E. E. HUSBY.

HORSE-POWERS.

No. 194,684. Patented Aug. 28, 1877.

Fig. 1.

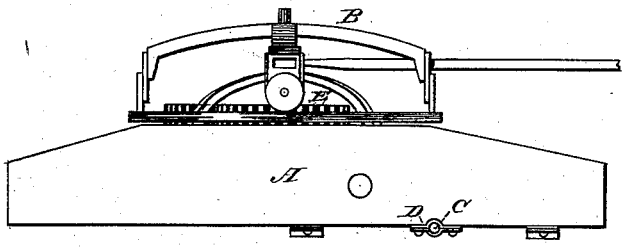


Fig. 2.

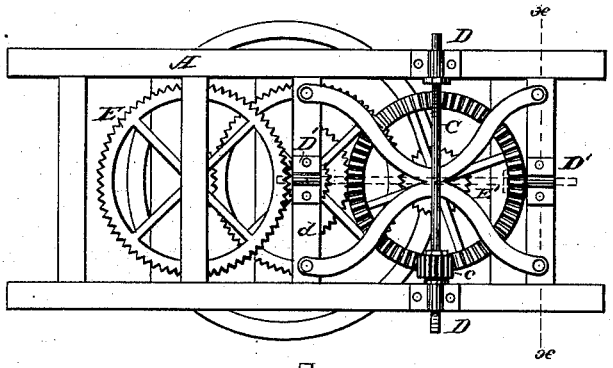
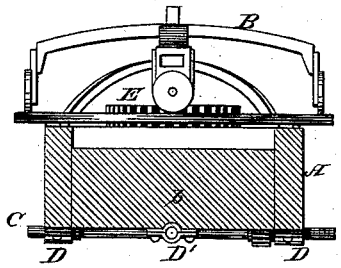


Fig. 3.



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UNITED STATES PATENT OFFICE.

ERICK E. HUSBY, OF MONTEVIDEO, MINNESOTA.

IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. **194,684**, dated August 28, 1877; application filed May 21, 1877.

To all whom it may concern:

Be it known that I, ERICK E. HUSBY, of Montevideo, in the county of Chippewa and State of Minnesota, 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 appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation. Fig. 2 is a bottom plan; and Fig. 3 is a section through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to certain improvements in horse-powers; and it consists in the construction and arrangement of parts which I shall now proceed more fully to describe.

In the drawings, A is the frame of my improved horse-power; B is the cross-brace, in which the sweeps to which the horses are hitched are secured; and E is the gearing, which is constructed and arranged in any suitable manner. C is the axle, to which the tumbling-rod is attached. It has a pinion, *c*, meshing with the last gear-wheel E′. The axle C may be adjusted in two different ways, either in the boxes D D, on the sides of frame A, (the end of the axle projecting on both sides,) or in auxiliary boxes D′ D′, which are secured upon the end piece *b* and cross-brace *d* of the frame. The former method of adjustment is shown in full lines in Fig. 2, and the latter in dotted lines. The tumbling-rod may, in either case, be attached to either end of the axle.

From the foregoing description the advantages of my invention will be readily understood. The axle C being adjustable in two different ways, the power may be connected to the machinery that is to be driven from either of its four sides, thus saving the time usually consumed in getting the power in position or in turning it, which, owing to its heavy weight, often causes serious loss of time. The speed of the power may be regulated by the size of pinion *c*; and, by changing the position of pinion *c* upon shaft C, so as to engage with different sides of the gear-wheel E′, the direction in which the power operates may be reversed.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In combination with the horse-power frame A, having gearing E E′, boxes D, and auxiliary boxes D′, the adjustable shaft or axle C, having pinion *c*, substantially as and for the purpose herein shown and specified.

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

ERICK E. HUSBY.

Witnesses:

JENS JOHNSON,

KNUELT E. HUSBY.