

No. 772,055.

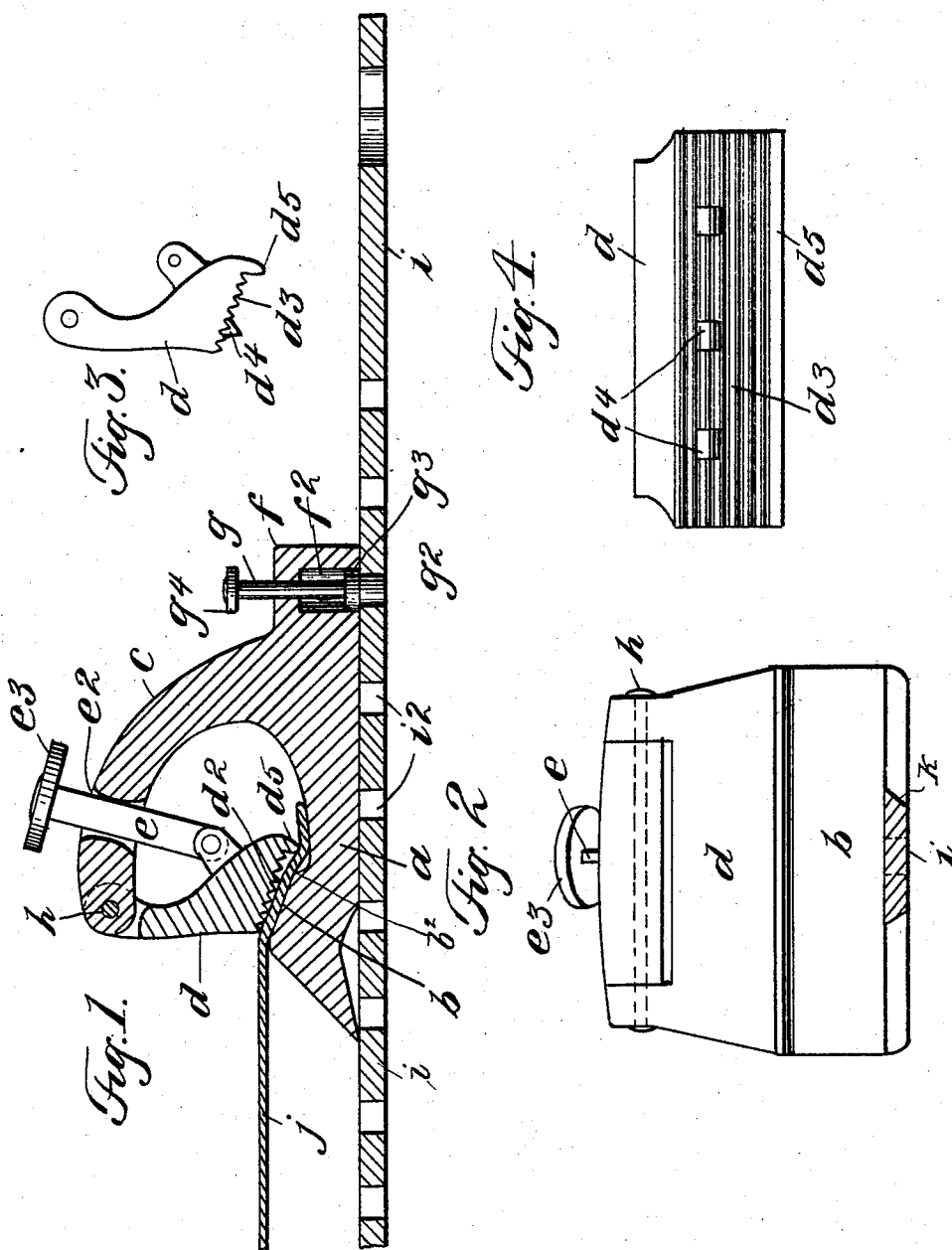
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E. L. POST.

CLUTCH FOR LEATHER STRETCHING MACHINES.

APPLICATION FILED JAN. 22, 1904.

NO MODEL.



WITNESSES

A. B. Mattingly
P. A. Stewart

INVENTOR

Ezra L. Post.
BY *Edgar Tate & Co.*

ATTORNEYS

UNITED STATES PATENT OFFICE.

EZRA L. POST, OF WALLINGFORD, CONNECTICUT.

CLUTCH FOR LEATHER-STRETCHING MACHINES.

SPECIFICATION forming part of Letters Patent No. 772,055, dated October 11, 1904.

Application filed January 22, 1904. Serial No. 190,127. (No model.)

To all whom it may concern:

Be it known that I, EZRA L. POST, a citizen of the United States, residing at Wallingford, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Clutches for Leather-Stretching Machines, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide an improved clutch for leather-stretching machines or devices such as is shown and described in an application for Letters Patent of the United States filed by me of even date herewith, a further object being to provide a clutch of the class specified which may be used in connection with leather-stretching machines or devices of various forms and constructions; and with these and other objects in view the invention consists in a clutch of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a central vertical longitudinal section of a clutch made according to my invention and showing a clutch-holder with which it is connected; Fig. 2, a front end view thereof; Fig. 3, a side view of one jaw of the clutch, and Fig. 4 a face view thereof.

