

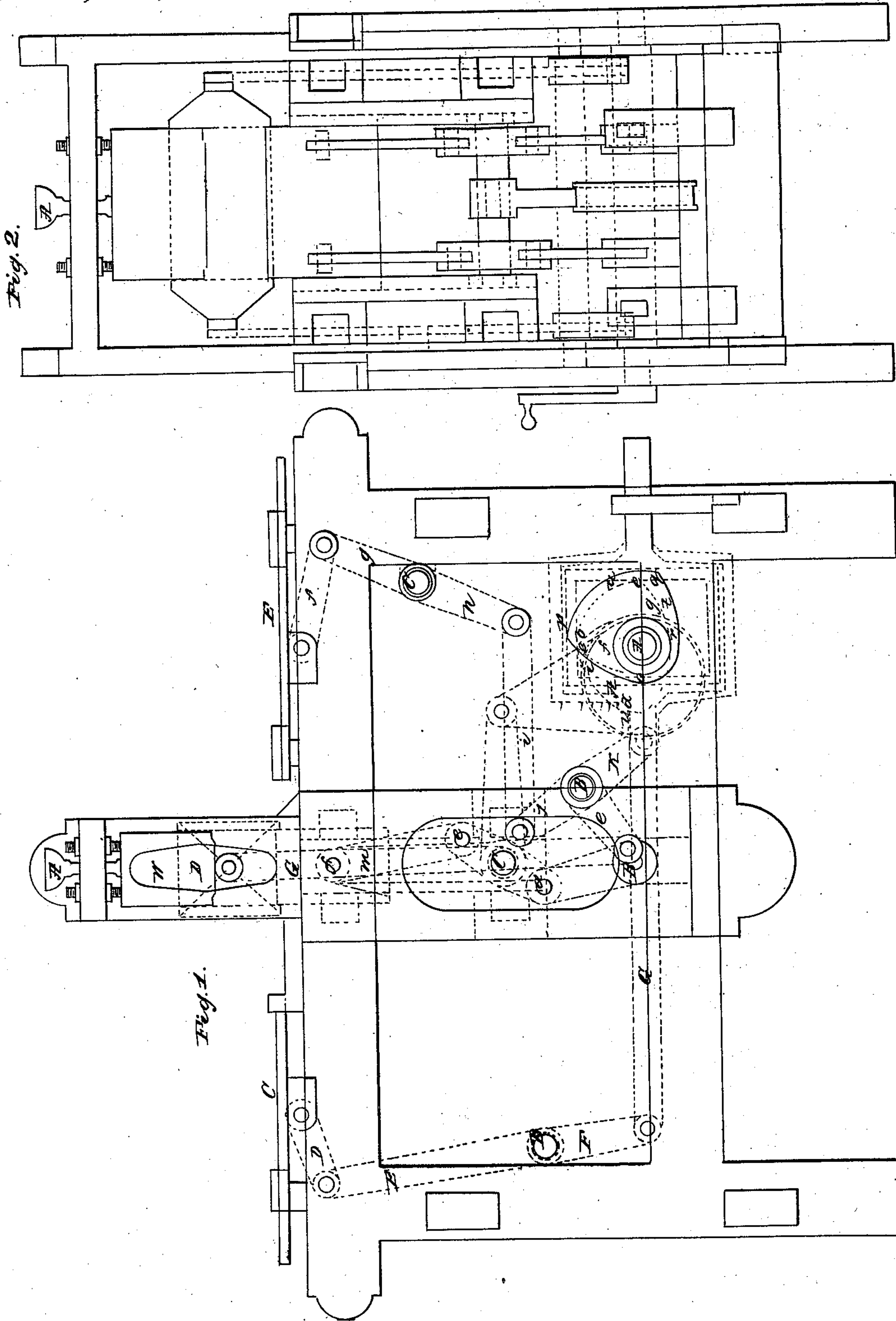
H. J. Hughes,

Sheet 1-2 Sheets.

Brick Machine,

Patented Feb. 5, 1856.

