

(No Model.)

R. A. HART.
PAPER JOGGER.

No. 446,447.

Patented Feb. 17, 1891.

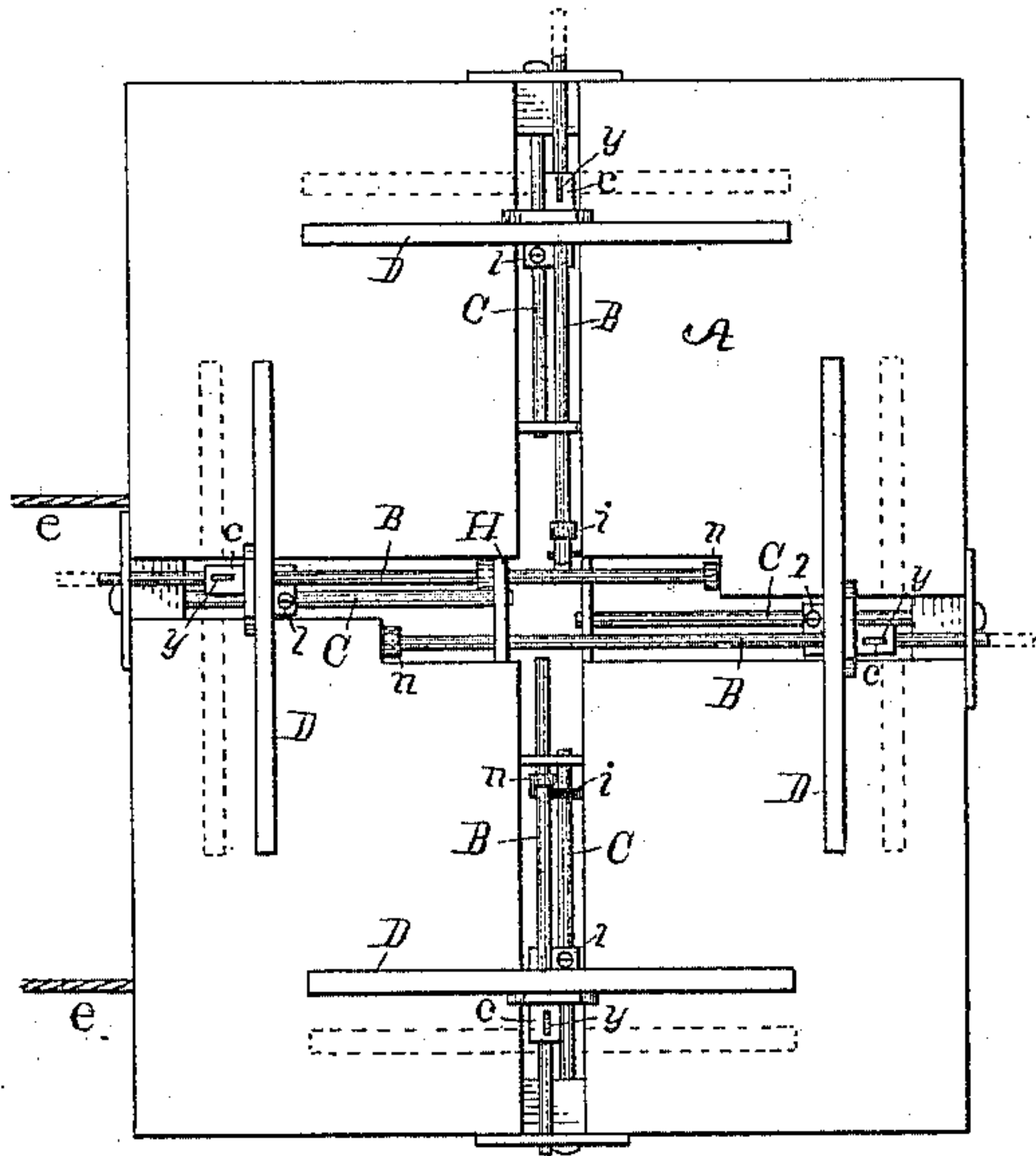


Fig. 1

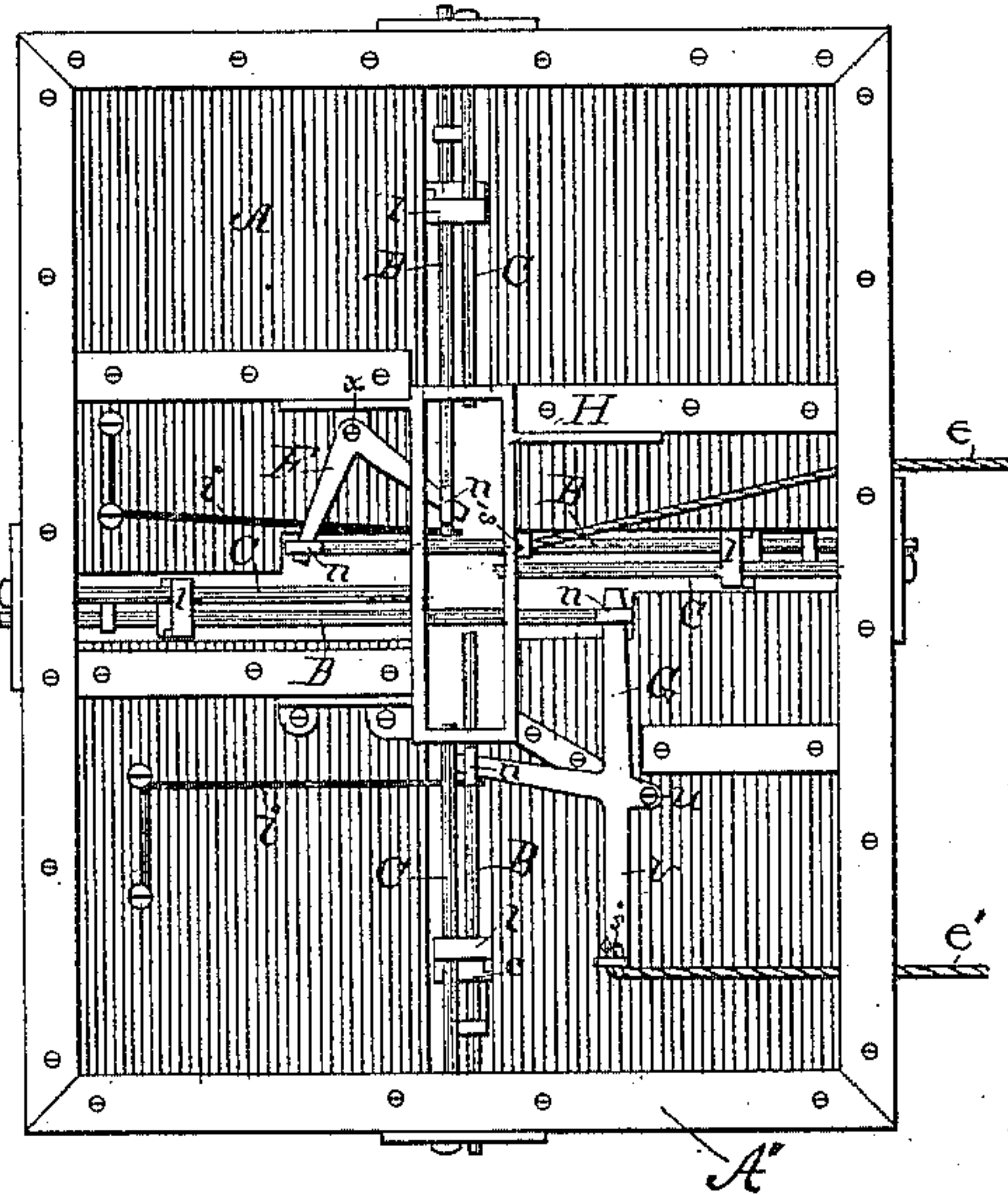


Fig. 2

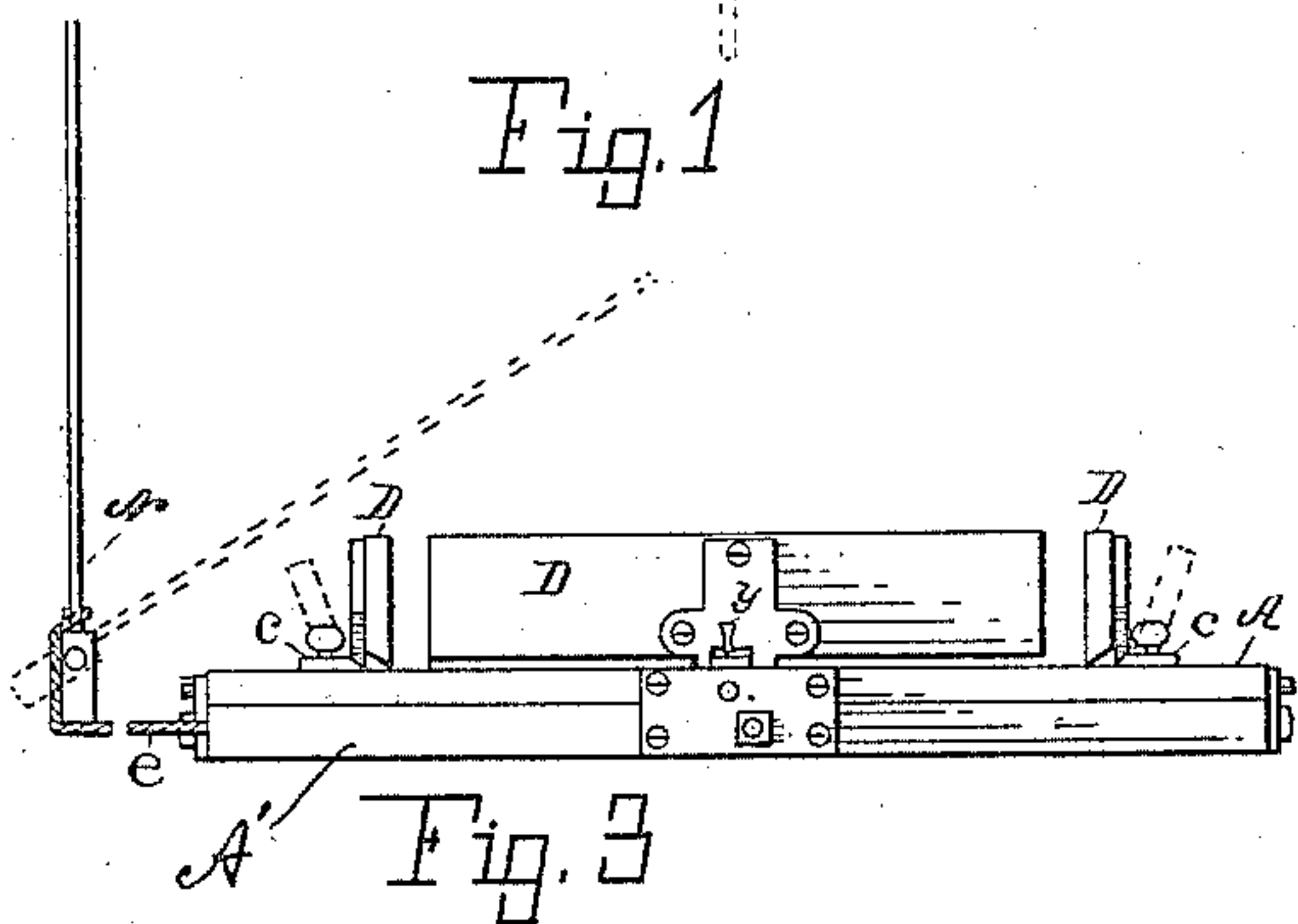


Fig. 3

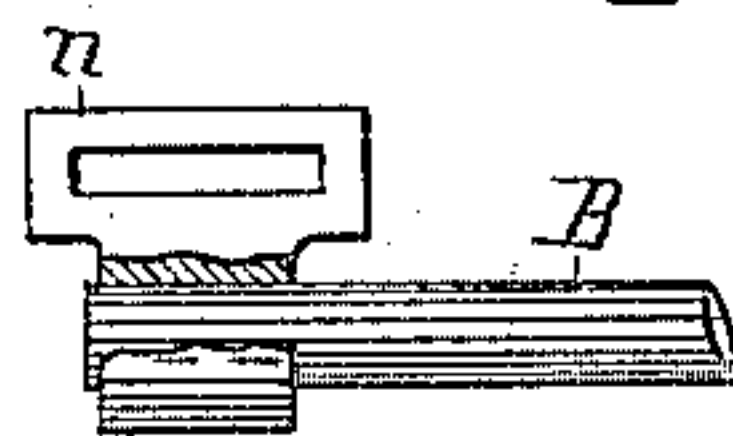


Fig. 6

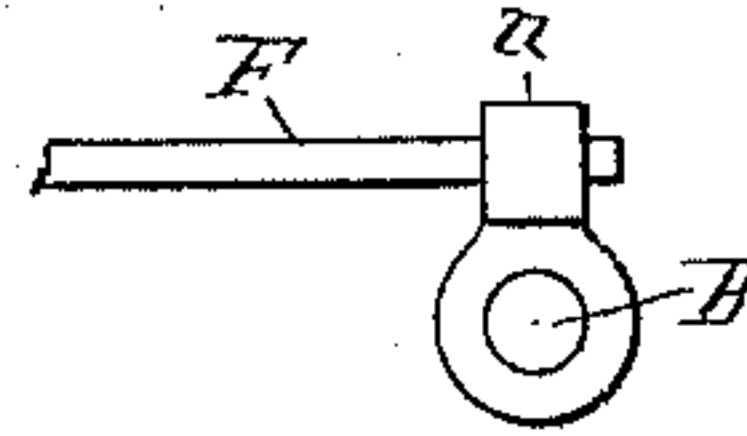


Fig. 7

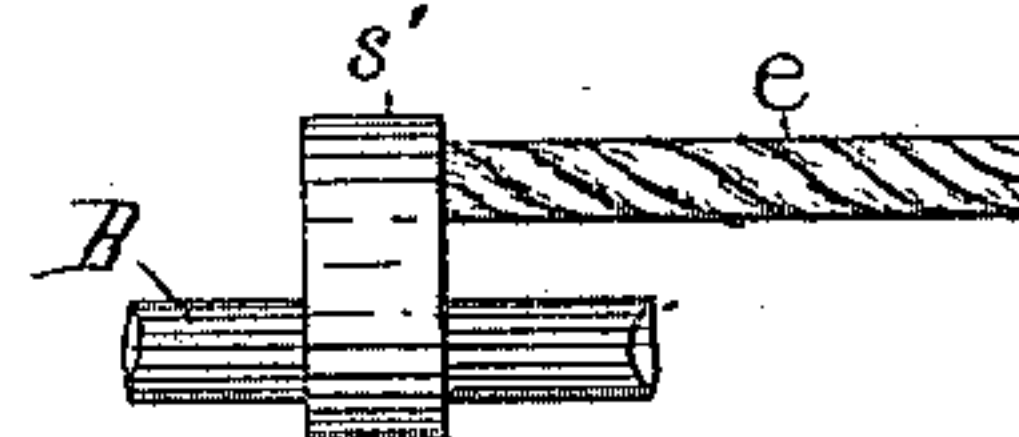


Fig. 8

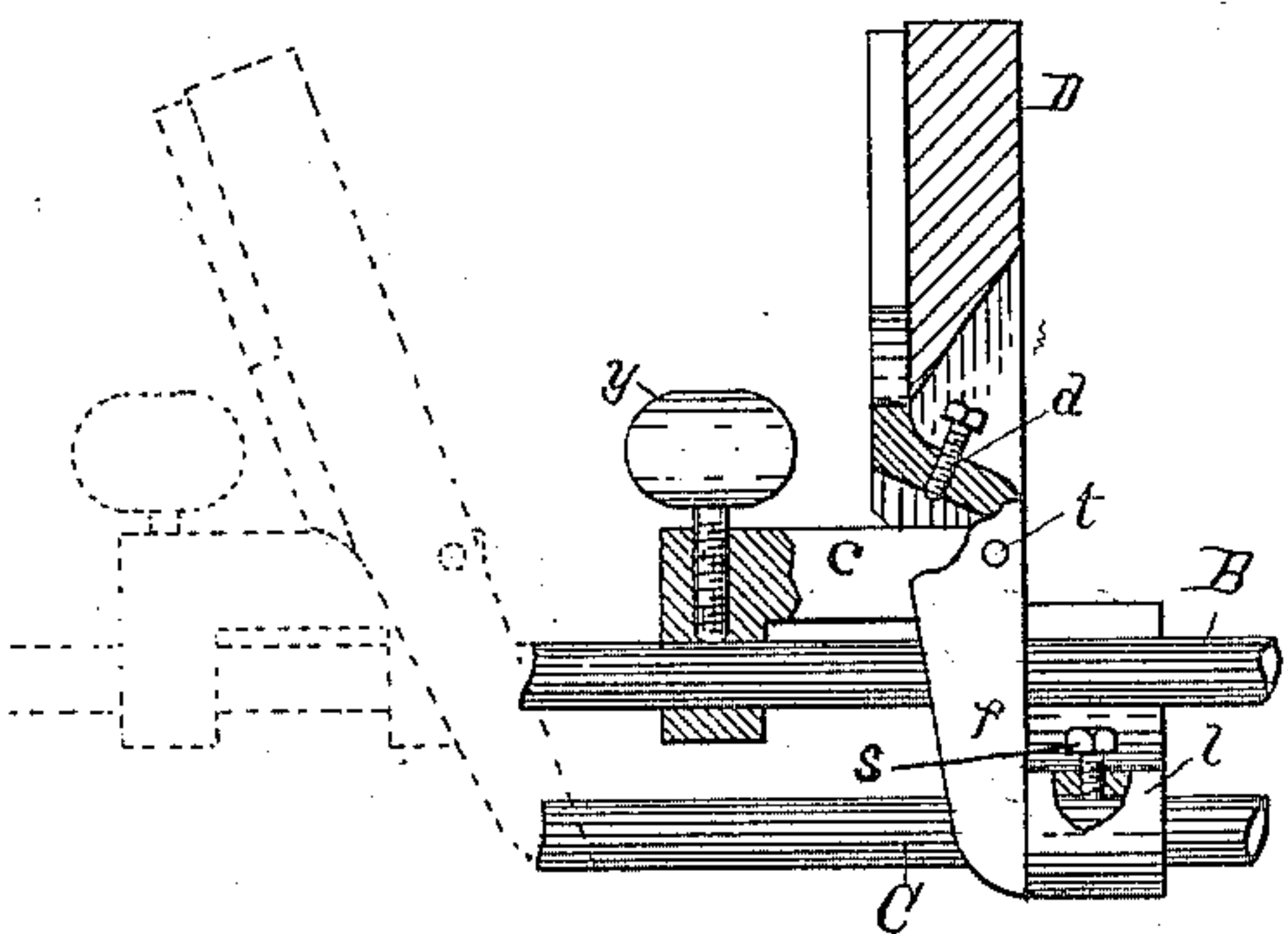


Fig. 4

