

D. GEISER.
Horse-Power.

No. 163,472.

Patented May 18, 1875.

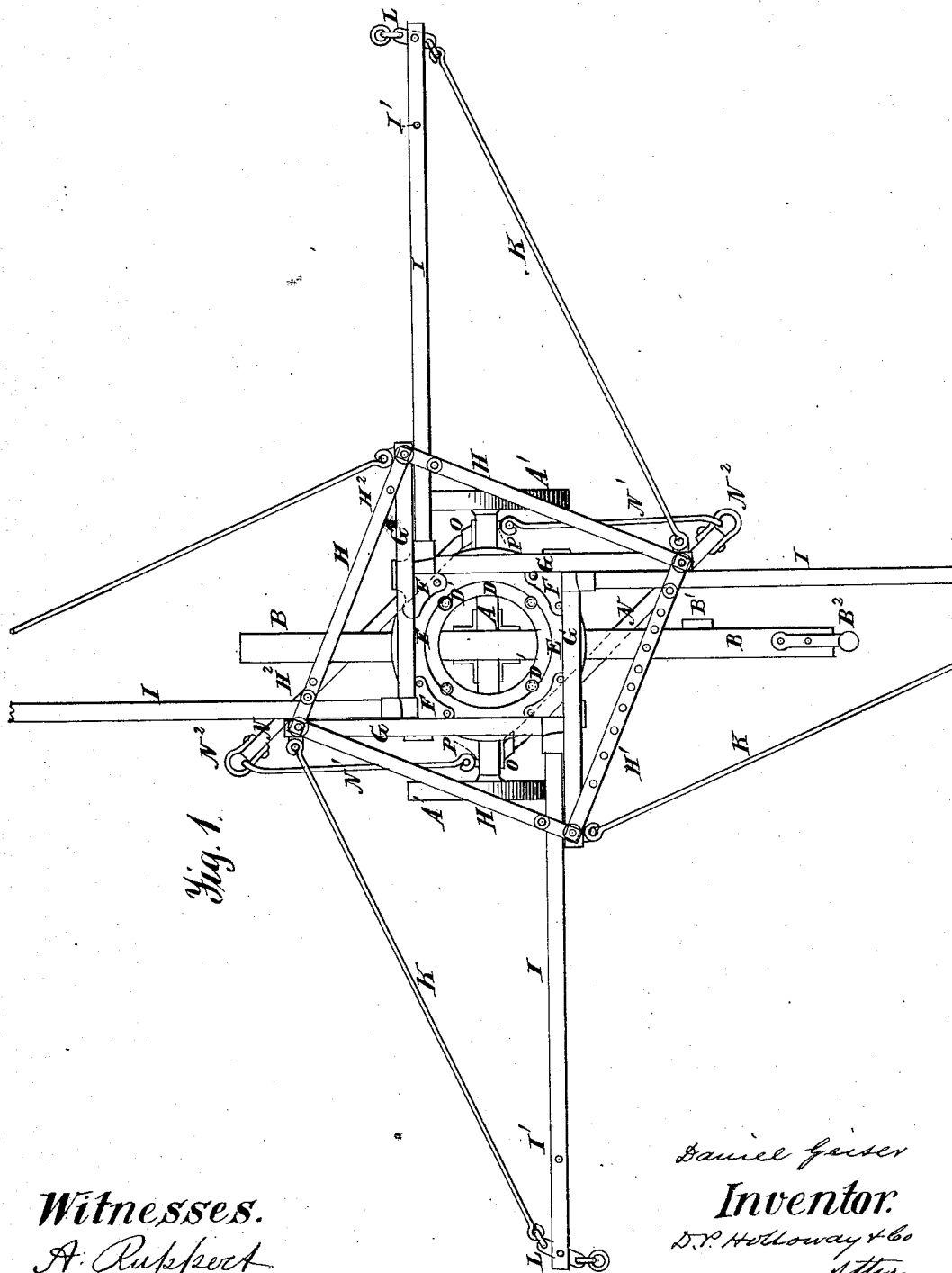


Fig. 1.

Witnesses.
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 Jos. Schildman

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 Inventor.
 D. P. Holloway & Co
 Atty.

