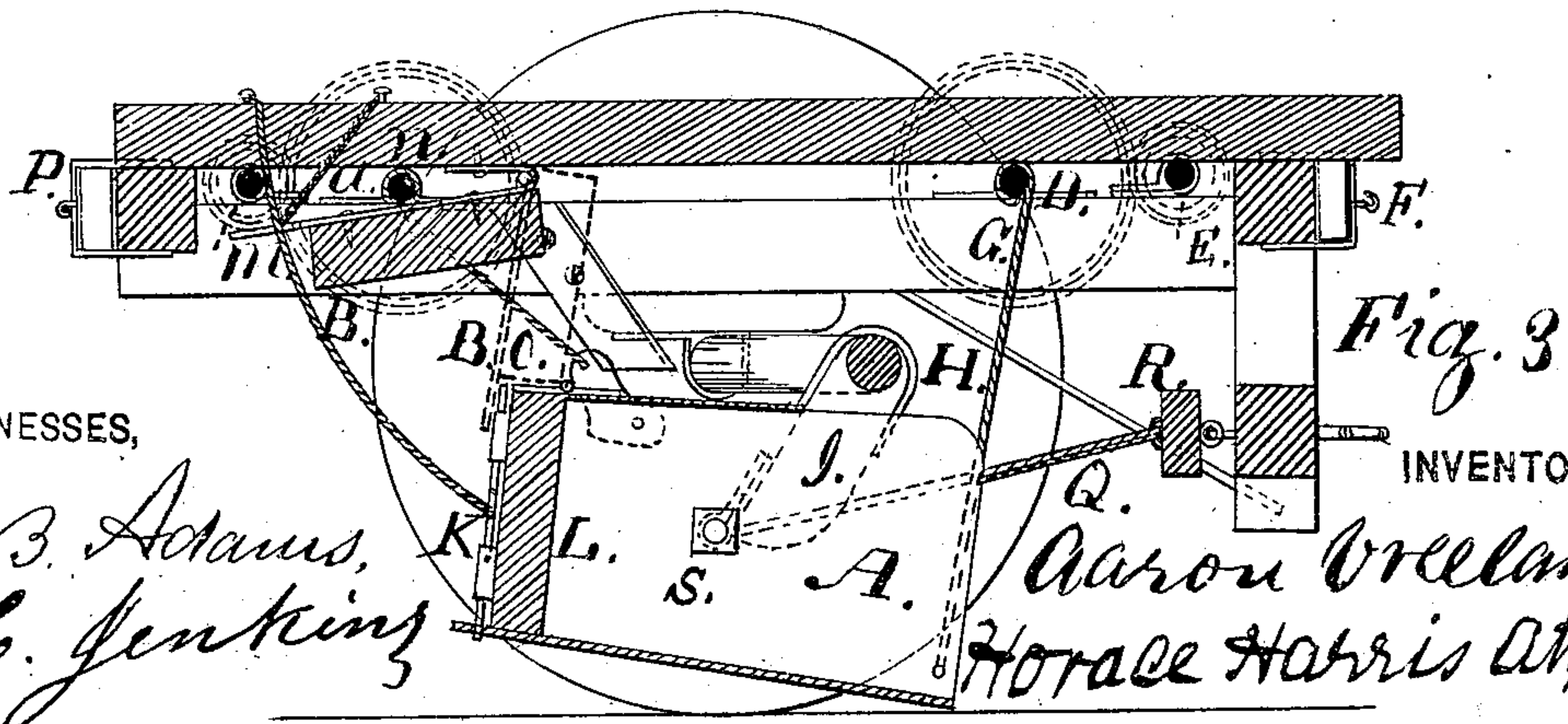