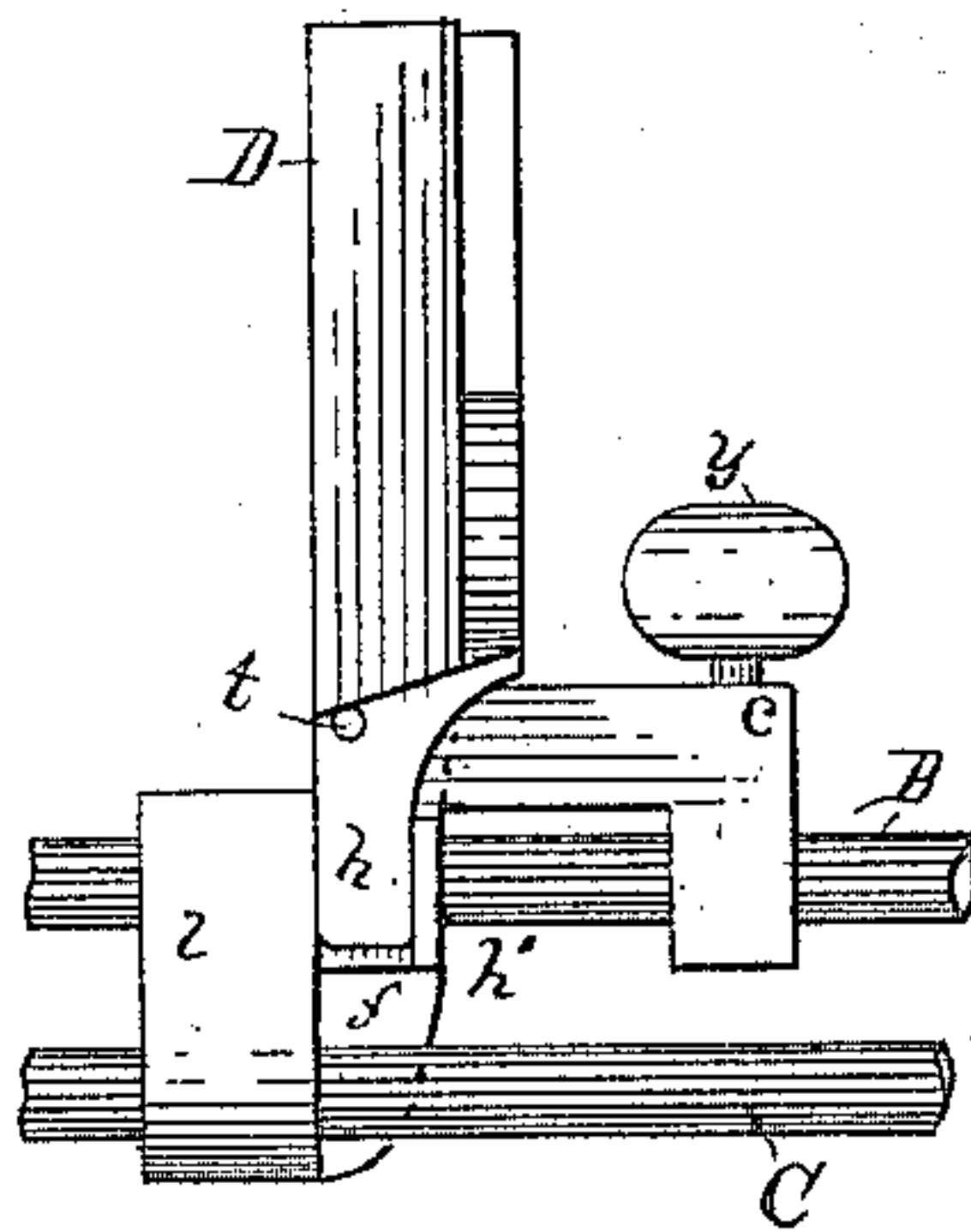


Fig. 5

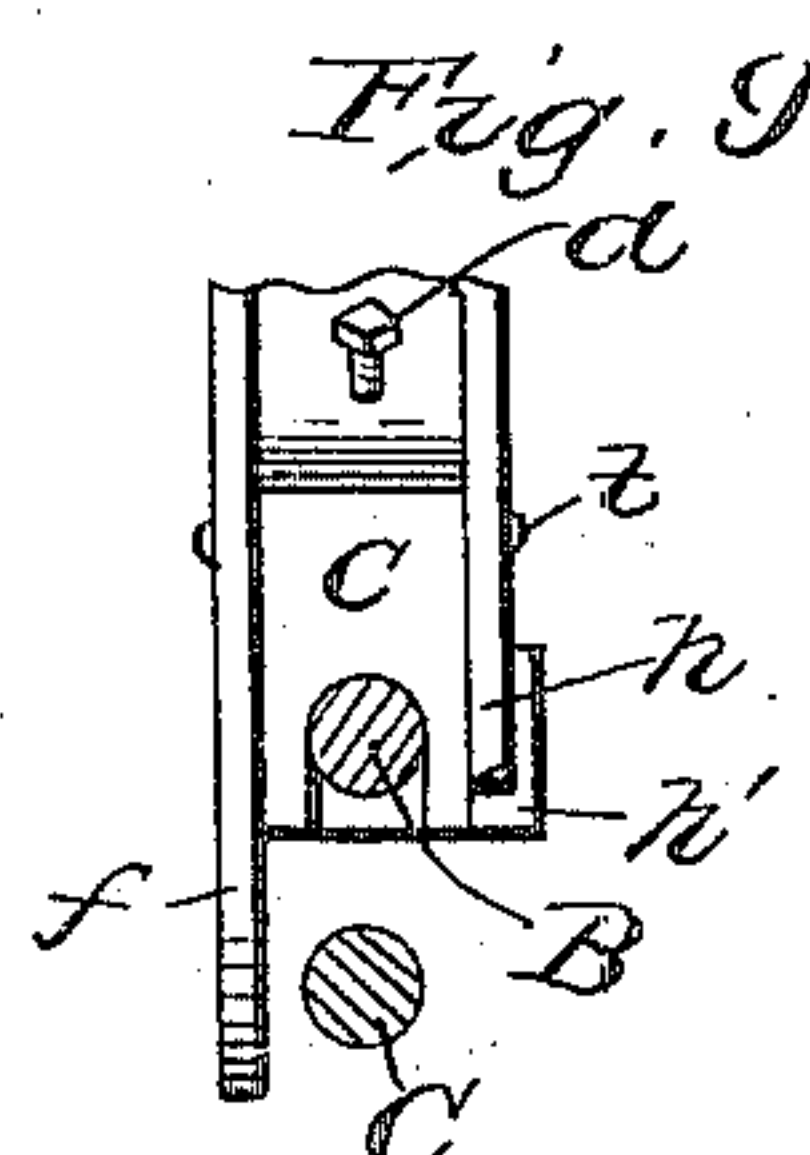


Fig. 9

Witnesses:
Walter S. Hood.
William Andrus.

Inventor.
Russell A. Hart.
By Martin Luttsch.
Att'y.

UNITED STATES PATENT OFFICE.

RUSSELL A. HART, OF BATTLE CREEK, MICHIGAN.

PAPER-JOGGER.

SPECIFICATION forming part of Letters Patent No. 446,447, dated February 17, 1891.

Application filed September 19, 1890. Serial No. 365,521. (No model.)

