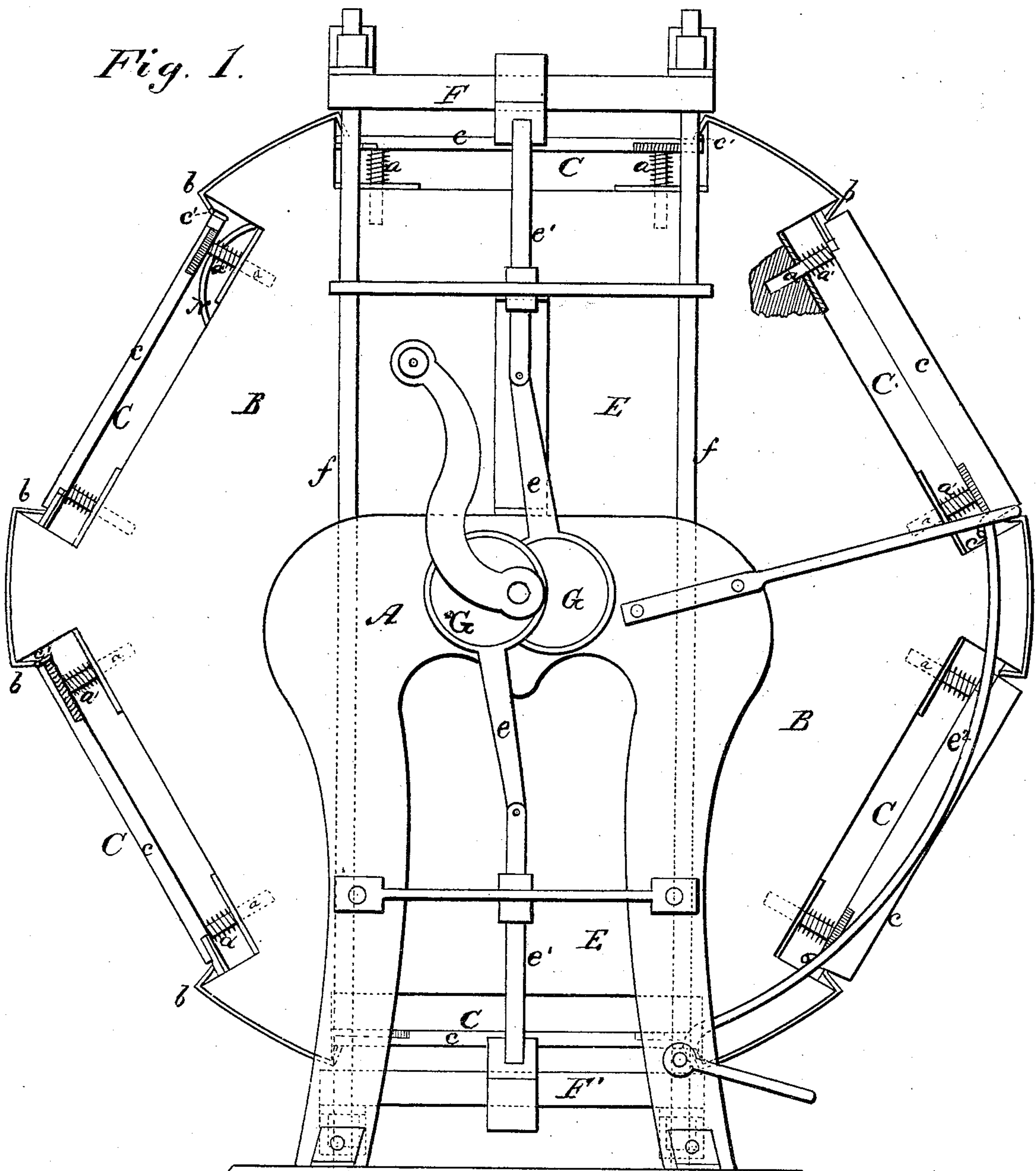


G. B. SARCHET.
Printing-Presses.

No. 151,441.

Patented May 26, 1874.

Fig. 1.



