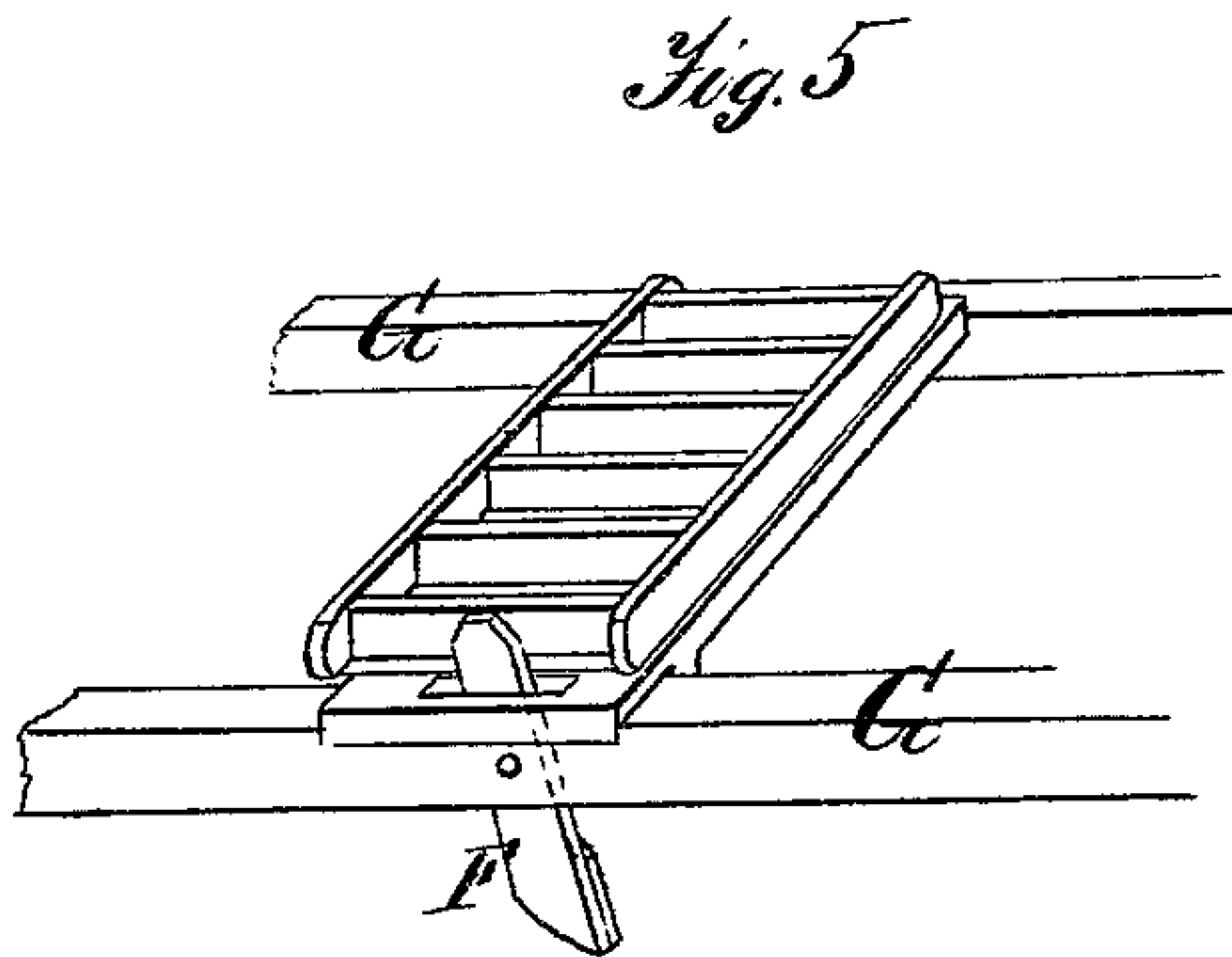