In the practice of my invention I provide a clutch of the class specified comprising a base portion *a*, having a raised and forwardly-directed stationary jaw *b*, the bearing-surface of which is smooth and inclined downwardly and backwardly and at the rear edge of which is a transverse shoulder *b*², and said base portion is provided at the back thereof with an upwardly-curved and forwardly-directed arm *c*, to the front end of which is pivoted the movable jaw *d*. The biting or bearing surface *d*² of the movable jaw *d* when said jaw is in operative position is parallel with the bearing-surface of the stationary jaw *b*, and said movable jaw is provided with parallel and

transverse corrugations *d*³ and with a plurality of projecting teeth *d*⁴, which in the form of construction shown are three in number, but a different number of which may be employed, and the teeth *d*⁴ project beyond the corrugations *d*³, and the rear edge of the movable jaw is provided with a downwardly-directed lip *d*⁵, which in the operation of the device operates in connection with the transverse shoulder *b*² of the stationary jaw. Pivoted to the back of the movable jaw is a rod or bar *e*, which passes upwardly through an opening *e*² in the arm *c* and is provided with a knob, head, or handle *e*³, and by means of this construction the movable jaw *d* may be raised out of contact or connection with the stationary jaw *b* whenever desired. At the base of the arm *c* the said clutch is provided with a backwardly-directed shoulder or projection *f*, in which is a recess or chamber *f*², which opens downwardly, and mounted in and movable vertically in the shoulder or projection *f* and the recess or chamber *f*² is a locking pin or bolt *g*, provided at its lower end with an enlarged head *g*², above which is a collar or flange *g*³, and the upper end of the locking pin or bolt *g* is provided with a knob, head, or handle *g*⁴. It will be observed that the stationary jaw *b* and the movable jaw *d* are of considerable width, and the base of the clutch and the arm *c* are also, preferably, so formed, and the jaw *d*, which is pivoted at *h*, is free to swing in a vertical plane and may be raised whenever desired by means of the rod or bar *e*.

In machines or devices of the class described it is customary to mount clutches of this class on a holder, arm, or bar which is free to swing horizontally, as shown and described in the application hereinbefore referred to, and in the drawings forming part of this application I have shown a holder or bar *i* for the purpose specified on which my improved clutch is mounted and on which said clutch is adjustable, said bar being provided at intervals with holes *i*², adapted to receive the head *g*² of the locking pin or bolt *g*, and in mounting the clutch on the bar *i* the said bar is passed through a groove *k* in the bottom of said clutch, as shown in Fig. 2. I have also

shown at *j* a piece of leather in order to show the operation of the clutch, and in practice the movable jaw *d* is raised and the leather is inserted between the stationary and movable jaws, after which the movable jaw is released or forced downwardly onto the leather; and any pull on the leather will cause the movable jaw to firmly clutch or bite the leather and hold it firmly between said jaws. In this operation, by reason of the fact that the bearing-surface of the stationary jaw is smooth, the leather when the pull is first made thereon will slip slightly; but as the pull or strain continues the movable jaw will firmly grasp and hold the leather and the lip *d*⁵ of the movable jaw will cause the leather to be compressed between the transverse shoulder *b*² of the stationary jaw and said lip, and this operation, in connection with the operation of the teeth *d*¹ and the transverse corrugations or lips *d*³, will enable the movable jaw to securely hold the leather without cutting or tearing it. Instead of the corrugations or lips *d*³ on the bottom surface of the movable jaw short teeth or other biting surfaces or devices may be employed, and by means of my improved construction I provide a clutch for the purpose specified which will operate effectively and which will securely hold the leather under all conditions and which is comparatively inexpensive.

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

1. A clutch for use in stretching leather, comprising a base portion having a forwardly-directed stationary jaw the bearing-surface of which is raised and directed upwardly and inclined downwardly and backwardly and is smooth and the rear edge of which forms a transverse shoulder, said base portion being also provided with an upwardly and forwardly curved arm, and a movable jaw pivoted to said arm and the bearing-surface of which is inclined to correspond with the bearing-surface of the stationary jaw, said movable jaw being provided at its rear edge with a transverse depending lip, which extends below the transverse shoulder of the stationary jaw when the

movable jaw is in operation, substantially as shown and described.

2. A clutch for use in stretching leather, comprising a base portion having a forwardly-directed stationary jaw the bearing-surface of which is raised and directed upwardly and inclined downwardly and backwardly and is smooth and the rear edge of which forms a transverse shoulder, said base portion being also provided with an upwardly and forwardly curved arm, and a movable jaw pivoted to said arm and the bearing-surface of which is inclined to correspond with the bearing-surface of the stationary jaw, said movable jaw being provided at its rear edge with a transverse depending lip which extends below the transverse shoulder of the stationary jaw when the movable jaw is in operation, the bearing-surface of the movable jaw being also provided with short biting teeth or projections, substantially as shown and described.

3. A clutch for use in stretching leather, comprising a base portion having a forwardly-directed stationary jaw the bearing-surface of which is raised and directed upwardly and inclined downwardly and backwardly and is smooth and the rear edge of which forms a transverse shoulder, said base portion being also provided with an upwardly and forwardly curved arm, and a movable jaw pivoted to said arm and the bearing-surface of which is inclined to correspond with the bearing-surface of the stationary jaw, said movable jaw being provided at its rear edge with a transverse depending lip which extends below the transverse shoulder of the stationary jaw when the movable jaw is in operation, the bearing-surface of the movable jaw being also provided with short biting teeth or projections, and with longer biting teeth or projections, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 18th day of January, 1904.

EZRA L. POST.

Witnesses:

F. A. STEWART,
C. E. MULREANY