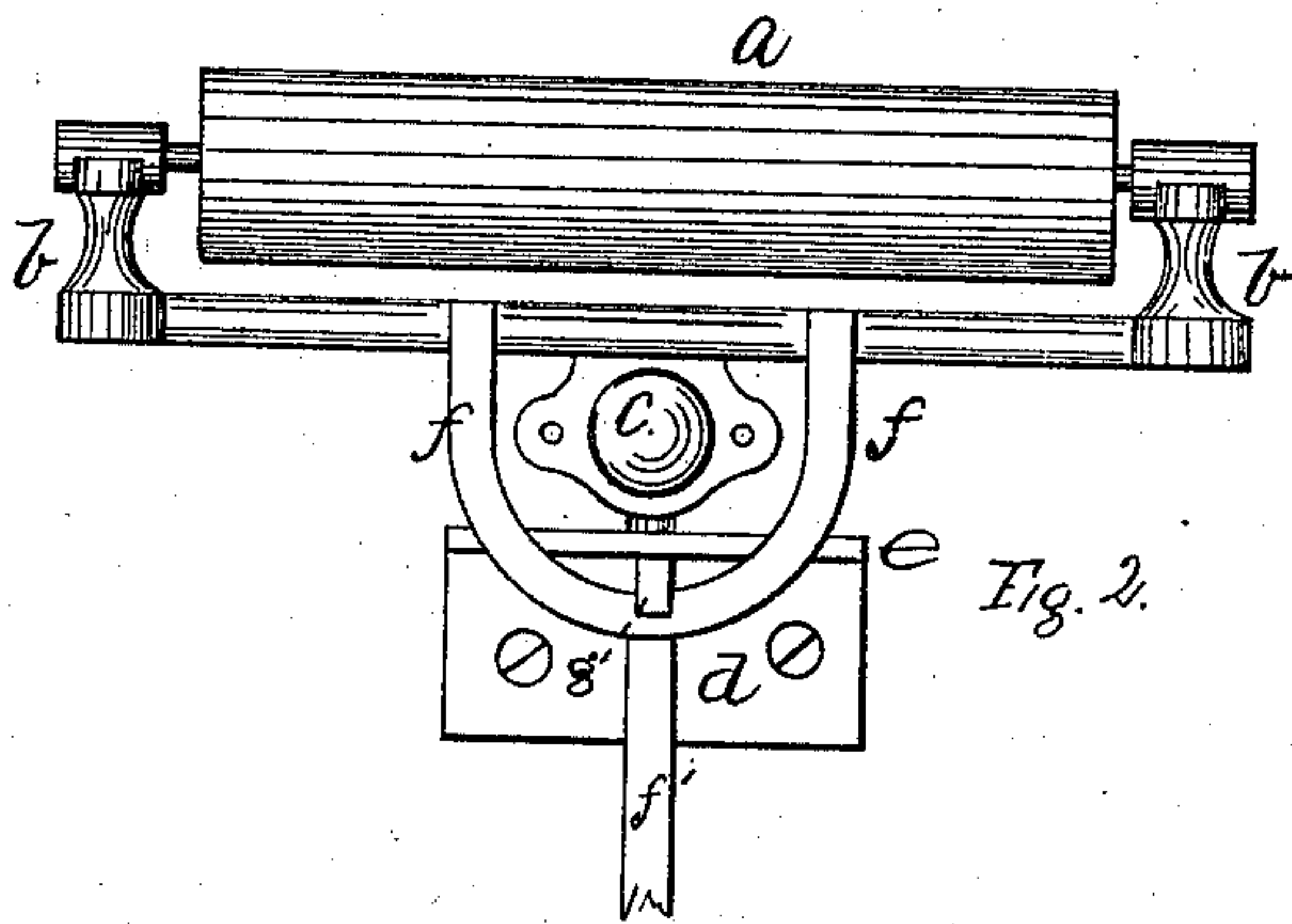
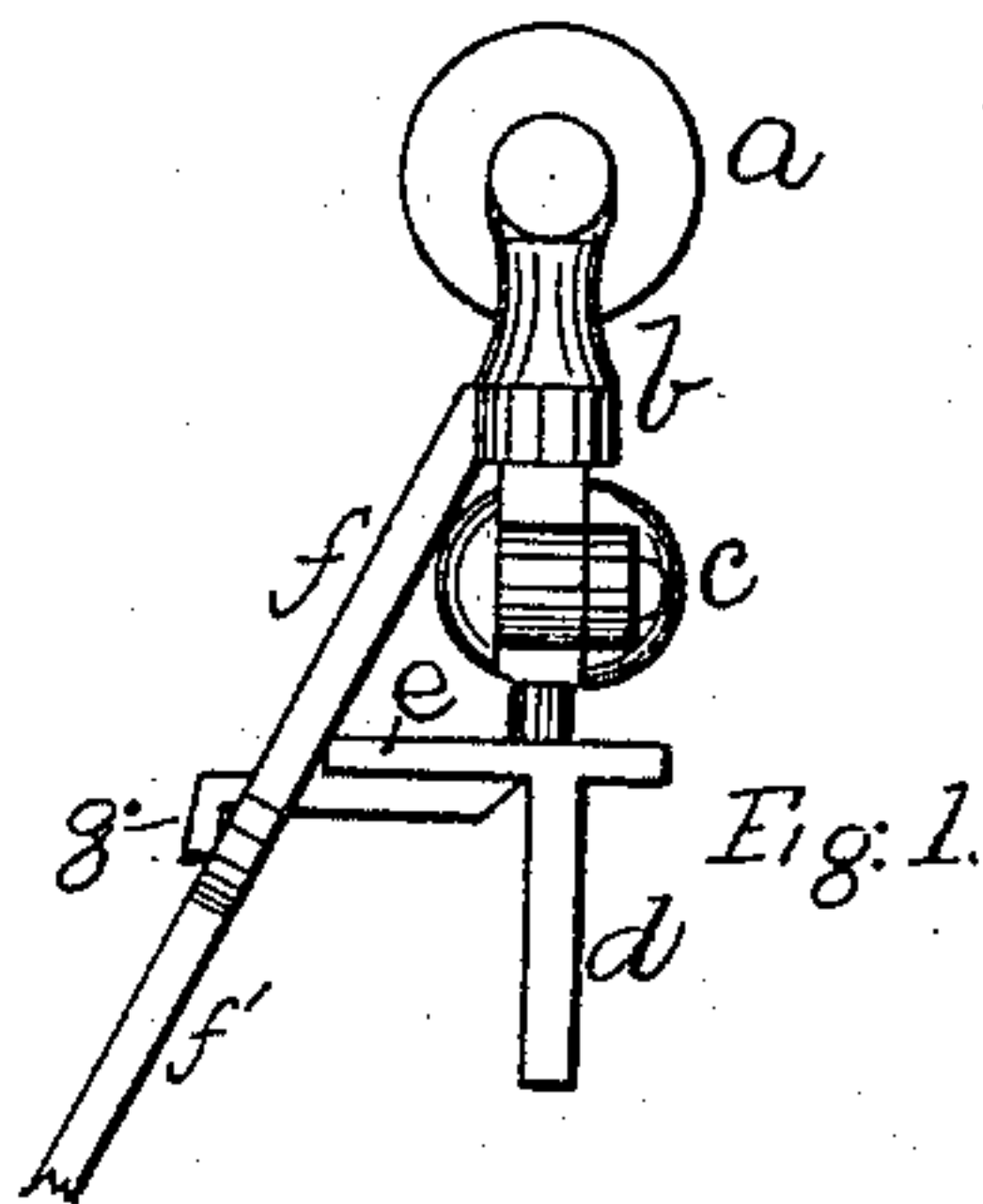


