

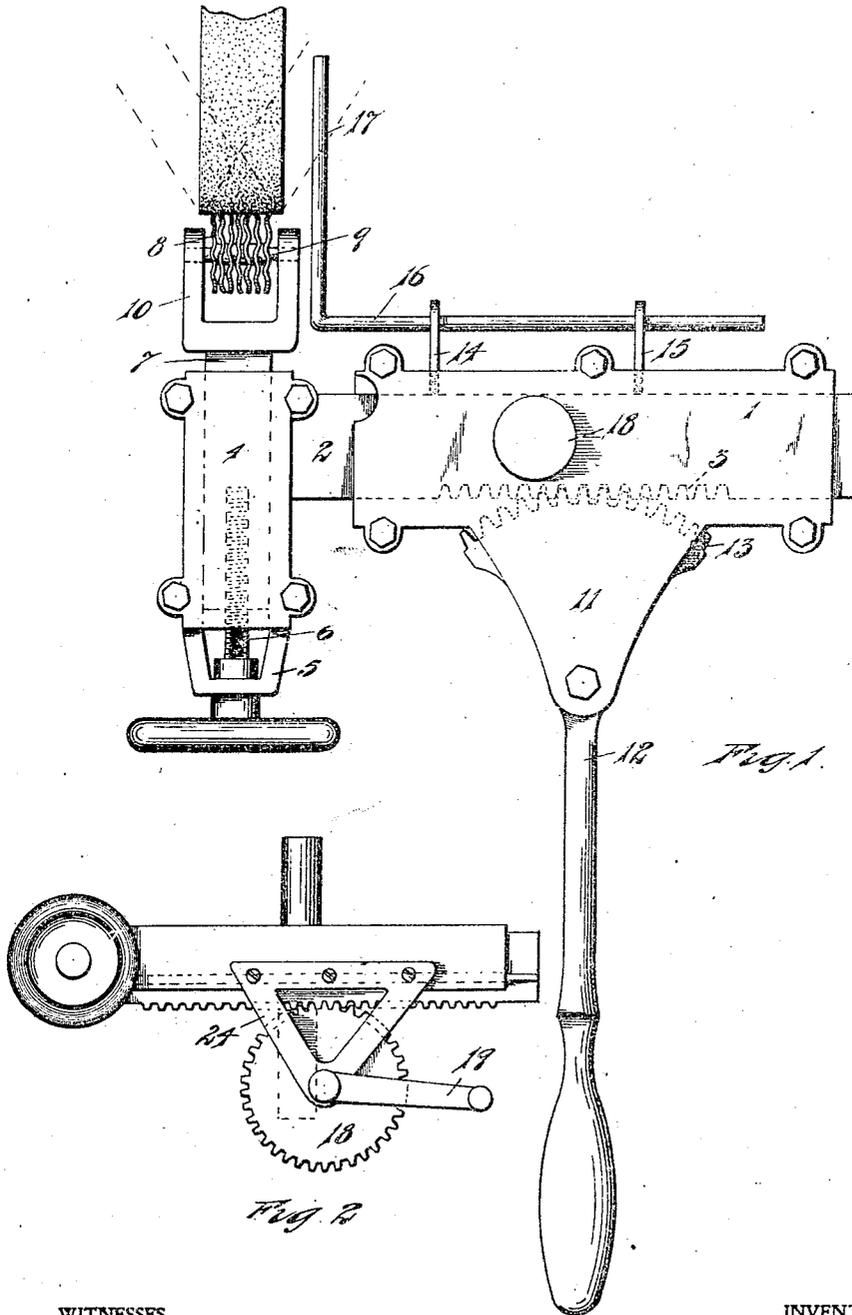
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L. BINGELL.

TOOL FOR TRUING GRINDING AND ABRADING WHEELS.

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LOUIS BINGELL, OF DETROIT, MICHIGAN.

TOOL FOR TRUING GRINDING AND ABRADING WHEELS.

No. 830,293.

Specification of Letters Patent.

Patented Sept. 4, 1906.

Application filed April 26, 1906. Serial No. 313,766.

