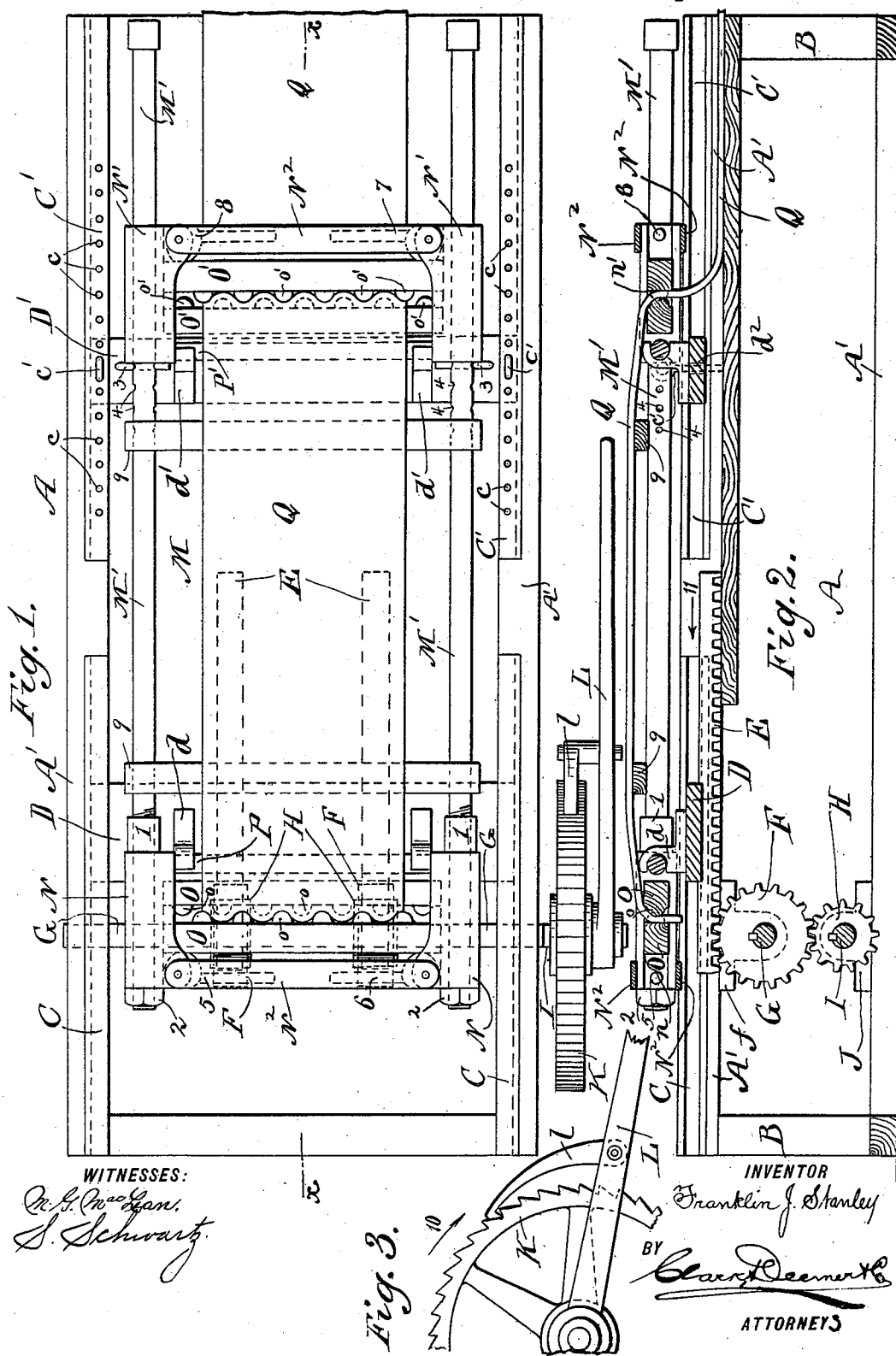


(No Model.)

F. J. STANLEY.
MACHINE FOR STRETCHING LEATHER.

No. 568,377.

Patented Sept. 29, 1896.



UNITED STATES PATENT OFFICE.

FRANKLIN J. STANLEY, OF BROOKLYN, NEW YORK.

MACHINE FOR STRETCHING LEATHER.

SPECIFICATION forming part of Letters Patent No. 568,377, dated September 29, 1896.

