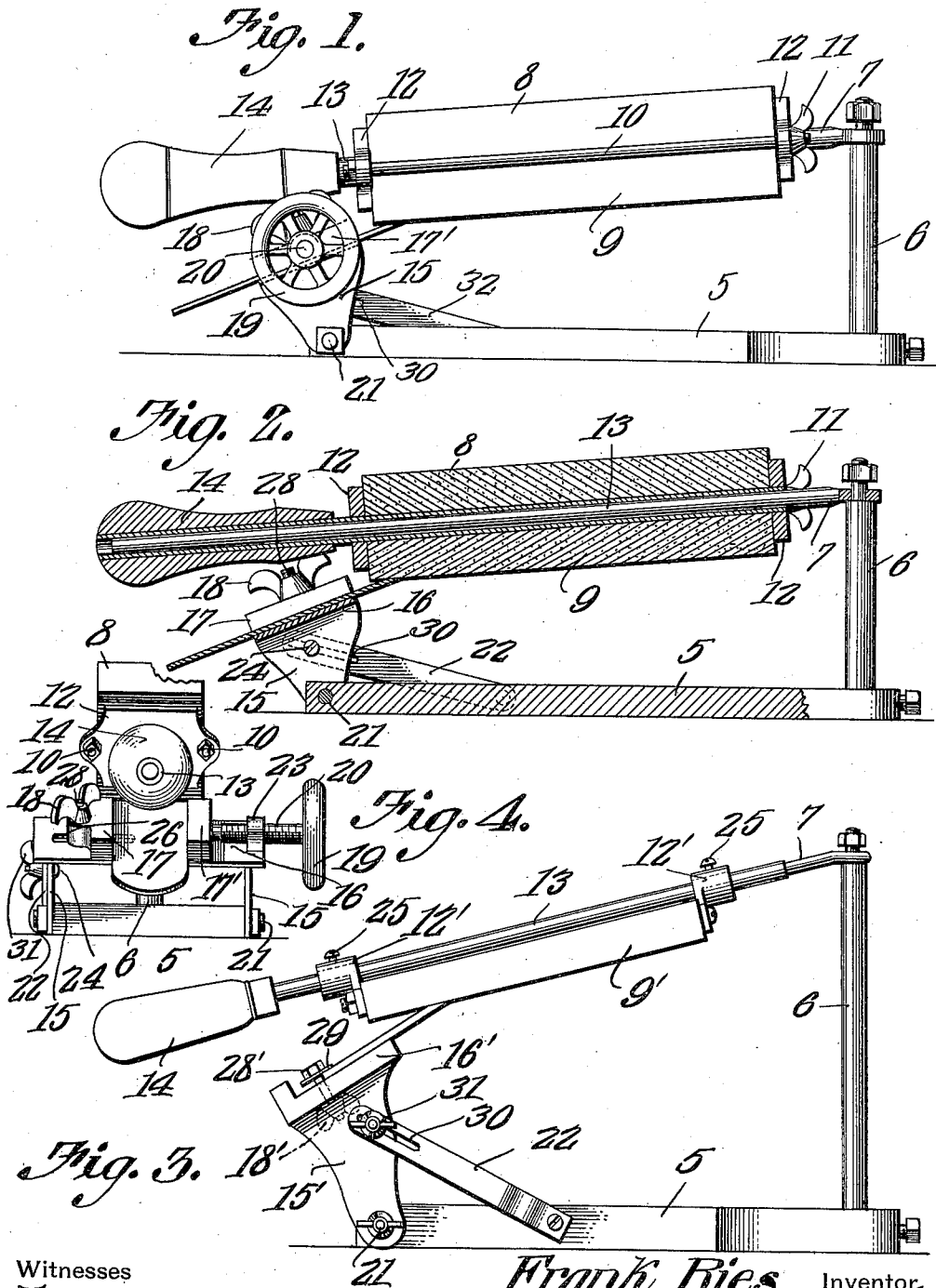


F. RIES.
SHARPENING MACHINE.
APPLICATION FILED AUG. 22, 1911.

1,015,075.

Patented Jan. 16, 1912.



Witnesses
Frank B. Woodard.
J. H. Wilson.

Frank Ries Inventor,
by C. A. Snow & Co. Attorneys.

UNITED STATES PATENT OFFICE.

FRANK RIES, OF TIFFIN, OHIO, ASSIGNOR OF ONE-HALF TO JOHN G. HEILMAN, OF
TIFFIN, OHIO.

SHARPENING-MACHINE.

1,015,075.

Specification of Letters Patent.

