller, mounted in suitable bearings, with a vertical shaft fitting in a sleeve, g, in the end of an arm, G, secured to the gauge-plate. Within the sleeve is a spiral spring, h, (shown in Fig. III,) which operates to keep the roller pressed down upon the gauge-plate, and also to render it self-adjustable.

The blade of the shears to be sharpened is inserted under the roller, with the edge against the stops e-e. A spring, k, constructed and arranged in any suitable manner to press against the back of the blade and keep it engaged with the grinding-wheel, is employed, as clearly represented.

The gauge-plate may be secured to the bed-plate or frame by dove-tail slides, or other suitable connections that will permit its adjustment to and from the wheel.

This adjustment is accomplished by means of a thumb-screw, i, passing through a flange from the gauge-plate, and screwing into a nut in the frame beneath. By means of this screw the gauge-plate is so adjusted that the edge of the blade, when arranged against the stops e, will also be in contact with the grinding-wheel, the stops operating to prevent an undue grinding away of the edge.

The blades of the instrument to be sharpened are successively placed on the gauge-plate, under the pressure-roller, as before described, and moved back and forth against the gauge-stops, which keep the edge parallel with the face of the wheel, and insure the sharpening of the instrument in a uniform and rapid manner.

The arrangement of the bed-plate a little above the centre of the wheel causes the action of the latter to impart to the edge the required bevel.

The bed-plate may be provided with a set-screw, and be constructed to permit the ready attachment of the instrument to the table of a sewing-machine, the emery-wheel in that case being operated by the mechanism of the sewing-machine, with which the pulley c may be connected in any suitable manner.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The adjustable gauge-plate D, provided with stops *e e*, arranged and operating with the grinding-wheel B, substantially as set forth.
2. In combination therewith, the self-adjusting pressure-roller F, substantially in the manner and for the purpose set forth.
3. The spring *h*, arranged with a pressure-roller, F, and gauge-stops *e*, substantially as and for the purpose specified.

MELVIN M. MORSE,
M. V. COLLINS.

Witnesses:

JAY HYATT,
W. H. FORBUSH.