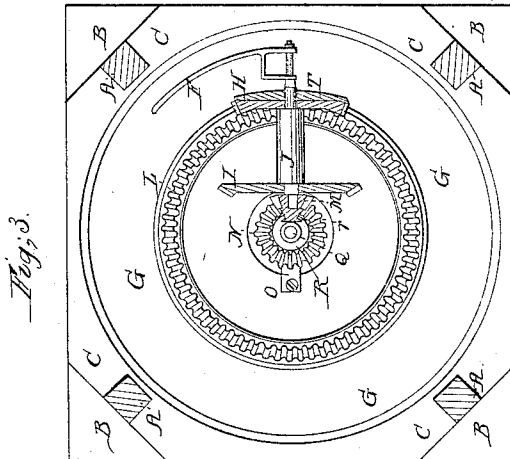
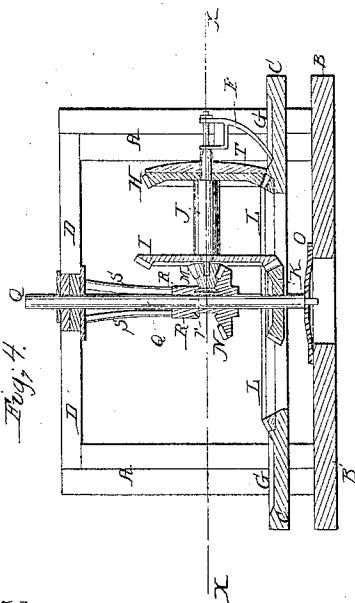
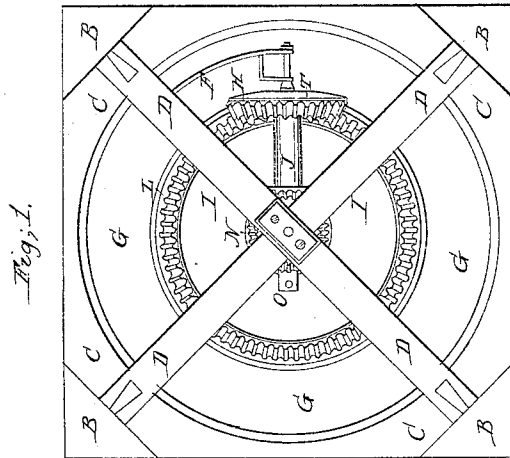
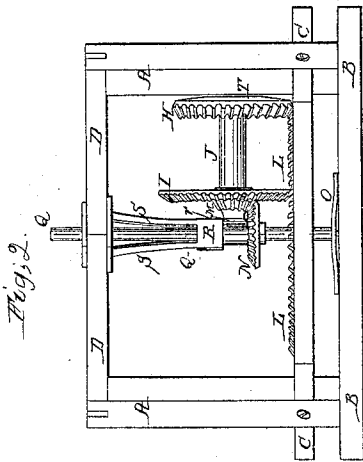


*J. Frezer,*  
*Horse Power,*

*No 22,721,*

*Patented Jan. 25, 1859.*



*Witnesses;*  
*Adam Stevens*  
*Miles Hays*

*Inventor,*  
*John Frezer*

# UNITED STATES PATENT OFFICE.

JOHN FREZER, OF NEWBERRY, PENNSYLVANIA.

## HORSE-POWER.

Specification of Letters Patent No. 22,721, dated January 25, 1859.

*To all whom it may concern:*

Be it known that I, JOHN FREZER, of Newberry, in the county of York and State of Pennsylvania, have invented an Improvement in Horse-Powers, the construction and operation of which I have described in the following specification and illustrated in the accompanying drawings with sufficient clearness to enable competent and skilful workmen in the arts to which it pertains or is most nearly allied to make and use my invention.

My said invention consists in the device hereinafter described for securing the inner end of said traveling axle in position.

In the accompanying drawings: Figure 1 is a plan of the machine; Fig. 2 is an elevation; Fig. 3 is a horizontal section showing the parts below the line X X, as drawn across Figs. 2 and 4. Fig. 4 is a vertical section.

A, A, A, A, are four upright posts which are framed into the ground frame B, to support the track and segment frame C, and caps D, which last support the upper bearing of the central shaft of the machine. This central shaft Q is supported at the bottom by the bearing box O, and has a pinion K upon it which gears into the bevel wheel or pinion I, which is firmly attached to the horizontal shaft J. This shaft J has also a wheel H attached to it by which it is geared to the segment wheel L, which is made stationary by being bolted to the frame C inside of the track G. A pinion M attached to the inner end of the shaft J gears into the pinion N, which is supported in a fixed position by the braces S, which are attached to the timbers D, the braces S terminating in a collar R for that purpose. The end of the shaft J has a flange r upon it which travels in a groove in the collar R,

and in a like groove in the pinion N, to keep it from moving longitudinally out of place. The shaft J is extended outside of the wheel H, and receives upon it a pole F, to which the horses are attached; they travel in the track G. A flange T attached to the wheel H rests upon a corresponding flange outside of the segment wheel L, to keep this wheel from meshing too deep into gear.

As the wheel L and the pinion N are both stationary, it is obvious that the shaft J must roll or turn as it is drawn forward by the team, and any tendency it may have to rise out of its gear with the segment wheel L is counteracted by its connection with the pinion N to which it is held by the collar R, so that should it rise from the segment wheel, its rotation is secured by that connection. The connection of the wheel I with the pinion K, causes the rotation of the shaft J to give motion to the shaft Q from which the power may be taken by any mode and modification of gearing which may be appropriate to the purpose to which the power is to be applied.

The particular improvement which constitutes my said invention, and which I claim as having been originally and first invented by me, is—

The combination of the flange r upon the end of the sweep shaft with the groove in the collar R or its equivalent for securing the shaft J against longitudinal motion as set forth in connection with the wheel H and pinion M attached to the sweep shaft and the stationary wheel and pinion L and N, which keep the shaft J in a directly radial position.

JOHN FREZER.

Witnesses:

ADAM STEVENS,  
MILLS HAYS.