

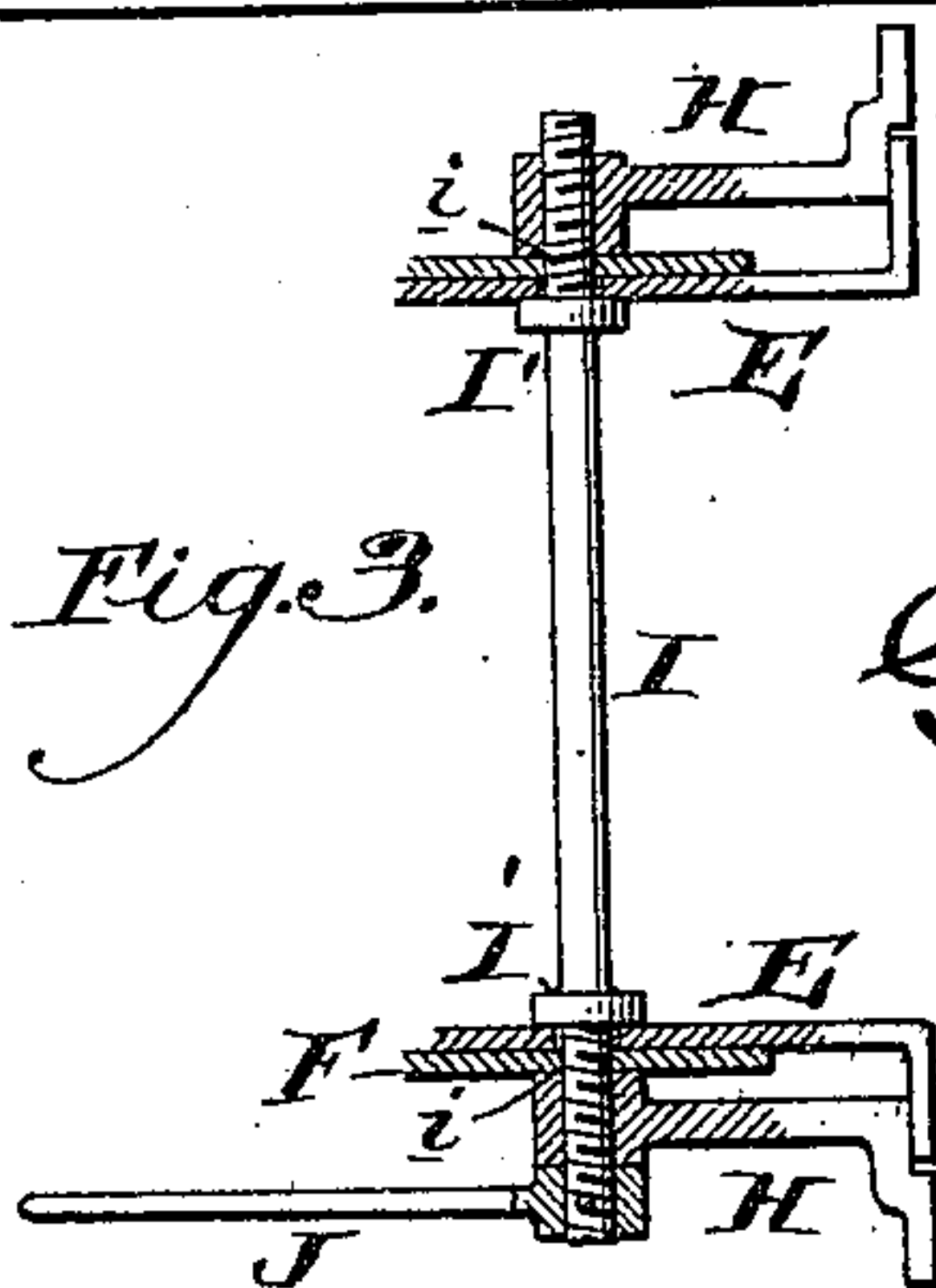
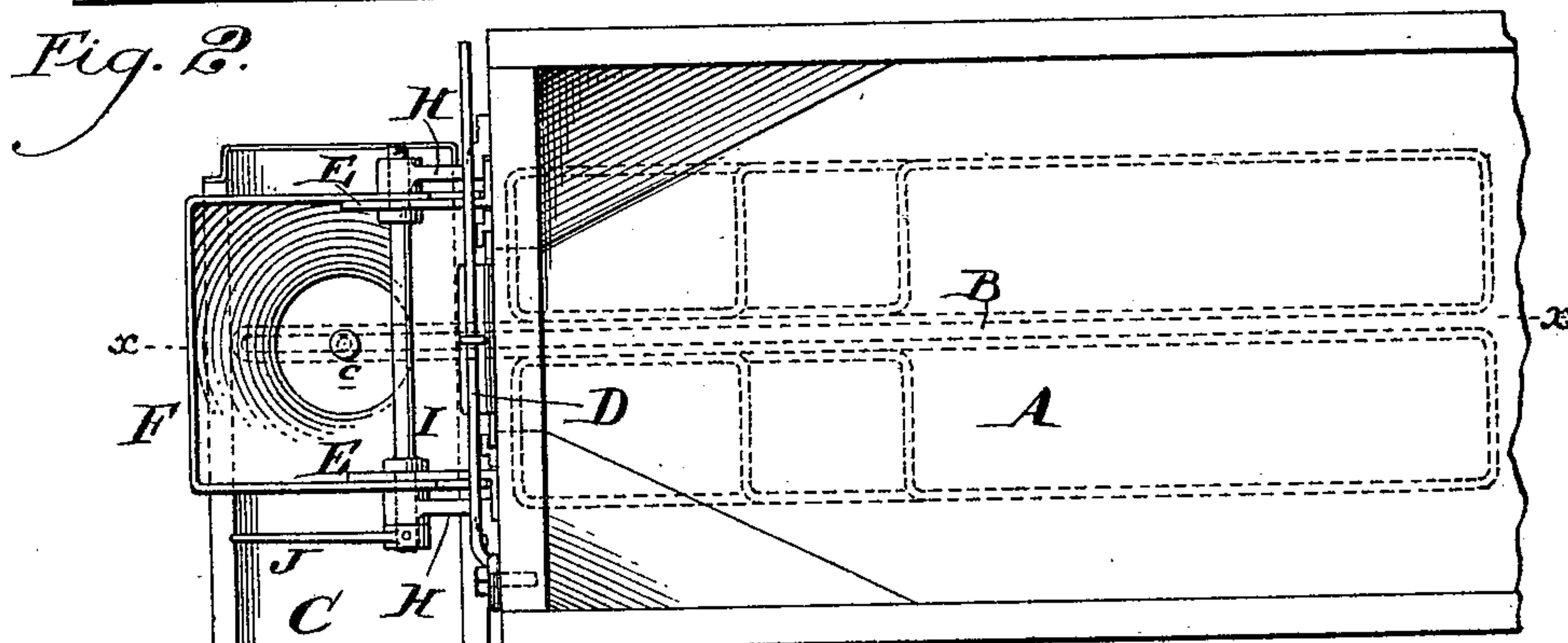
