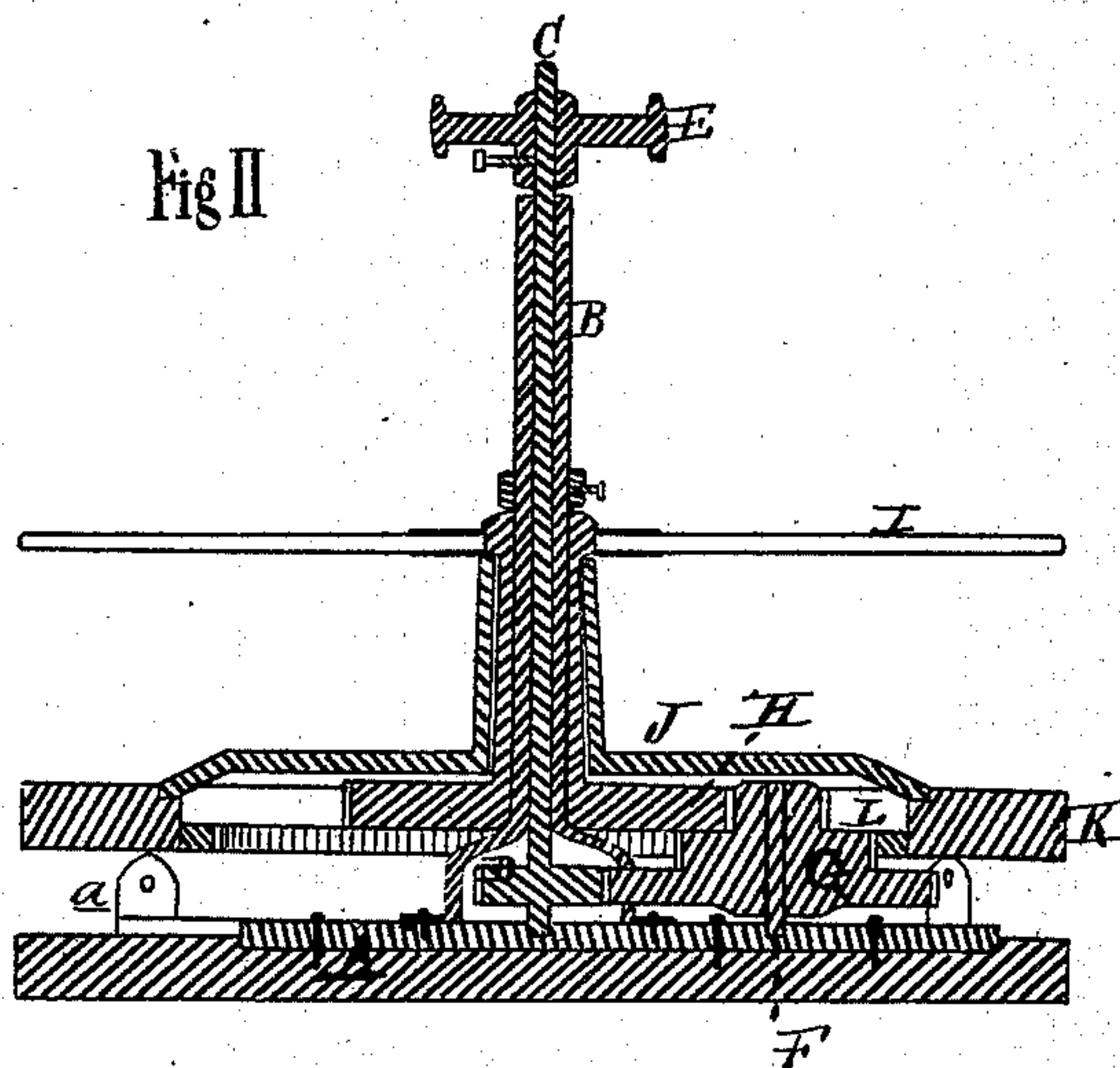
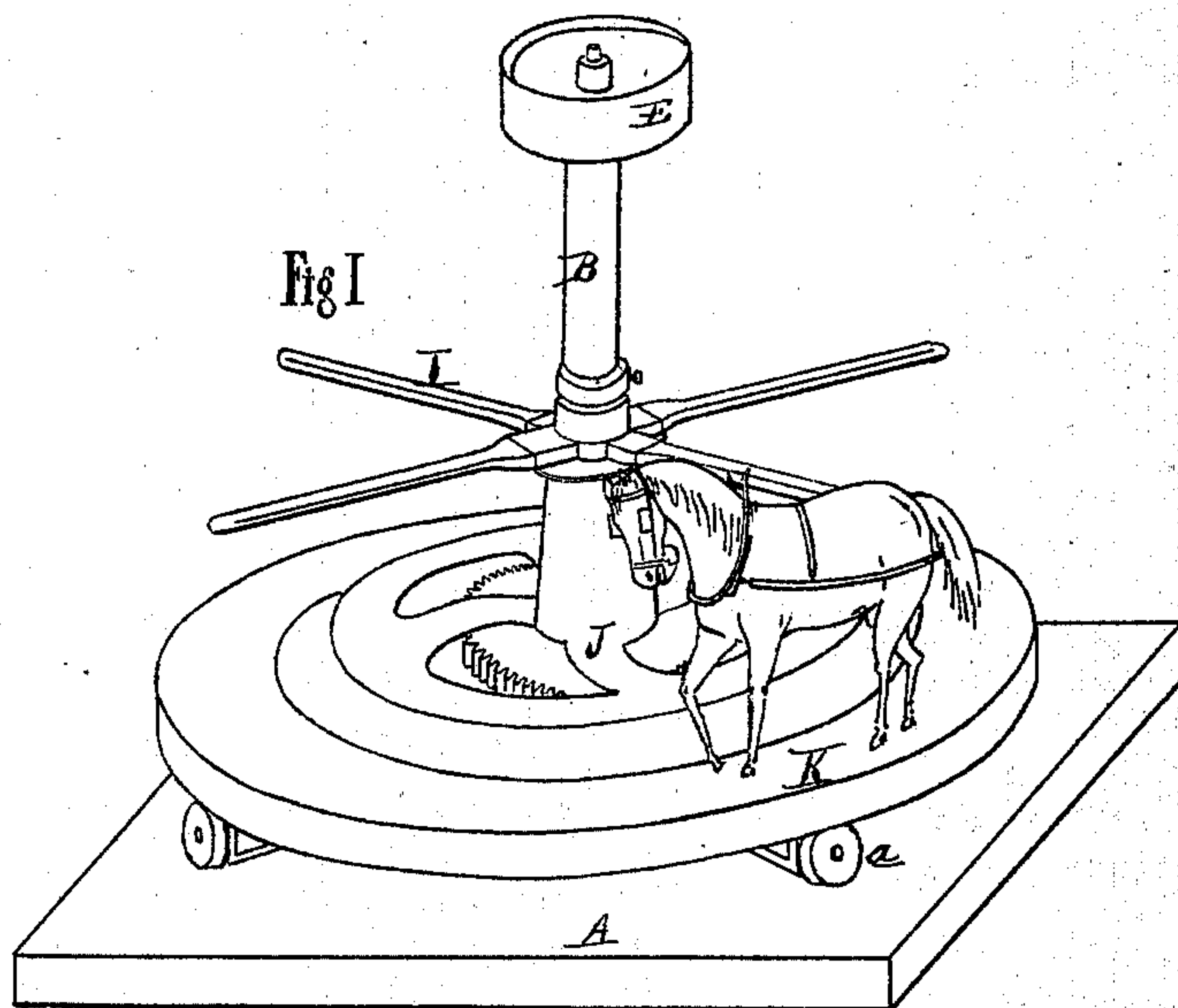