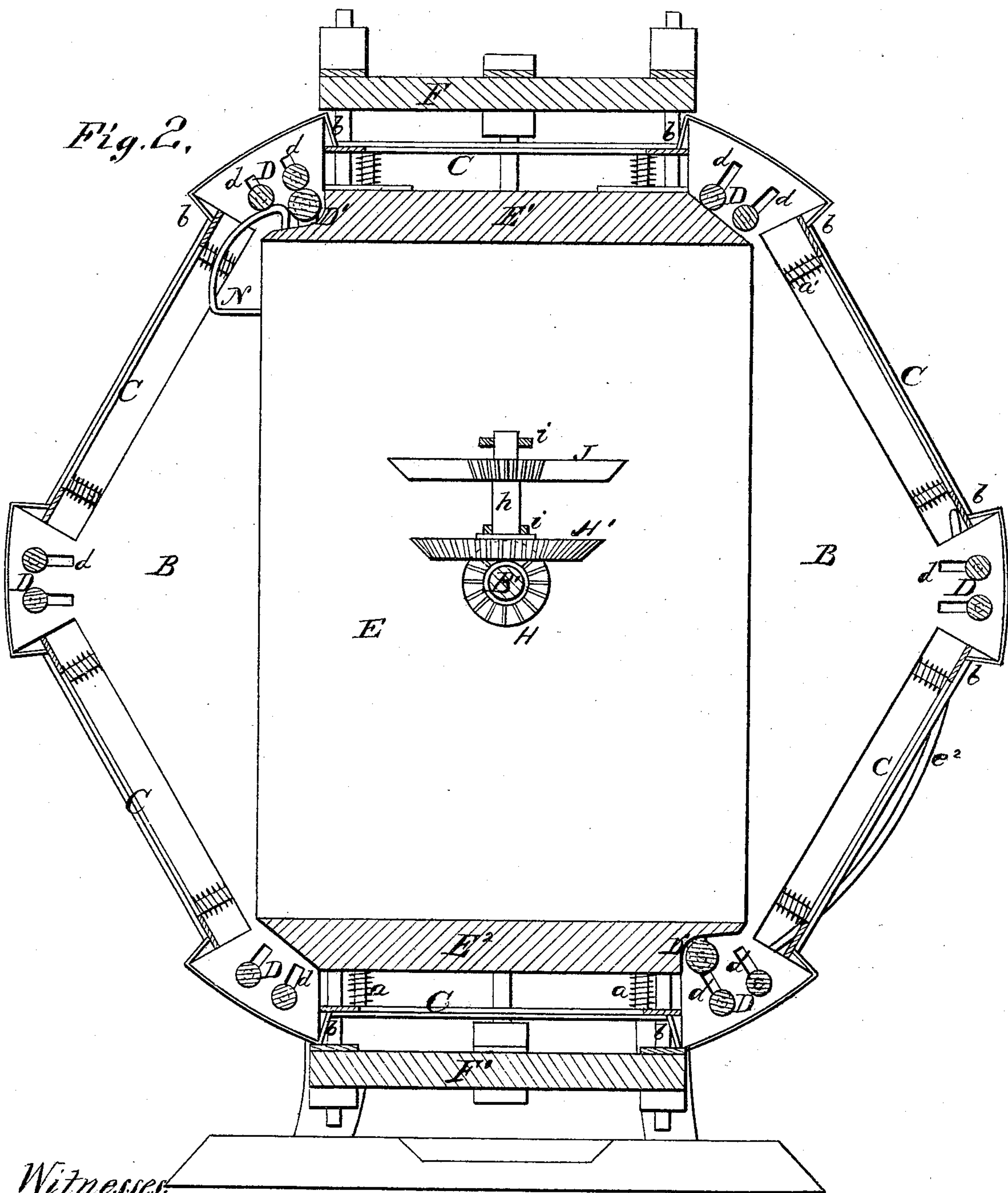
Witnesses.
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Geo. E. Upham.