Application filed February 17, 1896. Serial No. 579,591. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN J. STANLEY, a citizen of the United States, and a resident of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Machines for Stretching Leather, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters and figures of reference indicate corresponding parts.

This invention relates to improvements in machines for stretching leather, the object of the invention being to supply an efficient construction of this character which will be durable, inexpensive, and operative.

The invention will be hereinafter fully described, and specifically set forth in the annexed claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of my improved machine. Fig. 2 is a longitudinal sectional elevation taken on a line $x x$ of Fig. 1, and Fig. 3 is a detail view of a portion of the machine.

In the practice of my invention I supply, primarily, a framework A, which comprises in its construction longitudinal beams A' and vertical standards B. The two upper beams A' have embedded therein grooved rails C and C'. Engaging with the grooves of the said rails are two longitudinally-movable plates D and D', which plates have mounted thereon hooked bearings d and d' , and the plate D has connected therewith two longitudinally-projected racks E, which said racks mesh with pinions F, which are mounted upon a shaft G, which is journaled in hangers f . Meshing with the pinions F are two other pinions of smaller diameter H, which said pinions are mounted upon a shaft I, which is journaled in bearings J. The shaft is further provided with a ratchet-wheel K, and said wheel is keyed to the shaft. Mounted loosely upon the outer end of the shaft I is a lever L, which said lever is provided with a pawl l , adapted to engage with the peripheral teeth of the ratchet-wheel K.

The grooved rails C' are provided with apertures c , adapted to engage with pins c' , which

pass through openings d^2 of the plate D', whereby the said plate may be locked in any desired position.

The device comprises, further, a removable framework M, which consists of two longitudinal tubular rods M', which are secured to each other by means of heads N and N' and straps N². The heads N are rigidly attached to the rods M' by means of collars 1 and nuts 2, but the heads N' are slidable longitudinally upon said rods, and they may be locked in any desired position by means of pins 3, which engage with apertures 4 of the rods M'. The heads N and N' are provided upon their inner surfaces with longitudinal slots n and n' , which slots engage with cross-pieces O and O', which said cross-pieces are provided upon their opposing surfaces with teeth o and o' , which teeth register with each other and are adapted to clamp a piece of leather or other substance to be stretched. The framework M is further provided with cross-bars P and P', which serve to form rigid connections, respectively, between the heads N and N' and which engage with the hooks d and d' , respectively.

Mounted within the slots n and n' of the heads N and N' are levers 5, 6, 7, and 8, which levers are provided with eccentric heads adapted to force the clamping-strips O and O' together when the device is being operated.

In the operation of my invention a piece of leather Q or other substance to be stretched will be tightly clamped between the toothed strips O and O' by means of the eccentric levers 5, 6, 7, and 8, and to keep the stock from sagging cross-bars 9 are introduced between the under surface thereof and the longitudinal rods M'. The ratchet-wheel K will then be revolved in the direction of the arrow 10, whereby longitudinal motion will be supplied through the medium of the pinions H and F to the racks E, which racks will move in the direction of the arrow 11, whereby their connected cross-head D and all the parts carried by said cross-head will be moved in the same direction, thus stretching the stock, as its other clamped end is rigidly held by the locked position of the cross-piece D'. After sufficiently stretching the leather it

can be fed forward and the operation repeated until a strip of any desired length is stretched.

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

1. A machine for stretching leather, comprising a rigid framework having longitudinally-grooved rails and cross-heads connected therewith, one of which cross-heads is provided with means for rigid attachment and the other with racks which engage with pinions adapted to be operated by a ratchet and pawl, and a removable framework which comprises two longitudinal tubular rods having sliding and rigidly-attached heads mounted thereon and clamping-strips mounted within the heads, which heads are further provided with eccentrically-arranged levers adapted to engage with the said clamping-strips, substantially as shown and described.

2. In a leather-stretching machine, the combination of the rigid frame having longitudinally-movable cross-pieces in engagement therewith, one of which cross-pieces is provided with a locking device and the other with longitudinal racks which engage with operating-pinions, and a ratchet-wheel adapted to be operated by a pawl; with the removable framework comprising two longitudinal rods, two rigidly-attached heads, two sliding heads and the clamping mechanism, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 14th day of February, 1896.

FRANKLIN J. STANLEY.

Witnesses:

CHARLES J. SCHLEGEL,
ALFRED J. MENGE.