

J. EDSON.  
Edge Setting Machine.

No. 233,842.

Patented Nov. 2, 1880.

Fig. 1.

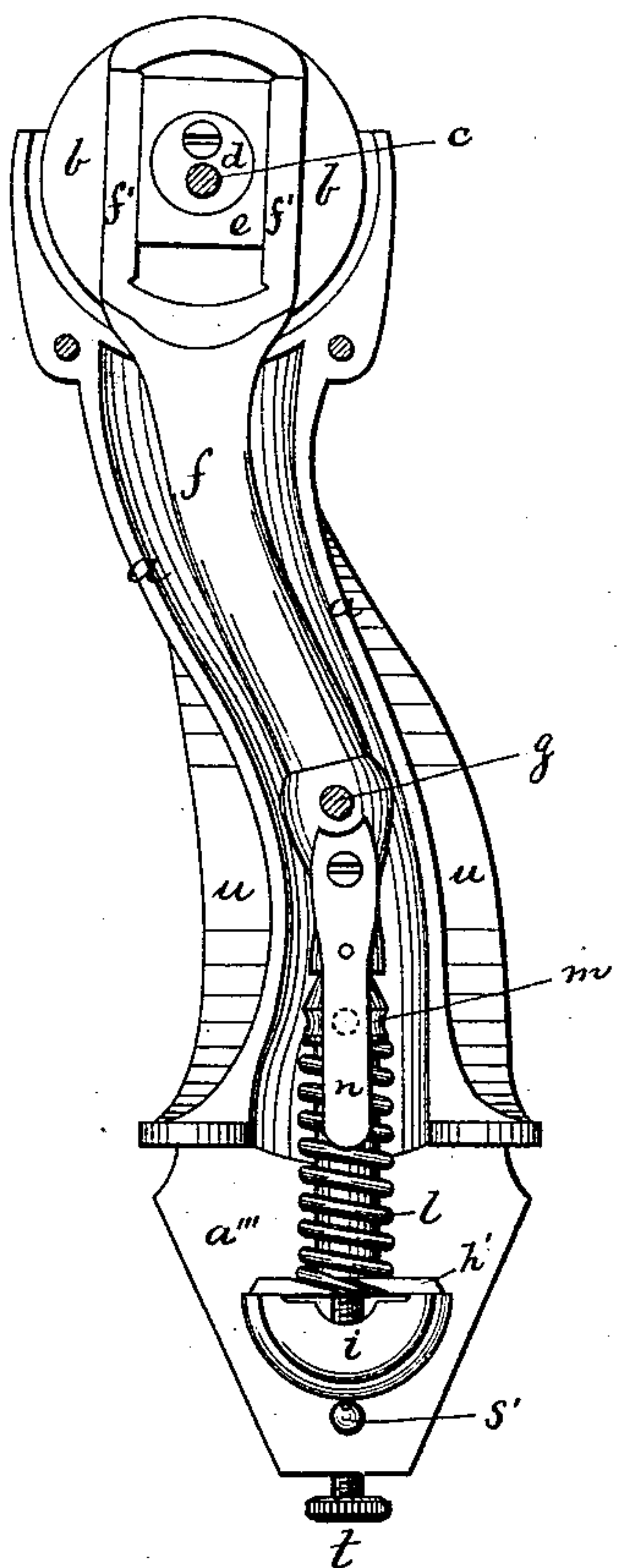


Fig. 2.

