J. B. GATHRIGHT & J. C. WATSON.

LEATHER STAMPING-MACHINE.

No. 185,095. Patented Dec. 5, 1876.

Fig. 1.

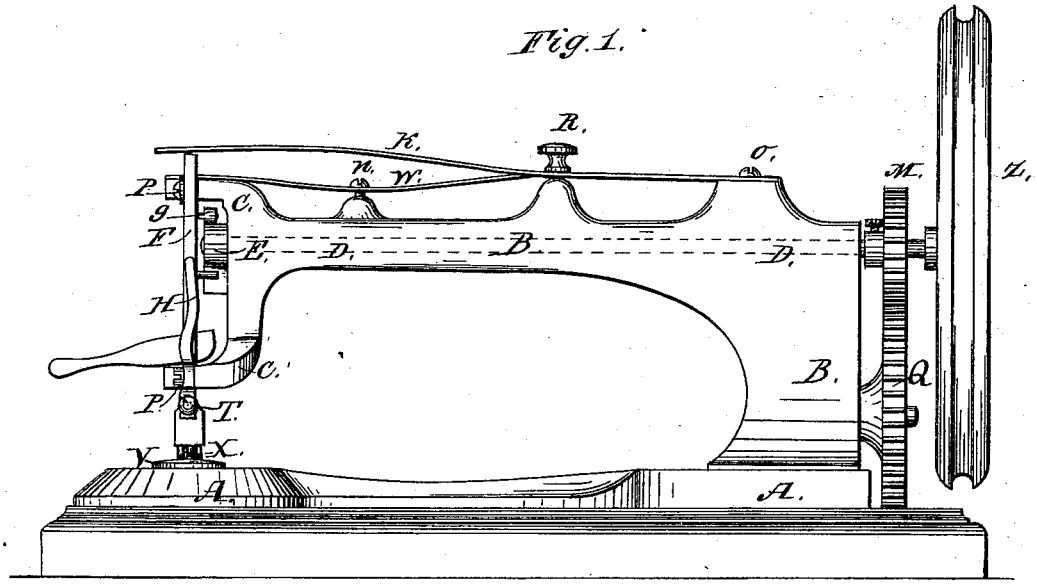
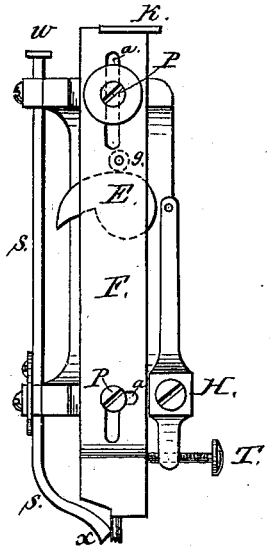


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOSIAH B. GATHRIGHT AND JAMES C. WATSON, OF LOUISVILLE, KENTUCKY; SAID JAMES C. WATSON ASSIGNOR OF ALL HIS RIGHT TO JOHN J. HARBISON, OF SAME PLACE.

IMPROVEMENT IN LEATHER-STAMPING MACHINES.

Specification forming part of Letters Patent No. **185,095**, dated December 5, 1876; application filed April 24, 1876.

To all whom it may concern:

Be it known that we, JOSIAH B. GATHRIGHT and JAMES C. WATSON, both of the city of Louisville, State of Kentucky, have invented a new and useful Machine for Stamping Border Impressions and Designs upon Leather-Work; and we hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form a part of this specification.

The object of our invention is to provide a machine that will make impressions on leather similar to those made by "hand-stamping," but much faster and more perfectly than can be done by the most expert workman.

Heretofore no nice stamped borders could be put upon saddles (for which our machine is especially adapted) except by hand-stamping. In that process the workman has to place the stamp and strike for each impression; and, as only small-sized stamps make nice work, the process was necessarily quite slow, even with experts, and, consequently, expensive. Furthermore, in stamping a border, one or more "creased" or "beaded" rows are made by a "double-creaser," (a hand-tool,) and a row of stamping is run on each side, after the crease has been made. This is all done at one time by our invention—that is, a center crease is made, and both rows of stamping put on simultaneously, thus saving much time.

