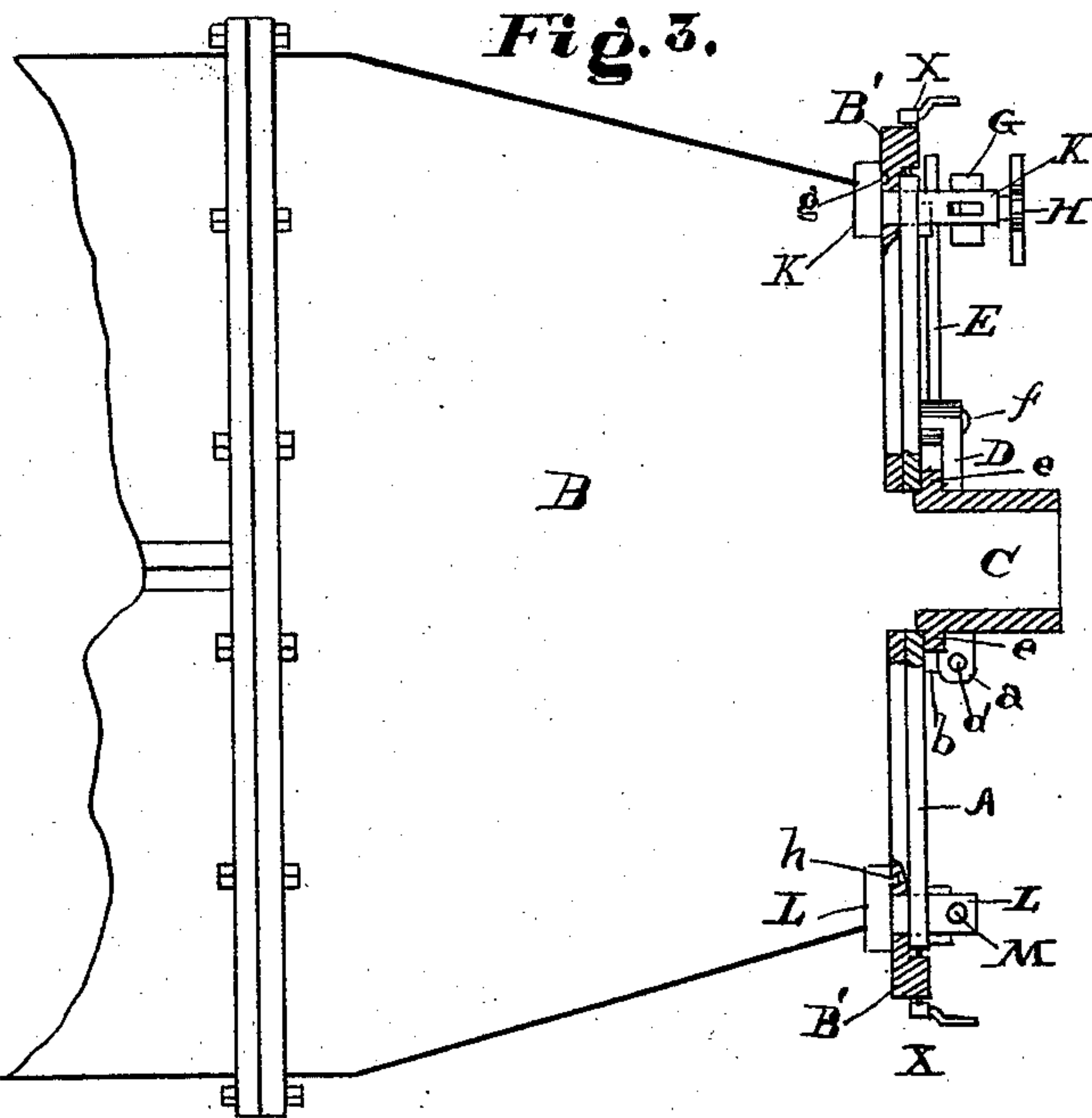
