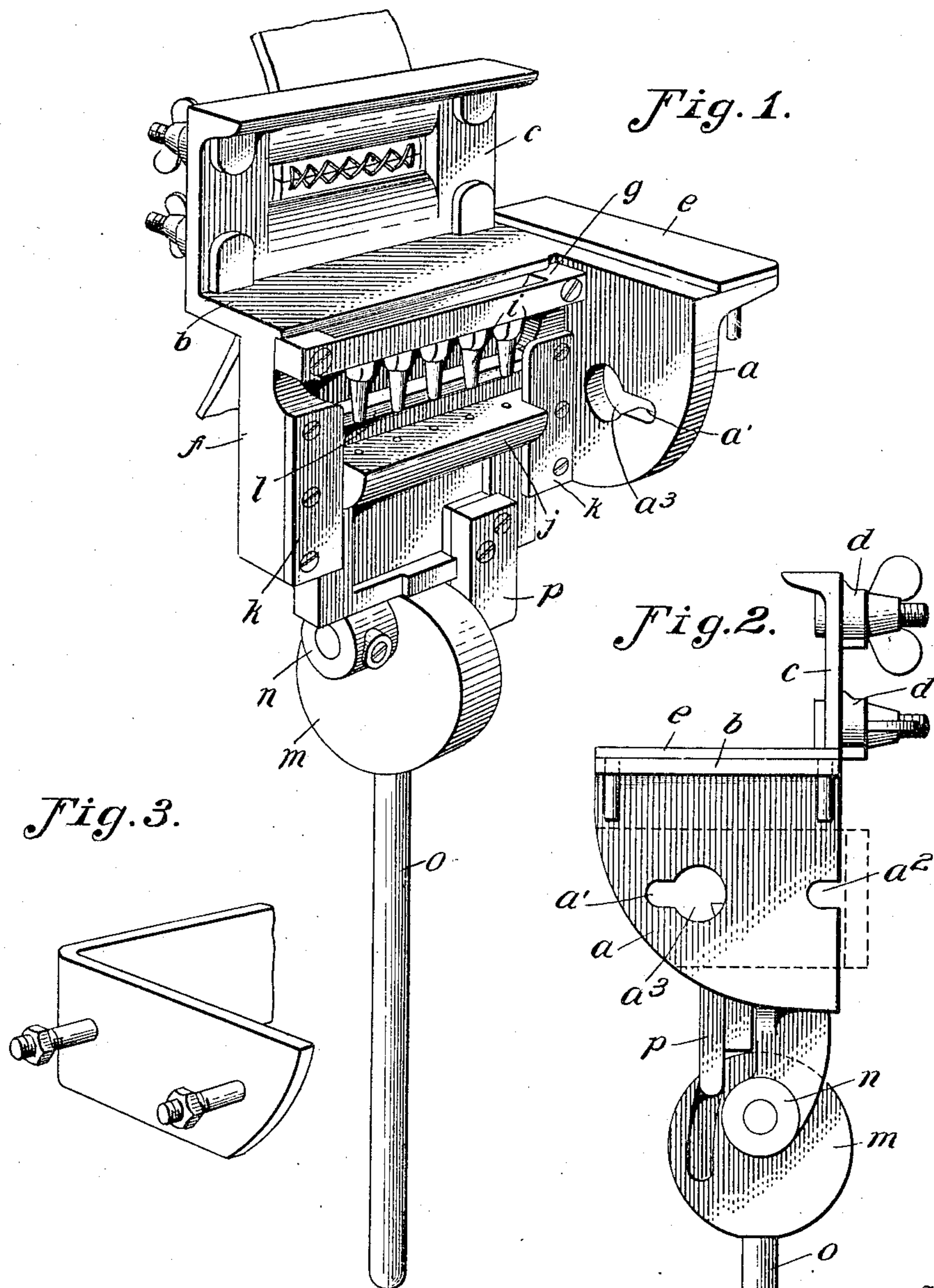


No. 872,210.

PATENTED NOV. 26, 1907.

W. W. WOODLEY.
BELT PUNCHING IMPLEMENT.
APPLICATION FILED MAR. 18, 1907.



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UNITED STATES PATENT OFFICE.

