

[84.]

No. 119,404.

Patented Sep. 26, 1871.

W.M. Pitts' Combined Scraper and Cultivator:

Fig. 1.

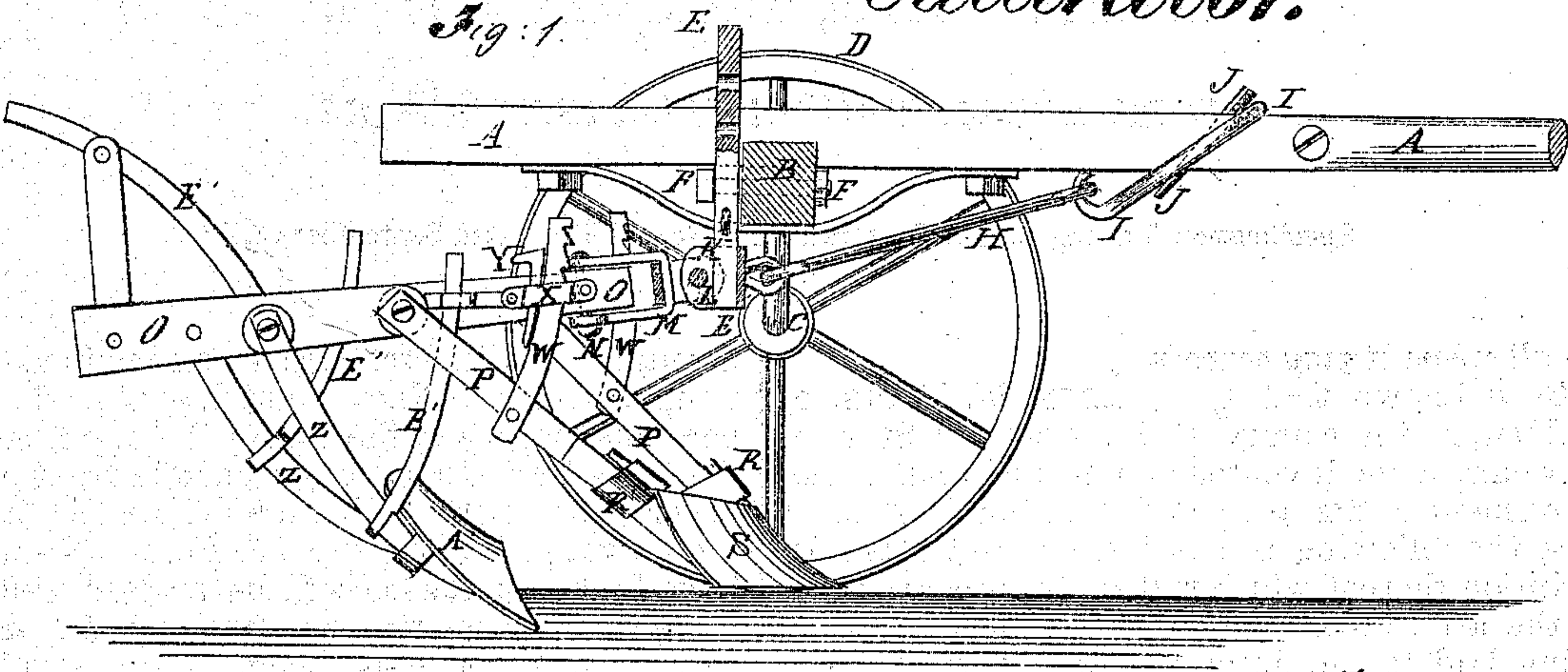


Fig. 2.