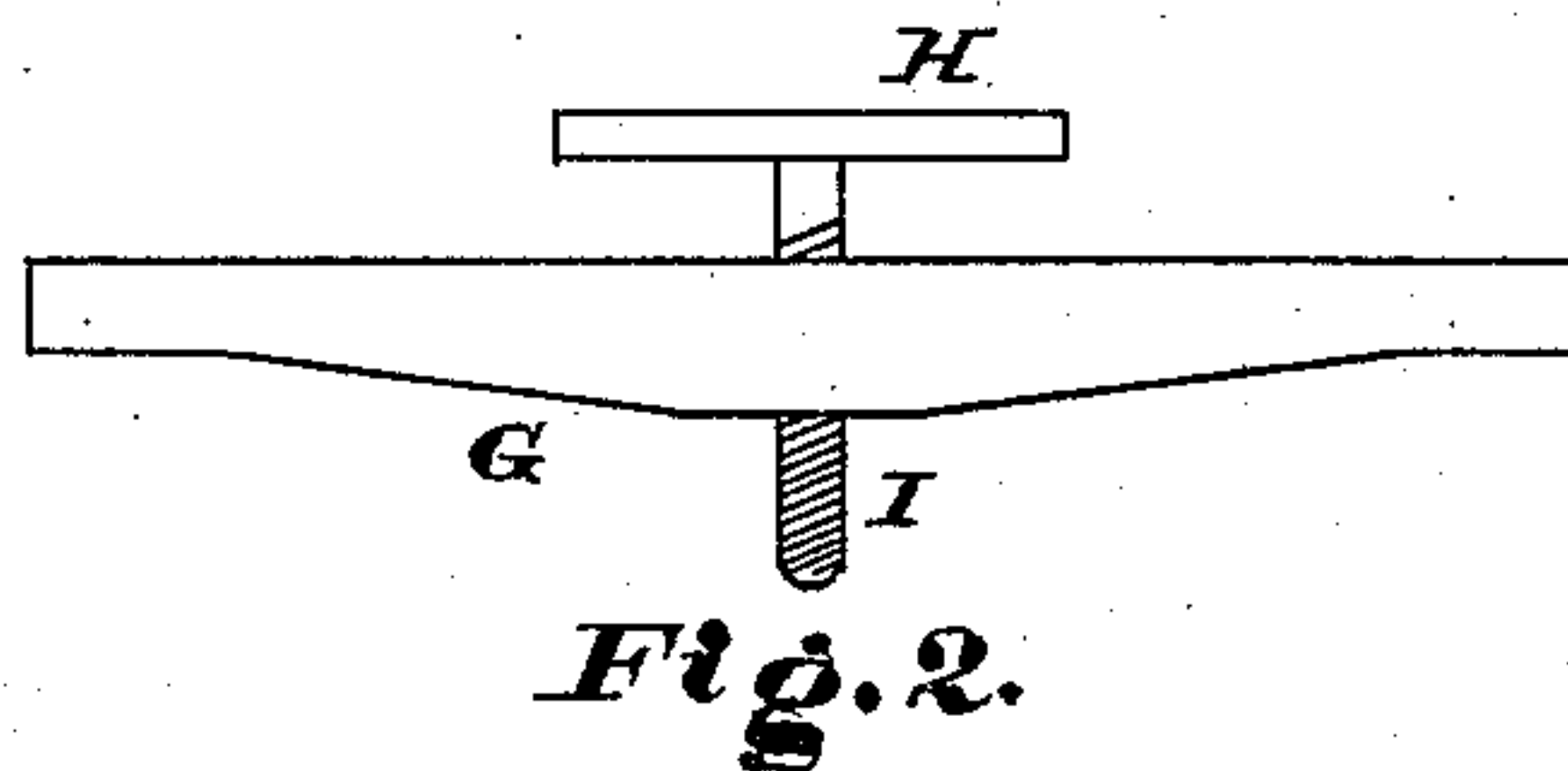
