

(No Model.)

H. SELLS.
FRICTION CLAMP.

No. 296,633.

Patented Apr. 8, 1884.

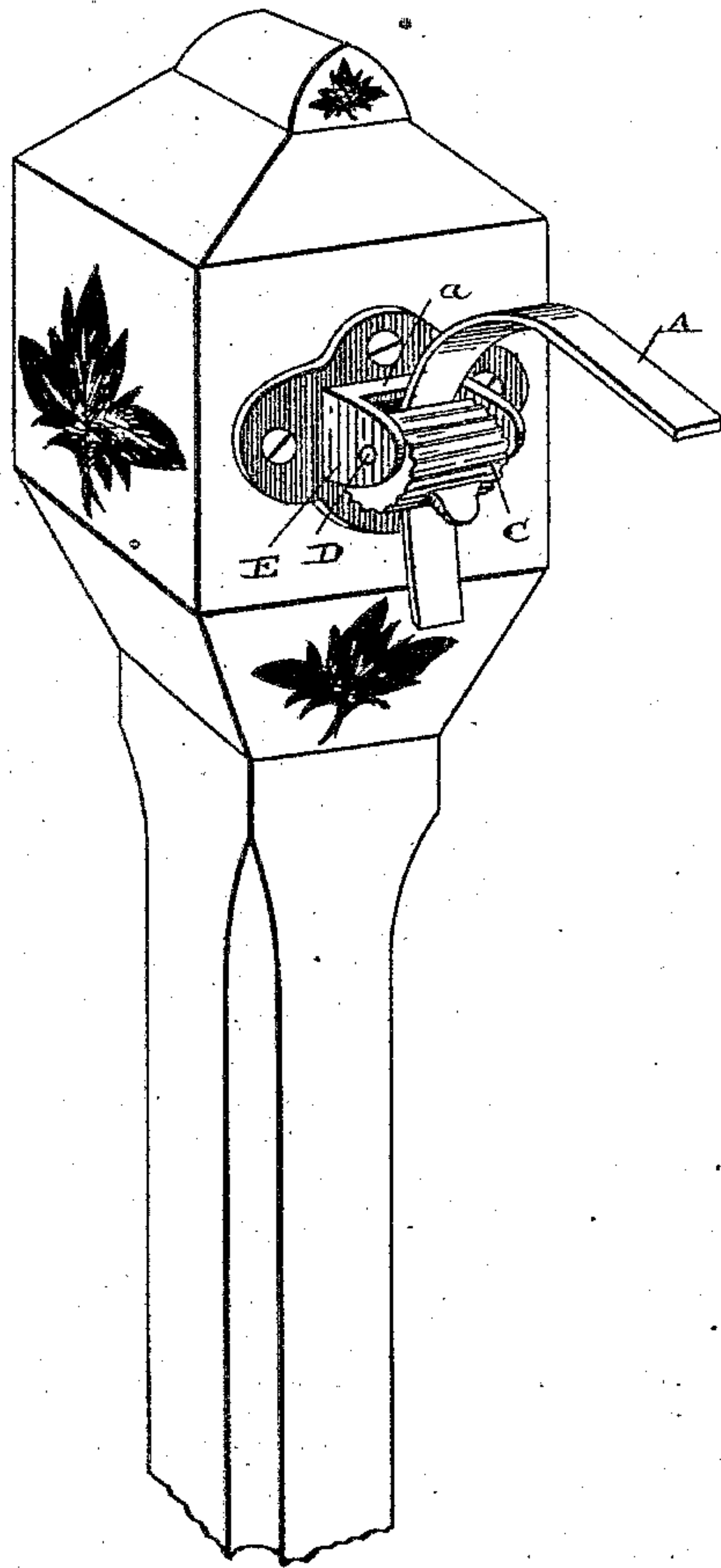


Fig. 1.