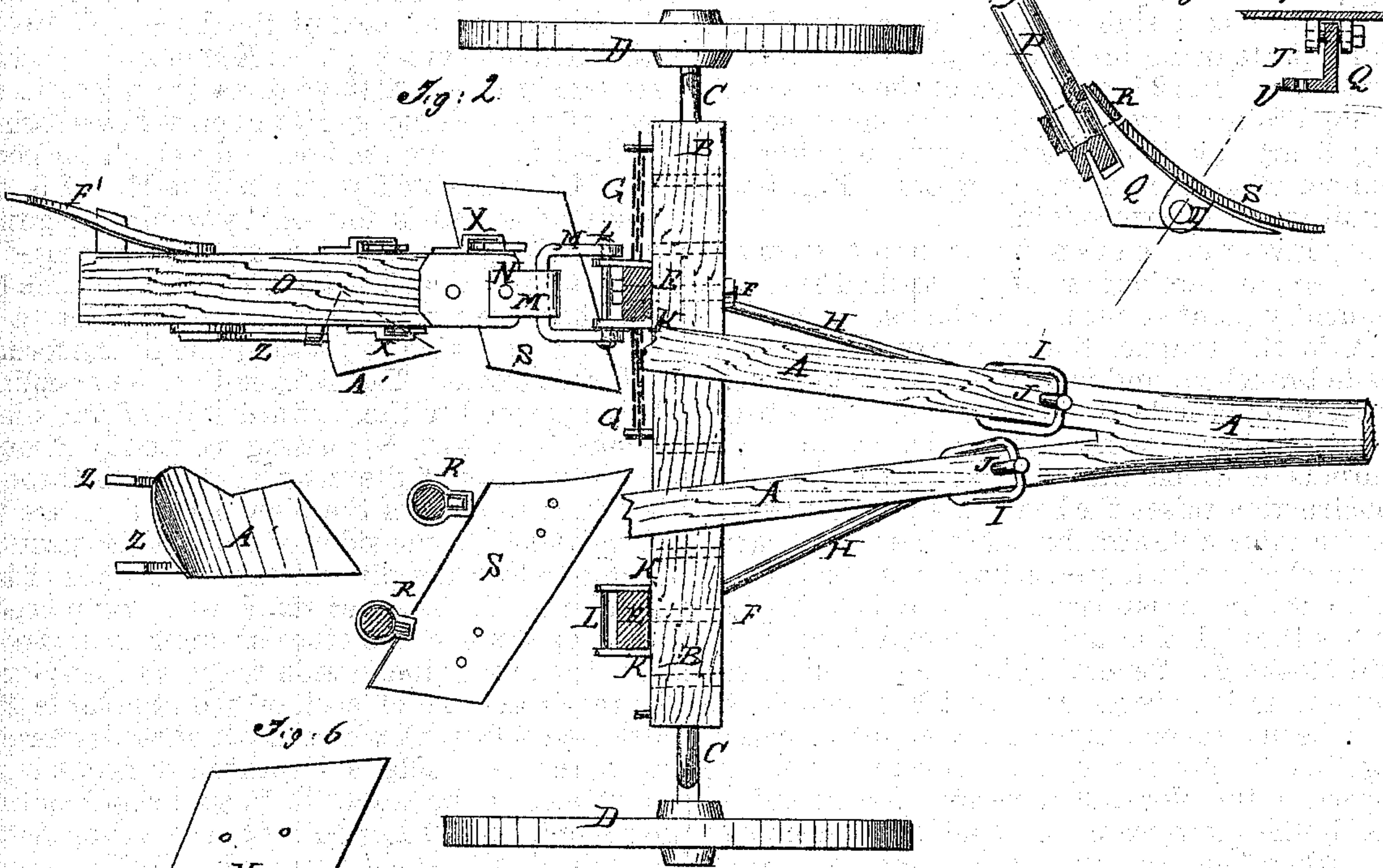


Fig. 3.