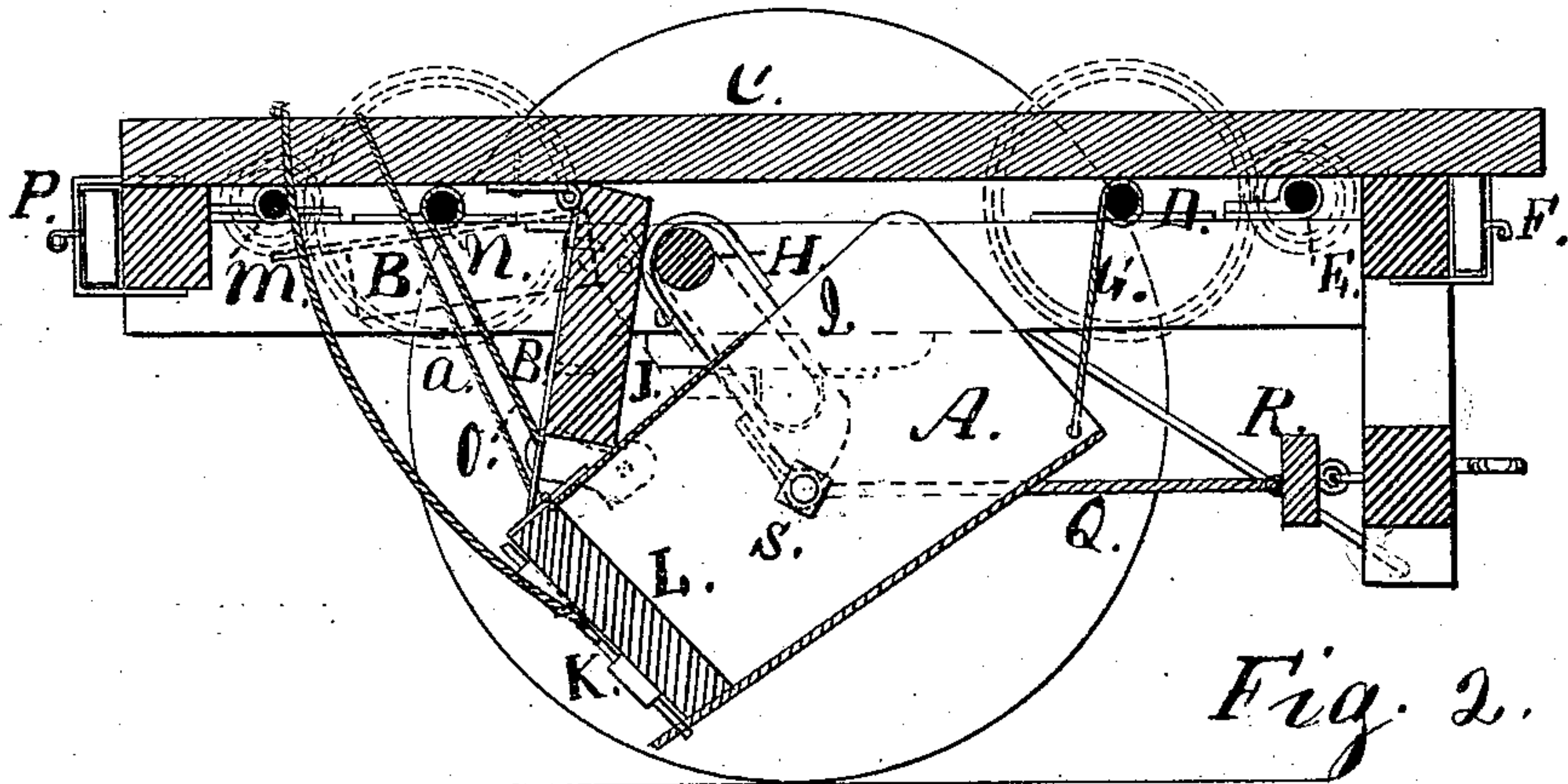