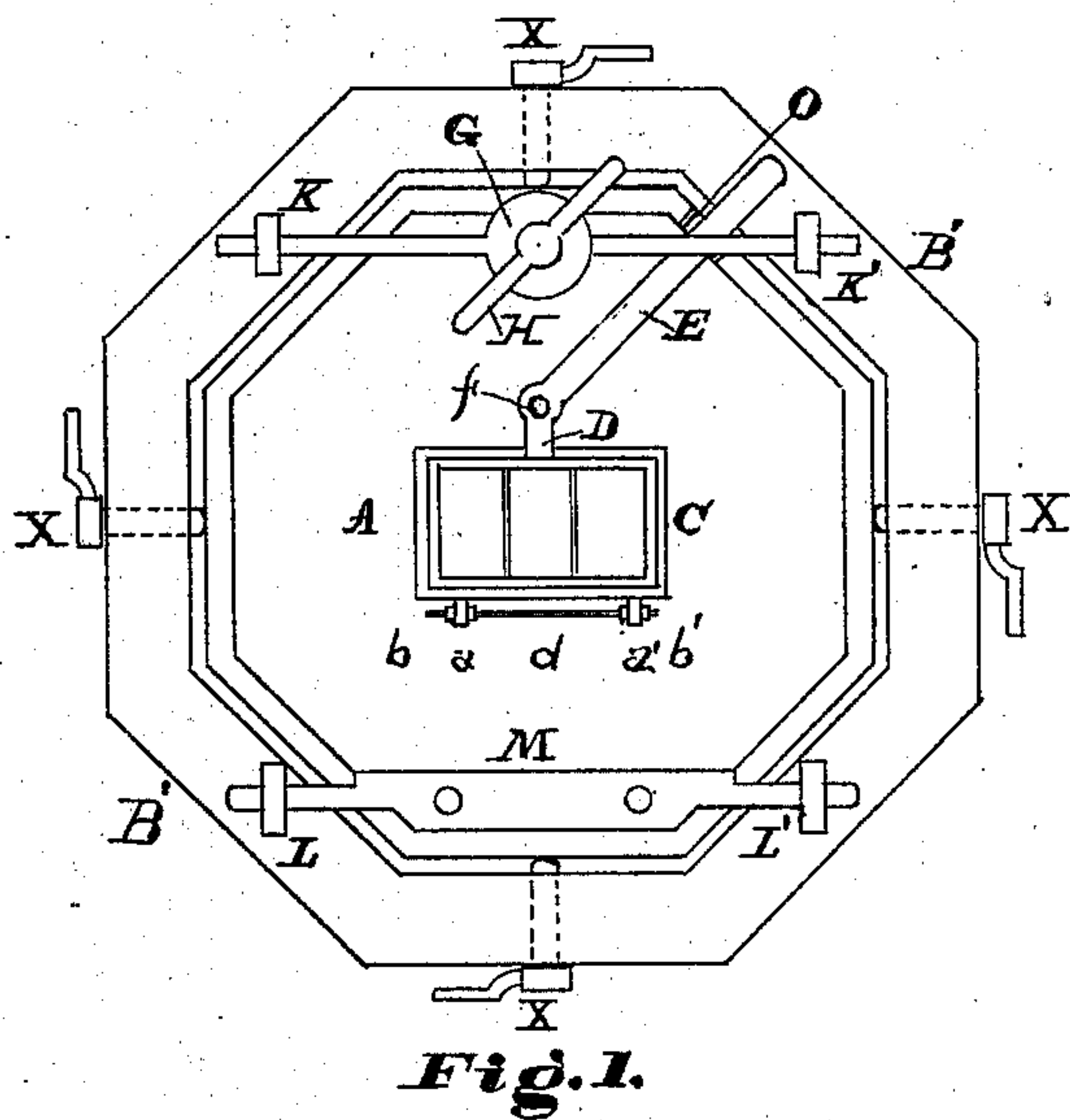


