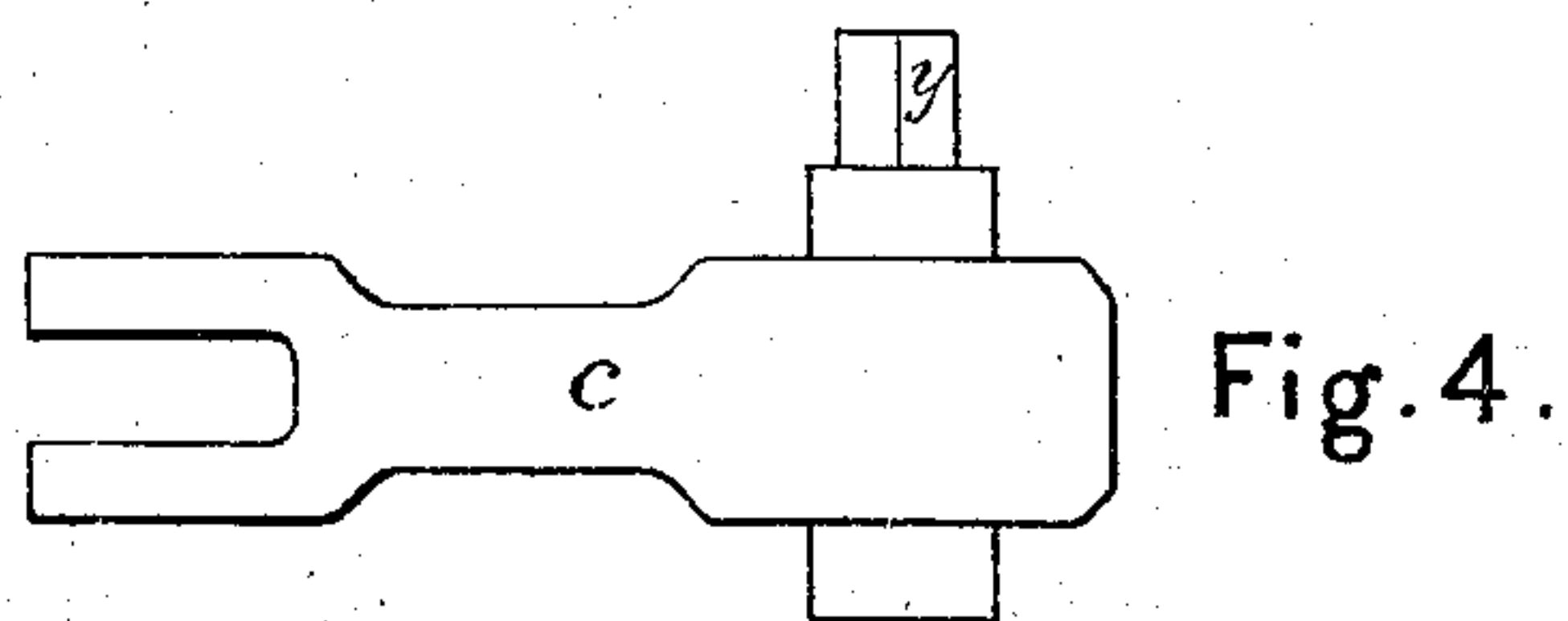
