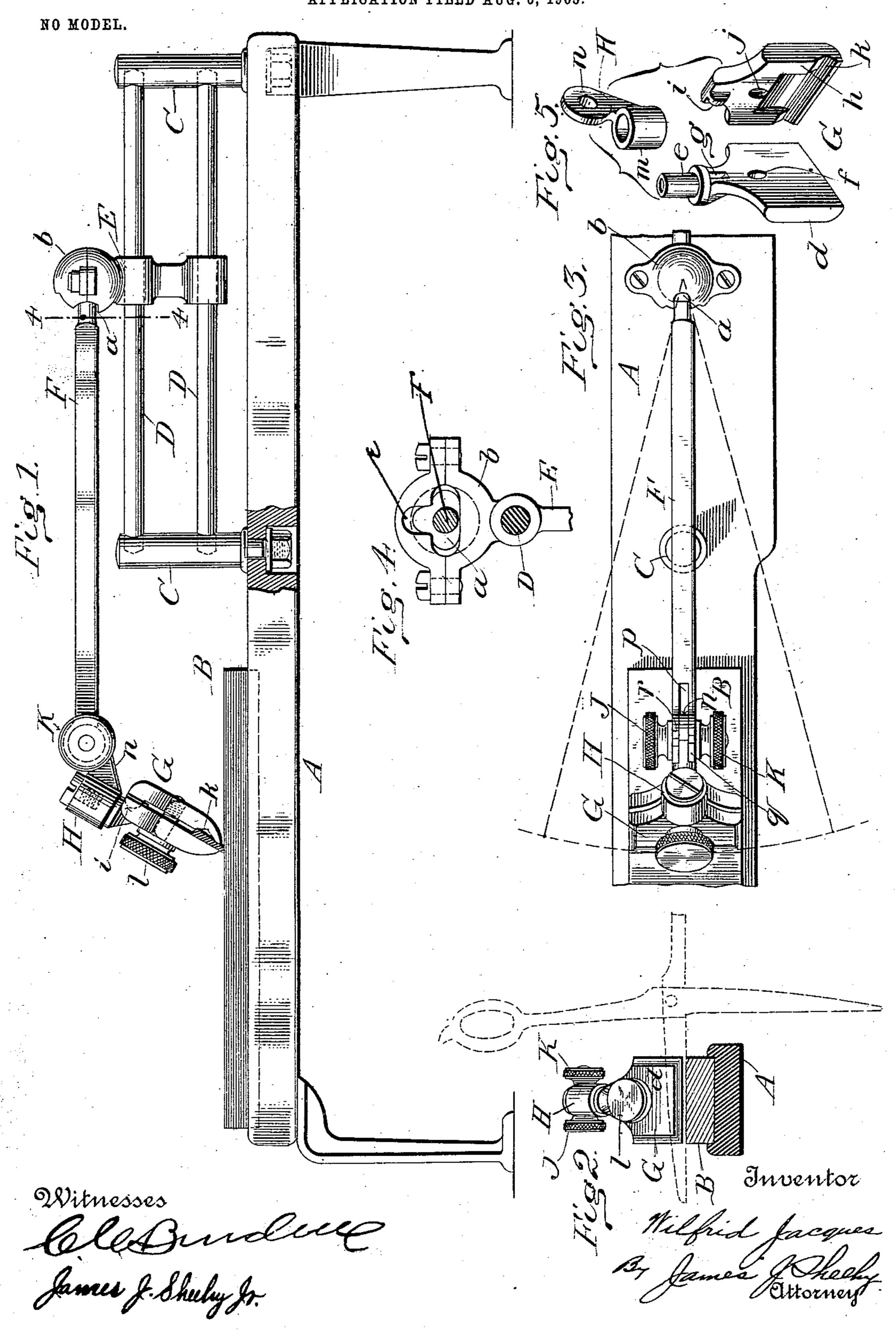
W. JACQUES. EDGE TOOL SHARPENER. APPLICATION FILED AUG. 6, 1903.



United States Patent Office.

WILFRID JACQUES, OF WOONSOCKET, RHODE ISLAND.

EDGE-TOOL SHARPENER.

SPECIFICATION forming part of Letters Patent No. 751,077, dated February 2, 1904.

Application filed August 6, 1903. Serial No. 168,522. (No model.)

To all whom it may concern:

Be it known that I, Wilfrid Jacques, a citizen of the United States, residing at Woonsocket, in the county of Providence and State of Rhode Island, have invented new and useful Improvements in Edge-Tool Sharpeners, of which the following is a specification.

My invention pertains to edge-tool sharpeners; and it has for its object to provide a simple and easily-operated device through the medium of which shears and other edgetools may be provided with an even edge.

The invention will be fully understood from the following description and claims when taken in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation, partly in section, of the sharpener constituting the preferred embodiment of my invention. Fig. 2 is a transverse section, on a reduced scale, taken through the body and stone of the sharpener in a plane in front of the clamp. Fig. 3 is a plan view of a portion of the sharpener. Fig. 4 is a detail transverse section taken in the plane of the line 44, Fig. 1, looking in the direction of the arrow; and Fig. 5 comprises disconnected perspective views of the jaws of the clamp for holding the tool to be sharpened and the bracket for connecting said clamp to the overhanging arm of the sharpener.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A is the body of the sharpener, in which is seated a suitable stone B for grinding the edges of the shears and other tools to be sharpened.

