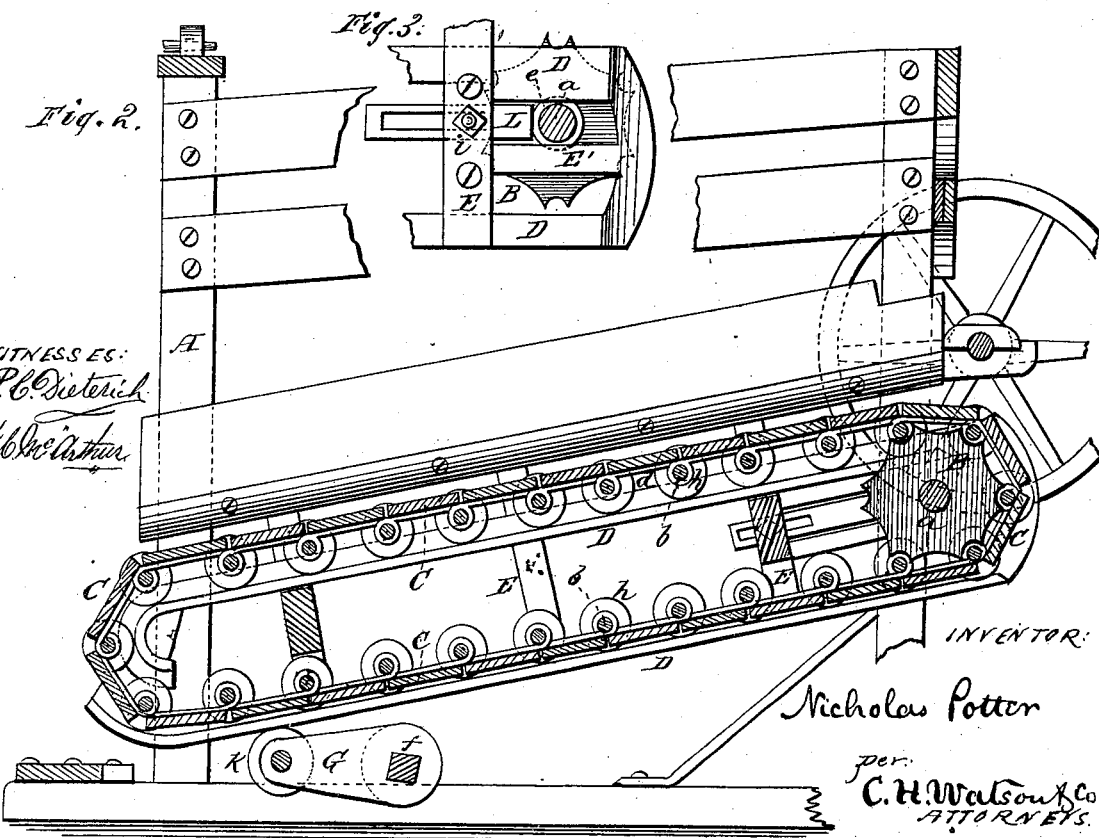
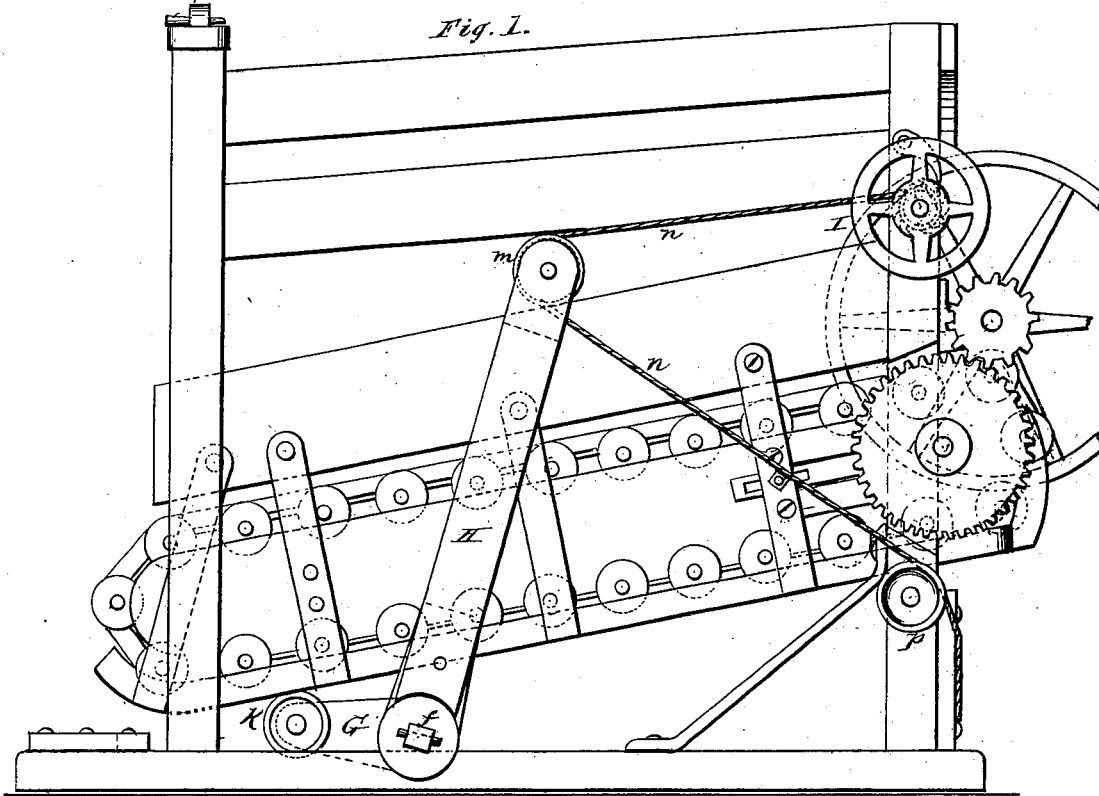