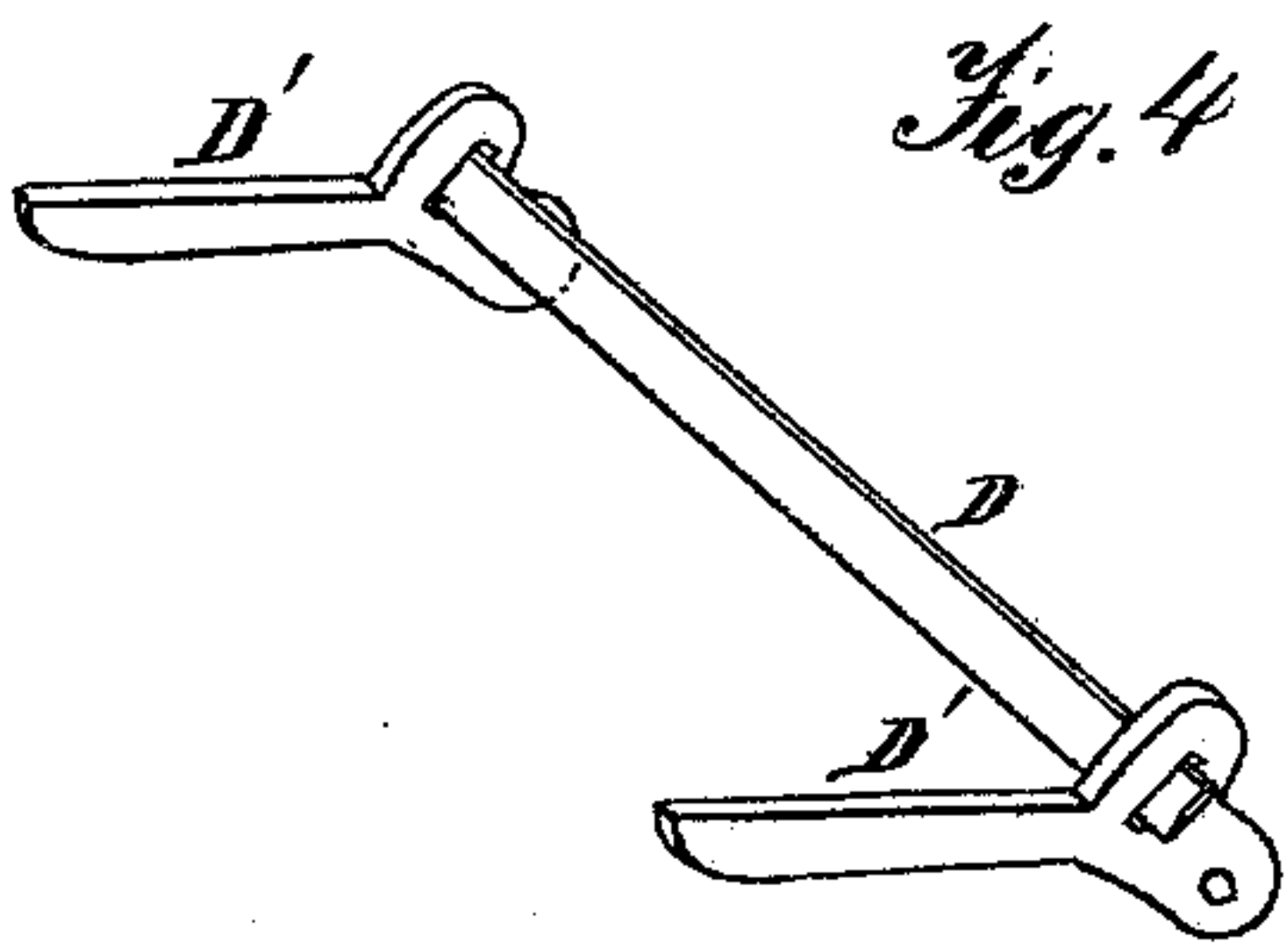
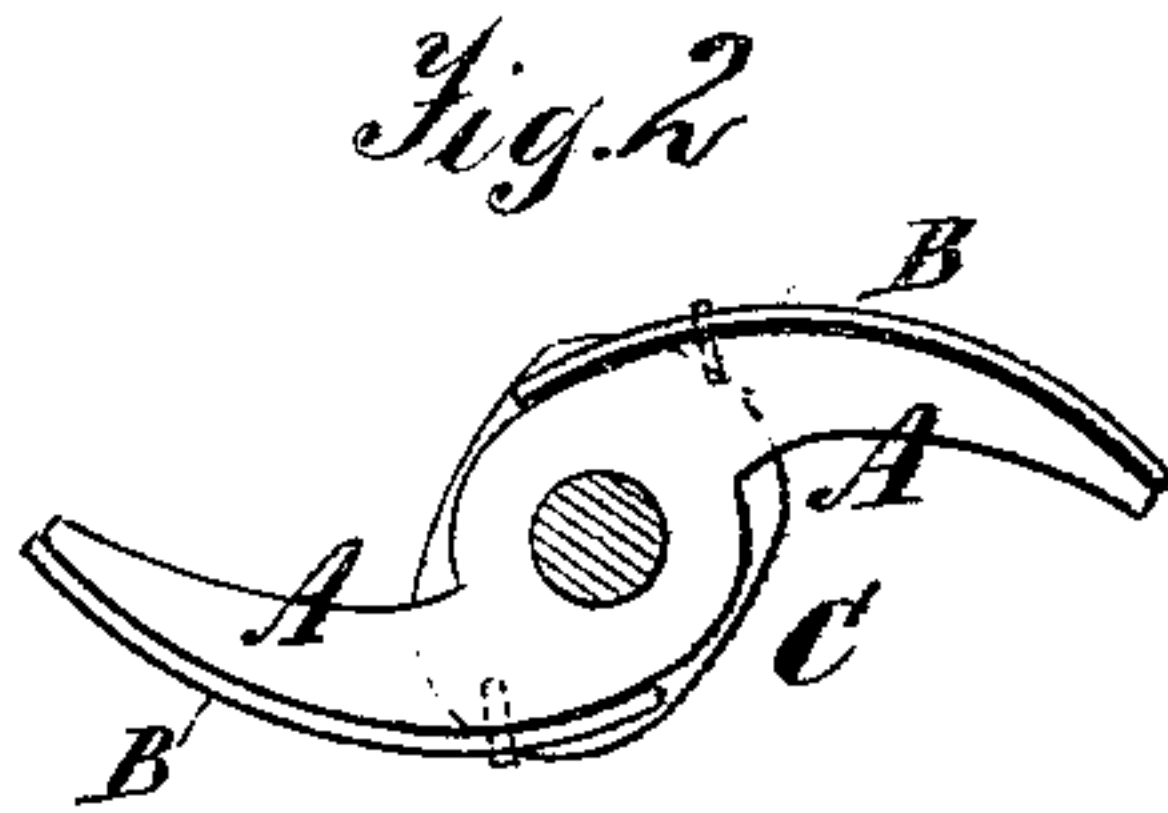
