3 Sheets-Sheet 1.

# Durand & Pecqueur

## Cutting Leather.

No. 7424. Patented June 11, 1850.

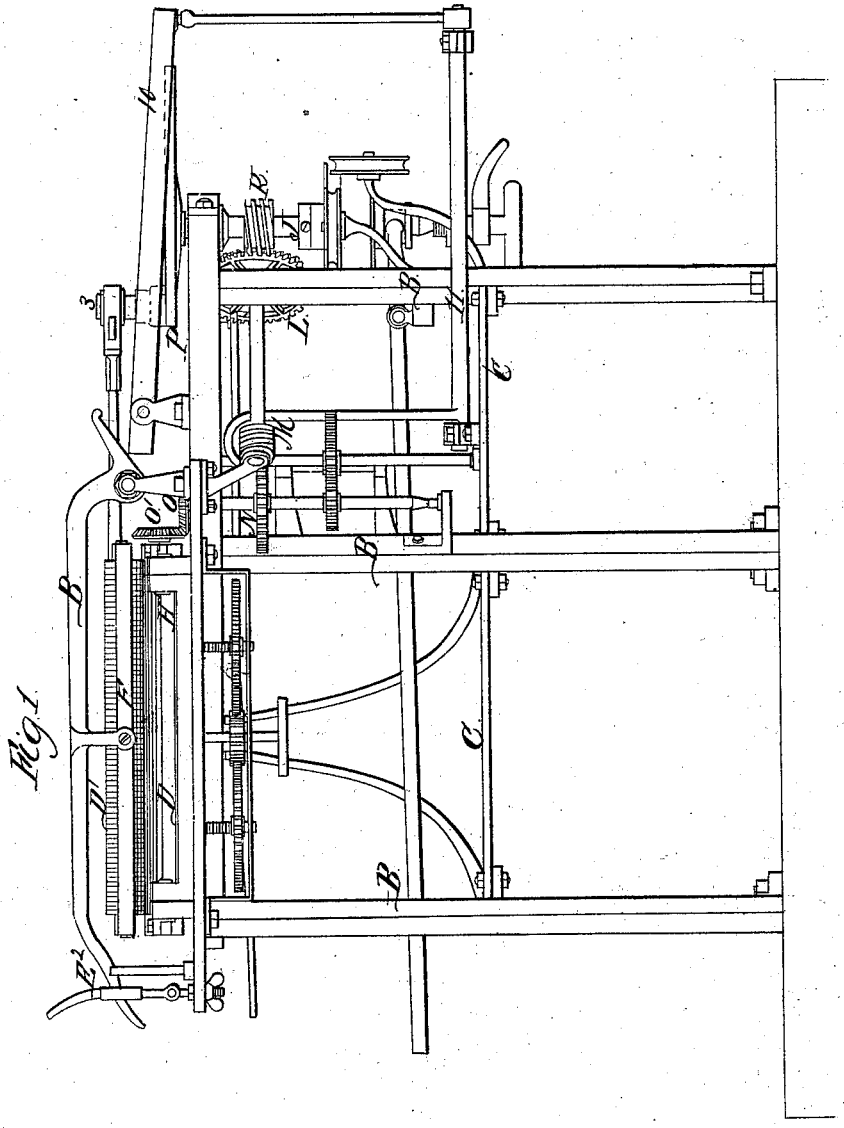


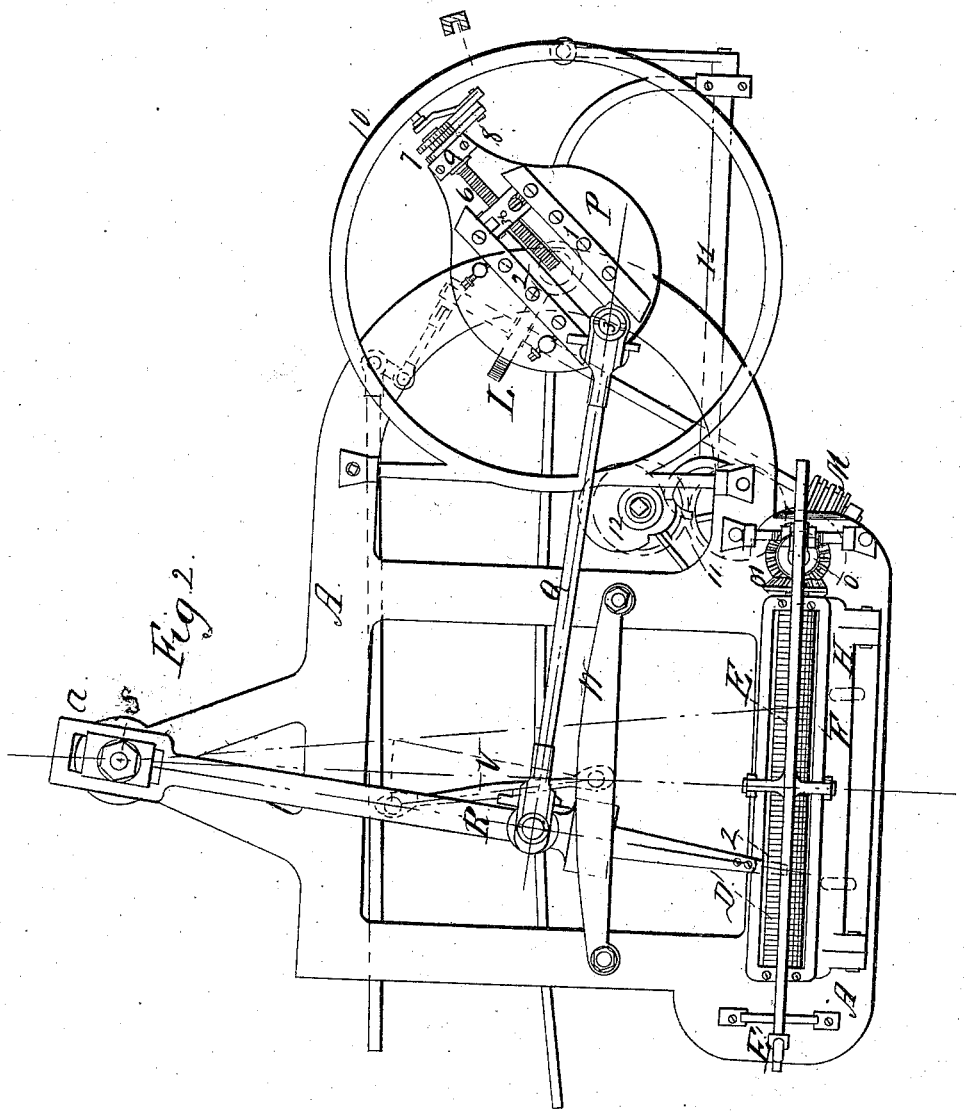
Fig. 1.

3 Sheets-Sheet 2.