T. N. EGERY.
Belt-Shifter.

No. 197,840.

Patented Dec. 4, 1877.



WITNESS

John R. Mason
G. L. Searcy

INVENTOR

Thomas N. Eger

PER *G. L. Searcy* ATT'Y.

UNITED STATES PATENT OFFICE.

THOMAS N. EGERY, OF BANGOR, MAINE.

IMPROVEMENT IN BELT-SHIFTERS.

Specification forming part of Letters Patent No. **197,840**, dated December 4, 1877; application filed October 20, 1877.

To all whom it may concern:

Be it known that I, THOMAS N. EGERY, of Bangor, in the county of Penobscot and State of Maine, have invented certain new and useful Improvements in Belt-Shifters; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 shows an end elevation, and Fig. 2 a front elevation.

The same letters show like parts.

My invention consists of an improved belt-shifter, so constructed as to change the direction of and shift the belt with great ease and rapidity.

It will be readily understood by reference to the accompanying drawings, in which, besides other letters indicating other parts of my invention, *a* shows a roller revolving in a frame, *b*. This frame is attached at its center by a universal joint to a plate, *d*, by which the device is secured in its desired position, which may be either above or below the belt. From this plate *d* projects a flange, *e*, serving as a guide to a forked lever, *f*, attached to the frame *b*, and extending over the edge of said flange at an angle to the perpendicular. A stud or catch, *g*, retains the roll in a horizon-

tal position when not used for shifting the belt.

When the belt is to be shifted, the end *f'* of the lever *f* is thrown in the contrary direction. This throws up one end of the roll *a*, pressing it against the edge of the belt, and at the same time the lever *f*, guided by the flange *e*, over which it works, gives to the roll a motion upon the perpendicular axis of the joint, thus cutting the roll and facilitating the shifting of the belt, both by pressure upon its edge and by changing the direction of the roller.

I claim as my invention, and desire to secure by Letters Patent—

1. In a belt-shifter, the combination of the roll *a*, frame *b*, and universal joint *c*, whereby said roll is enabled to move simultaneously upon both the horizontal and perpendicular axes of said joint, as and for the purposes specified.

2. The combination of the roll *a*, frame *b*, and joint *c* with the forked lever *f* and guiding-flange *e*, all arranged to operate in the manner specified, for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of October, 1877.

THOS. N. EGERY.

Witnesses:

JOHN R. MASON,

WM. FRANKLIN SEAVEY.