

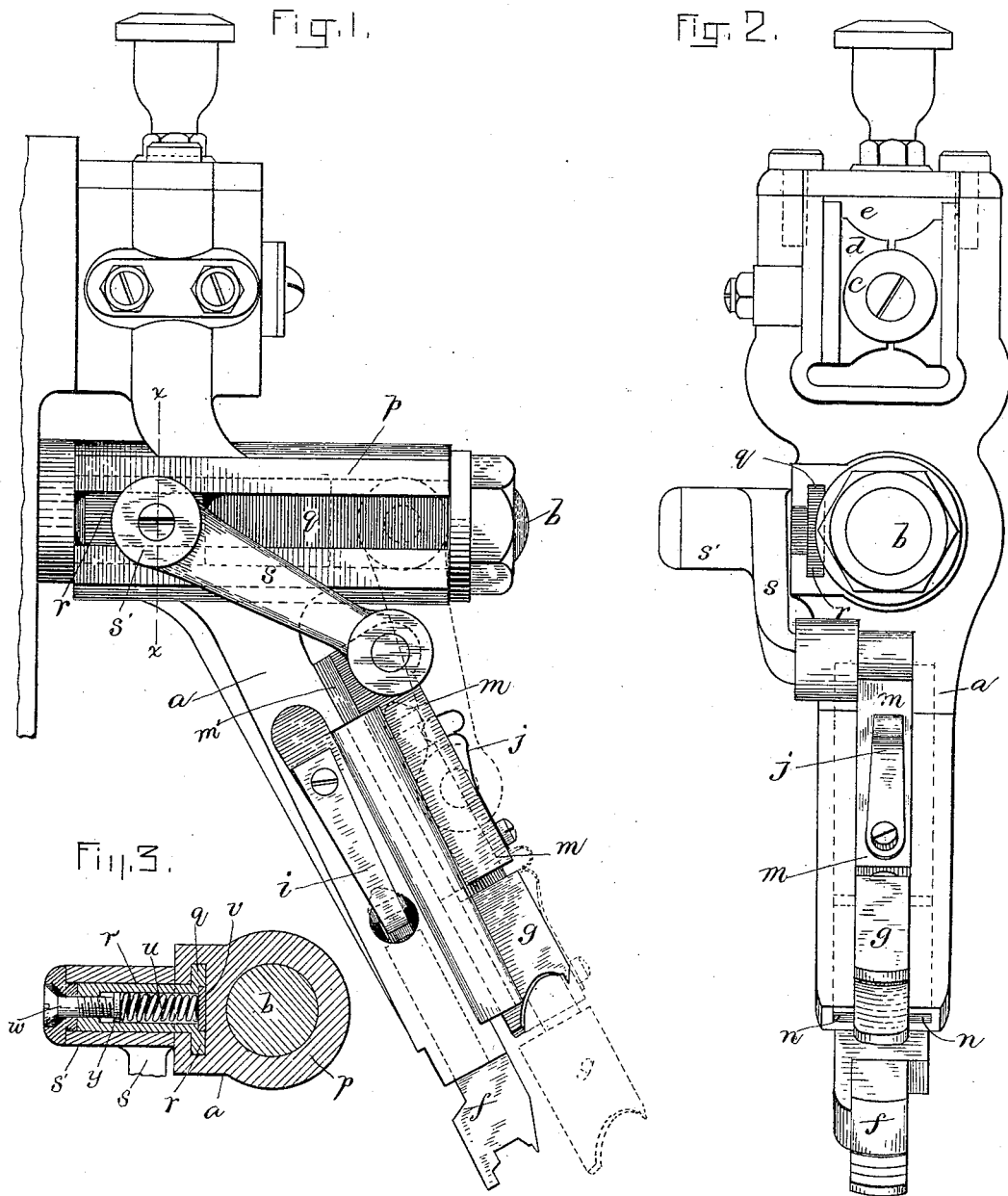
(No Model.)

W. GORDON.

SOLE EDGE BURNISHING MACHINE.

No. 381,497.

Patented Apr. 17, 1888.



WITNESSES.

A. D. Harrison.

W. Ramsay.

INVENTOR.

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By Wright & Smith, Attys.

UNITED STATES PATENT OFFICE.

WILLIAM GORDON, OF MELROSE, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO ARTHUR FULLER, TRUSTEE, OF BOSTON, MASSACHUSETTS.

SOLE-EDGE-BURNISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 381,497, dated April 17, 1888.

Application filed February 18, 1888. Serial No. 264,501. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GORDON, of Melrose, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Sole-Edge-Burnishing Machines, of which the following is a specification.