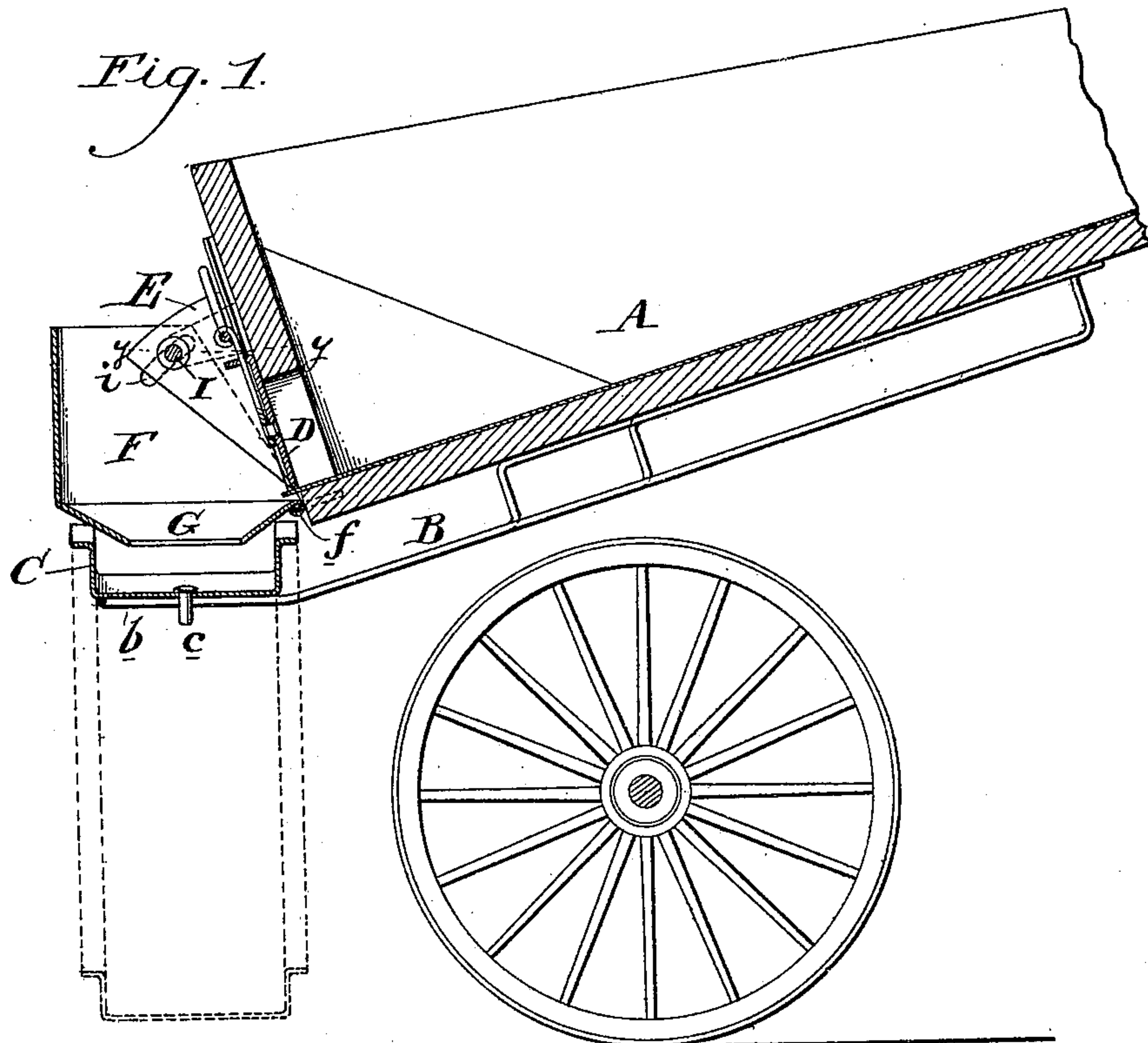
**No. 621,406.**