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

BELT-PUNCHING IMPLEMENT.

No. 872,210.

Specification of Letters Patent.

Patented Nov. 26, 1907.

Application filed March 18, 1907. Serial No. 362,891.

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 Belt-Punching Implements, of which the following is a full and clear specification, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of my improved implement complete; Fig. 2 is a side elevation thereof; and Fig. 3 is a detail view of a portion of the machine frame or support to which the device is adapted to be removably attached.

This invention has relation to that class of implements covered by my former patents as follows: No. 757,589, dated April 19, 1904; No. 763,137, dated June 21, 1904; and No. 782,307, dated Feb. 14, 1905; in which this implement is especially adapted for use in connection with a combination implement for preparing and fastening the abutting ends of machinery belts, preferably embodying in addition to the improved punching devices, certain means for squaring the ends of the belt which are to be abutted and laced together, means for clamping the abutting ends of the belt while the lacing wire is being interlaced, and an anvil for hammering down the fastening wire after it is laced, as fully set forth in said Letters Patent.

Referring to the drawings by letters, *a* designates a bracket plate which is provided with two horizontal slots *a'*, *a''*, the latter being open at the rear edge of the plate and the former being closed at its ends and having an enlargement *a'''* at one end. By means of these slots the implement may be readily attached to and detached from a suitable support.

In Fig. 3 is shown a part of a machine frame provided with a pair of stud bolts set the proper distance apart for engagement with the said slots. It will be observed that in attaching the implement the nut in one of the bolts is passed through the enlargement in the closed slot and then by a lateral movement of the implement both slots are engaged over the bolts, after which by simply tightening up the nuts the implement may be readily secured in place. By simply loosening the nuts the implement may be detached. This ready attachment and detachment of the implement is desirable in view of the fact

that it is intended to be used on various machines and to be changed from machine to machine so that the belt may be laced after it is passed around the shafts carrying the pulleys on which the belt is to run.

As is obvious the implement may be attached to any suitable part of the frame or any extension thereon.

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 on its rear face with suitable clamp bars *d* to hold the ends of the belt while being laced, as shown in the drawings.

At the right hand end of the table is mounted a suitable vertically movable 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* carrying a series or row of depending punches *i*. Mounted on the face of the blade just below the punches is a suitable pressure plate or slide *j* which is slidably attached to the face of the plate by the vertical bars or plates *k* bolted to the face of the plate at each end thereof. Formed on this pressure plate or platen at the inner corner of its upper edge or face is an upright flange *l*, which extends along the upper edge of the plate and is formed hook-shaped at its upper edge. This hook-shaped upright flange lies in a vertical plane back of the punches *i* and is adapted to pass up behind the same when the platen is raised.

The platen is raised by means of a cam *m* journaled on a horizontal pivot or shaft supported in depending arms *n* carried by the depending plate *f*. The cam is pivoted eccentrically so that when it is turned on its axis its periphery engages the lower edge of the platen and gradually forces its upper face against the punches thus perforating the end or ends of the belt placed thereon. This cam is provided with a suitable handle or lever *o* for operating it which may extend radially at any angle from the cam or may extend in any other desired direction. In one face of the cam is formed an

arcuate groove which groove is eccentric to the axis of the cam and is engaged by a laterally projecting pin carried by a plate or part *p* depending from the platen. The object of
5 thus positively connecting the platen to the punch-operating cam is to provide a positive means for drawing down the platen to strip the belt ends off the punches after they are punched, this stripping action being
10 caused by the upright hook-shaped flange *l*, as in my former patents referred to hereinbefore.

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

In a punching implement, the combination of a support carrying a depending plate,

a series of punches, a vertically movable platen and means for stripping the belt ends from the punches after being punched, and
20 means for positively raising and lowering the platen, said means embodying a cam whose periphery is in position to engage and raise the platen and which is provided with a groove in one side, and a pin engaging in
25 said groove and carried by the platen.

In testimony whereof I hereunto affix my signature in the presence of two witnesses this 15th day of March 1907.

WHITFORD W. WOODLEY.

Witnesses:

W. A. BINNER,
W. W. GRIFFIN.