This invention relates to sole-edge-burnishing machines in which two tools are mounted on the same carrier, to be used interchangeably, one of said tools being shiftable, so that when not required for use it can be moved out of its operative position so as to be out of the way of the other tool.

The invention has for its object to provide improved means for supporting the said shiftable tool in its operative and inoperative positions and for moving it from one position to the other; and to this end it consists in the devices which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of a tool-carrier provided with my improvements. Fig. 2 represents a front elevation of the same. Fig. 3 represents a section on line *x x*, Fig. 1.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents a burnishing-tool carrier, the same being in this instance a lever mounted to oscillate on a fixed stud, *b*, which is suitably attached to a supporting-frame, said lever being oscillated on said stud by an eccentric, *c*, on a rotary shaft, said eccentric being journaled in a block, *d*, which is fitted to slide in a slot, *e*, in the upper end of the lever or carrier *a*.

The pivoted lever or carrier and the means for oscillating it form no part of my present invention, the lever being supported and oscillated substantially like the lever *v'* shown in Letters Patent No. 364,585, granted to me June 7, 1887.

The lower end of the carrier is provided with two edge-burnishing tools, *f g*, as in the patent above mentioned, the tool *f* being formed to act on the fore part of a sole-edge, while the tool *g* is formed to act on the shank-edge.

The shank of the tool *f* is inserted in a socket formed in the lower end of the carrier *a*, and is held therein by a suitable spring-catch, *i*. The shank of the tool *g* is held by a spring-catch, *j*, in a sliding socket, *m*, which is provided with ribs *m' m'*, adapted to move in ways or guides *n n* on the carrier *a*. Said slide is adapted to be moved downwardly to depress the tool *g* to a position below the lower end of the carrier and in front of the tool *f*, as shown in dotted lines in Fig. 1, and is also adapted to be moved upwardly to raise the tool *g*, as shown in Fig. 2 and in full lines in Fig. 1, the tool *g*, when in the last-named position, being out of the way of the other tool, *f*.

The socket *p*, which is formed on the carrier to receive the stud *b*, is provided with a horizontal way or guide, *q*, in which is fitted a slide, *r*. Said slide *r* is connected by a link or rod, *s*, with the sliding socket *m*, which holds the tool *g*, said link being pivoted to the slides *r m* and provided with a boss or handle, *s'*, which may be grasped by the operator for the purpose of moving the sliding socket *m* and its tool *g* from one position to the other.

It will be seen that when the slider is moved to the rear end of the guide *q*, as shown in full lines in Fig. 1, the tool *g* is raised, and when said slide is moved to the opposite end of said guide, as shown in dotted lines, the tool *g* is lowered.

The slide *r* is provided with a sleeve, *r'*, which projects outwardly into the boss or handle *s'* of the link *s*, and contains a spiral spring, *u*, which presses a plate, *v*, against the inner surface of the guide *q*, and thereby creates sufficient friction to prevent the slide *r* from moving accidentally or too easily in its guide. The force of the spring may be regulated by a screw, *w*, in the outer end of the boss *s'*, said screw holding a follower, *y*, against the outer end of the spring.

By the described devices the operator is enabled to move the tool *g* into and out of operative position without stopping the machine.

I claim—

1. The combination, with the carrier adapted to hold a burnishing-tool, *f*, of the socket *m*, fitted to move in guides on said carrier and

adapted to hold a burnishing-tool, *g*, in different positions, as set forth.

2. The combination of the carrier adapted to hold a burnishing-tool, *f*, a socket, *m*, fitted to slide on said carrier and adapted to hold a burnishing-tool, *g*, a slide, *r*, fitted to slide on said carrier at an angle to the direction in which said socket slides, and a link, *s*, connecting said slide and socket, as set forth.

3. The combination of the carrier adapted to hold a burnishing-tool, *f*, a socket, *m*, fitted to slide on said carrier and adapted to hold a burnishing-tool, *g*, a slide, *r*, fitted to slide on said carrier at an angle to the direction in which said socket slides, a link connecting said slide and socket, and provided with a boss or handle, *s'*, whereby the slide-link and socket may be moved, as set forth.

4. The combination of the carrier adapted to hold a burnishing-tool, *f*, a socket, *m*, fitted to slide on said carrier and adapted to hold a burnishing-tool, *g*, a slide, *r*, fitted to slide on said carrier at an angle to the direction in which said socket slides, a link connecting said slide and socket, and a friction device or brake whereby said slide is prevented from moving accidentally, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 15th day of February, 1888.

WILLIAM GORDON.

Witnesses:

C. F. BROWN,

A. D. HARRISON.