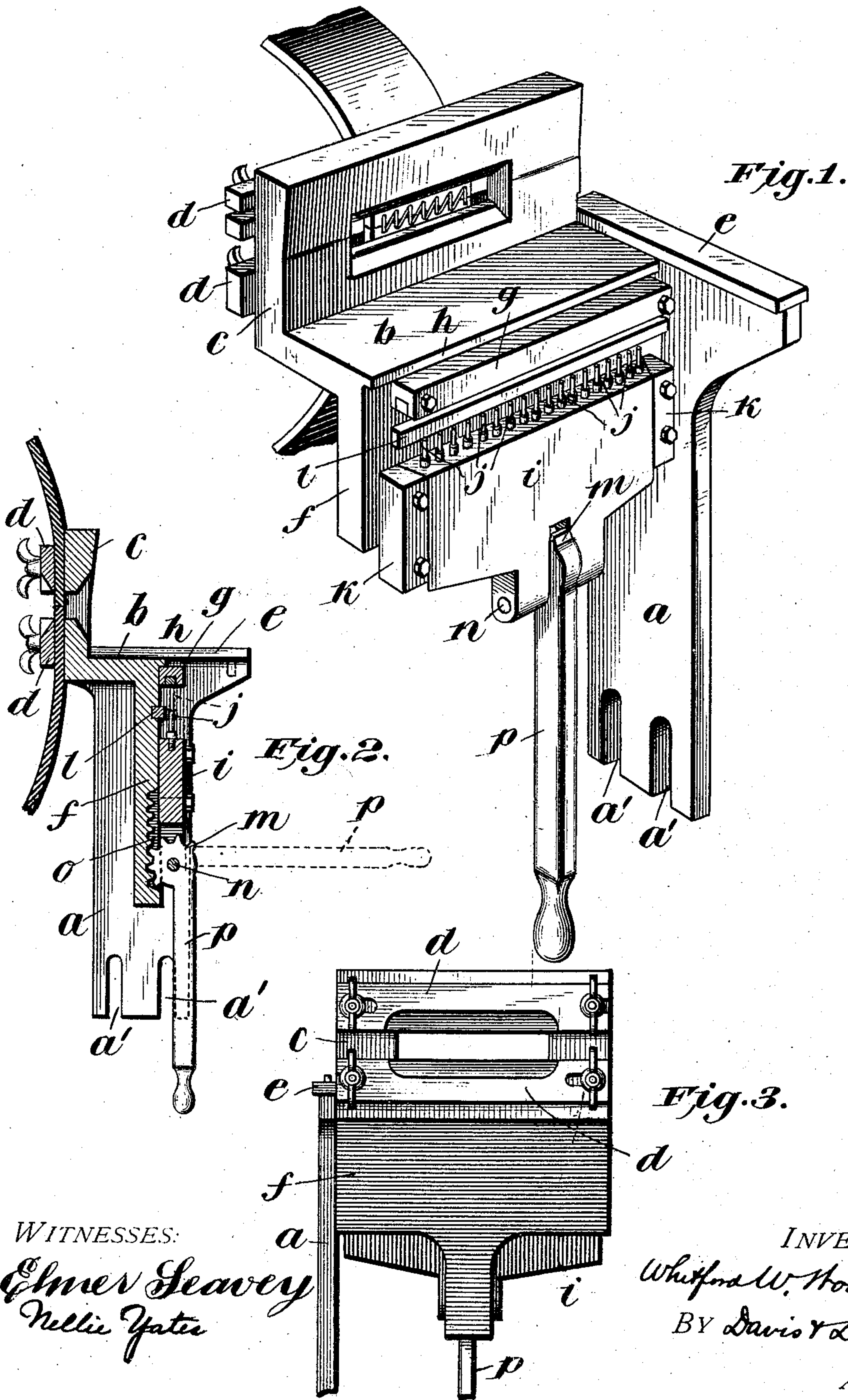


No. 782,307.

PATENTED FEB. 14, 1905.

W. W. WOODLEY.
IMPLEMENT FOR PUNCHING BELTS.
APPLICATION FILED APR. 29, 1904.



WITNESSES:

Elmer Seavey
Nellie Yates

INVENTOR,
Whitford W. Woodley,
BY Davis & Davis,
Attorneys.

UNITED STATES PATENT OFFICE.

WHITFORD W. WOODLEY, OF ELIZABETH CITY, NORTH CAROLINA.

IMPLEMENT FOR PUNCHING BELTS.

SPECIFICATION forming part of Letters Patent No. 782,307, dated February 14, 1905.

Application filed April 29, 1904. Serial No. 205,565.