C C are posts fixed to and rising from the body; D D, longitudinally-disposed guide-rods interposed between and supported by the posts; E, a slide movable in the direction of the length of the device on the rods D; F, an arm carried by the slide and overhanging and extending in advance of the forward post C and C a clarar carried by the averbancing

C, and G a clamp carried by the overhanging arm and having for its purpose to hold the shears or other tool during the sharpening thereof.

As best shown in Figs. 1 and 4, the connec- 50 tion between the arm F and the slide E is effected through the medium of the ball a on the former and a socket b on the latter containing the ball. The socket is provided in its forward side, Fig. 4, with an inverted-T- 55 shaped opening c, through which the arm \mathbf{F} extends. In virtue of the provision of the said opening c it will be observed that the user of the device is enabled while moving the arm F to and fro longitudinally to swing 60 said arm in a horizontal plane, as indicated by dotted lines in Fig. 3, and thereby apply the full length of the blade to be sharpened to the stone B; also that the operator is enabled to raise the arm for the purpose of ex- 65 amining the edge of the blade.

The clamp G (best shown in Fig. 5) comprises a jaw d, having a stem e, an aperture f, and a recess g, a jaw h, having a lug i designed to rest in the recess g of jaw d, a thread-70 ed aperture j, and a recess k, of obtuse-angle form in cross-section, and a screw l, connecting the said jaws d and h. The recess k in the jaw k and the recess g and the lug i of the jaws d and h, respectively, are provided in 75 order to permit of blades of various shapes in cross-section being properly placed and secured in the clamp.

H is a bracket having a sleeve m to receive the stem e of clamp-jaw d and an apertured 80 vertically-disposed head n adapted to rest in a bifurcation p in the forward end of the arm F.

I is a screw which secures the stem of the clamp-jaw d in the sleeve of the bracket H.

J is a threaded bolt which extends through 85

the walls of the bifurcation p in arm F and the head n of bracket H, and K is a nut mounted on and serving in conjunction with the bolt to adjustably fix the bracket and the clamp G with respect to the arm F.

The head n of the bracket H and circular enlargements q on the walls of the bifurcation p are provided on their perimeters with graduations r, as shown in Fig. 3. This to permit of the bracket and clamp being set for the 95 formation of the exact bevel desired on the tool to be sharpened.

In the practical operation of my improved

sharpener the clamp G is adjusted and adjustably fixed and the shears to be sharpened are secured in the clamp, as shown in Figs. 1 and 2, after which the operator grasps either the shears or the clamp and moves the shears to and fro on and lengthwise of the stone, meanwhile pressing the shears against the stone and moving the same crosswise thereof until the desired edge is produced on the blade of the shears.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear, and exact understanding of the same. I do not desire, however, to be understood as confining myself to such specific construction and relative arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the scope of my invention as claimed.

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

25 1. An edge-tool sharpener comprising a body, a flat stone thereon, a guide-rail connected with and arranged above the body, at one end of the stone, a slide movable on said guide-rail toward and from the stone, a socket
3° carried by the slide and having an inverted-T-shaped opening in its forward side, an arm extending forwardly through the T-shaped opening in the socket, and having a ball disposed in said socket, and tool-holding means
35 carried by the arm.

2. An edge-tool sharpener comprising a body, a flat stone thereon, a guide-rail connected with and arranged above the body, at one end of the stone, a slide movable on said quide-rail toward and from the stone, an arm carried by the slide and overhanging the stone, and movable vertically and sidewise on the

slide, and tool-holding means carried by the arm.

3. In an edge-tool sharpener, the combina- 45 tion of a stone, a movable arm overhanging the stone, and having a bifurcation and circular portions, on the walls thereof, provided with graduations, a bracket having a vertical, circular head arranged in the bifurcation of 50 and pivotally connected to the arm, and provided with graduations, means for adjustably fixing said bracket with respect to the arm, and a tool-holder carried by the bracket.

4. In an edge-tool sharpener, a tool-holding 55 clamp comprising a jaw having a recess in its inner side, a jaw having a lug on its inner side, adapted to rest in the recess of the first-mentioned jaw, and also having a recess in its inner side, of angular form in cross-section, and 60 means for connecting said jaws.

5. In an edge-tool sharpener, the combination of a flat stone, a fixed guide-rail arranged at one end of the stone, a slide movable on said guide-rail toward and from the stone, an 65 arm carried by the slide and overhanging the stone, and movable vertically and sidewise on the slide; said arm having a bifurcation in its forward end and circular portions on the walls of the bifurcation, provided with graduations, 70 a bracket having a vertical, circular head arranged in the bifurcation of and pivotally connected to the arm, and provided with graduations, means for adjustably fixing said bracket with respect to the arm, and a tool-holder carried by the bracket.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILFRID JACQUES.

Witnesses:

Edgar L. Spaulding,
Belle Smith.