Patented Jan. 16, 1912.

Application filed August 22, 1911. Serial No. 645,384.

To all whom it may concern:

Be it known that I, FRANK RIES, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have
5 invented a new and useful Sharpening-Machine, of which the following is a specification.

This invention relates to sharpening machines and has for its object to provide a machine for sharpening tools of various characters, such as chisels, plane bits, printing shear blades, or tools in general having beveled edges.

This invention is embodied in certain
15 novel arrangements, combinations and constructions of details as hereinafter described and as pointed out in the appended claim, the invention being illustrated in the accompanying drawings, wherein similar reference
20 characters indicate similar parts, and wherein:—

Figure 1 is a side elevation of the sharpener. Fig. 2 is a longitudinal vertical section thereof. Fig. 3 is a side elevation of a
25 modified form of sharpener. Fig. 4 is an end elevation of the former sharpener, parts broken away.

Referring specifically to the drawings, 5 designates a base of suitable material and design which has an upright 6 at one end of same and at the other end of the base is
30 mounted the tool holder. The tool holder comprises a table 16 having a pair of legs 15 at the ends thereof straddling the sides of the base 5 and pivoted thereto by the bolt
35 21 extending transversely through the base. To one side of the base 5 is pivoted a brace 22 having an elongated slot 30 in the free end thereof and the free end of the said
40 brace is adjustably secured to the corresponding leg 15 of the table 16 by means of a bolt 24 mounted in the said leg which passes through the slot 30 of the brace 22 and has a wing nut 31 on its outer end.
45 Thus by loosening the wing nut 31 the table may be swung to a suitable angle and by tightening the said nut the table is securely locked in its adjusted position.

In one end of the table is an elongated
50 transverse slot 26 and on the corresponding surface of the table is mounted a block 17 carrying a bolt 28 which passes through the slot 26 and has a wing nut 18 on its upper end to adjustably secure the said block on
55 the table. On the other end of the table is

an upstanding ear 23 through which a transversely arranged bolt 20 is screw-threaded and the said bolt having a hand wheel on the outer end thereof and carrying a block 17' on the inner end thereof, the said
60 bolt being swivelly connected to the said block. By turning the hand wheel 19 the block 17' may be slid to and from the block 17 to clamp or release the tool between the blocks 17 and 17' on the table. On the upper end
65 of the upright 6 is pivoted a rod 7, the said rod having a tubular member or sleeve 13 slidably and rotatably mounted thereon. On the outer end of the tubular member 16 is secured a handle 14 and a pair of elongated
70 plates 12 are arranged on the tubular member 13, which have a pair of bolts 10 connecting the ends thereof, the said bolts being provided with wing nuts 11. A pair of grinding stones 8 and 9 are clamped between
75 the plates 12 on the respective sides of the tubular member 13, one of the blocks or grinding stones having a roughened surface to serve as a rough cutter for the tools and the other block or grinding stone having a
80 smooth surface for giving the tools a keen edge or for giving the finishing edge to the tool.

In use, the tool is laid on the table 16 with the edge to be sharpened disposed in-
85 ward and the blocks 17 and 17' are clamped against the edges of the tools to retain same firmly in position. The table is then set to the proper angle or inclination by means of the brace 22 which sets the tool in proper
90 position for sharpening. The operator then grasps the handle 14 and by swinging the handle and sliding the same inward and outward the respective blocks 8 and 9 of abrasive material may be brought to bear on the
95 edge of the tool to sharpen same, it being understood that the tubular member 13 being rotatable on the rod 7 permits the blocks 8 and 9 to be swung downward as desired.
100

In the modified forms shown in Fig. 3 the table 16' has the legs 15' pivoted to the end of the base 5, the table being secured in its adjusted position by means of a similar
105 brace 22, and through the table 16' is arranged a bolt 28' having the head thereof upward, and on the lower end thereof having a wing nut 18' and the washer 29 is arranged on the upper end of the said bolt under which a tool is adapted to be clamped
110

on the table. The blocks 12' on the tubular member 13 has a single grinding stone 9' clamped therebetween and are held in adjusted position to said tubular member by means of set screws 25.

What is claimed is:—

In a sharpening machine, a base, a table having a leg pivoted to the base, means for adjusting the table at various inclinations, a block adjustably secured on one end of the table, the table having an ear on the other end thereof, a bolt screwthreaded through

the said ear, a hand wheel on the outer end of the said bolt, and a block slidable on the table and carried by the inner end of the bolt.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

FRANK RIES.

Witnesses:

GROVER STOFER,
HARRY TAGGART.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