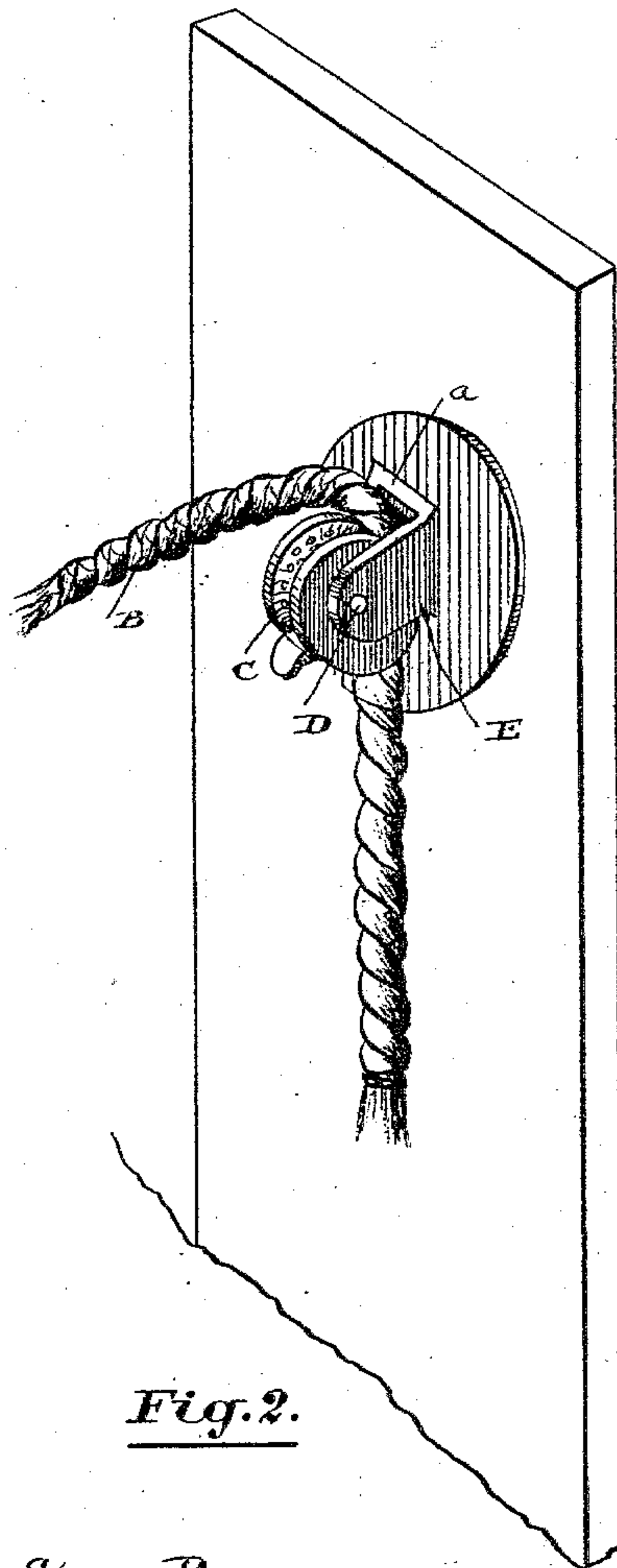


Fig. 2.