No 14,195,



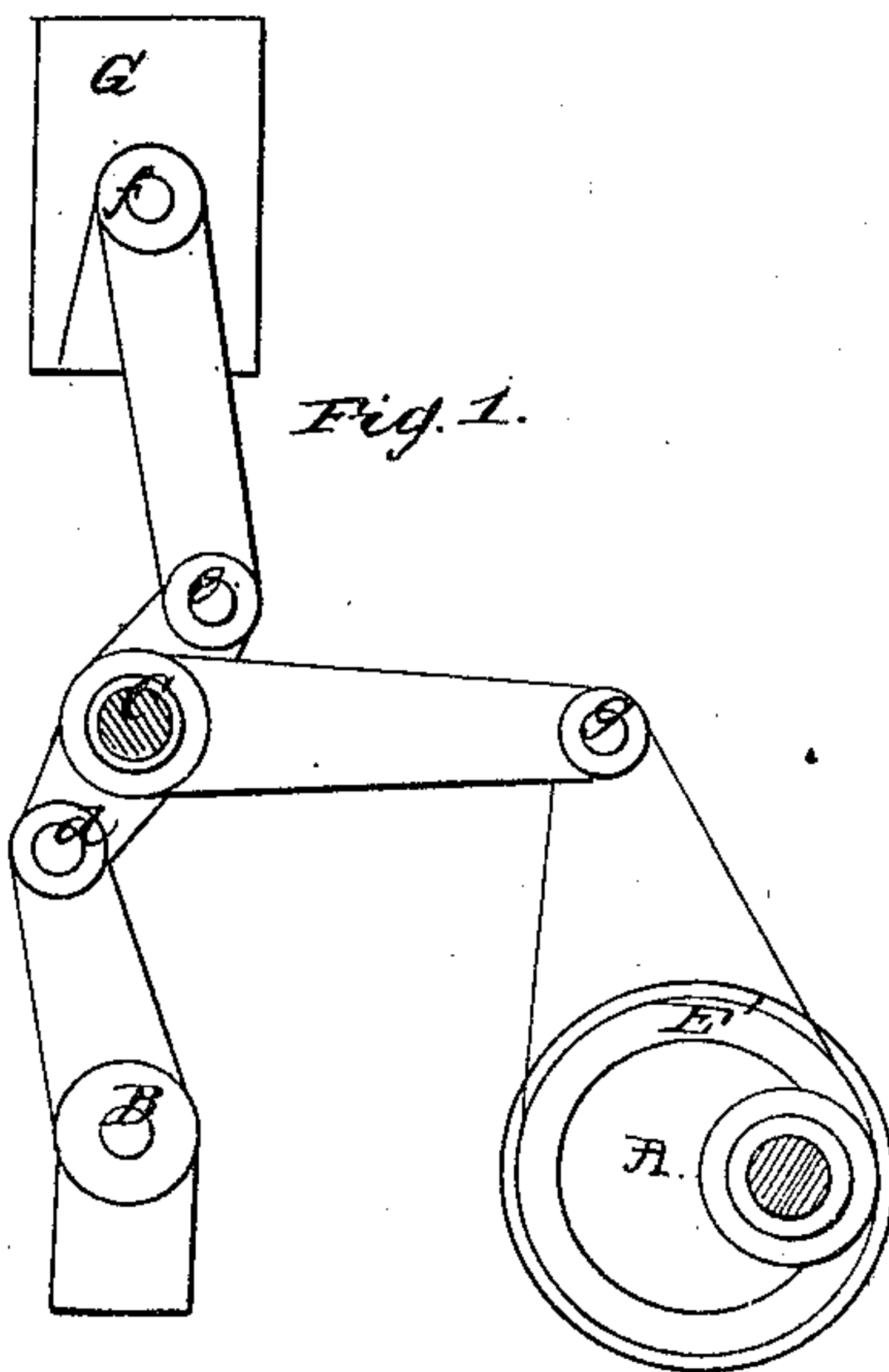