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Fig. 2.

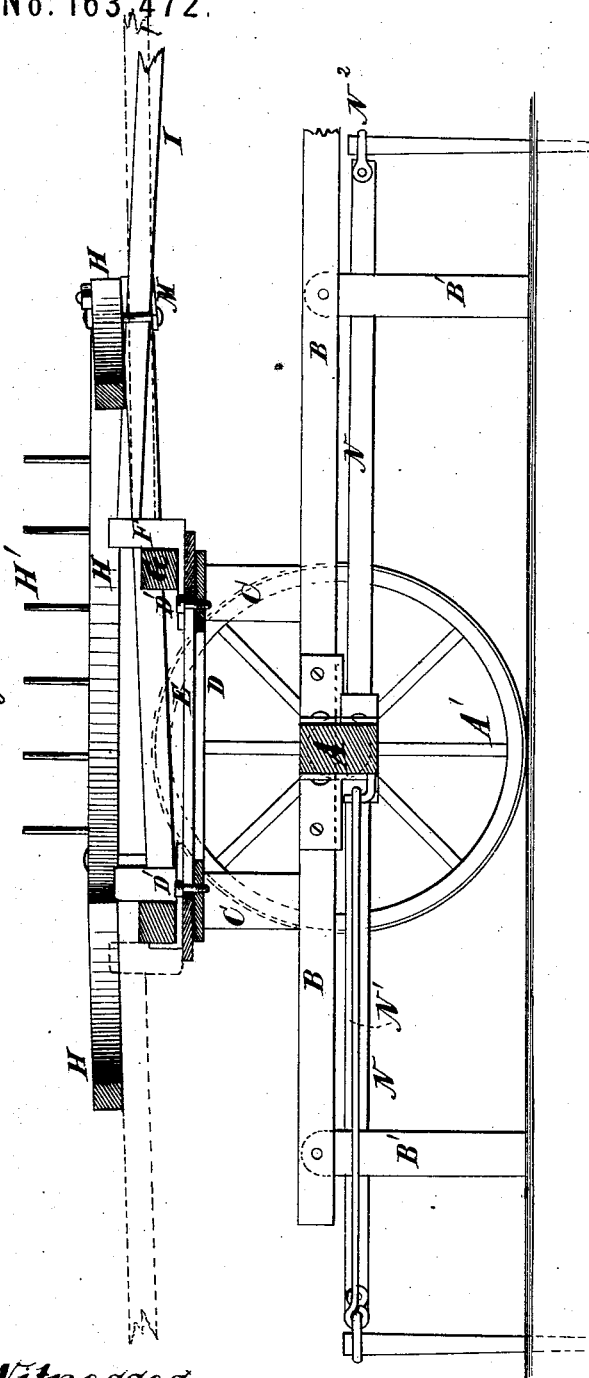
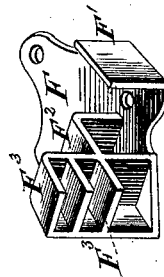


Fig. 4.



Fig. 3.



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UNITED STATES PATENT OFFICE.

DANIEL GEISER, OF WAYNESBOROUGH, PENNSYLVANIA.

IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. **163,472**, dated May 18, 1875; application filed March 24, 1875.

To all whom it may concern :

Be it known that I, DANIEL GEISER, of Waynesborough, in the county of Franklin and State of Pennsylvania, have invented new and useful Improvements in Horse-Powers; and I do hereby declare that the following is a specification of the same.

This invention relates more particularly to improvements in two-wheeled horse-powers, such as may be attached to a separator and drawn by the same team. It is, however, in some of its features, adapted to other horse-powers.

My improvements relate to certain peculiarities of construction, to be hereinafter designated, for facilitating the attaching and detaching and transportation of the horse-power.

In the annexed drawings, making part of this specification, Figure 1 is a plan view of the horse-power set up and ready for operation. Fig. 2 is a longitudinal section, showing by the dotted lines the different inclinations which may be given to the levers. Fig. 3 is a perspective view of a socketed bracket used for strengthening the frame, and also for attaching the levers; and Fig. 4 is an elevation of one of the levers.