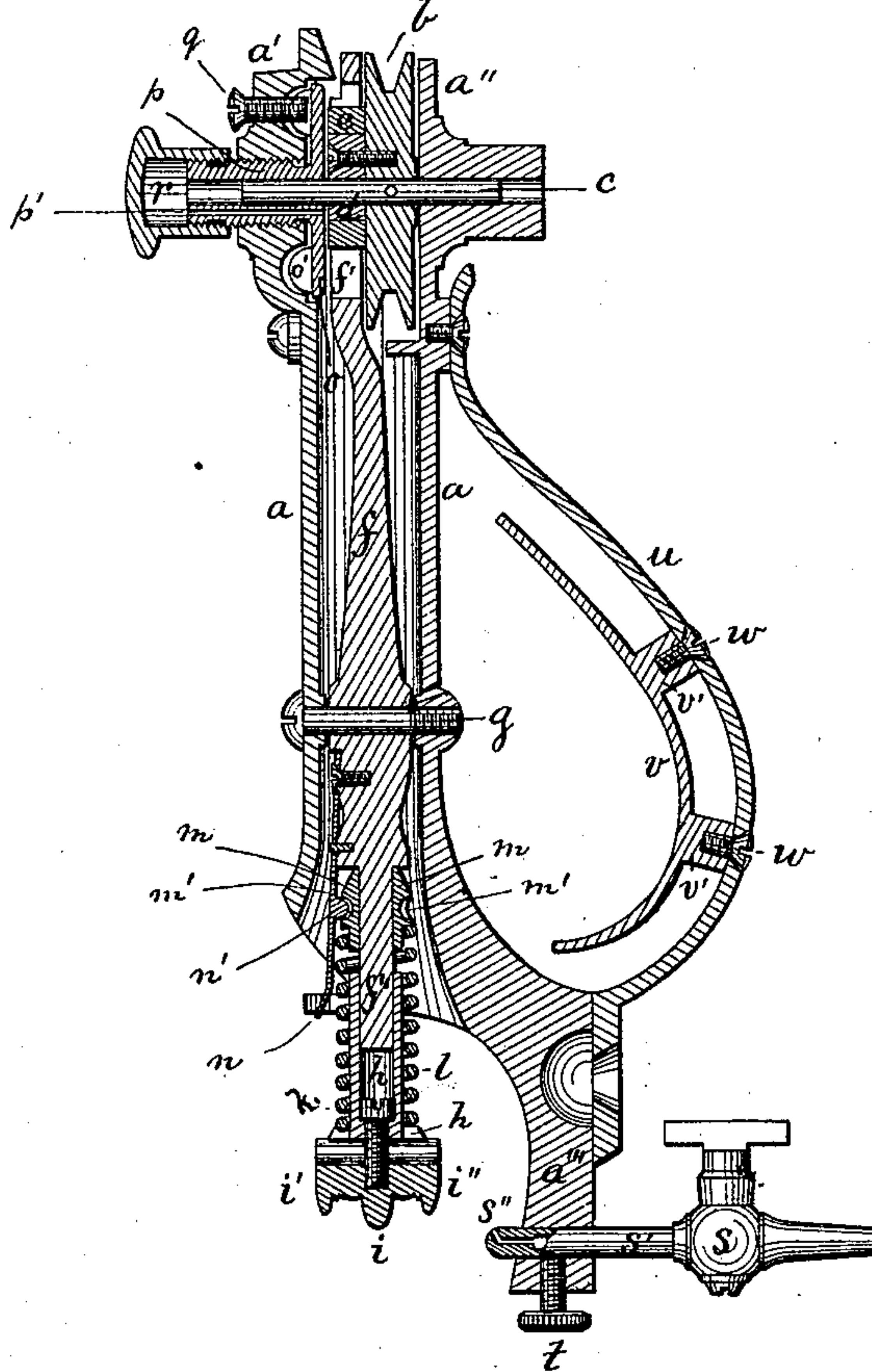
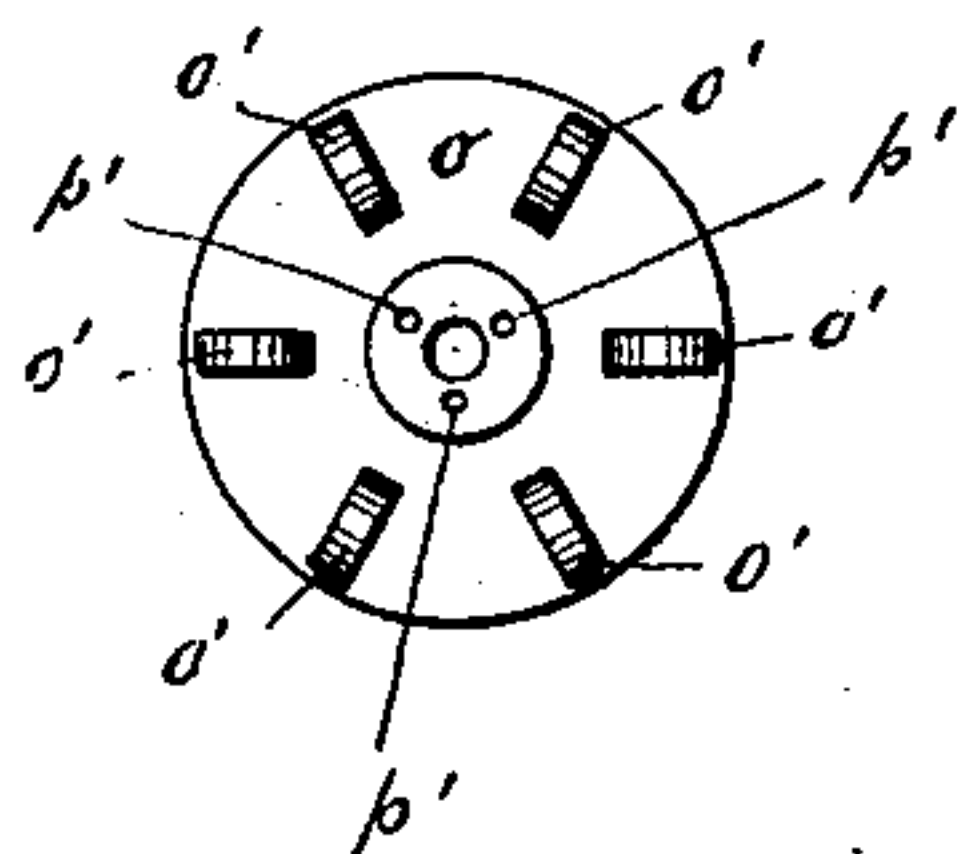