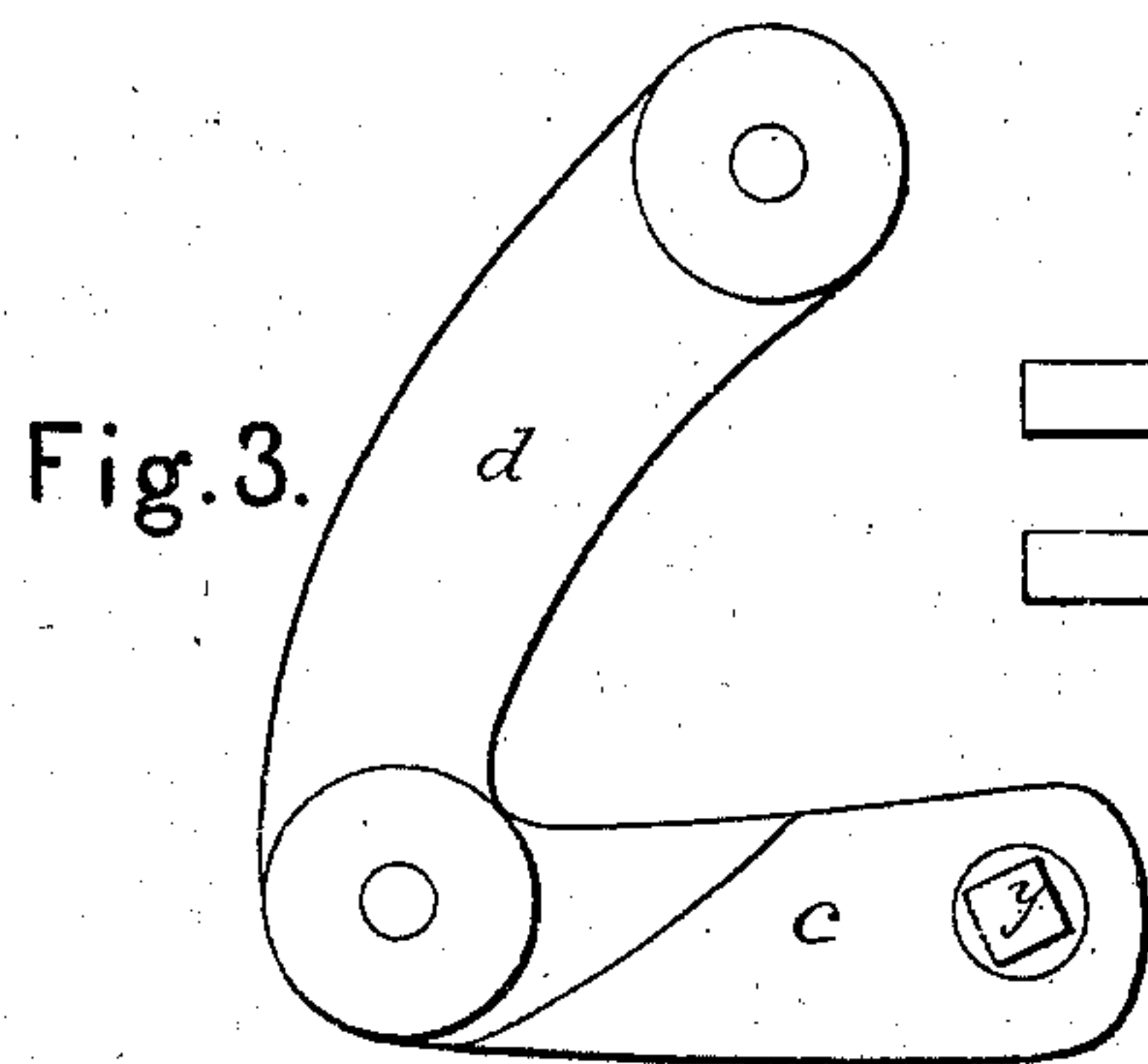
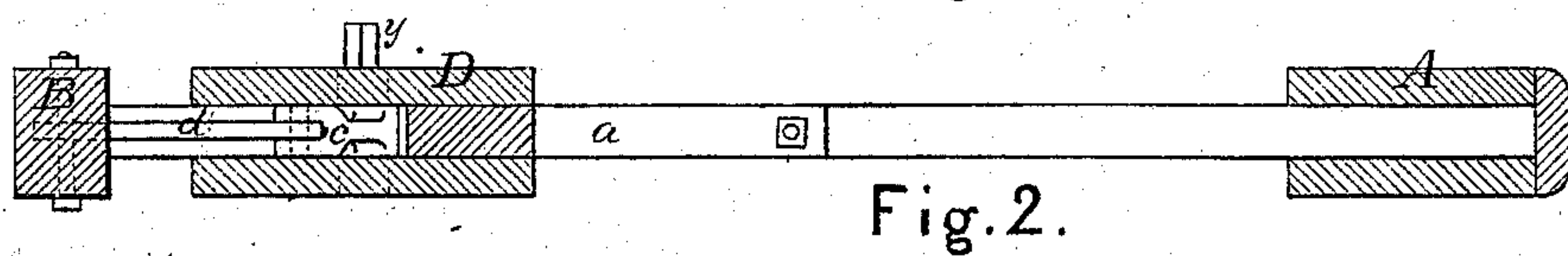