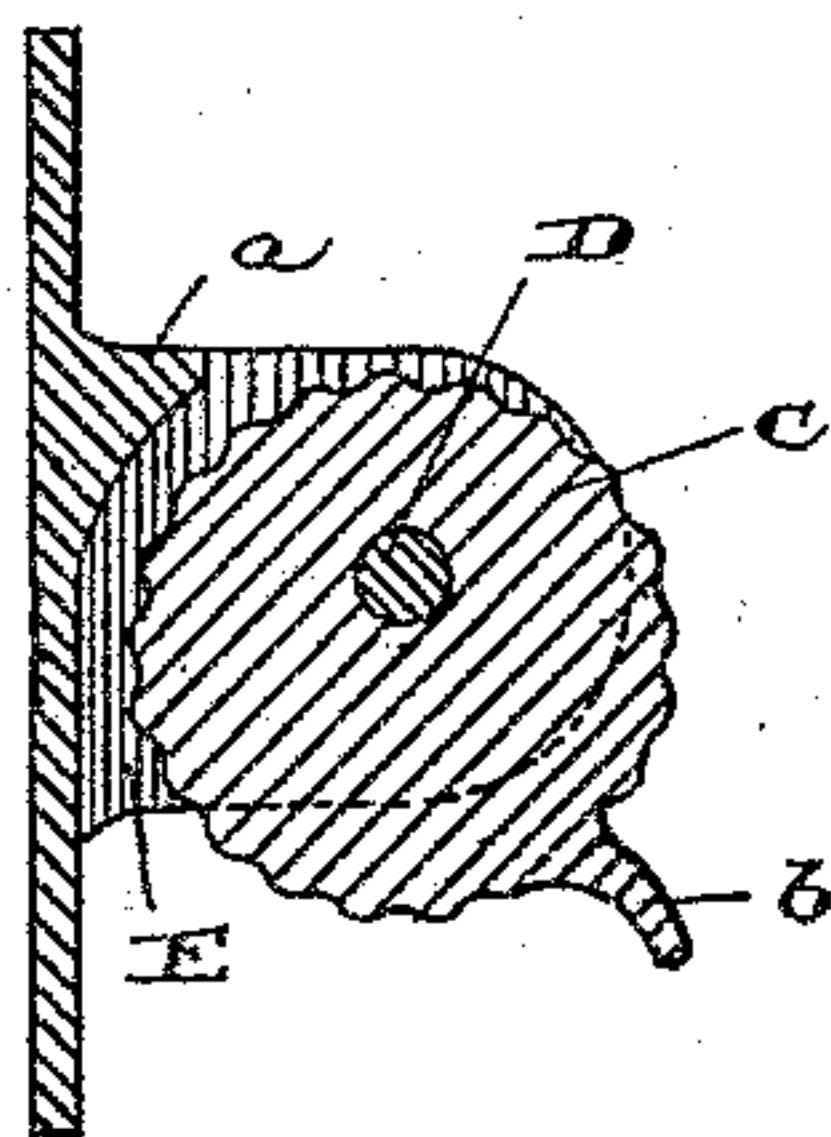


Fig. 3.

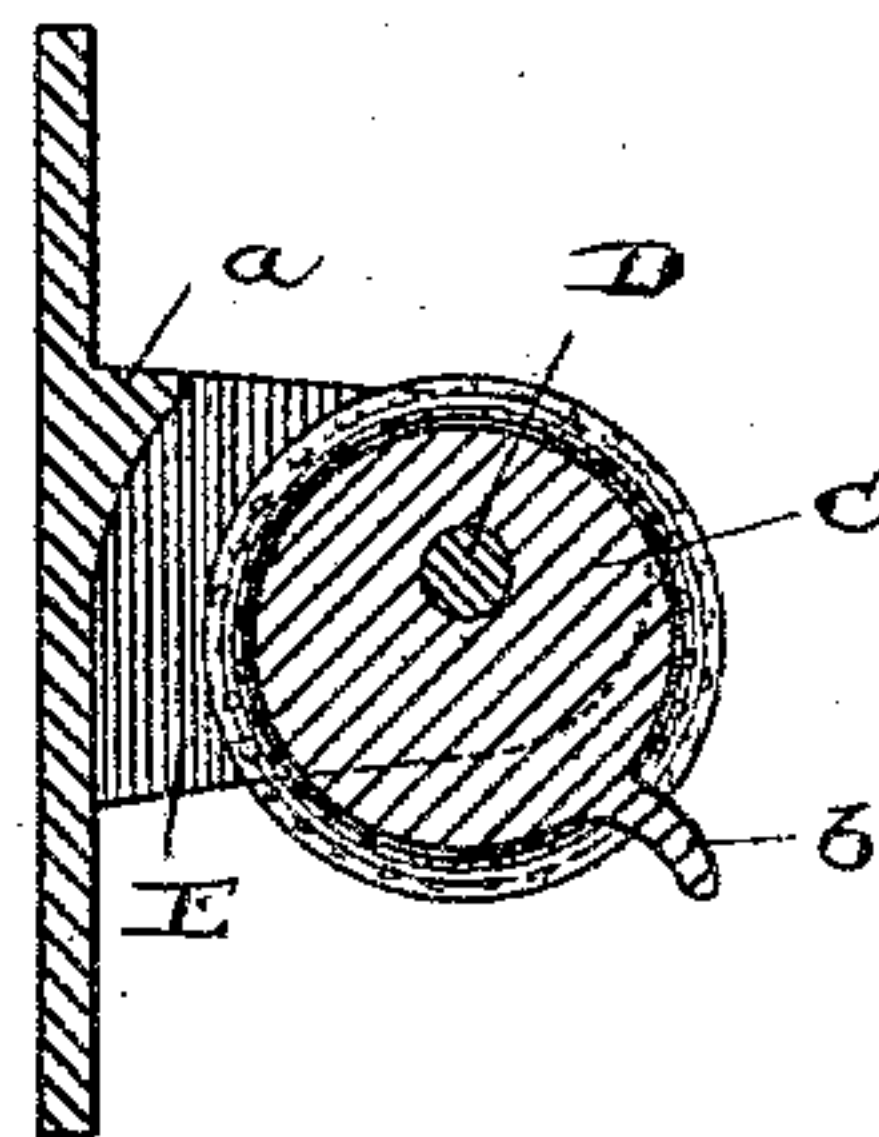


Fig. 4.