The same letters are employed in the figures in the indication of the same parts.

The horse-power is transported upon a truck composed of the axle A and wheels A' and beam B, at right angles, and securely framed to the axle. The beam B has folding legs B' to support it when the horse-power is arranged for operation, and give steadiness to the machine, which will then rest on the two wheels and two legs, B'. An eye, hook, or clevis, B², may be used to attach the truck behind the separator. Four posts, C, are framed onto the axle and beam B, and support the fixed annular metallic plate D, which has headed bolts or equivalent guides D', to receive and confine the inner edge of the corresponding annular plate E. Four metallic brackets, F, are secured to the annular plate E, at equal distances apart. These brackets are formed as shown in Fig. 3. An ear, F¹, is turned up to leave a recess to receive the quadrilateral frame G, which extends beyond the bracket, while the other end of the frametimbers is received into a socket, F², in the

next bracket. Three parallel plates, F³, are also cast with the bracket, to receive the ends of the levers I into the different chambers in the bracket, for a purpose to be presently explained.

A supplementary quadrilateral frame is attached to the outer and projecting ends of the pieces G by bolts, one passing through the angle of the supplementary frame and the timbers G, the other, at one side, passing through the frame and a plate, M, which forms, with the upper and side timbers and side bolt, an eye to receive the lever I, to which the horses are attached. A series of pins, H¹, are attached to one of the sides of the frame H, so as to project vertically. The levers I have holes bored through them at I¹ to fit the pins H¹. When they are detached, they are laid across the frame H, the pins H¹ passing through the holes I², to hold the levers on the frame while the machine is being transported. Other pins, H², on the opposite side confine the levers and prevent their slipping off.

The ends of the levers I are mortised, as shown at I², Fig. 4, to receive the plates F³ when the levers are attached by passing them through the eye formed by plate M. The ends of the levers fit snugly between the plates F³, and, by placing them on the different plates, the height of the outer ends of the levers (which rest on plates M) may be adjusted so as to incline upward when the axle rests upon the ground, or to be nearly horizontal, or inclined downward, when the power is used standing on its wheels. In the outer ends of the levers I are slots, receiving the oscillating link L, to which the horses are attached at one end, while the stay-rods K are attached at the other. These are for the purpose of relieving the levers from strain and transferring it to the rods.

In order to expedite the attachment of the horse-power to the earth I employ two bars, N N, on opposite sides of the axle, and having one end resting in a socket, O, bolted to the axle, and the other carrying a clevis, N², fastened by a pin, on which it can turn. Stay-rods N¹ are formed with an eye on each end, through one of which the clevis passes, and the other is intended to engage the hook P, also fastened to the axle. The bar and rod,

when attached, make, with the axle, a right-angled triangle, the angles being on opposite sides of the beam B. To secure the horse-power it is only necessary to attach the beams and rods, and then to drive stakes through the clevis into the earth. In transporting the horse-power the beams N and rods N¹ are carried on the pins on the auxiliary frame H with the levers I.

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

1. In combination with the frame formed of the beams G, the auxiliary frame H, attached to the outer ends of the beams G, so as to form diagonal braces, substantially as set forth.

2. The auxiliary frame constructed with pins H¹ H², engaging the levers I and bars N, for compactly and securely packing such pieces for transportation.

3. In combination with the beams G, the brackets F, attached to the annular plate E, and constructed with recesses, one to receive the end of one beam, and the other to receive the outer end of another beam, and yet another

to receive the inner end of the levers I, substantially as set forth.

4. In combination with the levers I, the brackets F, constructed with a series of plates, forming recesses to receive the levers and hold them, in connection with a stationary eye, at different inclinations, substantially as set forth.

5. In combination with the two-wheeled truck of a horse-power, a beam, B, at right angles to the axle A, and adjustable legs B¹, substantially as set forth.

6. In combination with the axle A of the truck which supports a horse-power, the adjustable bars N and rods N¹, attached thereto for securing the horse-power, substantially as set forth, when either down or mounted.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL GEISER.

Witnesses:

E. ELDEN,

H. M. SIBBET.