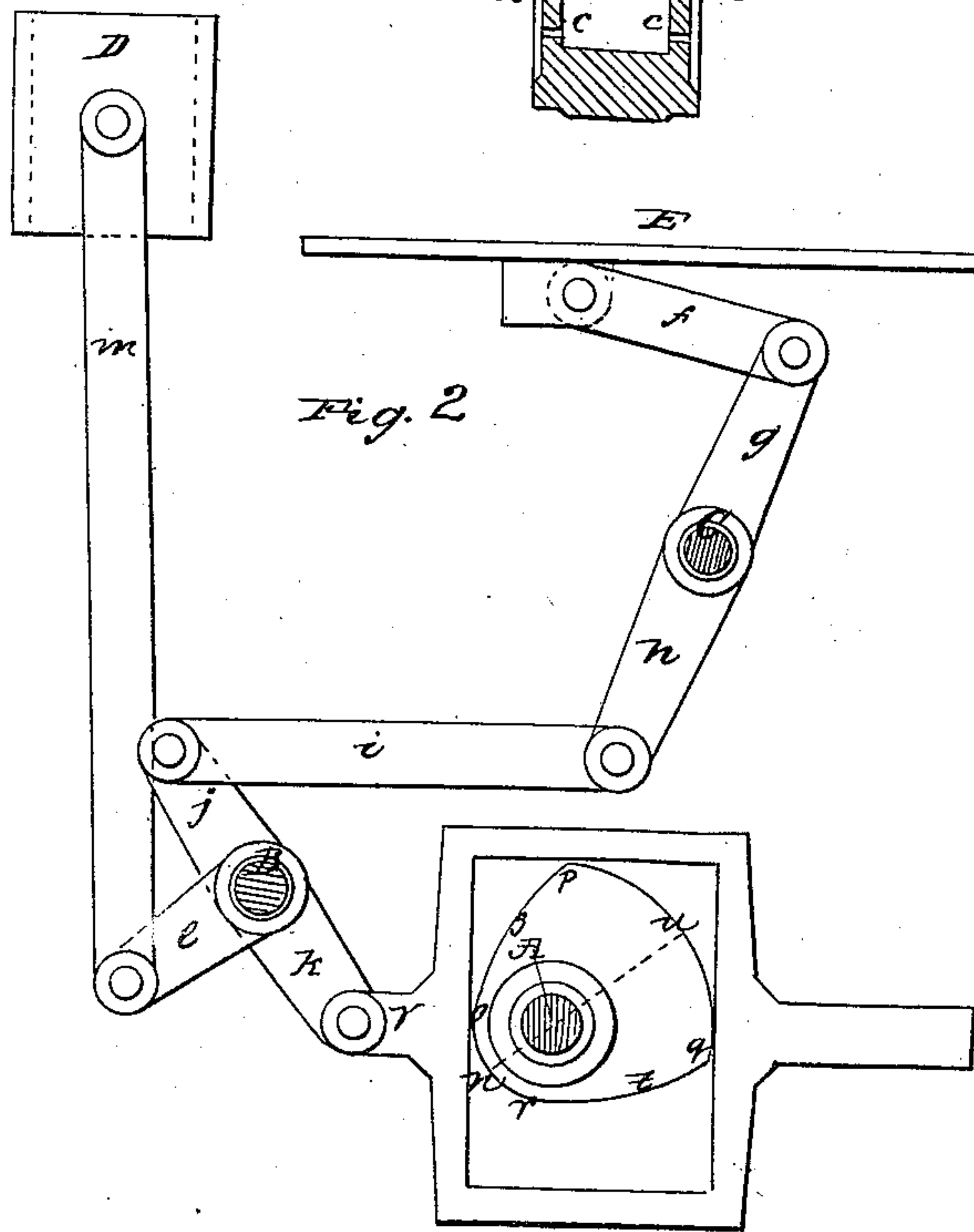
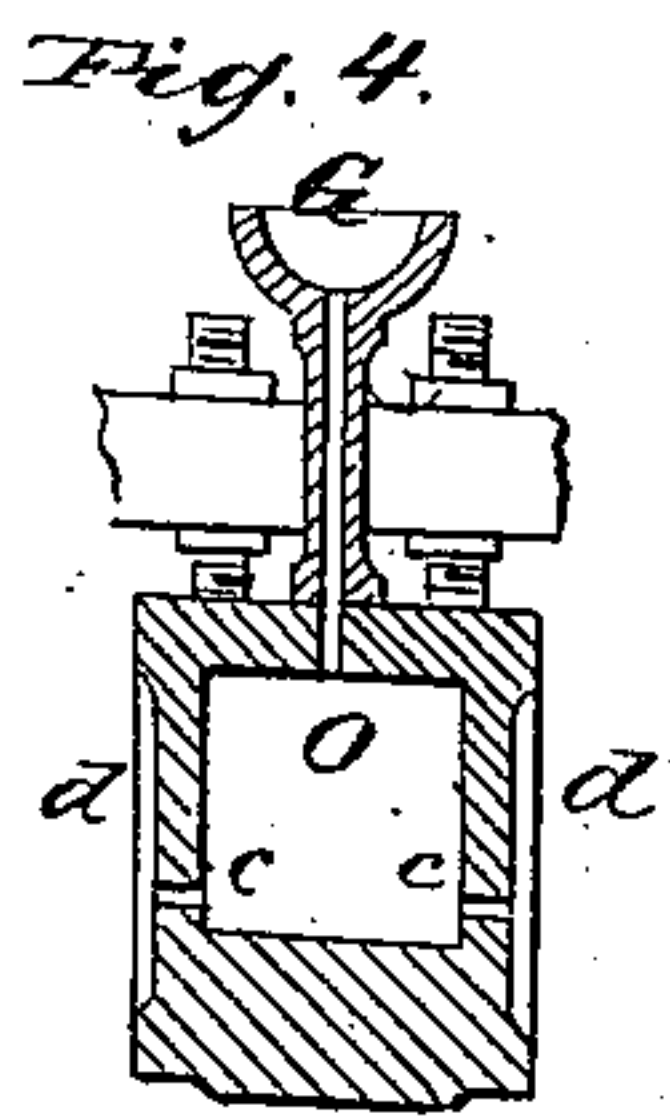