(No Model.)

E. ROTHWELL, N. L. DARGIS & A. ANDREWS.
DETACHABLE HEAD FOR BRICK OR TILE MACHINES.

No. 413,834.

Patented Oct. 29, 1889.



Witnesses:

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UNITED STATES PATENT OFFICE.

EDMUND ROTHWELL, NAPOLEON L. DARGIS, AND ALBERT ANDREWS, OF
LITTLE FALLS, MINNESOTA.

DETACHABLE HEAD FOR BRICK OR TILE MACHINES.

SPECIFICATION forming part of Letters Patent No. 413,834, dated October 29, 1889.

Application filed November 3, 1888. Serial No. 290,056. (No model.)

To all whom it may concern:

Be it known that we, EDMUND ROTHWELL, NAPOLEON L. DARGIS, and ALBERT ANDREWS, citizens of the United States, residing at Little Falls, in the county of Morrison and State of Minnesota, have invented a new and useful Improvement in Detachable Head for Brick or Tile Machines, of which the following is a specification.

10 Our invention relates to improvements in detachable head for brick or tile machines, in which the head-plate is secured to the body of the machine by a pivot-bar and lugs and press-bar and eyes, and in which the die or
15 mold plate is hinged to the face of the head.

The object of our invention is to secure the ready and rapid means of removing the head of the machine and of cleaning the die or mold plate from roots and other obstructions.
20 We attain this object by the device shown in the accompanying drawings, in which—

Figure 1 is a view of the outer face of the head and die or mold plate. Fig. 2 is a view of the press-bar. Fig. 3 is a sectional view
25 of the body of the machine and the detachable head.

Similar letters refer to similar parts throughout the several views.

On the plate B' of the body of the brick or
30 tile machine B we make holes to accommodate the eyebolts L and L' and K and K'. These eyebolts are provided on the inner surface of the head with a lug g' and h. The outer end of the eyebolt K and K' is provided with a rectangular mortise, which holds
35 the end of the press-bar G. The outer end of the eyebolt L and L' is provided with a round hole, which accommodates the end of the hinge-bar M. We then fit to the plate B' a
40 second plate A, which is made to conform to the depression in the outer face of the plate B', and has a perforation or hole in the center for the accommodation of the die or mold plate C. On the outer and lower face of this
45 plate A is secured the hinge-bar M, which is provided with rounded ends that project through the round holes in the eyebolts L and L'. In the center line above and below, and at right angles on the sides of the plate
50 B', we make four holes and top them with a

thread, to which we fit the set-screws X, turned by a handle. In the center of the plate A we make an opening and fit to it the die or mold plate C. Across the inner mouth of the die or mold plate C we fit two knives or cutters, 55 set vertically, to divide the column of clay into three (3) parts. On the lower side of the die or mold plate C we make the lugs a and a', which fit into and hinge with lugs b and b' on the plate B' by the rod d. On the sides 60 of the die or mold plate C we make a flange or rim c. This die or mold plate is rectangular in section and has the inner surface squared. Above the die or mold plate C we make a pivoted lever E with a shorter arm D 65 and a longer arm, the lever E being secured by the pivot f to the plate A at such a point that the short arm D of the lever will rest upon the die or mold plate C and against the flange c and bind it tightly. The longer arm 70 of the lever E is bent at an angle and tends to one side. Near the outer margin of the plate A it is held in a notch O. At a point remote from the hinge-bar M we put the eyebolts K and K', and into the mortise of the 75 eyebolts K and K' fit the ends of the press-bar G. The press-bar we make of a straight bar of metal widened in the middle and perforated by a hole fitted with a thread and accommodating a screw I, which is turned by 80 the handle H.

Having thus described the parts of our invention, we now proceed to explain the method of using the same.

When the parts are put together and the 85 lever E thrown up so that the long arm rests in the notch O, the ends of the press-bar G are thrust through the mortises in the eyebolts K and K', and the handle H of the screw I turned so as to tighten up the screw which 90 binds the plate A firmly against the plate B' of the machine B. As it sometimes happens that the plate A in coming up does not register or match exactly the end of the auger or piston in the body B, in this case the set- 95 screws X are used to set up the plate A. When any obstruction occurs or it is desired to take off the head or plate A, it is only necessary to make a few turns of the screw I to loosen the press-bar G and slip it out of the 100

mortises of the eyebolts K and K', and the plate A may be dropped down and removed by sliding the pivot-bar M in the eyebolts L and L'. To replace the parts the operation is
5 simply reversed. To remove the die or mold c in case the edges become clogged by roots or other foreign bodies, the lever E is disengaged from the notch O and pushed up when the short arm D is carried away from the
10 flange c, and the die or mold plate may be dropped down. To return the die or mold plate the operation is reversed and the lever E restored to the notch O.

We are aware that the device consisting of
15 a face-plate or head that may be removed is not new, and we do not, therefore, lay claim to such in the broad sense; but

What we do claim, and desire to secure by Letters Patent of the United States, is—

In a brick or tile machine, the combination 20 of a body B, plate B', set-screws X, and eyebolts L and L' K and K', combined with the hinge-bar M, plate A, press-bar G, screw I, and handle H, all substantially as and for the purpose set forth and described.

EDMUND ROTHWELL.
NAPOLEON L. DARGIS.
ALBERT ANDREWS.

In presence of—

H. HAUPT, Jr.,
THOS. MARRIOTT.