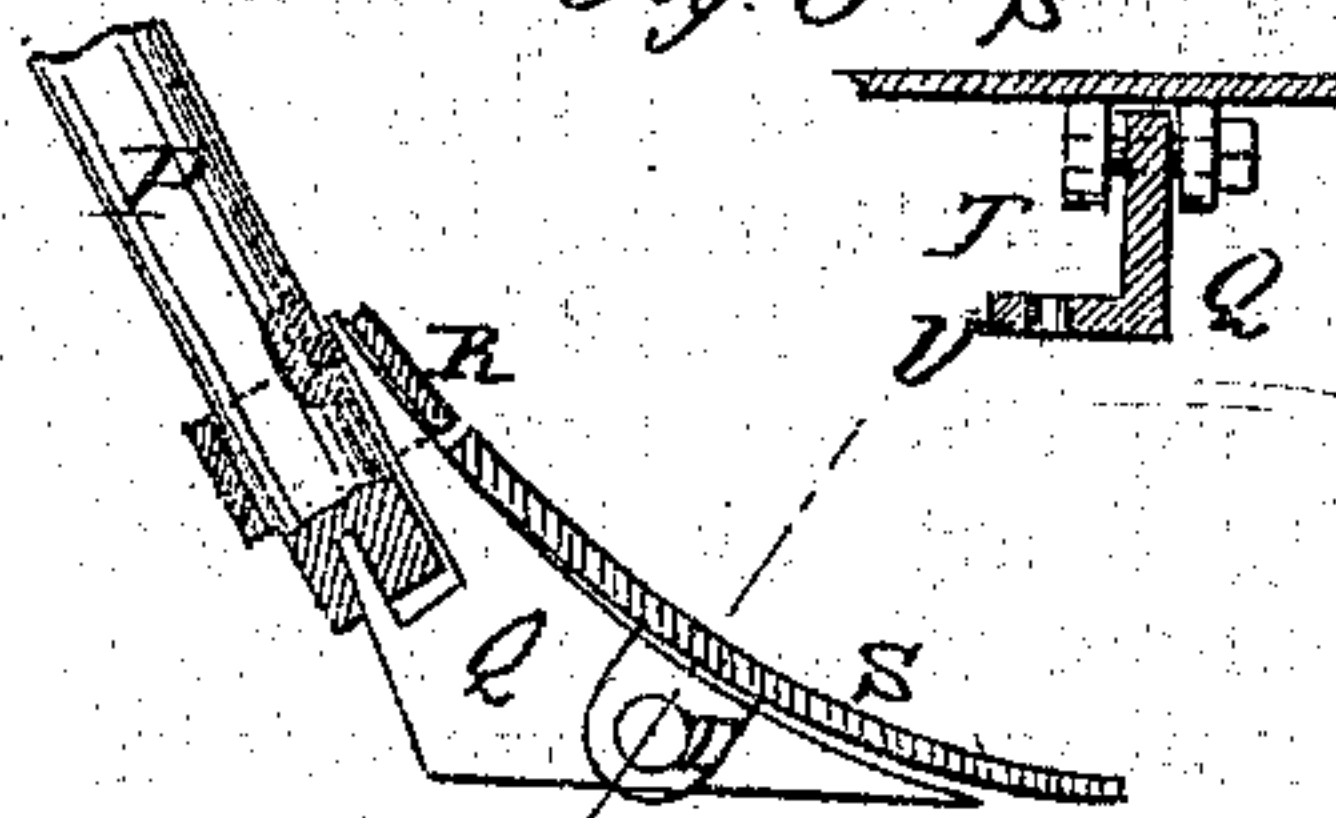
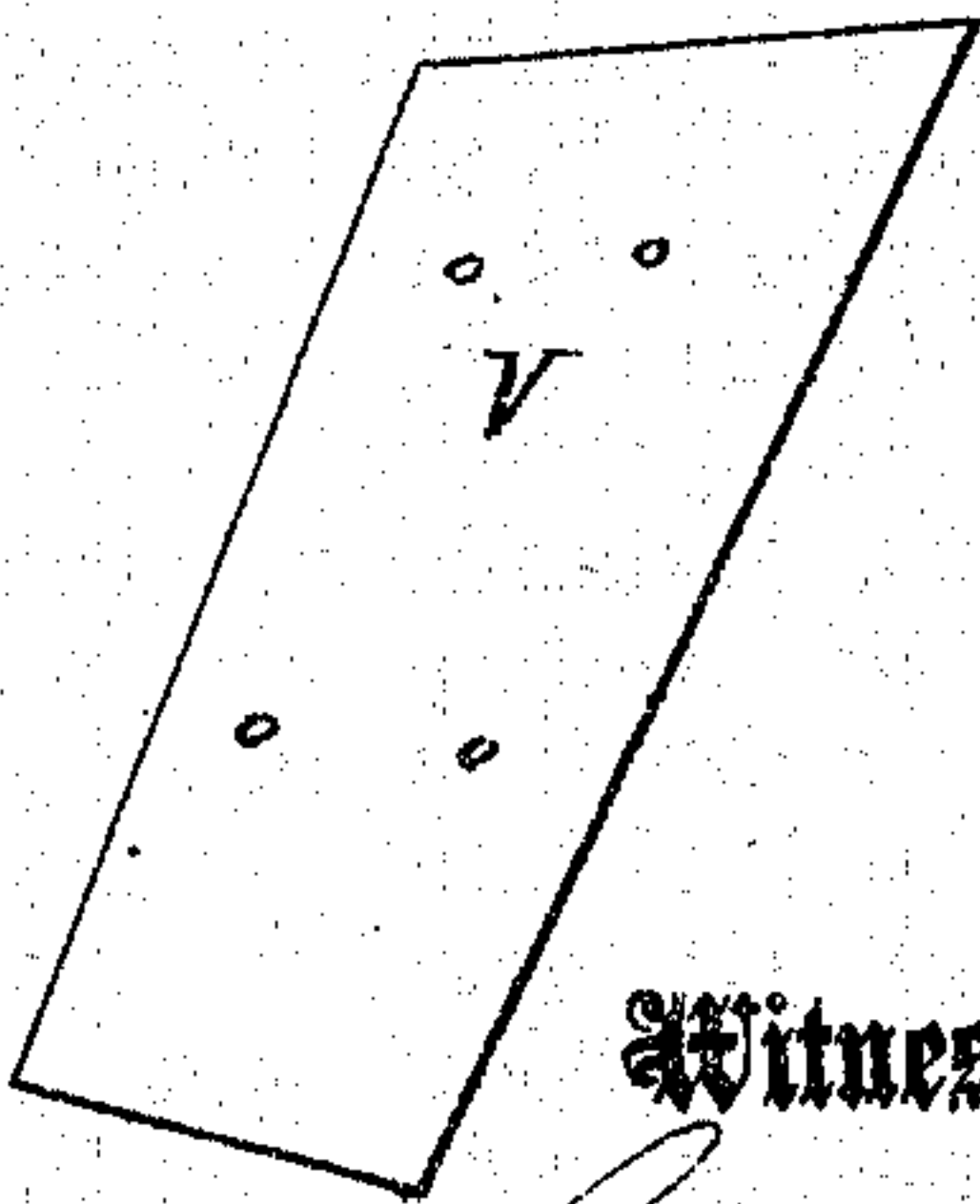