Patented Mar. 21, 1899.

**G. A. GARRETT.**  
**DUMPING WAGON.**

(Application filed Nov. 17, 1998.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

GEORGE A. GARRETT, OF PHILADELPHIA, PENNSYLVANIA.

## DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 621,406, dated March 21, 1899.

Application filed November 17, 1898. Serial No. 696,657. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE A. GARRETT, of the city and county of Philadelphia, State of Pennsylvania, have invented an Improvement in Dumping-Wagons, of which the following is a specification:

My invention has reference to dumping-wagons; and it consists of certain improvements which are fully set forth in the following specification and shown in the accompanying drawings, which form a part thereof.

In the employment of chute-wagons for delivering coal great annoyance is experienced in narrow streets from the fact that the wagons cannot stand with the rear arranged to the curb, as the front portion of the wagon acts as an obstruction to the passage of cars, causing their temporary stoppage, with the consequent inconvenience to the passengers.

The object of my invention is to provide an attachment suitable to dumping-wagons of this class whereby the wagon may be placed parallel to the curbing and the chute arranged at right angles to the side of the wagon.

In carrying out my invention I provide the usual structure of chute-wagon with a receiving box or hopper adjustably secured to the rear end of the wagon-body and inclosing the tail-gate, said hopper having a downwardly-extending perforated bottom for discharging the coal received therein upon the upper end of the chute, the weight of which chute is sustained independently of the hopper. The construction is such that the hopper may be adjusted to suit different elevations or obliquities of the wagon-body, so as to insure the coal being properly delivered upon the chute. I would furthermore call attention to the fact that by my improved construction no excessive strains are put upon the hopper which would tend to displace it and otherwise require it to be made exceedingly heavy and cumbersome. The only function which my improved hopper is required to perform is that of receiving and guiding the coal downward into proper position upon the chute. By arranging the hopper independently of the chute it is evident that it may be readily adjusted after the chute is in position and even while the coal is passing over it where such adjustment is required to more properly direct the movement of said coal.

My invention will be better understood by reference to the accompanying drawings, in which—

Figure 1 is a sectional elevation on line *xx* of Fig. 2, showing my improvement in dumping-wagon. Fig. 2 is a plan view of my invention; and Fig. 3 is a horizontal sectional view on line *yy* through the clamping mechanism.

A is the body of the wagon and may be of any suitable construction and adapted to be elevated in any of the well-known manners employed in dumping coal-wagons.

B is the chute-guide, arranged under the bottom of the wagon and extending rearwardly, as at *b*, beyond the rear end of the wagon-body.

D is the tail-gate, and may be of any well-known construction.

F is a hopper closed on three sides and having the conical perforated bottom G. The forward and lower edge of the hopper is hinged at *f* to the wagon-body below the tail-gate.

