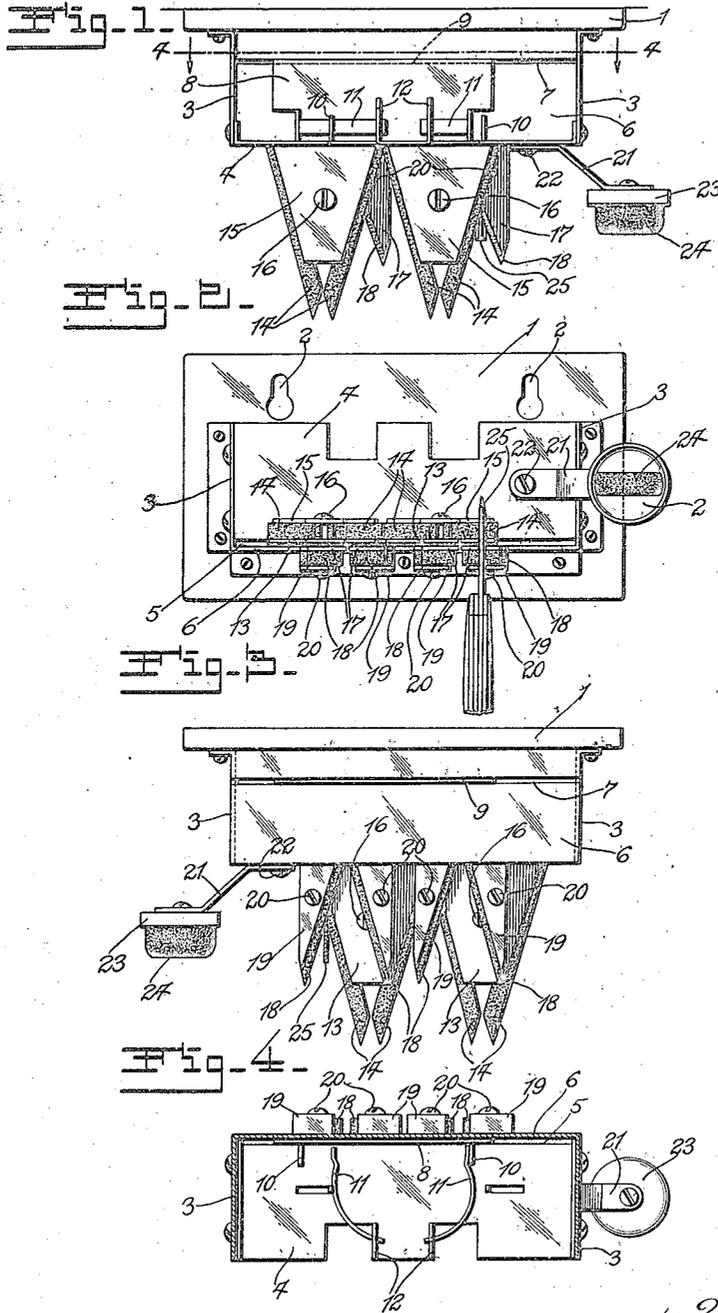


Jan. 2, 1923.

1,441,030.

A. W. RUDOLPH.
KNIFE SHARPENING MACHINE.
FILED DEC. 10, 1921.



Inventor.
Alfred W. Rudolph,
by Small & Small
His Attorneys.

UNITED STATES PATENT OFFICE.

ALFRED WILLIAM RUDOLPH, OF ST. LOUIS, MISSOURI.

KNIFE-SHARPENING MACHINE.

Application filed December 10, 1921. Serial No. 521,413.

To all whom it may concern:

Be it known that I, ALFRED W. RUDOLPH, a citizen of the United States of America, residing at St. Louis, in the State of Missouri, have invented a new and useful Knife-Sharpener Machine, of which the following is a specification.

The prime object of this invention is the provision of a simple, durable, inexpensive and efficient machine by which steel knives may be quickly sharpened throughout the entire length of the blade and in which the sharpening material may be quickly replaced when worn.

Referring to the accompanying drawing, wherein like numerals refer to like parts throughout, Figure 1 is a plan view of one side of the machine as the same appears when suspended upon a wall; Figure 2 a front elevation depicting the insertion of a knife between the sharpening surfaces; Figure 3 a plan view which is the reverse of Figure 1; and Figure 4 a sectional view taken along line 4-4 of Figure 1.

1 indicates a wooden block having apertures 2 for the reception of hooks when the machine is hung upon a wall, and secured to said block is a substantially oblong box comprising side-walls 3, front-plate 4 provided with a slot 5 and bottom-plate 6 which also has a slot 7.

Disposed within said box is a reciprocally movable plate 8 having a down-turned flange 9 projecting through slot 7 and lugs 10 adapted to engage springs 11, the latter being secured to lugs 12 of plate 4 and serving to retract plate 8 after removal of the knife from the sharpening surfaces. The forward edge of plate 8 projects through slot 5 of front plate 4 and is provided with extensions 13 against which the sharpening stones 14 are held by detachable plates 15 secured by screws 16. The forward edge of bottom-plate 6 is provided with four substantially triangular-shaped extensions 17 which are similar in appearance to scissor-blades and the additional set of stones 18 are retained thereagainst by detachable plates 19 (of corresponding shape) fastened by screws 20.

An arm 21 pivotally fastened at 22 to plate 4 serves to support a holder 23 for a pad 24 of absorbent material saturated with oil and the knife blade is preferably drawn over said pad before and after sharpening. When the machine is not in use, said arm may be turned inwardly upon its pivot and a suitable cover (not shown) placed over the whole.

Finally it should be noted that one set of the sharpening stones may be comparatively coarse so as to prepare the blade for the finishing action of the other set of less abrasive material, and that, in distinction to certain other devices of the same general character, the construction of this machine is such that the entire length of the knife-edge may be sharpened.

In using the machine the knife blade 25 is inserted within the space A (Figure 1) so as its cutting edge rests against one of the immovable stones affixed to plate 6 and one of the movable stones carried by plate 8. The blade is then pressed downward and simultaneously drawn toward the operator, thereby forcing plate 8 from left to right against the resistance of springs 11 which serve to return said plate to its original position immediately upon removal of the blade.

What I claim as new and desire to secure by Letters-Patent is:—

1. A knife-sharpener comprising a reciprocally movable member, a plurality of sharpening stones secured thereto, an immovable plate positioned opposite said stones, and a plurality of similar stones affixed to said plate, the stones of said member being spaced apart at their base and converging at their upper extremities, and the stones of said plate being juxtaposed at their base and diverging upward, whereby a substantially V-shaped channel is provided between the sets of stones for the insertion of a knife-blade.

2. A knife-sharpener comprising a reciprocally movable member, a plurality of sharpening stones secured thereto, an immovable plate positioned opposite said stones, and a plurality of similar stones af-

