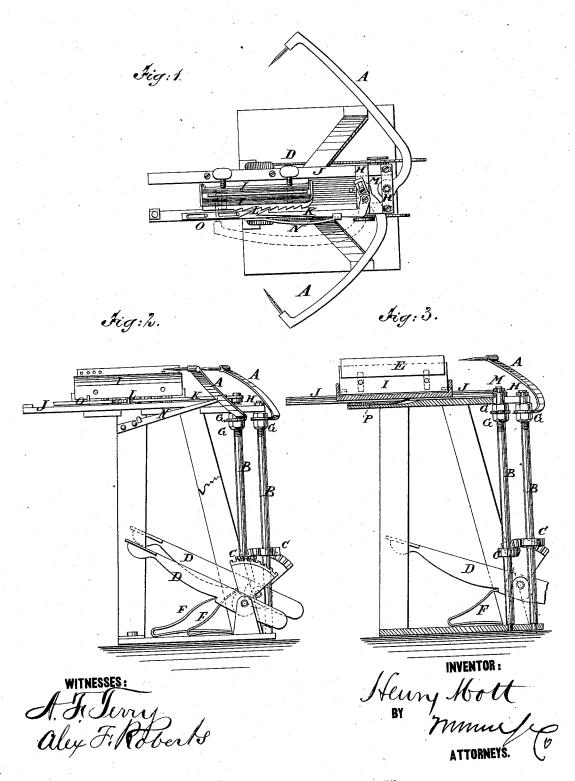
## H. MOTT. Leather-Punching Machine.

No. 163,096.

Patented May 11, 1875.



## UNITED STATES PATENT OFFICE.

HENRY MOTT, OF POTTSVILLE, IOWA, ASSIGNOR TO HIMSELF AND JOHN C. CALLBREATH, OF SAME PLACE.

## IMPROVEMENT IN LEATHER-PUNCHING MACHINES.

Specification forming part of Letters Patent No. 163,096, dated May 11, 1875; application filed March 20, 1875.

To all whom it may concern:

Be it known that I, HENRY MOTT, of Pottsville, in the county of Allamakee and State of Iowa, have invented a new and Improved Leather-Punching Machine, of which the fol-

lowing is a specification:

My invention consists of a pair of horizontally-swinging awl-carrying arms, with foottreadles and springs for swinging them forward and backward, in combination with an intermittingly - reciprocating work - holding clamp, and mechanism for feeding it, all contrived for punching straps for harness-work, and all other leather work to be sewed in straight lines by hand, easier and more regularly than it can be done with the hand-punching awl; at the same time the clamp by which the work is fed to the punches serves to hold it suitably for the workman to sew it as the punch-holes are made.

Figure 1 is a plan view of my improved leather-punching machine. Fig. 2 is a side elevation, and Fig. 3 is a sectional elevation.

Similar letters of reference indicate corre-

sponding parts.

A represents the horizontally-swinging punch-carrying arms. They are mounted on upright shafts B, which gear, by bevel-wheels C, with vertically-working foot-treadles D, by which the punches are swung forward to punch the holes in the work E. The springs F raise the treadles and swing the punches back. The arms A are adjustable up and down on the shafts, to regulate them as to height, by the adjusting-nuts G and the upper bearing-blocks H, for the shafts are capable of shifting toward and from each other to adjust the punches to work in exactly opposite points in the sides of the leather. The leather is held in the clamp I, which slides in ways J on the bench, and is fed by the pawl K and notched bar L. The pawl is worked by a little crank, M, on

one of the awl-arm shafts, said crank being attached so that it can be lengthened and shortened to vary the throw for stitches of different lengths; and the toothed bar L is detachably connected to the clamp, for changing one bar for another with notches of different lengths for different stitches. N is a spring for holding the pawlin contact with the notched bar. O is a sliding bar by which to disconnect the pawl with the notched bar when the clamp is to be pulled back. P is a springpawl under the clamp to prevent it from being pulled back too far. One of the ways J is adjustable to the clamp for keeping it snug and tight. The awl-arms will be worked alternately in order that the punches shall not strike together, and the left-hand one will be worked first, because the other one feeds the work along.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

ent-

1. The combination of the foot-power awlcarrying arms A, attached to semi-rotating shafts, intermittingly-reciprocating work-holding clamp I, and feed mechanism, substantially as specified.

2. The combination of the adjustable awlcarrying arms and semi-rotative shafts, adapted for relative adjustment, all substantially

as and for the purpose described.

3. The combination of the slide O with the feed-pawl and the notched feed-bar, substan-

tially as specified.

4. The foot-treadles D, springs F, gears C, shafts B, and the awl-carrying arms A, combined and arranged substantially as specified.

HENRY MOTT.

Witnesses:

FRANCIS M. McConmack, George F. Crouch.