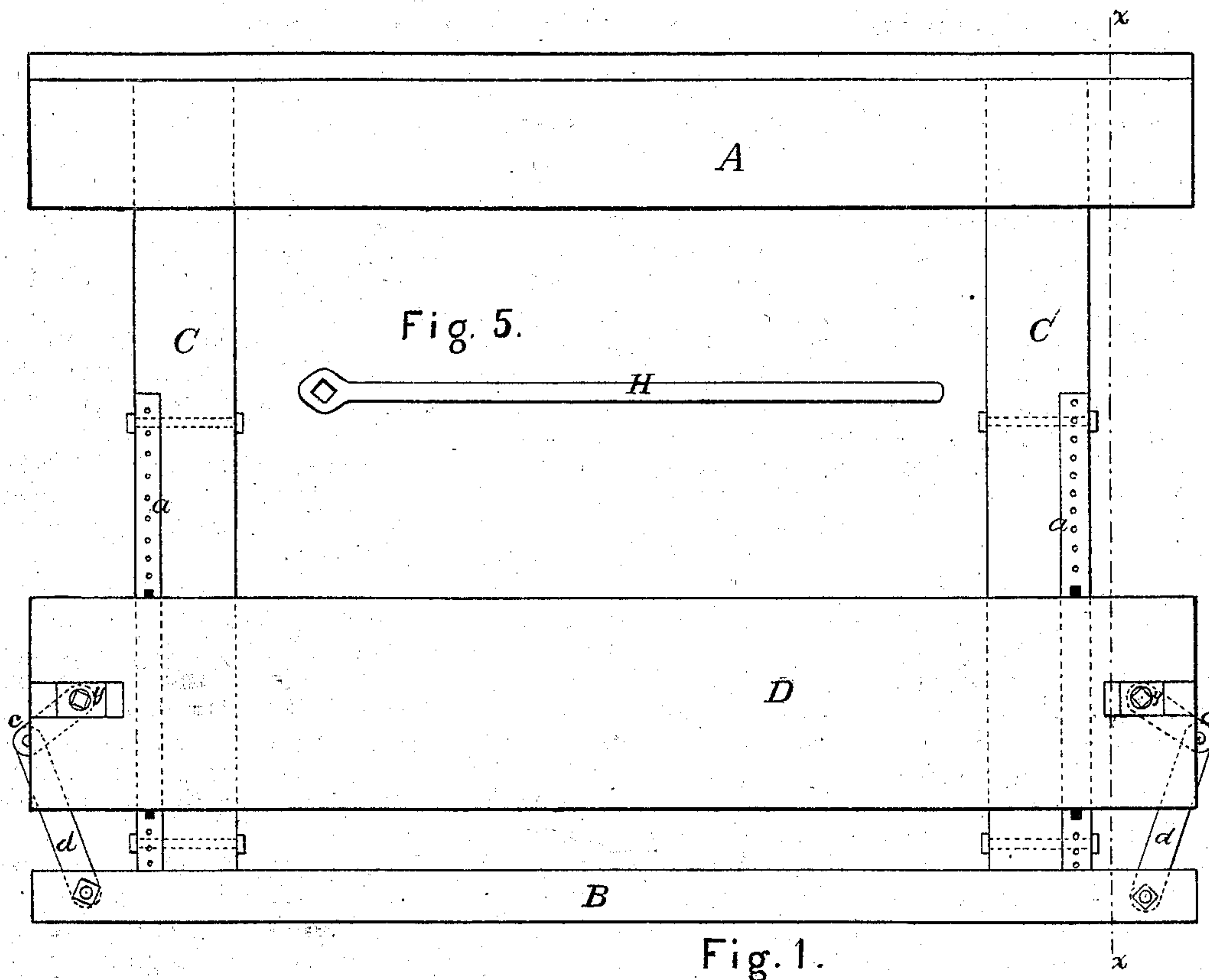