# Durand & Pecqueur,

## Cutting Leather.

No. 7,424. Patented June 11, 1850.



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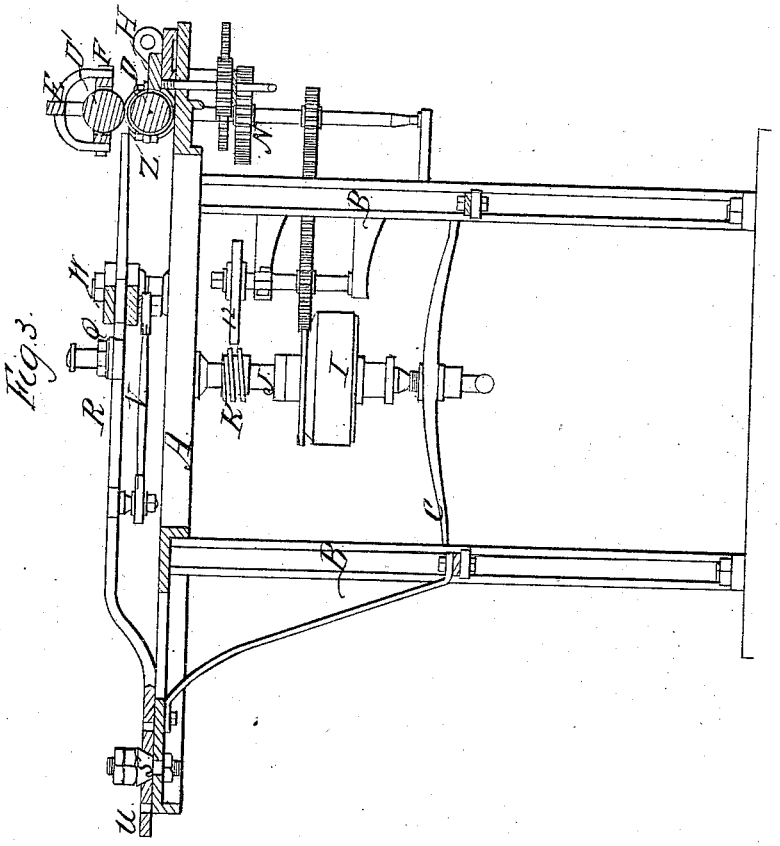
# Durand & Pecqueur,

## Cutting Leather.

No. 7424. Patented June 11, 1850.

