

(No Model.)

2 Sheets—Sheet 1.

G. HADENFELDT.

HORSE POWER.

No. 374,186.

Patented Dec. 6, 1887.

Fig. 1.

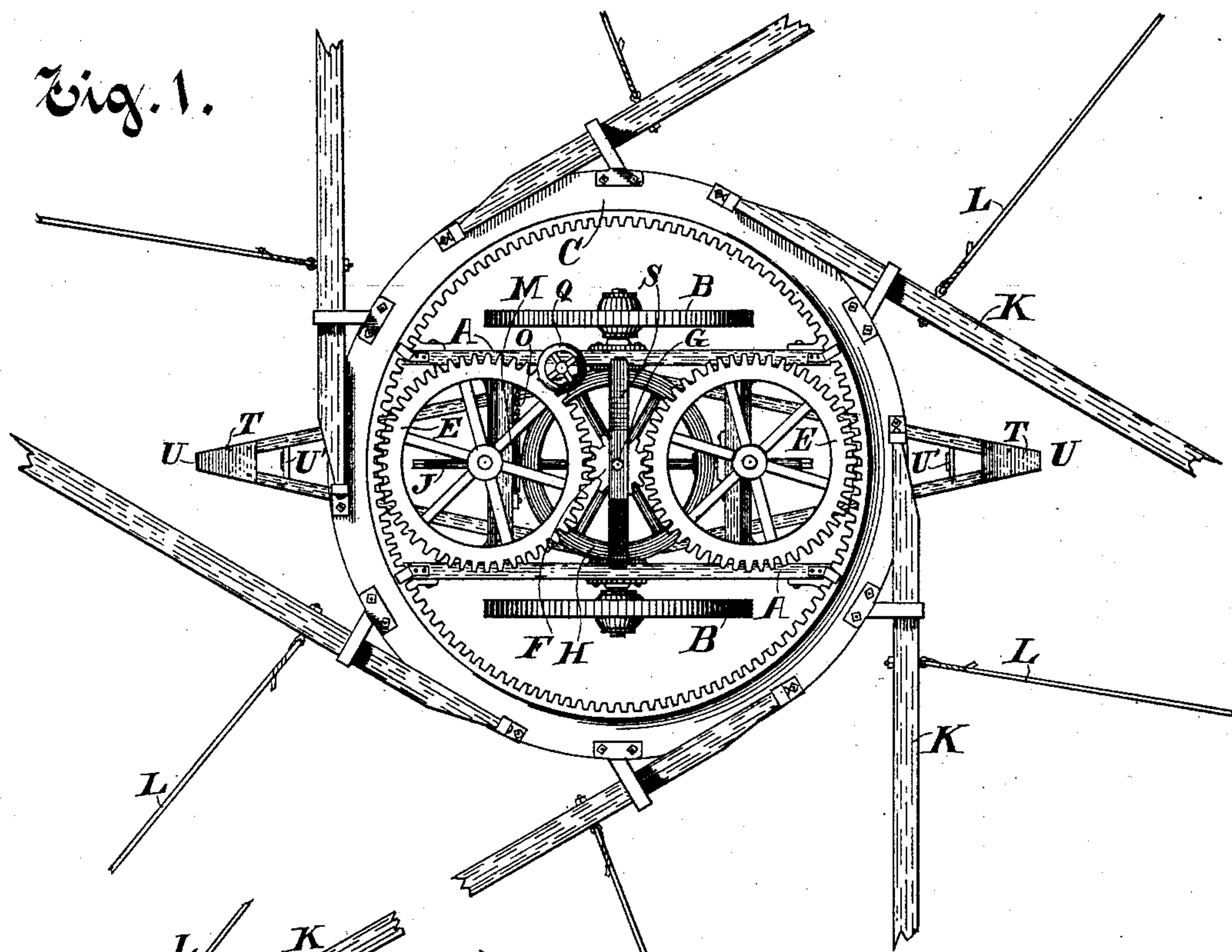
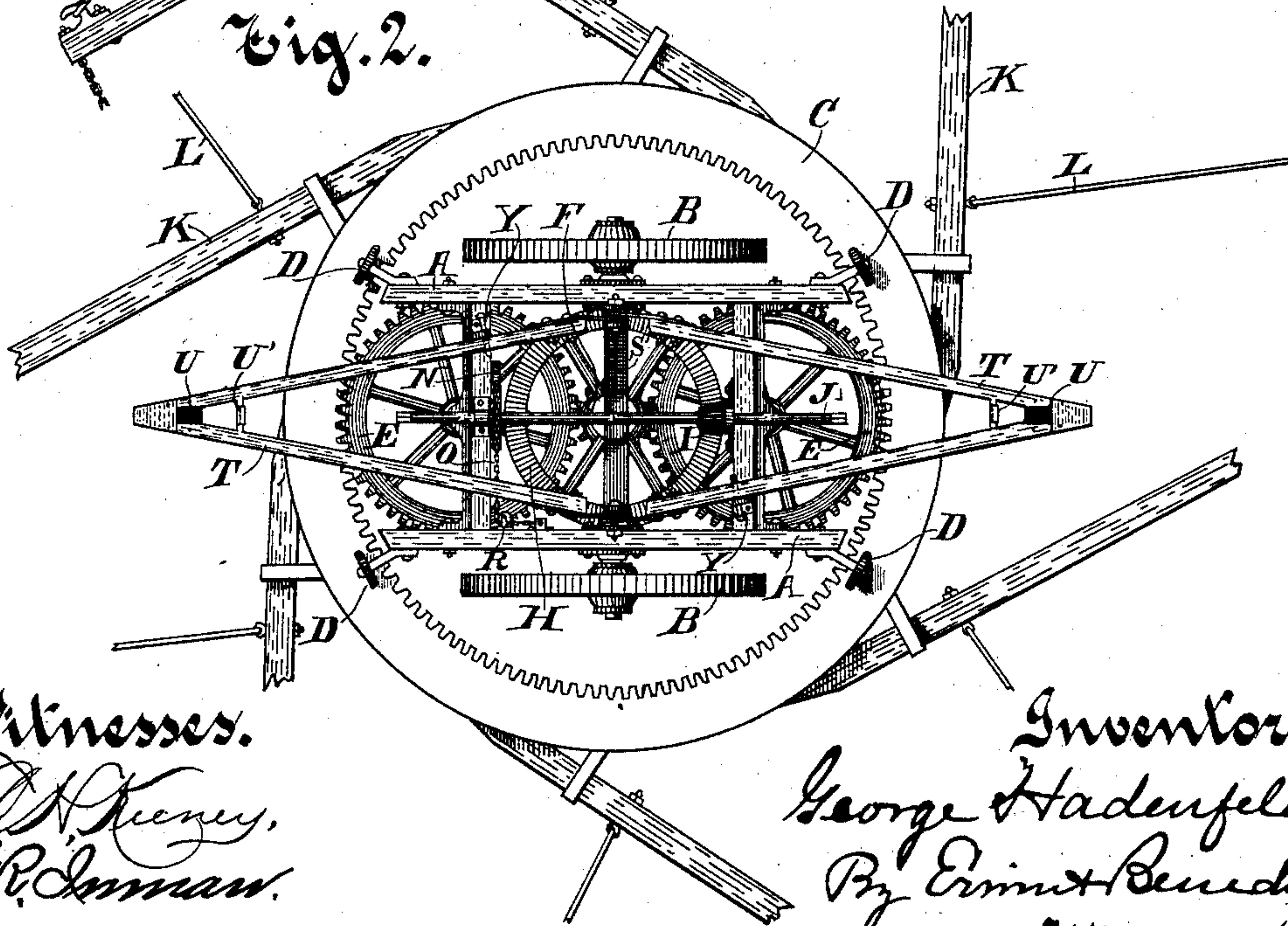