To all whom it may concern:

Be it known that I, RUSSELL A. HART, a citizen of the United States, residing at Battle Creek, in the county of Calhoun and State of Michigan, have invented a new and useful Improvement in Paper-Joggers, as particularly set forth in the following specification and drawings.

The object of this invention is to provide a neat, compact, and perfect device for truing the sheets of paper delivered from the printing-press upon the table or platform by the fly or other device, as more fully particularized and pointed out in the specification, drawings, and claims hereinafter appearing.

Referring to the drawings, wherein similar letters designate like parts in the several views, Figure 1 represents the top surface of my new paper-jogger as applied to the receiving table or platform of a printer's press. Fig. 2 is a reverse view of the same, showing the under side of the table and the principal parts of the operating mechanism. Fig. 3 is an end elevation showing one of the operative cords attached to the "fly" of the press; and Figs. 4, 5, 6, 7, 8, and 9 are enlarged details thereof detached.

Referring to the letters of reference, A represents the platform or paper-receiving table, consisting of four nearly equal rectangular parts, which are placed side by side and end to end and separated by longitudinal and transverse channels intersecting about the middle of the table and secured in place by screws that pass into the border frame A' and the rectangular central metallic frame H, situated on the under side, as clearly seen in Fig. 2. Sliding rods B, having suitable supporting-bearings in said frames, run through the outermost sides and ends of the table parallel to and within said channels. Similar rods C reach from the inner through the outermost frames and are firmly fixed thereto in any suitable way. The rods C are provided with projecting lugs *l*, made movable on and adjustably fixed to said rods by means of a set-screw *s*, Fig. 4, and the adjacent portion of the sliding rods B carry the movable and adjustable supporting-upright *c* of the hinged and angularly-adjustable evener bars or leaves D, which latter have a limited lateral motion on the pivotal pin *t*. One-half of