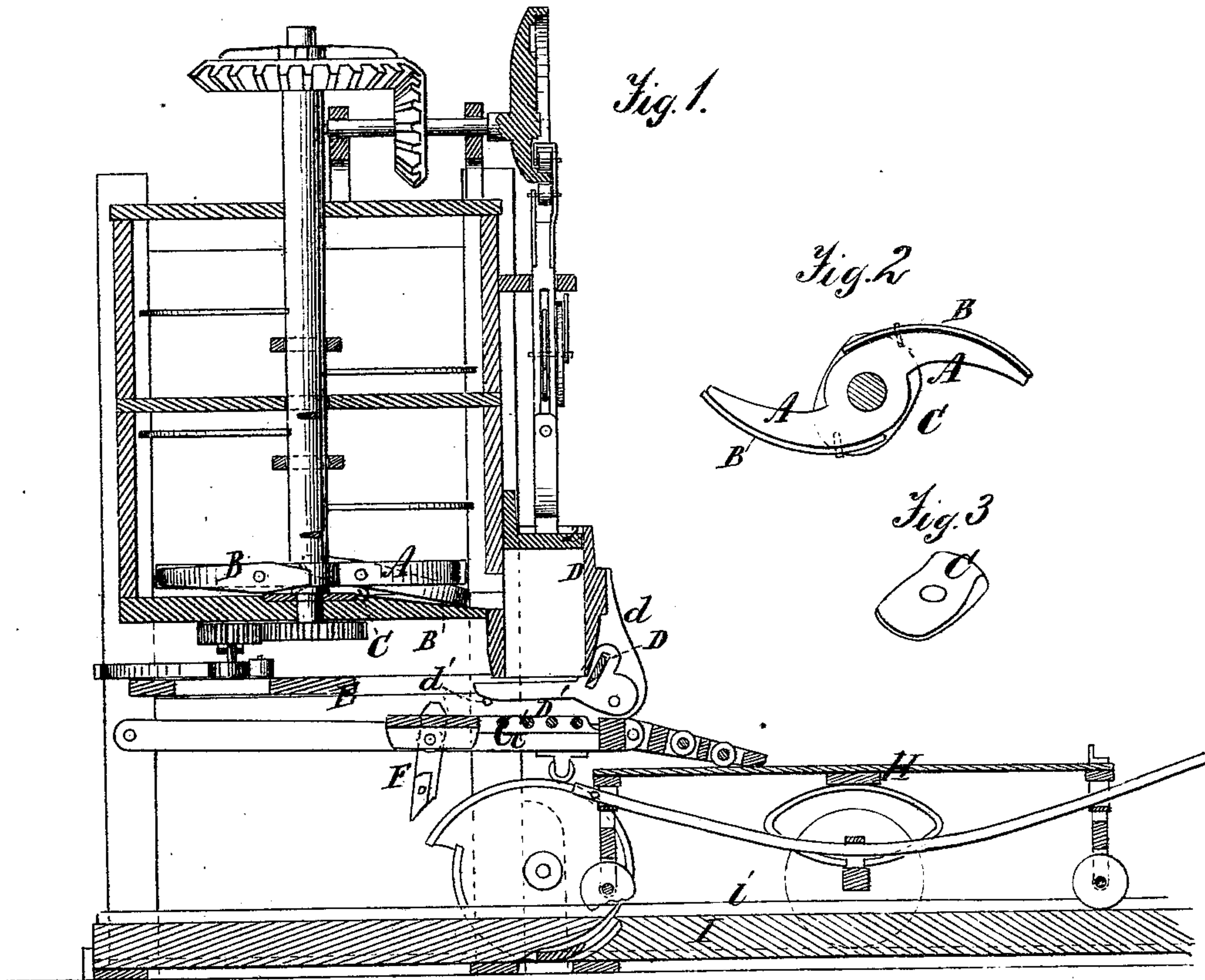