Fig. 2.



Witnesses.

A. H. Kneary,
E. R. Linnan.

Inventor.

George Hadenfeldt
By Ernest Benedict
Attorneys.

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Fig. 3.

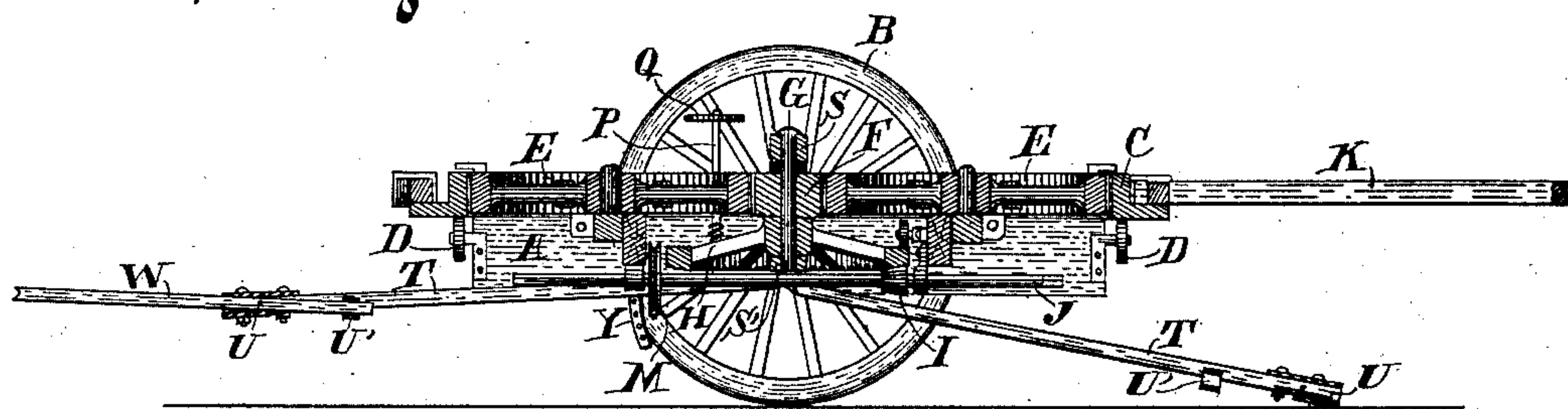


Fig. 5.