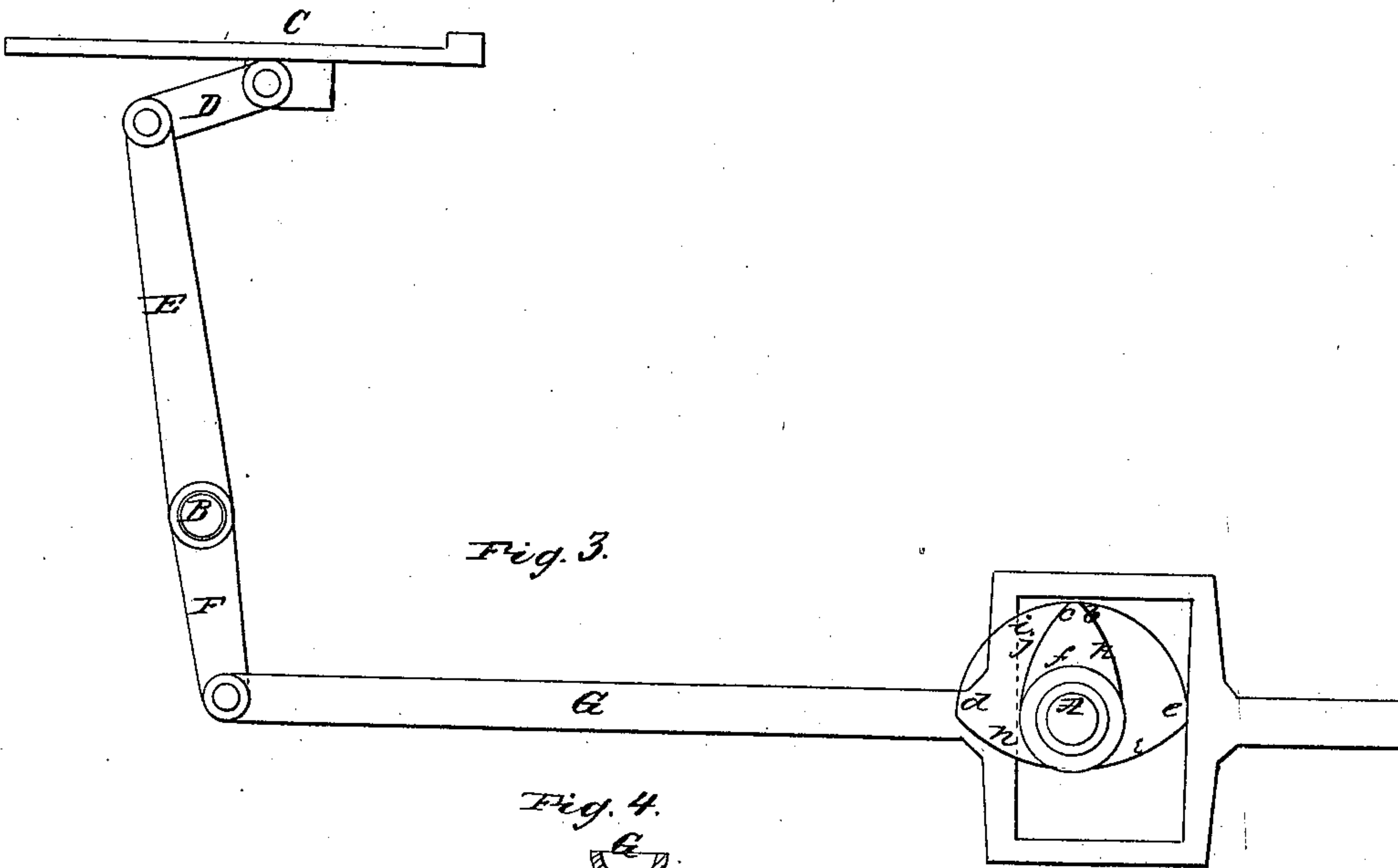
Sheet 2-2 Sheets.