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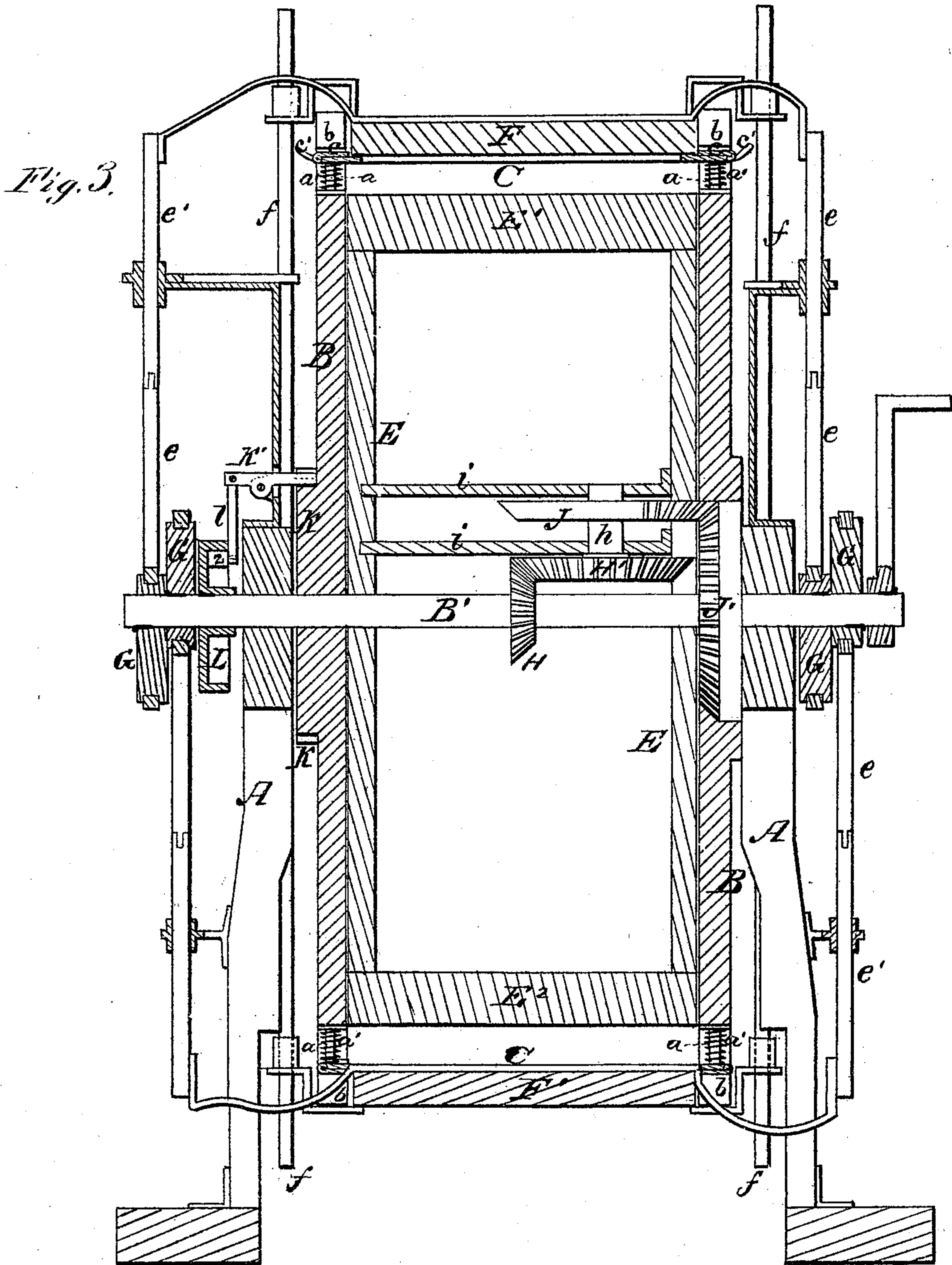
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UNITED STATES PATENT OFFICE.

GEORGE B. SARCHET, OF PARIS, ILLINOIS.

IMPROVEMENT IN PRINTING-PRESSES.

Specification forming part of Letters Patent No. 151,441, dated May 26, 1874; application filed January 3, 1874.

To all whom it may concern:

Be it known that I, GEORGE B. SARCHET, of Paris, in the county of Edgar and State of Illinois, have invented a new and valuable Improvement in Printing-Presses; 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 drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my printing-press. Fig. 2 is a vertical longitudinal central section of the same. Fig. 3 is a vertical transverse central section of the same.

This invention has relation to printing-presses which are designed for printing either on both sides of a sheet or only on one side; and the novelty consists in the combination and arrangement of the parts, as will be hereinafter more fully described and claimed; also, in certain mechanism for revolving the sheet-carrier and automatically arresting its movement at the proper times for taking the impressions; also, in novel means for inking the type, and for applying ink to type-inking rollers, as will be hereinafter explained.