F. L. HALL.

Improvement in Brick-Machines.

No. 126,291.

Patented April 30, 1872.



Witnesses:
J. M. Hiter.
A. Ruppert.

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UNITED STATES PATENT OFFICE.

FRANCIS L. HALL, OF ONEIDA, NEW YORK.

IMPROVEMENT IN BRICK-MACHINES.

Specification forming part of Letters Patent No. 126,291, dated April 30, 1872.

Specification describing certain Improvements in Brick-Machines, invented by FRANCIS L. HALL, of Oneida, in the county of Madison and State of New York.

This invention has reference to an improvement in brick-machines; and it consists of certain means for properly conveying the mud or clay from the clay-receptacle to the press; of a strike so constructed and arranged as that it can be operated, raised, and depressed through the follower, and of itself; of a self-adjusting stop or guide, by means of which the molds when inserted in place for the reception of the clay from the press are prevented from being brought in contact with any obstruction; and of means for retaining the truck in its position while carrying the bricks from the machine or being returned thereto, substantially as hereinafter more fully set forth and claimed.

In the annexed drawing, Figure 1 represents a vertical central section through a brick-machine and truck patented by me July 4, 1871, and to which my improvements are attached. Fig. 2 is a plan view of the stirrers, to which the "whippers" or means for conveying the clay into the press are attached, said "whippers" also being shown in plan view. Fig. 3 is a perspective view of a cam which is placed beneath the stirrers and "whippers" for the purpose of keeping the said "whippers" down flush with the inclined portion of the floor of the clay-receptacle when brought around in contact with such part of said floor. Fig. 4 is a perspective view of the "strike" and its levers, which, when in place, are eccentrically pivoted to the machine; and Fig. 5 is a similar view of the self-acting stop or guide, and a mold for bricks when in place under the clay-receptacle.

Similar letters of reference in the several figures refer to like parts.

To enable others to make and use my improvements I will proceed to describe them.

