

C. ROBERTS.
HORSE-POWER.

No. 172,175.

Patented Jan. 11, 1876.

FIG. 1.

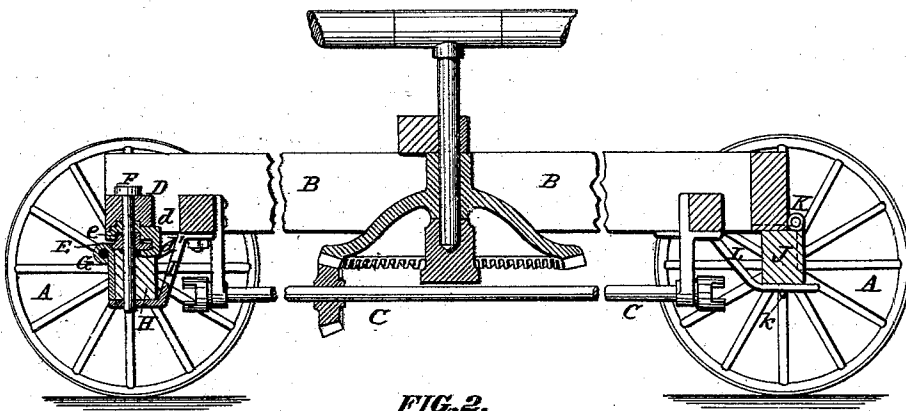
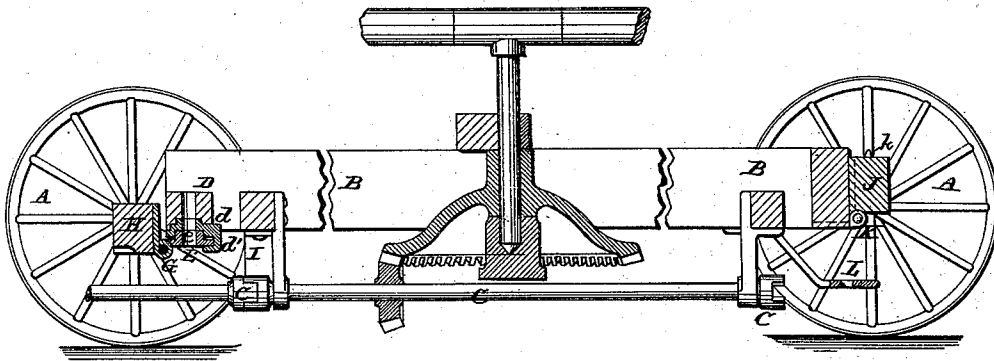


FIG. 2.



ATTEST:

Robert Burns.
Chas. Horch

INVENTOR:

Cyrus Roberts
By Amesbury
Attorney

UNITED STATES PATENT OFFICE.

CYRUS ROBERTS, OF THREE RIVERS, MICHIGAN.

IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. **172,175**, dated January 11, 1876; application filed December 11, 1875.

CASE A.

To all whom it may concern :

Be it known that I, CYRUS ROBERTS, of Three Rivers, in the county of St. Joseph and State of Michigan, have invented a new and useful Improvement in Horse-Powers, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

This invention relates to that class of horse-powers that are arranged on wheels for transportation from place to place; and this invention consists in hinging the axles to the bolsters of the horse-power frame, so that the axles can be turned up beside the bolster, and the frame thus lowered to fit it for use as a horse-power. In this position of the frame the line of the tumbling-shaft is beneath the level of the axles.

When it is desired to transport the horse power to another place the axles are again turned down, the wheels supporting the horse-power frame in both of its positions.

When the horse-power frame is in its upper position the front and rear axles are underneath the bolsters, and the front axle is held in this position by the king-bolt which passes through the bolster and through said axle. The rear axle is held by spring-straps that engage studs or pins on said axle, or by any other suitable device.

Figure 1 is a longitudinal section, showing the horse-power frame supported in its upper position. Fig. 2 is a similar view, showing the frame supported in its lower position.

A A are the wheels supporting the frame B of the horse-power, which may be of any suitable construction, and which supports a horizontal tumbling-shaft, C, as usual. D is the front bolster, having a bearing-block, *d*, which has a circular recess for the reception of a boss, *e*, concentric with the king-bolt F, and turning in said recess. The boss *e* is on a turn-plate, E, which forms a part of the hinge G, the other part of the hinge being secured to the axle H. The turn-plate E is held

in place by the hooked projection *d'* of the bearing-block D. I is a strap secured to the frame B, which projects underneath the axle, and has a perforation for the reception of the lower end of the king-bolt. The rear axle J is hinged to the rear bolster by plain hinges K, and has lugs *k* that engage in perforations in the spring straps or hasps L, to hold it in the position shown in Fig. 1.

By removing the king-bolt F and disengaging the spring-straps L the two axles H J can be turned into the position shown in Fig. 2, thus lowering the horse-power. The purpose of lowering the horse-power is twofold: first, to lower the sweeps to the proper position for the attachment of the double-trees; and, second, to lower the tumbling-shaft below the plane of the axles. The purpose of raising the frame for moving from place to place is to lift the tumbling-shaft and other parts out of the way of obstructions.

It is evident that the axles can be hinged so as to turn inward instead of outward, and when thus constructed the bolsters will be placed below the frame of the horse-power, or the frame will be cut away near the bolsters to admit of the axles turning up against the bolster when it is desired to lower the frame.

I claim—

1. The axle of a horse-power hinged to the bolster, so as to turn on said hinge from a position beneath the bolster to a position beside the bolster, substantially as and for the purpose set forth.

2. The axle hinged to the bolster, in combination with the king-bolt F and horse-power frame B, substantially as and for the purpose set forth.

3. The combination of tumbling-shaft C with axles H and J, hinged so as to turn out of the line of said shaft, substantially as set forth.

CYRUS ROBERTS.

Witnesses:

JAS. H. LYON,
CHAS. A. LYON.