The frame-work of our invention consists of a strong base-plate, A A, for stamping upon, and a strong arm, B B, for supporting the working parts, which is firmly set and secured upon one end of the base-plate, and extends out over the base-plate any desired length. The outer end of this arm is provided with the face lugs or projections C C, which form a basis for attaching and operating the stamping devices. Through the arm B B extends the shaft D D, as indicated by the dotted lines, the rear end of which is provided with a pinion, M, or band-wheel, as may be preferred, by means of which the desired motion may be imparted to it, while the front end is provided with the peculiar-shaped cam or eccentric E, for lifting and dropping the stamp-bar, as hereafter described. The eccentric E, as will be seen by reference to Fig. 2, has an abrupt "drop" from the highest to the lowest point on its working-face. It lifts the stamp-bar F by means of the stud *g*, having anti-friction roller, and drops it suddenly after it has reached the highest point. The bar F is held in place and guided by two bolts or screws, P P, which pass through slots *a a* (see Fig. 2) in the bar, and screw firmly into the faces of the lugs C C. The stamp-bar is provided at its lower end with two beds or sockets for stamps; and, when placed in these, the stamps may be set in any desired position with respect to each other, and held in place by set-screws, pins, or other known devices. The stamps can also be removed at pleasure, and others substituted. The slots *a a* are just long enough to allow the bar to be raised to the highest point, and drop low enough for the stamps to reach within a thirty-secondth of an inch to the base or stamping plate, at which point the upper pin may form a stop, and thus prevent the possibility of the stamp cutting through the leather in thin, damp, or spongy parts. The lower slot is enlarged at its upper end on the side nearest the operator (see Fig. 2) to allow the stamp-bar, when down, to be moved backward for feeding, as hereafter described. Pivoted to the face-piece C is a feed-lever, H, the upper end of which is so placed as to be pressed outwardly by the eccentric at each revolution, while the screw T, through the lower end, presses against the stamp-bar, and causes it to "feed." The screw enables us to increase or diminish the feed at pleasure. K K is strong spring, secured to arm B at O, with its front or loose end resting upon stamp-bar F. A regulating-screw, R, near its center, enables us to increase or diminish its force at pleasure, and thus give a more or less powerful stroke to the stamp-bar, as may be desired.

The operation of the stamping devices will now be readily understood. The shaft being set in motion, the eccentric lifts the stamp-bar to the highest point and drops it, the spring giving the force necessary to make the impression on the leather. After dropping the

stamp-bar the eccentric strikes the feed-lever H, which forces the stamp-bar backward, and thus feeds. As it is necessary that the stamp remain down, and press upon the leather in full force while feeding, the eccentric is so shaped that its shortest radius remains the same for some distance, thus giving time for the feeding operation to be completed before it begins to lift the stamp-bar again. When the eccentric again lifts the stamp-bar the slots *a a* and bolts P P guide it into perpendicular position again, and also guide it, during its descent, for a sufficient distance to insure a true stroke. In order to make the desired crease between the two rows of stamping a foot, X, is provided, (see Fig. 2,) a foot-bar, S S, to hold it in position, and a spring, W, with regulating-screw *n*, (see Fig. 1,) to give the desired pressure to the foot. This foot (see Fig. 2) rests upon the leather just between the two stamps, and is shaped beneath so as to have one or more longitudinal grooves like a saddler's double-creaser. As the stamps force the leather back under this foot in feeding it makes the desired crease. The creaser-foot may be in the form of a roller; in which case it would, preferably, be composed of two rollers, each beveled inwardly on its creasing-face, and the arm should pass between them to the axis, so as not to be in the way of the stamp when striking and feeding.

Our machine may be run by any kind of power. In most cases the pinion M, fly-wheel Z, and spur-wheel Q, provided with crank-pin and crank to operate with foot-lever, are all that will be needed. Geared in this way a half-grown boy can do with it as much stamping as four or five expert workmen can do by hand, and at same time do the work more perfectly than any workman can do it by hand.

We would remark that our machine may be used with only one stamp at the time, if desired, and with or without the creaser-foot.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The eccentric E, stamp-holding bar F, spring K, and feed-lever H, combined and operating substantially as and for the purpose herein shown and described.

2. A presser-foot for a leather-stamping machine, having its under or pressure surface formed of two or more sharp edges, with a concave surface or surfaces between the edges, to form one or more creases or beads upon the leather, substantially as herein shown and described.

3. A presser-foot for leather-stamping machine, adapted to work between the two stamps, substantially as herein shown and described.

4. In a machine for stamping purposes the combination of the stamping-base A, arm B, shaft D, eccentric E, stamp-bar F, spring K, feed-lever H, and presser-foot X, substantially as herein shown and described.

Witness our hands this 21st day of April, 1876.

JOSIAH B. GATHRIGHT.
J. C. WATSON.

Witnesses:
JOHN J. HARBISON,
O. GATHRIGHT, Jr.