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UNITED STATES PATENT OFFICE.

HARVY J. HUGHES, OF DAVENPORT, IOWA.

BRICK-PRESS.

Specification of Letters Patent No. 14,195, dated February 5, 1856.

To all whom it may concern:

Be it known that I, HARVY J. HUGHES, of the city of Davenport, county of Scott, and State of Iowa, have invented a new and useful Machine for Pressing Bricks, which I denominate the "Compound-Lever Press;" and I hereby declare that the following is a full, clear, and exact description of the construction of the same, reference being had to the annexed drawing, making a part of this specification, in which—

Figure one, (Fig. 1,) is a longitudinal elevation, Fig. two, (Fig. 2) is a transverse section, (the complex appearance of the perspective renders it impracticable to give a perspective drawing.)

A, in Fig. 1, and Fig. 2, is an oil globe, for the purpose of introducing oil into the chamber in the stationary head of the press, and by means of smaller holes made through to the outer surface of said head, the oil may pass into the mold, thereby oiling its surface as it passes up and down over the head. Sectional drawing No. 4 is a transverse section of the stationary head of the press, with the oil globe attached, showing the method of introducing oil into the mold, through the press head, in which G, is an oil globe, *b* is a chamber in the press head, *c c* are small holes through which the oil may pass into the mold. The recess on the outside of the head is made to prevent the holes from closing up during the passage of the mold up and down. The corners of the head are left full to guide the mold. Sectional drawing No. 1, exhibits the construction of the press, in which A, is the eccentric on the main or driving shaft; B, the fulcrum; C, the countershaft with movable journals; G, the press head; *d, e, g* and *f* the connection of compound levers by which the press is operated. No. 2, exhibits the manner of bearing off the bricks after being possessed, also the manner of bringing the mold down over the brick after it has been placed on the movable head of the press. D, is the mold in which the brick is formed; E, the off-bearing table; A, the driving shaft; B, and C, the counter shaft; *m, e*, and *k*, are the connections from the cam to the mold; *f, g, h, i*, and *j*, are the

connections from the counter shaft B, with the off-bearing table. No. 3, is a guide or feed. G, F, E, and D are the connections from the cam to the driving shaft A, with the guide, or feed, C.

The mode of operating with the compound lever press, consists in adjusting the bricks upon the movable head of the press, and bringing down over the bricks after they are thus placed the mold D, by the application of the motion produced by the cam as indicated in sectional drawing No. 2, and the connection with the cam yoke *v, k, l, m*, after which the mold remains stationary for a time, during which the power is applied by means of the eccentric and double extension or compound lever as indicated by sectional drawing No. 1, by which the press head G, is made to raise by the application of the motion of the eccentric, and the connection G, C, and F, with G, which produces a progressive power. As the connection *d* and *e* approach the line with B, C, and F, after the application of the power, the mold is made to rise, by the revolving of the cam in sectional drawing No. 2, leaving the brick free to be removed from the off-bearing table by another being brought into position upon the movable head of the press, by the feed and displacing the one already pressed, which operation is performed by the revolving of the cam as indicated in sectional drawing No. 3 and the motion thereby created in the combinations G, F, E, and D, with C.

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

1. The table actuated as above described or by any other equivalent means by which the bricks are discharged after being pressed and by which they are borne away from the press head.

2. The specific arrangement above described for oiling the mold during its passage up and down over the head.

HARVY J. HUGHES.

Witnesses:

E. H. BRADLEY,
JAMES McCOSH.