In the accompanying drawing, Fig. 1, is illustrated a brick-machine patented by me the date above stated, showing my improvements attached thereto, and in which drawing A A refer to the stirrers, which are fastened to the shaft carrying the knives which pulverize the clay. B B are the "whippers," made preferably of metal, and pivoted, at a point near their

inner or inclined ends, to the stirrers A A. C is a cam, fastened to the bottom of the clay-receptacle, within which the knives for pulverizing the clay revolve directly beneath the stirrers and "whippers" B B, and is so placed as that when the inclined or inner ends of the latter are brought around in contact therewith it will cause their forward ends to be held down flush with the inclined part of the bottom of the said clay-receptacle until they have reached the point where said incline terminates, when they will be relieved therefrom (the cam) by their inclined ends, and be allowed through their pivots to return to their original or horizontal positions. The object of imparting such movement to these whippers is to cause them to properly convey the clay from the clay-receptacle to the press where the clay is formed into bricks, the said whippers being depressed directly in front, or in line with the aperture through which the clay enters the press, forcing the said clay down the inclined part of the floor of the clay-receptacle into or through said aperture, and at the same time thoroughly scraping said floor. D refers to the strike—a blade or other suitable contrivance—which is inserted within diagonal slots cut in the forward ends of two arms or levers, D¹ D¹. This device is for the purpose of removing superfluous clay or other matter from the brick-mold passing under it. D¹ D¹ refer to two levers or arms, to which, as above stated, the strike D is attached. These levers are pivoted at their forward ends to pendants d, fastened to the press D², and project under the machine, where they rest upon pins or projections d'. The levers D¹ D¹ may have weights attached thereto when required to assist in holding the strike D down upon the brick-molds while the latter are passing under it, and are of such length as that when the follower E is thrown forward they will be slightly lifted by the said follower striking against them, which will in turn sufficiently raise the strike D as to prevent its setting down between the molds, it (the said strike) being in line with the space between any two of the brick-molds passing beneath it at the moment the follower strikes the said levers. F is a stop or guide situated beneath the receptacle for holding the clay, and opposite the opening, (not shown in the drawing,) through

which the brick-molds are inserted under the said receptacle, and is for the purpose of regulating or indicating the point to which the said molds are to be pushed under the aforesaid receptacle. This stop or guide is so constructed and hung in place that when the projecting portions of the brick-molds come in contact therewith, while they are moving forward through the follower E, it will yield or be depressed, and allow said molds to pass it without being delayed or retarded, and return to its original position after the molds have passed it. This stop or guide is pivoted within a slot made in one of the sides or bars of the hinged or pivoted leaf or platform G, over which the brick-molds pass.

It is not deemed necessary to enter into a description of the other or remaining parts of my brick-machine in consequence of my Letters Patent bearing date aforesaid.

H refers to a truck for conveying the brick-molds with their contents from the brick-machine, and returning the empty molds to the machine. The pendants attached to the ends of the truck H, and supplied with "trucks" or wheels, are made of such a length as to elevate said trucks, as plainly shown in Fig. 1, which run upon an elevated track, I, the two side wheels of said truck running upon the ground or boards provided for such purpose. The track I, just alluded to, is constructed with elevations, upon which are fastened side strips or rails *i*, forming a groove, within which

are retained the central elevated trucks or wheels for the purpose of guiding the said truck in its passage to and from the brick-machine.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The whippers B B, in combination with the stirrers A A attached to the clay-receptacle shaft, substantially as and for the purpose specified.

2. The strike D and levers D¹ D¹, combined and arranged to operate substantially as shown, and for the purpose set forth.

3. The strike D and levers D¹ D¹, in combination with the press D² and the follower E, substantially as shown, and for the purpose described.

4. The self-acting stop or guide F, in combination with the leaf or platform G, arranged and operating substantially as shown and described.

5. In combination with a brick-machine the truck H with elevated and side wheels or trucks, and the central track I *i*, constructed substantially as and for the purpose specified.

In testimony whereof I have hereunto signed my name this 31st day of January, 1872, in presence of two subscribing witnesses.

FRANCIS L. HALL.

Witnesses:

AMBROSE HILL,
EDWARD GROOT.