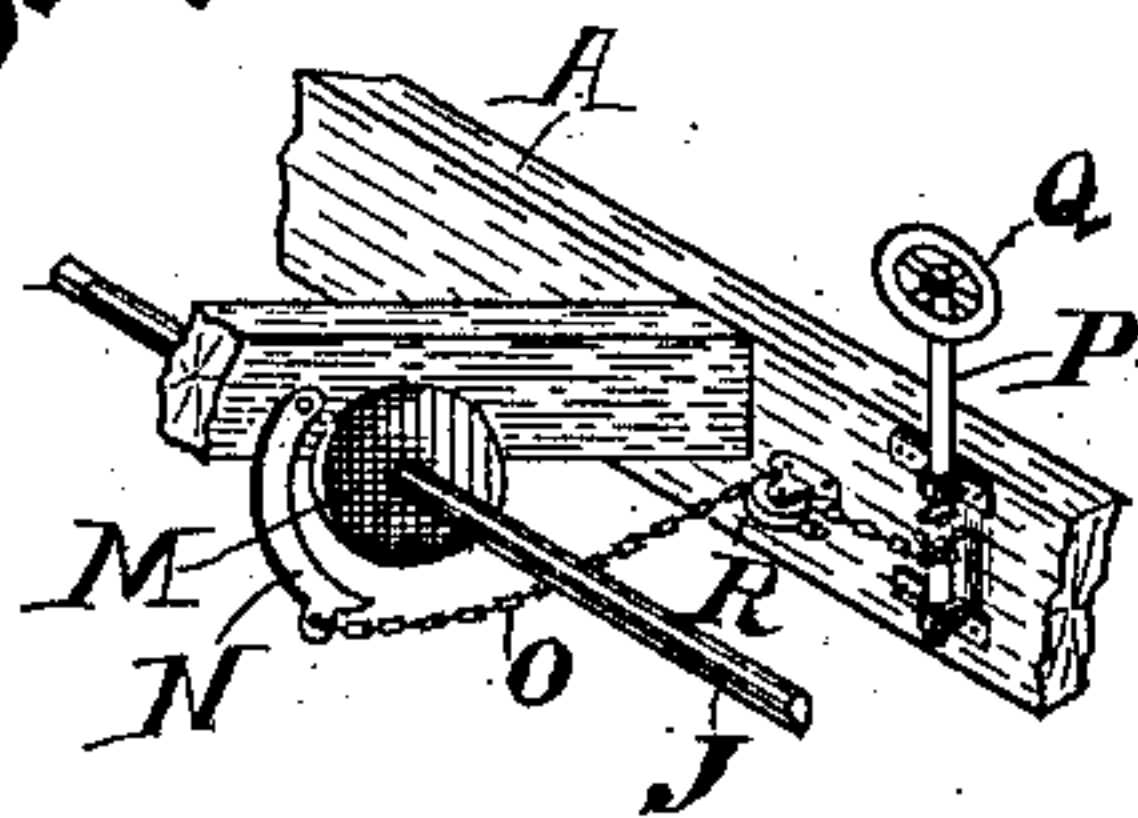


Fig. 6.