the upper part of said leaf is broken away, so as to show cross-section above the center of said upright *c*, showing a set-screw *d*, by the means of which the said leaf may be set at any desired angle, as seen by the dotted lines, Figs. 3 and 4. That portion of the hinged leaf D depending below the said set-screw *d* is centrally slotted, so as to sit straddle of the adjustable pivotal supporting-upright *c*, the longer arm *f* whereof reaches downward coincident with its engaging lug *l* of the fixed rod C, while its opposite shorter arm *h* engages the shoulder *h'* of said upright, whereby the hinged leaf D is restricted to a vertical position as regards the central portion of the receiving-table, and the said adjustable upright support for the evener bars or leaves D is movably fixed to the sliding rod B by means of the thumb-screw Y. Firmly fixed to the said sliding rods at convenient points, preferably at or near the inner ends thereof, are the slotted thimble-lugs *n*, and from one of each pair of said rods reach the returning-springs *i i*. The opposite ends of said springs are suitably secured to the under surface of said receiving-table, as seen in Fig. 2. A bell-crank F, fulcrumed on the under side of the table at *x*, engages with the slotted lugs *n* of the right-angul- 80
ularly-converging sliding rods B B, covering one end or the half of the table by means of these thimble-slots *n n*, and motion is communicated by means of the attached cord *e* at *s'*. The opposite half of the jogger is independently actuated through the bell-crank G and cord *e'* in a precisely like manner, these operative cords being thus separately provided so that either pair of evener-leaves or all may be operated at the will of the user by simply attaching one or both of said cords to the fly or other moving parts of the printer's press. For some kinds of work a single pair of leaves, one of which is placed at a right angle with its twin or mate moving in unison, is a very great advantage, and where the operator can have instant availability of the arrangement shown very perfect and rapid work may be accomplished.

A further advantage accruing to the use of my improvement of prime importance consists in the fact that at each reciprocation of the leaves D D on either end of the table A they may move at any angle from a vertical

position outwardly, (dotted lines, Figs. 3 and 4,) and the downwardly-depending arm *f* of the hinged leaf D impinges against the lug *l* of the fixed rod C, and thereby the said leaf is suddenly brought up and inward, rising to a vertical position, whereby a very perfect evening of the paper being received and without folding any portions thereof is accomplished, and a further advantage accrues from the use of the thumb-screw Y and set-screw *d*, in combination with the pivoted evenner-leaf, whereby the operator is enabled to vary and adjust the advancing angle and consequent movement of the jogger-leaves to the varied requirements and kinds of work in hand.

Having thus fully illustrated and described my novel improvement, and pointed out its mode of operation and some of its advantages over other paper joggers and eveners hitherto known and used, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a paper-jogger of the class described, a table having longitudinal and transverse channels, sliding and fixed rods in said channels, uprights on said sliding rods, and lugs on said fixed rods, in combination with angularly-adjustable evenner bars or leaves pivoted on said uprights, each of said bars or leaves having depending arms, one of which engages a shoulder on one of said uprights and the other of which engages one of said lugs, and means for reciprocating said sliding rods.

2. In combination, a paper-receiving table or platform having longitudinal and transverse channels, the fixed rods provided with movable and adjustable lugs, the adjacent

parallel sliding rods carrying movable supports, angularly-adjustable pivoted paper-evenner bars or leaves adapted to automatic movement by the reciprocating engagement of the leaves with the adjustable lugs of the fixed rods, and means for reciprocating said sliding rods.

3. In a paper-jogger of the class described, a table having longitudinal and transverse channels, sliding and fixed rods in each of said channels, a movable upright on each of said sliding rods, and a lug on each of said fixed rods, in combination with an evenner bar or leaf pivoted to each of said uprights and formed with depending arms, one of which engages a shoulder on said upright and the other the lug of the adjacent fixed rod, a set-screw in each of said evenner bars or leaves, and means for reciprocating said sliding rods.

4. In a paper-jogger of the class described, a table having longitudinal and transverse channels, a sliding rod in each of said channels, and two pairs of swinging evenner bars or leaves connected with and operated by said sliding rods, in combination with a bell-crank lever for each pair of sliding rods and connected thereto and to a moving part of the press, substantially as described, whereby the two pairs of evenner bars or leaves may be operated together or separately, as specified.

In testimony that I claim the foregoing I hereunto affix my hand and signature, in the presence of two attesting witnesses, this 12th day of September, A. D. 1890.

RUSSELL A. HART.

Witnesses:

W. A. COLCORD,
M. B. DUFFIE.