H. I. MARNETTE.

Horse-Powers.

No. 139,682.

Patented June 10, 1873.



Attest

*H. J. Sprague*  
*C. F. Eberts*

Inventor

*Henry I. Marnette*  
By Attorney  
*Wm. H. Sprague*



# UNITED STATES PATENT OFFICE.

HENRY I. MARNETTE, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. **139,682**, dated June 10, 1873; application filed April 10, 1873.

*To all whom it may concern:*

Be it known that I, HENRY I. MARNETTE, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Horse-Powers; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 is a vertical section.

Like letters refer to like parts in both figures.

This invention relates to a horse-power of such construction that the platform upon which the horse walks will be impelled in one direction while the sweep is drawn in an opposite direction, both the sweep and revolving platform being geared to a central vertical shaft having a pulley overhead from which motion is given to the machinery to be driven, thereby enabling the animal to exert his full strength in the work to be done. The invention consists in the peculiar construction and arrangement of the various parts, as more fully hereinafter set forth.

In the drawing, A represents a foundation or bed-plate, upon which is securely bolted a hollow metallic column, B, having an enlarged base, within which is stepped a vertical spindle, C, carrying a pinion, D, at its lower end, within the enlarged base, and a pulley, E, at its top, which projects above the hollow column. From the pulley a belt may be taken to the machinery to be driven. F is a short vertical shaft stepped in the bed-plate and carries a cone-gear, G, of three different diameters, the largest at the bottom, engaging with the pinion D through a segment-slot in the

base of the hollow column. H is a spur-gear, with a long sleeve slipped over the column B, with one or more sweeps, I, attached to its upper end. The gear H engages with the smallest gear at the top of the cone G, giving it motion in the rotation of the sweep, and through it the spindle C. J is a spider and sleeve slipped over the sleeve of the gear H, and has attached to its periphery an annular wooden platform, K, having a series of toothed segments bolted to its inner edge, forming an internal gear, L, which meshes with the middle gear of the cone G. In the rotation of the platform, opposite to the motion of the sweep, its gear imparts a movement to the gear G the same as given by the sweep. The platform is supported on a series of rollers, a, journaled in short standards rising from the bed-plate.

When the horse exerts his strength to draw the sweep around he also pushes the platform in the contrary direction, so that whatever useful power he fails to develop by the sweep he develops through the movable platform. The lower edge of the platform may have beveled gear-segments bolted to it for the purpose of driving a horizontal shaft, taking off a portion of the power developed in that way and direction.

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

The construction and arrangement of the bed-plate A, column B, spindle C, pinion D, pulley E, shaft F, geared cone G, spur-wheel H, sweep I, spider J, platform K, internal gear L, and supporting-rollers a, substantially as and for the purpose set forth.

HENRY I. MARNETTE.

Witnesses:

WM. H. LOTZ,  
EMIL HACKER.