To all whom it may concern:

Be it known that I, LOUIS BINGELL, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful improvement in Tools for Truing Grinding and Abrading Wheels; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to tools for truing grinding and abrading wheels.

It has for its object an improved tool for the purpose specified.

In the drawings, Figure 1 is a plan view of the tool. Fig. 2 shows a pinion-actuator in place of the quadrant-actuator of Fig. 1

The tool consists of a tubular body 1, in which there is contained a tool-head carrier 2, provided on one side with a rack 3 and carrying at one end a head 4, which is also tubular, with the opening through it at right angles to the opening through the body part 1. The head part 4 is provided at one end with bearings 5 for a hand-actuated screw 6. The screw engages in the stem 7 of the abrading-tool, which consists of a number of corrugated disks 8, mounted on a shaft 9, which shaft 9 is journaled in a fork 10 at the end of the tool-stem 9.

The tubular body part 1 is preferably made in two parts, secured together by bolts, and the tubular head part is also preferably made in two parts, secured together by bolts. The carrier 2 is rectangular in cross-section or prismatic. So, also, the tool-stem 7 is rectangular in cross-section or prismatic. The body part 1 is provided with handle-support projections 11, in which there is pivoted a handle-lever 12, having an arched rack 13. The rack 13 engages with the rack 3 on the carrier 2. The screw 6 engages in a threaded screw-hole in the stem 7. On the front side of the body 1 opposite the handle-support projections 11 are secured two brackets 14 and 15, provided with circular perforations, and through the perforations extends one branch 16 of a squaring-guide whose branch 17 can be swung to a position of parallelism with the axis of the stem 7; but if left without support the arm 17 will drop (when the tool is in position for work) to a position at an angle to the stem 7, where it is no longer in a position

to interfere in any way with the proper working of the tool. Its use is to square up the tool with the stone to be treated in order that the tool-stem 7 may be projected to the proper distance through the head 4 to engage properly with the face of the stone.

From the body 1 there projects upward a trunnion 18 and downward a trunnion opposite the trunnion 18, (which is not seen in the drawings.)

In use one of the trunnions is seated in a bearing in the frame of the stone to be trued, the one to be used determining whether the tool-truing disks 8 shall be located to the right or to the left of the handle 12 and the body 1. The workman selects that position which is best adapted for the particular stone under treatment, and the tool works equally well either side up. After the trunnion is seated in its bearing the carrier 2 is moved until the axis of the tool-stem 7 is in alignment with the normal to the face of the stone to be trued. This face of the stone may be at right angles to the side face of the stone or it may be at an angle thereto. The tool will work to true up either face with equal facility—as, for example, it will true up the face of the stone shown in full lines or the face of the stone shown in dotted lines.

By oscillating the handle 12 the truing-disks 8 are carried in reciprocation across the entire face of the stone and are held truly to a straight line in their path of travel.

For machines to be used with broad-faced wheels a pinion-actuator 18, driven by a hand-winch 19, is employed. The carriage 22 is made longer, and the rack 23 is placed on the under side. The pinion is supported in hangers 24. The principle of action is the same, but the range of movement greater.

What I claim is—

1. In a tool for truing up abrading-wheels, the combination of a body portion, a carrier engaging therethrough, means supported by said body portion and engaging said carrier whereby its position with respect to said body portion may be regulated, a tool-carrying head at one end of said carrier, and an adjustable stem provided with an abrasive end portion engaging through said head transversely to the longitudinal axis of the carrier, substantially as described.

2. In a tool for truing up abrading-wheels, in combination with a body portion, a carrier passing therethrough, a rack-segment pivotally supported by said body portion and en-

gaging in a complementary rack on said carrier whereby the position of the carrier in the body portion may be controlled, a tool-carrying head at one end of said carrier, and an abrasive tool adjustably held thereby, the axis of its possible movement being perpendicular to the lengthwise axis of the carrier, substantially as described.

3. In a tool for truing up abrading-wheels, in combination with a carrier, a squaring-up implement held to the body part and having

an arm adapted to be brought into parallelism simultaneously with the axis of the tool-stem, and with a normal to the surface to be trued, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

LOUIS BINGELL.

Witnesses:

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