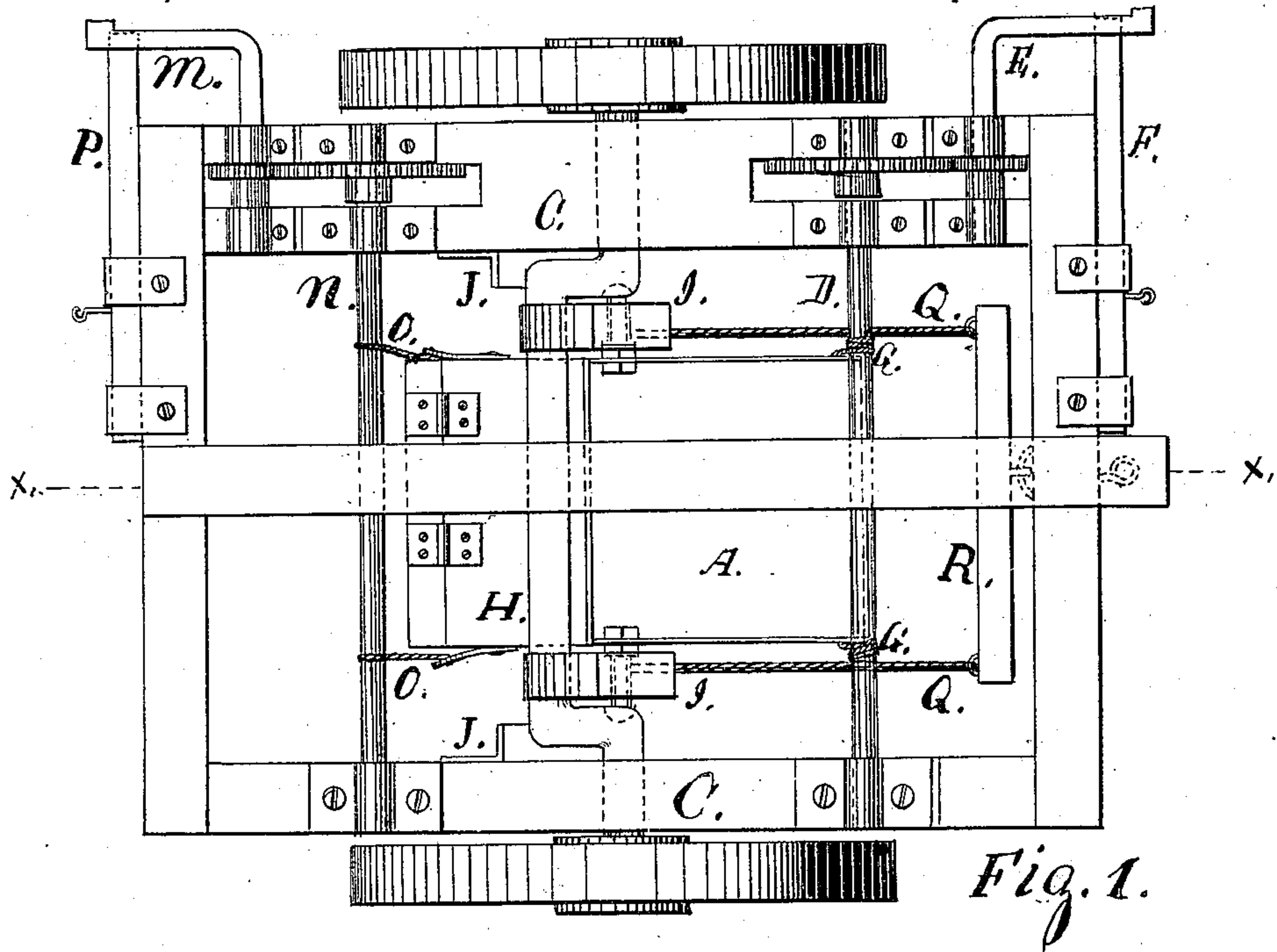


