(No Model.)

J. BEATTIE.

BUCKLE.

No. 416,985. Patented Dec. 10, 1889.

Fig. 1

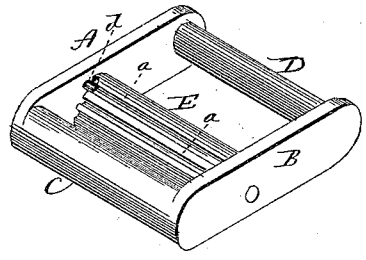


Fig. 2

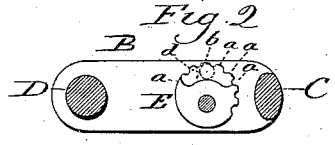
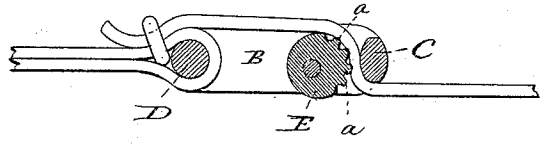


Fig. 3



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES BEATTIE, OF MIDDLETOWN, CONNECTICUT, ASSIGNOR TO THE RUSSELL MANUFACTURING COMPANY, OF SAME PLACE.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 416,985, dated December 10, 1889.

Application filed June 4, 1889. Serial No. 313,050. (No model.)

To all whom it may concern:

Be it known that I, JAMES BEATTIE, of Middletown, in the county of Middlesex and State of Connecticut, have invented a new Improvement in Buckles; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view; Fig. 2, a side view, the side removed, showing the end of the clamping-cylinder; and Fig. 3, a sectional view with the strap engaged.

This invention relates to an improvement in buckles, and particularly to that class which are adapted for binding-straps—such as trunk-straps, &c.—and in which the strap is clamped in contradistinction to being pierced and held by the tongue of the buckle extending through one of the holes. In such buckles the extent of the adjustment is limited to the number of holes, and such holes tend to weaken the strap.

The object of this invention is to construct a buckle simple and cheap to manufacture, yet one which will securely hold the strap in any desired position; and it consists in the construction as hereinafter described, and particularly recited in the claim.

The frame of the buckle consists of two sides A B, connected at their ends by bars C D, and may be cast complete. Between the sides of the frame and near one of the end bars, as C, a cylinder E is arranged upon an eccentric axis parallel with said bar C and so that when rotated on its axis it will approach or recede from the said bar C according to the direction of rotation. The portion of the roller E toward the bar C is longitudinally grooved, forming ribs *a a*, which increase the holding power of the buckle. To prevent the cylinder E from turning completely around on its axis, I construct it with a recess *b* at one end, and on the corresponding side of the frame I arrange a stop *d*, which extends into the recess, and against which the ends of the recess will strike, and thereby limit the movement of the cylinder. One end of the strap is secured to the bar D.

To engage the free end of the strap, it is passed between the bar C and cylinder E, the action of the strap in such introduction tending to turn the cylinder from the bar C, so as to allow the free introduction of the strap. When the strap is drawn to the desired position, the cylinder E is turned toward the bar C and clamps the strap between it and the said bar, and because of the eccentricity of the axis of the cylinder the strain upon the strap will tend to turn the cylinder toward the bar C; consequently the clamping power is increased according to the strain upon the strap. The ribs *a a* will indent the strap and greatly increase the holding capacity.

To remove the strap, draw upon the free end of the strap until the cylinder is turned from the bar C, free from the strap. Then the strap may be removed or adjusted, as desired.

By employing the recess in the end of the cylinder and the stop in the frame I prevent the full revolution of the cylinder, which might otherwise occur, and if so allowed to revolve would clamp the strap in either direction. While I therefore prefer to employ the recess and stud, they may be omitted, as the buckle is operative without them, simply requiring more care in adjusting.

I claim—

The herein-described buckle, consisting of a rectangular frame, combined with an eccentrically-pivoted cylinder arranged parallel with and near one end of the frame, so as to be turned toward or from that end, one end of said cylinder constructed with a recess *b* and a stop *d*, projecting from the corresponding side of the frame into said recess, whereby the rotatory movement of the cylinder is limited, substantially as and for the purpose described.

JAMES BEATTIE.

Witnesses:
C. R. MATHEWSON,
EUGENE H. BURR.