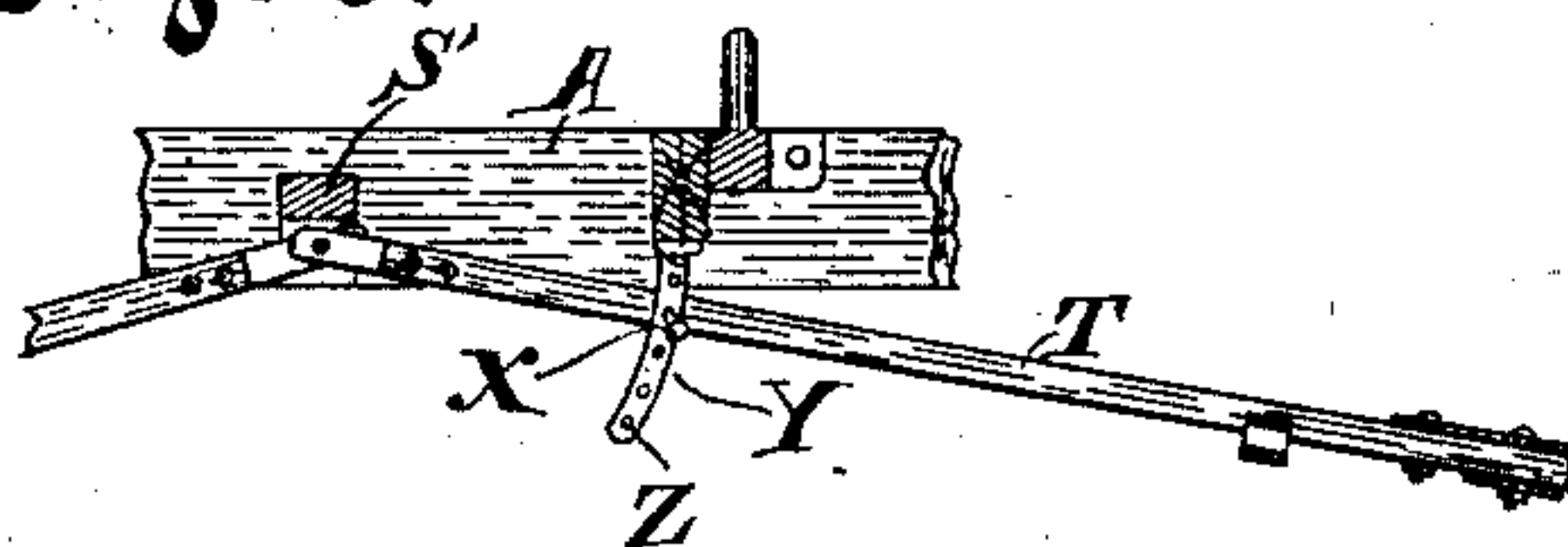
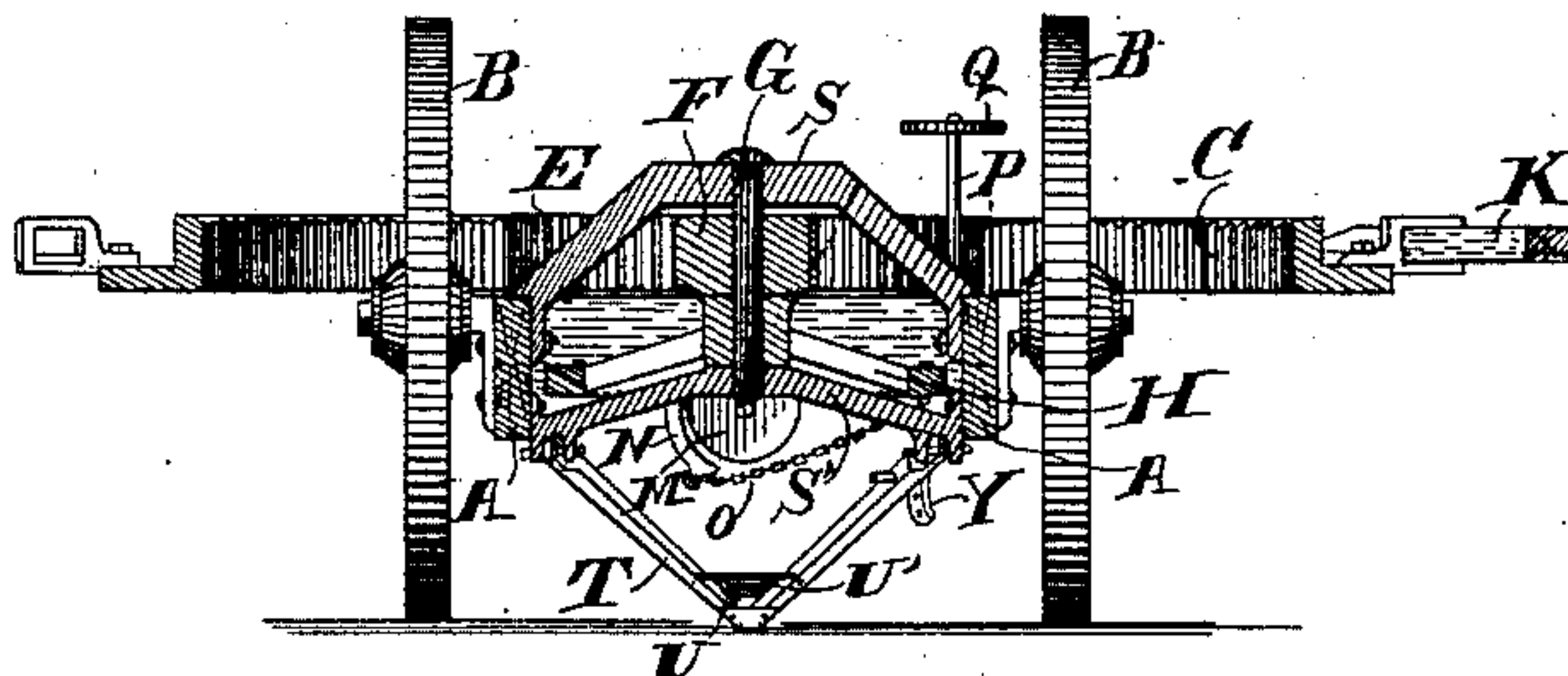