Fig 3.



# UNITED STATES PATENT OFFICE.

FRANCOIS DURAND AND ONESIPHORE PECQUEUR, OF PARIS, FRANCE, ASSIGNORS TO RICHARD E. RABEAU.

## MACHINE FOR CUTTING LEATHER INTO HOLLOW-WARE FORMS.

Specification of Letters Patent No. 7,424, dated June 11, 1850.

*To all whom it may concern:*

Be it known that we, FRANCOIS DURAND and ONESIPHORE PECQUEUR, of Paris, in the Republic of France, have invented a certain new and useful Machine for Manufacturing Articles of Leather Without Seam or Cement, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawing, which forms a part thereof, in which—

Figure 1 is an elevation of the machine, Fig. 2 is a plan.

The same letters refer to like parts in both figures.

The machine which is the subject of the present description and claim is for the purpose of making shoes of all kinds, boot legs, cartridge boxes, hats, caps, hose, fire buckets, gloves, &c. and consists of an upper frame A supported by six posts or legs B and braces C connecting them. That part of the machine which holds the leather, and advances it to the knife to be cut consists of two rollers D D′ the lower D having longitudinal grooves cut in it parallel with the axle and supported in a swing H which is joined to A so that it can be raised or lowered at pleasure; and the upper roller being grooved around its circumference as clearly shown in Figs. 1 and 2. This roller is suspended in a frame F which is connected by its center with, and is borne by a lever E jointed by one end to the frame A and secured by the other to a catch $E^2$. These rollers, when in place, are geared together and are connected with the driving shaft J by means of a train of gearing consisting of an endless screw or worm wheel K on said shaft J that works into a gear wheel L on a horizontal leading shaft which has upon its opposite end a worm wheel M that again takes into and drives a gear wheel N on an upright shaft on the upper end of which, above frame A there is a bevel wheel O gearing into another O′ on the end of the lower roller D above named.

On the upper end of the shaft J there is a plate of metal P which forms an adjustable eccentric; upon this plate are two guides 1 and 2 along which the crank pin 3 is made to slide radially by means of a screw 6 which turns in a bearing 9 affixed to the plate, and working into a nut on the slide 3′ of the crank pin 3 to move it out or in, to or from the center or shaft J; two small ratchet wheels of metal 7 may be affixed to the end of the screw, which, as the plate P revolves, by being acted on by a dog 8 that is moved up and down by the circular grooved ring 10 strikes the ratchet which causes it to revolve (one of these causes the screw to turn one way, the other in a contrary direction, by striking the ratchet either above or below the axis).

The crank pin 3 is connected with the arm R to which the knife is attached by an adjustable connecting rod Q. The arm R is connected with the frame A by a fulcrum S on which it slides back and forth by means of a collar U so as to give the knife a straight motion parallel with, and in front of the rollers, which motion is insured by the connecting link V as in ordinary parallel motions. A guide W is affixed to the frame A to steady the knife in its vibration. The dogs 8 can be thrown out or into contact with the ratchet wheel 7 to curtail or extend the vibrations of the knife, so as to form a margin of any shape that may be required, by lowering or raising the ring 10. This is done by its connection with a cam 12 by means of the shaft 11 and its connections.

When the leather is presented to this machine the rollers D D′ are adjusted to the knife Z so as to have the cut made in the center of the thickness, the parts are then put in motion by the driving pulley I or the shaft J which communicates with this motive power, and the rollers are made to revolve and draw in the leather, while the knife is put into motion and splits it to the breadth permitted by the adjustable crank. Instead of the adjustable crank a pattern can be introduced to regulate the vibrating of the knife.

Having thus fully described our improved

machine, and its mode of operation, what we claim therein as new, and desire to secure by Letters Patent is—

The combination of the vibrating knife with the fluted rollers, constructed and operating substantially in the manner and for the purpose above fully set forth, one of which rollers being fluted longitudinally and the other circumferentially serve firmly to hold the leather in any position.

DURAND.
PECQUEUR.

Witnesses:
L. RUCHET,
JOHN BARTLY.