N. POTTER.  
Horse-Power.

No. 167,930.

Patented Sept. 21, 1875.



# UNITED STATES PATENT OFFICE.

NICHOLAS POTTER, OF TROY, PENNSYLVANIA.

## IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. 167,930, dated September 21, 1875; application filed March 24, 1875.

### *To all whom it may concern:*

Be it known that I, NICHOLAS POTTER, of Troy, in the county of Bradford and State of Pennsylvania, have invented certain new and useful Improvements in Horse-Powers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a horse-power, which may be conveniently raised and lowered to give the endless chain any required inclination, and in devices for tightening or slackening the endless chain, as will be hereinafter more fully set forth.

In the accompanying drawing, Figure 1 is side elevation of a horse-power embodying my invention. Fig. 2 is a longitudinal vertical section of the same. Figure 3 is a detached view of the tightening device.

A represents the frame of my machine, at the front end of which, in suitable bearings, is the shaft *a*. On this shaft is secured a polygonal-shaped drum, B, having longitudinal grooves made in its corners to receive the rods *b b*, which are connected to each other by straps *d d* to form an endless chain, and to which are attached the cross bars or planks *c c*, on which the horse or other animal walks to give motion to the machine. Upon the ends of the rods *b b* are placed small wheels *h h*, which roll along the flanges of the side bars of the track-frame D. This track-frame is constructed, as shown in Fig. 2, with straight and parallel top and bottom side bars, and with semicircular ends, in such a manner that the wheels *d* may pass easily from the top of the top side bars to the top of the bottom ones, and vice versa. E E represent iron posts, cast solid with the track-frame D, and extending above the same a suitable distance, to be bolted to the board G. From the front

post E to the forward ends of the frames D extend short longitudinal bars E', between which and the upper side bars of the track-frames are bearings *e*, through which the shaft *a* passes, so that the forward end of the said frame D may hang upon the said shaft *a*. L is a slotted bar attached by means of a bolt, *i*, to the front post E, and having its forward end resting against the box *e*. By adjusting the slotted bars L the endless chain may thus be tightened or slackened, as may be required.

In the lower part of the main frame A is a shaft, *f*, having arms G G, in the outer end of each of which is a roller, *k*, bearing against the under sides of the lower side bars of the track-frame D, and supporting the lower end thereof. On one end of the shaft *f* is a lever, H, carrying a pulley, *m*, at its upper end. Above the upper end of the track, on one side of the machine, is a windlass, I, from which a rope, *n*, passes around the pulley *m* in the lever H, thence around an idle-pulley, *p*, and fastened to the main frame. By these means the rear end of the track-frames may be raised and lowered to adjust the inclination of the track as desired.

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

1. The combination, with the track-frame D, having posts or bars E E', as described, of the boxes or bearings *e e* on the shaft *a*, and the adjustable slotted bar L, substantially as and for the purposes herein set forth.

2. The combination, with the track-frame D, of the shaft *f*, arms G, with rollers K, lever H, with pulley *m*, idle-pulley *p*, and windlass I, with rope *n*, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

NICHOLAS POTTER.

Witnesses:

W. H. CARNOCHAN,  
CHAS. T. PAINE.