Fig. 4.



Witnesses.
O. H. Keeney,
E. R. Inman

Inventor.
George Hadenfeldt
By Ernest Benedict
Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE HADENFELDT, OF IDA GROVE, IOWA.

HORSE-POWER.

SPECIFICATION forming part of Letters Patent No. 374,186, dated December 6, 1887.

Application filed May 2, 1887. Serial No. 236,786. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HADENFELDT, of Ida Grove, in the county of Ida and State of Iowa, have invented new and useful Improvements in Horse-Powers; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to that class of horse-powers which are particularly adapted for use in connection with thrashing-machines or other agricultural implements now commonly used on farms.

My invention consists in the peculiar form and construction of the various parts of the mechanism and in their location and arrangement and in their combination with each other and in the complete device.

In the drawings, Figure 1 is a top view or plan of the complete device. Fig. 2 is a view of the bottom or under plan of the device shown in Fig. 1. Fig. 3 is a central vertical longitudinal section of the device shown in Fig. 1. Fig. 4 is a central vertical cross-section and view of the device shown in Fig. 1. Figs. 5 and 6 are details.

The device is supported on the oblong frame A, which is provided with rigid arbor-axes, which enter and carry the supporting and traveling wheels B B.

My device is so constructed that I am enabled to use for moving it from place to place only two wheels, B B, and these of large size, thereby providing for easy draft, while the mechanism is located mostly at or below the axes of the wheels B B. The large internally-cogged driving-wheel C is supported and travels on small anti-friction bearing-wheels D D, which are supported and rotate on short arbor-axes rigidly affixed to the frame A. This driving-wheel C is located on the frame A about the wheels B B, and its cogs mesh with the gear-wheels E E, located and rotating in the same plane with the wheel C. The gear-wheels E E mesh with the pinion F, which rotates on and about the central vertical pin, G. There is also on the pin G, below and integral with the pinion F, the larger bevel

crown-wheel, H, which in turn meshes with the bevel-pinion I, rigid on the driving-shaft J.

The gear-wheels E E and shaft J are respectively journaled in the frame A. The several sweeps K K, to which the horses are attached for supplying the motive power, are each secured to the periphery of the driving-wheel C by entering brackets affixed to said wheel.

L L are stay-rods, one of which is attached to the front side of each sweep near its inner end and at its other extremity is attached to the outer end of the preceding sweep.

Rigid on the driving-shaft J, near one of the cross-beams of the frame in which the shaft is journaled, is a friction-wheel, M. A curved brake-arm, N, is pivoted at one end to a cross-beam of the frame A, near to the friction-wheel M, and is adapted to be forced against and stop the motion of the wheel M and its driving-shaft J. A chain, O, is attached at one end to the free swinging end of the brake-arm N, and at the other end is attached to and is adapted to wind upon the vertical rotating shaft P. The shaft P is journaled in bearings in the frame A, and is provided at its upper extremity with a rigid wheel hand-crank, Q.

For changing the line of motion of the chain O, if made necessary by the relative location of the brake-arm M and shaft P, a bearing-pulley, R, is supported in a bracket affixed to the frame A, and the chain O runs over this pulley R.

For securing a proper support for the center pin, G, two cross-beams, S S', one above the other, are secured at both ends to the frame A, and the pin G is supported at its upper and lower ends, respectively, in the upper and lower cross-bars, S S'. Two V-shaped braces, T T, are pivoted at the separated ends of their arms to the extremity of the cross-beam S'. One of these braces extends each way from the central cross-beam, S', and is adapted at its free vertex end to rest upon the ground and serve as a brace to hold the device steady in position, and is also provided with a socket and bracket, U and U', adapted to receive the end of a tongue, W, for attaching a team to the device for hauling it from place to place. These braces T T are both adapted to rest

on the ground and secure the device in position when the horse-power is in use as a horse-power, and are both adapted as hounds for the reception of the tongue W, which tongue
5 may be attached to either one of the braces, whereby the device can be hauled from one place to another with either end at the front, as desired. Hanging brackets Y Y are secured to the frame A, near to the arms of the
10 braces T T, at a distance from the point at which they are pivoted to the frame, and each of these brackets Y Y is provided with a series of apertures, Z, through which a pin, X, is adapted to enter and pass through a corre-
15 sponding aperture in the arm of the brace T, whereby the free ends of the braces may be held down or supported at any height desired. It will be understood that by the use of these
20 two sets of independent swinging and adjustable braces, one set extending to the front and the other to the rear, the frame may be as readily leveled and held in position on inclined or hilly ground as on level ground, while any
25 supporting mechanism having a constant vertical height would be inadequate for such purpose without separate propping up.

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

1. A horse-power consisting of a frame, A, the thereon-supported horizontally-rotating 30 and internally-cogged driving-wheel C, with the thereto-attached sweeps K K, in combination with two gear-wheels, E E, and a there-with-meshing pinion, F, rotating in the same
35 plane with the driving-wheel C, the vertical pin G, bevel-wheel H, bevel-pinion I, and driving-shaft J, all substantially as described.

2. A large internally-cogged driving-wheel, C, with gear-wheels E E, all supported on a
40 frame, A, and the frame A supported and carried on two large wheels, B B, the frame A and its supported mechanism being located at and near the line of the axis of the wheels B B, the said wheels B B being so large as to extend considerably above the top surface of the
45 described mechanism, all substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE HADENFELDT.

Witnesses:

ED. G. BOWMAN,

C. E. LLEWELLYN.