To all whom it may concern:

Be it known that I, WHITFORD W. WOODLEY, a citizen of the United States of America, and a resident of Elizabeth City, county of Pasquotank, State of North Carolina, have invented certain new and useful Improvements in Implements for Punching Belts, of which the following is a full, clear, and exact description, reference being had therein to the accompanying drawings, in which—

Figure 1 is a perspective view of my implement; Fig. 2, a vertical transverse section of the apparatus, and Fig. 3 a back view thereof.

The object of this invention is to provide a simple punching device especially adapted for use in connection with a combination implement for preparing and fastening the abutting ends of machinery-belts, said combination implement preferably embodying in addition to the punching devices certain means for squaring the ends of the belt which are to be abutted and fastened together, means for clamping the abutting ends of the belt while the fastening-wire is being interlaced, and an anvil for hammering down the fastening-wire after it is laced, as more fully hereinafter set forth.

Referring to the drawings by letters, *a* designates a bracket or standard which is provided at its lower end with a pair of slots *a'*, by means of which and a pair of suitable bolts the appliance may be fastened to a convenient part of a larger machine or to any other suitable support. Cast integral with this bracket-plate *a* is a rectangular table *b*, having in turn formed integral with it at its rear edge an upright flange *c*, which is thickened at its upper end to form an anvil whose upper surface is flat. This flange is provided with a lacing-opening and suitable clamp-bars *d* to hold the ends of the belt while being laced, the drawings showing the clamped ends of the belt laced together and ready to be removed. At the right-hand end of the table is arranged a suitable straight-edge *e*, which is employed to square the ends of the belt that are to be fastened together. Formed on the front edge of the table is a depending flange or plate *f*, which runs the full length of the table and affords a

suitable support below the upper surface thereof for the punching devices.

The punching devices consist of an upper member or bar *g*, bolted to the face of the plate *f* just under an overhanging flange *h* on the front edge of the table, and a movable member *i*, consisting of a plate slidably mounted on the face of plate *f* just below the stationary member *g*, this slidable member being attached to the face of the plate *f* by vertical bars *k*, bolted to the face of said plate near each end thereof and beveled along their inner edges. This slidable plate *i* carries along its upper edge a series of punches *j*, which are adapted to be forced through the leather when the same is placed between the two members *g* and *i*.

To strip the leather from the punches when the same are drawn down, I employ a bar or strip *l*, which is secured to the face of the plate just under the stationary member *g*. To raise and lower the pressure-plate *i*, I employ a toothed gear-wheel *m*, journaled on a horizontal pin *n* in a slot in the lower end of plate *i*, the teeth of this gear meshing with a rack *o*, depending from and forming an integral part of the table-plate *f*. To operate this gear, I employ a lever *p* and attach it to the gear at such an angle that when the punch-carrying plate is down the lever will also be down out of the way. With this manner of operating the punch-carrying plate it will be observed that the same may be forced upward with considerable power and also that the operating-lever is always in engagement with the punch-carrying plate.

In using this implement the ends of the belt to be fastened together are first squared by means of the straight-edge *e* and a suitable knife held in the hand of the operator. Then the ends of the belt are inserted singly or together under bar *g* and on top of bar *l*. Then by raising lever *e* the punches will be forced through the ends of the belt, and when the lever is swung down the strip or bar *l* will strip the leather off the punches. After the belt is thus punched it is placed in the clamp on the back of the anvil and suitably laced with wire, and after it is thus laced it is re-

moved from the clamp and the wire lacing is hammered down on the upper flat face of the anvil.

It will be obvious that instead of using the stripping device shown and described in this application I may use instead the stripping devices shown in my copending application, Serial No. 179,314, in which the stripping device consists of a hook-like part attached to the movable member in such a position that when the movable member is drawn down the leather is pulled off the punches, the latter being in this instance carried by the stationary member.

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

1. In a punching implement, the combination of a table carrying a depending supporting-plate and a depending bracket-plate, the latter adapted for attachment to a support, and punching means carried by said supporting-plate below the table-top, said punching means consisting of two members, the upper one being stationary and the lower one vertically movable, a series of punches carried by the lower member, a stripping-plate between the members, a rack-bar carried by the supporting-

plate, a gear journaled on the movable member and engaging the rack and connected to an operating device.

2. In combination, a supporting-plate, punching means carried by said plate, said means consisting of a stationary member and a movable member, one of the members carrying punches, and means for operating the movable member, said means consisting of a rack held stationarily and a gear journaled on the movable member and provided with means for operating it.

3. In a punching implement, the combination of a supporting-plate and punching devices carried thereby, said devices consisting of a stationary member and a movable member, one of these members carrying the punches, a rack-bar carried by the supporting-plate, a gear journaled on the movable member and engaging said rack, and an operating-lever attached to said gear.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 27th day of April, 1904.

WHITFORD W. WOODLEY.

Witnesses:

RILEY CARROLL ABBOTT,
WM. C. GLOVER.