The following is a description of my improvements:

In the annexed drawings, A represents two standards, which are arranged on opposite sides of an intermittently-revolving carrier, B, and which afford bearings for the journals of the carrier-shaft B'. The carrier B is represented as having six flat sides on its periphery, adapted for as many sheet-holders; but a greater or less number of sides may be adopted, according to the capacity required of the press. C C designate the sheet-holders, which are open rectangular frames, possessing proper rigidity, and applied over the flat sides of the carrier B in planes parallel to these sides. Each holder C is guided by four posts, *a*, and held out in contact with stops *b* on carrier B by means of helical springs *a'*. Two sides of each sheet-holder C have hinged grippers *c* applied to them, which are held down upon the surface of the holders by means of a spring, and which are raised at the proper time by means of curved ways *e*², fixed rigidly

to the sides of the standard A. These ways lift the grippers *c* to discharge the sheets, and also to allow sheets to be adjusted on the frames C by acting on short crank-shaped arms *c'*, to which the grippers are attached. Between the frames or sheet-holders C are the rollers D, which supply ink to the forms of type, which rollers are allowed to play freely in short grooves *d*, radiating from the axis of the carrier B. These inking-rollers D are supplied with ink by means of doctors D', applied at the corners of a frame, E, which doctors may be supplied with ink from a suitable fountain, and they may be rotated and given endwise play by any convenient means. The frame E is arranged between the sides of the carrier, and between two reciprocating plates, F F', which latter are in planes parallel to the top and bottom plates E¹ E² of frame E. This frame E is supported on the axle B', but does not turn with it. G G are eccentrics, which are keyed on the ends of the shaft B' outside of the carrier B, and which communicate vertical movements to the plates F F' by means of connecting-rods *e e'*. The plates F F' are guided in their up-and-down movements by means of fixed rods *f f*, which pass through arms rigidly fixed to said plates. H represents a bevel-pinion, which is keyed on the shaft B', and which communicates rotary motion to a bevel-wheel, J, through the medium of a bevel-wheel, H'. The two wheels J H' are keyed on a vertical shaft, *h*, which has its bearings in horizontal bars *i i*, fixed to the inner vertical sides of the frame E, as shown in Fig. 3. The wheel J has a number of teeth arranged diametrically opposite each other, for the purpose of engaging with a spur-wheel, J', on the carrier B, and giving two movements to this carrier during every revolution of shaft B. By these means the frames or sheet-holders C are successively moved between the ends of the frame E and the plates F F', and allowed to pause long enough for the impressions to be made. K designates a circular hub, which is formed on one side of the carrier B, and which has notches in its periphery corresponding in number and arrangement to the sheet-holders C. K' is a pivoted stop-latch, which has its bearings on one of the standards A, and which

is actuated by means of a cam-groove in the wheel L and rod l, with friction-roller Z. This latch K' is intended to firmly hold the carrier B during the taking of impressions, and to release this carrier when the teeth on wheel J engage with the wheel J' for rotating the carrier. By means of curved ways N the inking-rollers D will be lifted up to the doctors while passing the latter.

In operating the press, if it is desired to print on two sides of the sheets, a form of type is suitably supported and held in place on top of the frame E beneath the platen F, and another form is suitably supported and held in place upon the lower plate F'. As the sheets are successively moved between the reciprocating plates and the ends of the frame E, these plates are moved toward the frame E carrying with them the frames C, holding the sheets, and making the impressions, and as the plates recede from the frame E the sheets are separated from the type-forms, after which the sheets are taken off by any suitable means.

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

1. The combination of an intermittently-revolving sheet-carrier, B, provided with inking-rollers D, the type-bed frame E, with inking-doctors D', and the reciprocating plates F F', arranged substantially as specified.

2. The combination, with an intermittently-revolving sheet-carrier B, having inking-rollers D, of the curved ways N and inking-doctors on the type-bed frame E, as and for the purpose set forth.

3. The combination, with the sheet-carrier B and power-shaft B', of the gearing H H' J' and the intermittent spur-wheel J, as and for the purpose mentioned.

4. In combination with the notched hub K on sheet-carrier B, the pivoted stop-latch K', rod l, with friction-roller Z, and cam-groove in wheel L, substantially as specified.

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

GEO. B. SARCHET.

Witnesses:

E. F. GLOVER,
JOE SARCHETTE.