Witnesses.

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UNITED STATES PATENT OFFICE.

HUGH SELLS, OF TORONTO, ONTARIO, CANADA.

FRICTION-CLAMP.

SPECIFICATION forming part of Letters Patent No. 296,633, dated April 8, 1884.

Application filed February 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, HUGH SELLS, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, manufacturer, have invented a certain new and useful Friction-Clamp; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of the invention is to devise a friction-clamp which will permit a cord, strap, or their equivalent to move freely through the clamp when drawn in one direction, but will rigidly hold the said cord or its equivalent when the draft is directed from the opposite side; and it consists, essentially, of a roller eccentrically pivoted within a bracket in such a manner that the space between the back of the bracket and the periphery of the roller shall be sufficient to allow the cord or its equivalent to pass when the short throw of the eccentric roller is on the inside, but when the long throw of the eccentric roller is drawn toward the inside the cord or its equivalent is jammed or clamped between the surface of the roller and the back of the bracket, substantially as hereinafter more fully explained.

Figure 1 is a perspective view of my improved friction-clamp designed for and applied to a hitching-post. Fig. 2 is a perspective view of my improved friction-clamp designed for a clothes-line fastener. Fig. 3 is a cross-section of the clamp shown in Fig. 1. Fig. 4 is a cross-section of the clamp shown in Fig. 2.

Various alterations can of course be made in the general design of my friction-clamp without altering its principle or effectiveness, the two designs shown being used to illustrate the changes which it may be necessary to make in order to accommodate the clamp for the style of a cord or strap it is intended to be utilized for fastening.

In Figs. 1 and 3 the clamp is shown to hold a strap, A, while in Figs. 2 and 4 the clamp is adapted to fasten a cord, B. In Figs. 1 and 2 it will be noticed that the roller C has its circumference corrugated by grooves running parallel with its pivot D, while in Figs. 2 and 4 an annular groove is cut around the circumference of the roller C to admit the round body of the cord B. In both instances the pivot D is eccentrically located in the roller, and is so

held in the jaws of the bracket E that when the roller is turned to bring the short throw of the eccentric—or, in other words, that portion of the circumference of the roller nearest to its pivot—between the back of the bracket E and the pivot D, there will be sufficient space between the two to permit the cord or strap, as the case may be, to pass.

As shown in the drawings, the strap A or the cord B is supposed to have been inserted from the top side of the roller, and as the short throw of the roller C lies on the top side, as indicated by Figs. 3 and 4, any draft on the lower end of the strap or cord has a tendency to keep the short throw of the roller on the inside or opposite to the back of the bracket E; consequently, when the strap or cord is so pulled, it will pass freely between the roller and the bracket. As the long throw of the eccentric roller lies on the bottom side, any draft on the opposite or top end of the cord or strap has in moving the roller on its pivot a tendency to draw the long throw or side of the roller inwardly, thereby causing it to jam the cord or strap against the back of the bracket E, the grip thus caused being increased in proportion to the upward draft on the strap or cord.

From this description, and by aid of the drawings, it will be seen how readily the strap or cord may be locked, it being merely necessary to slip the loose end in between the roller and the bracket, which may be, as described, freely done, when any draft on the other end of the strap or cord immediately causes the desired lock.

In order to cause the strap or cord to hug the circumference of the roller, and thereby insure the turning of the roller on its pivot, I form a curved projection or lip, *a*, on the back of the bracket E, between the two jaws, which projection or lip is shaped substantially as shown in Figs. 3 and 4, so as to cause the strap or cord to conform to the circle of the roller, so that any draft on the strap or cord makes it hug the roller.

b is a handle fixed to the roller, in order to enable the same to be turned readily on its pivot D when it is desired to release the strap or cord.

What I claim as my invention is—

1. In combination with a strap or its equiv-

alent, a roller, C, provided with a handle, *b*, and eccentrically pivoted between the jaws of the bracket E, substantially as and for the purpose specified.

5 2. In combination with a strap or its equivalent, a roller, C, eccentrically pivoted between the jaws of a bracket, E, having a curved projection, *a*, arranged substantially as and for the purpose specified.

10 3. In combination with a strap or its equiv-

alent, a roller, C, provided with a handle, *b*, and eccentrically pivoted between the jaws of a bracket, E, having a curved projection, *a*, substantially as and for the purpose specified.

Toronto, February 7, 1884.

H. SELLS.

In presence of—

F. W. HILL,

CHAS. C. BALDWIN.