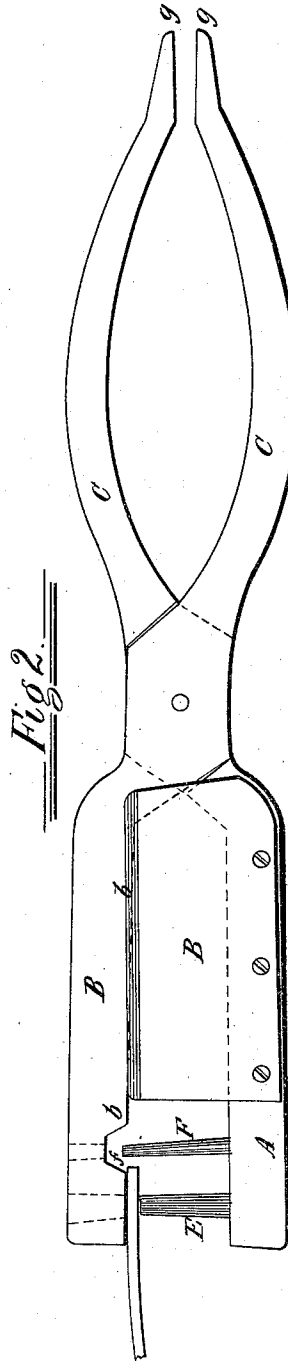
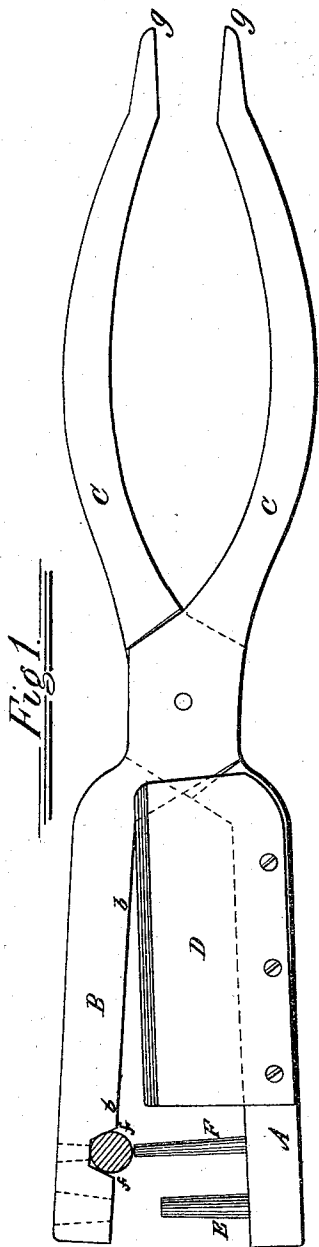


E. G. PULLIS.
Belt-Punches.

No. 147,792.

Patented Feb. 24, 1874.



Witnesses.

W M Edwards.

William R Whitney

Inventor.

Edward G Pullis
per James A Whitney
Attorney

UNITED STATES PATENT OFFICE.

EDWARD G. PULLIS, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN BELT-PUNCHES.

Specification forming part of Letters Patent No. **147,792**, dated February 24, 1874; application filed December 6, 1873.

To all whom it may concern:

Be it known that I, EDWARD G. PULLIS, of Providence, in the county of Providence and State of Rhode Island, have invented certain Improvements in Belt-Adjusters, of which the following is a specification:

This invention is more especially designed for use in adjusting the belts of sewing-machines to any desired tension, and, while adapted for adjusting flat belts, is more particularly intended for round belts, or those of cylindrical or circular cross-section. The invention consists in a notch or recess formed in the one jaw of a hand punching device, in combination with a punch provided upon the other jaw of the instrument; whereby the end portions of a round belt may be firmly held in such position that, in the operation of the instrument, holes may be punched through the central or thickest portion of the belt, to receive the hooks or fastenings by which the ends of the belt are joined. The invention also comprises a novel combination, with the hereinbefore-specified parts, of a blade or knife for cutting and squaring the ends of the belt to the requisite degree.

Figure 1 is a side view of a belt-adjusting device constructed according to my invention, as used upon round belts; and Fig. 2 is a similar view of the same as designed for use upon flat belts.

A B are jaws, constructed with handles C, and pivoted together by a pivot, *a*, as shown in the drawings, in such manner that when the handles are opened or closed, as the case may be, a corresponding movement is given to the jaws. Upon the jaw A, but at some little distance from its outer extremity, is affixed a blade, D, which projects inward, with its sharp inner edge shearing past the angular shoulder *b*, constituted by the adjacent portion of the jaw B. Nearer the outer extremity of the jaw A, upon the inner side thereof, are provided the two punches E F.

Formed in the inner side of the jaw B, immediately opposite the punch F, is a transverse notch or recess, *f*, made preferably with sloping sides. The extremities of the handles C are formed with flat inner surfaces, and in general contour are shaped to form a pair of nippers or pliers, *g*.

In using the implement, the jaws A B being opened, the end of the belt, whether round or flat, is thrust between the blade D and the shoulder *b*, and is cut off at the requisite length by the shearing action of the blade when the handles are brought toward each other by the hand of the operator. This done, the ends of the belt are punched to receive the fastenings. If the belt is a round one, it is laid with its end in the recess *f*, which forms a guide to hold it in such position that the punch F will pass through it midway between its sides, as indicated in Fig. 1, when the implement is worked to bring its jaws toward each other. If the belt be a flat one, the end is placed between the punch E and the adjacent end of the opposite jaw F, as represented in Fig. 2, and by the operation of the jaws the holes are punched singly and in succession across the ends of the belt.

The ends of the belt being brought together, the metallic hooks or fastenings usually employed in sewing-machine belts are inserted, and are bent to their places and firmly clamped to the position required for the permanent retention of the ends together by the nippers *g*, applied after the manner of ordinary gripping-pliers.

What I claim as my invention is—

The jaw A, provided with the blade D and one or more punches, in combination with the jaw B, provided with the notch *f*, all substantially as shown, and for the purpose described.

EDWARD GOULD PULLIS.

Witnesses:

EMORY COOK,
HENRY COOK.