A. VREELAND.  
Self-Loading Cart.

No. 226,638.

Patented April 20, 1880.



WITNESSES,

Geo. B. Adams,  
H. C. Jenkins

INVENTOR,

Aaron Vreeland  
Horace Harris Atty



# UNITED STATES PATENT OFFICE.

AARON VREELAND, OF CEDAR GROVE, NEW JERSEY.

## SELF-LOADING CART.

SPECIFICATION forming part of Letters Patent No. 226,638, dated April 20, 1880.

Application filed November 1, 1878.

*To all whom it may concern:*

Be it known that I, AARON VREELAND, of Cedar Grove, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Wheel-Scrapers, of which the following is a specification.

In the drawings, Figure 1 is a plan view. Fig. 2 is a longitudinal section on the line of  $x x$  on Fig. 1, and shows the scraper raised to a dumping position. Fig. 3 is the same, and shows the scraper in the position of gathering earth.

My invention relates to self-loading scrapers or cart-bodies connected with wheels and operated by means of chains, cranks, &c.; and it consists in a scraper hung by two pitmen under the bent axle of the driving-wheels and to two shafts attached to the vehicle, so that the chains or ropes by which it is hung to the shafts, being wound or unwound by the respective cranks, will change it from a scraping to a dumping or carrying position, and the reverse. It is also provided with certain stops for holding it in desired positions, and has adjustable chains connected with a swing-bar for regulating the depth of working in the earth.

Having stated in general the parts, a description of the working will further set forth the nature of my invention.

In Fig. 3 the scraper A is in position for loading. As the cart with which it is connected is drawn along the stop B (shown in dotted lines) bears on the rear end to keep it from rising up. When the scraper is filled this stop is drawn up out of the way by a cord,  $a$ , and connected with the frame C, and the rear crank is released and the chain O unwound. Then, to raise the scraper, the crank of shaft E, geared to shaft D, is released from the slide-stop F, by which it has been held, and is turned, winding up the chains G, united to the front end of the scraper, until the bent section of the axle H, to which the scraper is hung by the pitmen I, is carried up over the center and rests against the stops J. In this position the scraper is in order for dumping, which may be done by releasing the bolt K, which holds the hinged rear end, L, of the scraper; but, if desirable to carry the scraper, either before or after it is dumped, the front chain, G, is slightly unwound, and the rear chain, O, slightly wound up, when the scraper will hang in nearly a level position.

To arrange the scraper again for work, the bent axle is thrown over forward by the hand of the operator, and the crank E is turned back until the front of the scraper is let down, when the crank is made to rest again on the stop F. The rear crank, M, geared to the shaft N, will now be turned, and the chains O wound up sufficiently to give the scraper with which they are connected the proper pitch for filling, when the crank will rest on the slide-stop P, and stop B will be let down to bear upon the scraper, as before shown.

To regulate the depth of the working of the scraper in the earth, there are chains Q attached to a swing-bar, R, at the front of the vehicle and to the axle S of the scraper, which are made adjustable, and the adjustment of these chains will determine the depth to which the scraper will work in the earth. If the chains are lengthened it will allow the front end of the scraper to run deeper into the earth, and the other chains, G, above named, will yield accordingly; or the shortening of the chains Q will raise the front of the scraper for more shallow working in the earth. Therefore,

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

1. The bent axle H, made to swing forward of the center in loading and back of the center in carrying, resting against the stops J, and having hung thereto, by the pitmen I, the adjustable scrapers A, substantially as and for the purpose specified.

2. The combination of the adjustable scraper A, having the pitmen I, connecting with the axle H, the chains G and O, winding-shafts D and N, and cranks E and M, substantially as and for the purpose specified.

3. The combination of the scraper A, having the pitmen I, the chains G and O, winding-shafts D and N, cranks E and M, and stop B, substantially as and for the purpose set forth.

4. In combination with the frame C and axle H, the stops J, substantially as set forth.

5. In combination with the scraper A and frame C, the swing-bar R and chains Q, substantially as and for the purpose specified.

AARON VREELAND.

Witnesses:

HORACE HARRIS,  
GEO. B. ADAMS.