Fig. 3.



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# UNITED STATES PATENT OFFICE.

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## EDGE-SETTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 233,842, dated November 2, 1880.

Application filed November 10, 1879.

*To all whom it may concern:*

Be it known that I, JACOB EDSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Edge-Setting Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements upon the patent granted to Andrew W. Rogers for edge-setting machines, dated August 26, 1879, No. 219,021; and it consists in improvements in the mechanism for conveying a reciprocating motion to the edge-setting tool from the rotary cord-pulley in the upper end of the machine; also, in interposing between the reciprocating lever and edge-tool a coiled and yielding spring, so as to present a lateral as well as a vertical yielding pressure from the tool onto the edge of the boot or shoesole, by which arrangement the tool is held in contact with the sole during the entire stroke of the former, causing the work to be performed in a quicker and better manner, as compared with the usual method of rigidly securing the tool to its driver; also, in the combination of the reciprocating lever, its tool, and interposed yielding spring, and a spring-fastener for holding the tool connected to the lever during the progress of the work, as well as for the purpose of quickly disconnecting the tool and interchanging it for another of a different size or shape, as may be required for various kinds and sizes of boots and shoes; also, in an improved device for preventing the cord-pulley, its eccentric block, and the upper end of the reciprocating lever from a lateral motion in the direction of the rotary shaft, so as to make the machine run as noiseless and with as little friction as possible; and this device consists of an adjustable plate provided with a central and hollow screw-threaded shank that is capable of adjustment in a lateral direction within a female screw-thread in the head of the handle of the machine, the face of said plate being provided with a number of projections, which, combined with an adjustable set-screw passing

through the upper end of the head of the machine, serve to retain the said plate in the desired position when adjusted, the hollow central shank of said plate serving as a bearing for the rotary cord-pulley shaft; also, in an improved lubricating device for the purpose of properly lubricating the rotary spindle and other moving parts, which device consists of a screw-shank provided with one or more perforations, and an adjustable screw-cap fitting over the outer end of the screw-threaded shank, which cap contains the lubricant that is fed to the parts that are to be lubricated, by turning the screw-threaded cap forward, when the lubricant is forced through the aforesaid one or more perforations to the spindle and other movable parts of the machine; and, finally, my invention consists of a detachable inner hand-rest, secured by means of set-screws to the ordinary shield, by which arrangement the said hand-rest may easily be removed and covered or padded without the need of removing the usual outer brace or shield, and when so covered or padded it can easily be secured in place by the set-screws above mentioned.

On the accompanying drawings, Figure 1 represents a front view of my improved edge-setting machine. Fig. 2 represents a longitudinal section thereof, and Fig. 3 represents a plan view of the adjustable plate on the rotary spindle.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

*a* is the hollow handle or frame of the machine, as usual. *a'* *a''* is the upper end or head of said handle. *b* is the cord-pulley, located on the spindle *c*, to which a rotary motion is imparted from an overhead pulley and an endless cord or belt, as usual. *d* is the eccentric on the face of the pulley *b*, as shown. *e* is the rectangular block that surrounds the eccentric *d* and moves up and down within the upper and slotted end *f'* of the rocking lever *f*, the latter being, by these means, caused to rock on the stationary fulcrum-pin *g*, as shown.