C. P. OLIVER.

Leather Stretching Frames.

No. 135,836.

Patented Feb. 11, 1873.



WITNESSES.

Phil. Keasi.
E. A. Bates.

INVENTOR.

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Attorneys.

UNITED STATES PATENT OFFICE.

CHARLES P. OLIVER, OF NEWARK, NEW JERSEY, ASSIGNOR OF ONE-HALF HIS RIGHT TO THEODORE P. HOWELL, OF SAME PLACE.

IMPROVEMENT IN LEATHER-STRETCHING FRAMES.

Specification forming part of Letters Patent No. 135,836, dated February 11, 1873.

To all whom it may concern:

Be it known that I, CHARLES P. OLIVER, of Newark, in the county of Essex and State of New Jersey, have invented a new and valuable Improvement in Leather-Stretching Frames; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a top view of my machine. Fig. 2 is a vertical transverse section of the same. Figs. 3, 4, and 5 are details of the same.

My invention relates to machines for stretching hides and leather; and consists in the novel construction and arrangement of the lever-joint and wrench hereinafter described, and applied to the stretching-frame as shown.

A of the drawing represents the upper and B the lower cross-bar of my stretching-frame, and the letters C indicate the sides thereof. On the front sides of the bars C, or upon the sides of such bars, I affix perforated plates, marked *a*. These perforated plates are adapted for use upon wooden upright bars; but in case such bars be made of metal, the plates may be dispensed with, and the bars themselves be perforated. The cross-bar A is constructed with a rounded upper surface, to adapt it for holding the center of the hide, inasmuch as my apparatus is designed for attaching both flanks or sides of the hide to the sliding bar D. The letter D represents the sliding or stretching bar, which is arranged with reference to the bars A and C in the manner shown. The letter *c* indicates the short arm of a joint attached to the sliding bar D, and the letter *f* indicates the long arm thereof attached to the bar B, each connection being made with a suitable pivot-pin or hinge. These two arms of my joint are united by a tongue-and-groove joint, as shown on Fig. 2 of the drawing. It will be observed that the end of the sliding bar D is slotted to

provide for holding the fore arm of the joint and allow the movements thereof. The letter *y* indicates a quadrangular wrist firmly attached to the short arm of the joint. I prefer to cast this arm and wrist in one piece of metal. The letter H represents a wrench, the head of which is adapted to fit upon the wrist *y*.

To operate my device, I tack the moist hide to the sides of bar D, allowing the center thereof to rest upon the oval upper surface of bar A, and place the wrench-head upon the wrist *y*. I then turn the wrench downward, bringing the two arms of the joint toward or beyond a right angle, thereby increasing the distance between the bars A and D. When I find the skin is sufficiently stretched, I place a pin above the bar D in one of the apertures of the perforated plate, and permit the skin to dry, or be manipulated, as the operator may see fit.

It is apparent that my joint would only be partially effective if attached to one end of the bar D only; I therefore connect such a joint with each end of said bar, together with a perforated plate upon each of the side bars of the frame.

My device possesses the merit of unusual simplicity and cheapness of construction, and also is susceptible of operation without removing the frame from its pendent position from the supporting-bars.

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

The leather-stretching frame herein described, having bars A and D, levers *c* and *f*, wrist *y*, perforated plate *a*, and wrench H, constructed and arranged substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHAS. P. OLIVER.

Witnesses:

GEO. E. UPHAM,
D. D. KANE.