E E are two rearwardly-extended wings secured to the rear end of the wagon-body in any suitable manner, and journaled in said wings is the clamping-rod I, which is provided on each end with screw-threads, the threads on one end being right and on the other end left handed. These screw-threaded ends extend through slots *i* in the side plates of the hopper F and are screwed into nuts H H, which have extensions by which they are connected to the end frame of the wagon-body, so that they will not turn. Any suitable manner of arranging these nuts so as to permit longitudinal motion without rotation may be employed, the object being to cause the nuts H to be drawn toward the clamping-collars I upon rotating the rod I. The rod I is provided with a handle or lever J, by which it may be readily rotated for positively and quickly clamping or unclamping the hopper. It will now be understood that when the wagon is raised to the proper elevation the lever J is drawn downward and the hopper F is then free to be adjusted about its hinge *f*. After the adjustment the lever J is drawn upward and the nuts H are drawn tightly against the outer walls of the hopper and grip said walls and the wings E between said nuts and the



collars I'. The chute C is then drawn down upon the guide B and turned at right angles, as indicated, the pin c working in the guide B as a means of maintaining the chute against displacement. It will be observed that in this manner the chute is supported wholly independent in any manner interfering with the normal and ordinary adjustment of the hopper. Furthermore, by removing all of the weight of the chute and its load from the hopper the latter may be made very light and at the same time durable. The tail-gate is arranged to be operated so as to allow any speed of delivery of the coal into the hopper desired.

In the drawings I have shown the chute as drawn out and arranged at right angles to the end of the wagon, such as would be employed where the wagon was arranged close to the curbing and the point of delivery in line with the hopper; but it is evident that in many cases the chute C will be adjusted in various positions to suit the location of the opening into which the coal is to be discharged, but this does not interfere with the arrangement of the wagon parallel to the curb.

While I prefer the construction shown, it is evident that the particular means for adjusting the hopper may be modified, as a variety of special types of clamps well known in the art may be employed in lieu of that here shown. Hence while I prefer the construction illustrated I do not confine myself to the minor details thereof.

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

1. The combination of the wagon-body, a chute-guide carried by the wagon-body and extending to the rear thereof, a freely-adjustable chute having its weight at its upper end sustained directly and wholly by the chute-guide, and an adjustable hopper having a permanently-closed wall surrounding the tail-gate of the wagon and further having its bottom within the boundary of said walls formed with a downwardly-discharging aperture arranged above the rear end of the chute-guide so as to come over the upper end of the chute when in discharging position said hopper being connected to and sustained directly by the wagon-body and having no direct connection with the chute, whereby the weight of the chute does not come upon the hopper and the latter may be readily adjusted after the chute is in position for or during the discharging operation.

2. The combination of the wagon-body, a chute-guide carried by the wagon-body and extending to the rear thereof, a freely-adjustable chute hinged to the wagon-body having its weight at its upper end sustained directly and wholly by the chute-guide, an adjustable hopper having a permanently-closed wall

surrounding the tail-gate of the wagon and further having its bottom within the boundary of said walls formed with a downwardly-discharging aperture arranged above the rear end of the chute-guide so as to come over the upper end of the chute when in discharging position said hopper being connected to and sustained directly by the wagon-body and having no direct connection with the chute, and means acting upon both sides of the hopper at the same time for simultaneously adjusting and clamping the said hopper in position upon opposite sides of the tail-gate, whereby the weight of the chute does not come upon the hopper and the latter may be readily adjusted after the chute is in position for or during the discharging operation.

3. The combination of the wagon-body, a chute-guide carried by the wagon-body and extending to the rear thereof, a freely-adjustable chute hinged to the wagon-body having its weight at its upper end sustained directly and wholly by the chute-guide, an adjustable hopper having a permanently-closed wall surrounding the tail-gate of the wagon and further having its bottom within the boundary of said walls formed with a downwardly-discharging aperture arranged above the rear end of the chute-guide so as to come over the upper end of the chute when in discharging position said hopper being connected to and sustained directly by the wagon-body and having no direct connection with the chute, adjusting means for connecting the hopper with the wagon-body for adjusting the same relatively to the tail-gate to suit different inclinations of the wagon-body consisting of two side wings firmly secured to the wagon-body, a transverse rockingshaft extending through the wings and sides of the hopper, and clamping devices for clamping the sides of the hopper to the wings by the rotation of the rockshaft, whereby the weight of the chute does not come upon the hopper and the latter may be readily adjusted after the chute is in position for or during the discharging operation.

4. An adjustable hopper for a dumping-wagon which consists of box-shaped sheet-metal structure closed on three sides and having a conical bottom having a central discharge-aperture, a suitable hinge for supporting the hopper located at the lower part of its open or unclosed side, two side wings adapted for attachment to the end of the wagon, and suitable clamping devices between the side wings and the sides of the hopper adapted to be operated for clamping the wings and sides of the hopper simultaneously at each side.

In testimony of which invention I have hereunto set my hand.

GEORGE A. GARRETT.

Witnesses:

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R. M. KELLY.