*f''* is a cylindrical shank in the lower end of the lever *f*, on which is located the up-and-down adjustable sleeve *h*, that terminates in its lower end as a plate, *h'*, serving the double purpose of a rest for the circular edge-tool



*i*, that is secured to it by means of the internal screw, *k*, as well as to secure thereto the lower end of the coiled spring *l*, the upper end of which terminates as an annular collar, *m*, that surrounds the shank *f''*, and is provided on its exterior with a pair of diametrically-opposite located notches *m' m'*, into either of which the projection *n'* on the spring-fastener *n* is held firmly by the pressure of the latter, and the edge-tool can thus easily be turned half a revolution around its axis and held in its proper and yielding position, according to which of its faces *i'* or *i''* is to be used.

It will thus be seen that the edge-tool *i* has, in addition to its lateral motion, a vertical as well as a swinging motion around its axis, imparted to it as it is pressed against the edge of the boot or shoe sole, and guided around the latter by the influence of the yielding spring *l*, as described.

*o* is the adjustable plate, with its projections *o' o' o'* and central screw-shank, *p*, as and for the purpose set forth.

*q* is the adjustable set-screw, for the purpose of interlocking between any two of the projections *o' o'*, so as to hold the plate *o* in position after its being adjusted, as described.

*r* is the adjustable screw-cap that serves as a receptacle for the lubricant, as set forth, and *p' p' p'* are the perforations through the screw-threaded shank *p*, for the purpose of forcing through them, by means of the screw-threaded cap *r*, the lubricant, as and in a manner described.

*s* is the gas-cock with its pipe *s'* and orifice *s''*. The pipe *s'* is adjustable to and from the tool *i* by passing through a perforation in the lower part, *a'''*, of the handle *a*, as shown; and *t* is the set-screw for securing the said pipe in position after being adjusted, as described.

*u* is the ordinary shield or brace, secured to the frame or handle *a*, as usual; and *v* is the detachable inner hand-rest, preferably made of some suitable metallic material, so that it may be bent to conform to the size of the operator's hand, and covered or padded, as may be desired.

*v' v'* are screw-threaded projections at the rear of the hand-rest *v*, and *w w* are set-screws to secure the hand-rest *v* to the outer shield, *u*, as shown.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent, and claim—

1. The herein-described edge-setting machine, consisting of the frame *a a*, rotary shaft *c*, pulley *b*, eccentric *d*, block *e*, slotted lever *f f'*, and edge-tool *i*, as and for the purpose set forth.

2. In an edge-setting machine, the combination of the reciprocating lever *f*, and its edge-tool *i*, and the yielding coiled spring *l*, interposed between them, in the manner and for the purpose set forth and described.

3. In an edge-setting machine, the combination of the reciprocating lever *f*, tool *i*, sleeve *h*, coiled spring *l*, notched collar *m m' m'*, and spring-fastener *n n'*, as and for the purpose set forth.

4. The herein-described reversible circular edge-setting tool *i*, having a central circular rib, as shown, in combination with the independent edge-setting faces *i'* and *i''*, located on opposite sides of the central rib, substantially as shown, and for the purpose set forth.

5. In combination with the frame and handle *a* and reciprocating lever *f* of an edge-setting machine, the screw-threaded head *a'*, adjustable plate *o*, with its projections *o' o' o'* and screw-threaded shank *p*, and set-screw *q*, substantially as and for the purpose set forth and described.

6. In combination with the frame and handle *a* and reciprocating lever *f* of an edge-setting machine, the screw-threaded shank *p*, with one or more perforations, *p' p' p'*, and the screw-threaded cap or receptacle *r*, for the lubricant, all arranged and combined substantially as and for the purpose set forth.

7. In an edge-setting machine, the combination of the outer shield, *u*, the inner hand-support, *v*, provided with its screw-threaded hubs or projections *v' v'*, and set-screws *w w*, as and for the purpose set forth and described.

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

JACOB EDSON.

Witnesses:

ALBAN ANDRÉN,  
HENRY CHADBourn.