Fig. 6.



Witnesses:

Chas. Nida
Gustave Dietrich

Inventor:

W. M. Pitts

PER Minn. Co.
Attorneys.

UNITED STATES PATENT OFFICE.

WARREN M. PITTS, OF HOLDEN, MISSOURI.

IMPROVEMENT IN WHEEL-CULTIVATORS.

Specification forming part of Letters Patent No. 119,404, dated September 26, 1871.

To all whom it may concern:

Be it known that I, WARREN M. PITTS, of Holden, in the county of Johnson and State of Missouri, have invented a new and useful Improvement in Scraper; 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 make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a side view of my improved machine, parts being broken away to show the construction. Fig. 2 is a top view of the same, parts being broken away to show the construction. Fig. 3 are detail sectional views, showing the manner of attaching the scrapers. Fig. 4 is a detail view of cutter-plate.

My invention consists in the improvement of scrapers, as hereinafter fully described and subsequently pointed out in the claims.

A is the tongue, the rear part of which is made branched, and is securely attached to the cross-beam or axle B. To the ends of the beam B are attached short crank-axes C, upon the journals of which the wheels D revolve. This construction raises the beam B and allows room for the adjustable attachment of the plow-beams. E are blocks which are secured in a vertical position to the cross-beam, B, by a bolt, F, that passes through the said beam B and through the said blocks E. Several holes are formed in the cross-beam B to receive the bolt F, to enable the plow-beams to be conveniently adjusted nearer together or further apart. Several holes are formed in the blocks E to receive the bolt F, to enable the plow-beams to be adjusted nearer to or further from the ground, as may be desired. The lower ends of the blocks E are secured against lateral movement when adjusted by the brace-chains G, the lower ends of which are secured to the side edges of the lower ends of the blocks E, and the upper parts of which are hooked upon pins or hooks attached to the ends and middle part of the cross-beam B. H are the draft-rods, the rear ends of which are pivoted to eyebolts attached to the lower ends of the blocks E. The forward ends of the draft-rods are hooked upon hooks formed upon the lower ends of the links I, which are placed upon the forward parts of the branches of the tongue A, where they are secured in place by the pins J, which are passed

through the said branches in an inclined direction, as shown in Figs. 1 and 2, so that their upper ends may be in the rear of the upper ends of the links I and their lower ends in front of the lower ends of the said links I, thus preventing the forward movement of the lower ends of the links I should the rods H be pressed forward, while at the same time preventing the rearward movement of the upper ends of the said links under the draft strain. To the forward side of the lower end of each of the blocks E are attached short bars or plates K, the ends of which are bent to the rearward so as to project in the rear of the said blocks E, and have holes formed in them to receive the bolt L by which the coupling M is connected to the blocks E. M is the coupling, which is formed by welding together the middle parts of two short bars arranged at right angles to each other. The ends of each bar are then bent toward the other bar into a U-shape, thus giving to the coupling M the form of a double clevis. The rear end of the couplings M are pivoted to the forward ends of the plow-beams by a bolt, N, passing vertically through the rear ends of the couplings M and through the forward ends of the plow-beams. O are the plow-beams, to the sides of the middle parts of each of which are pivoted the upper ends of two standards, P, the inner standard being placed a little in front of the other or outer standard to give the proper inclination to the scraper-plates. To the lower end of each of the standards P is attached a foot, Q, which has a shoulder formed upon the rear side of its shank to fit upon the lower end of the standard P, said shoulder having a point formed upon it to enter a hole in the lower end of the said standard. The upper part of the shank of the foot Q that extends up along the forward side of the standard P has a rearwardly-projecting pin formed upon its upper end, which enters a hole in the forward side of said standard, as shown in Fig. 3. The shank of the foot is then secured to the standard by a sliding or band, R, that is slid down upon the standard P, and is so formed as to fit upon the shank of the foot Q. S are the scraper-plates, to which are riveted or otherwise securely attached lugs T, arranged in pairs, and in such positions as to pass down upon each side of the foot Q, to which they are secured by bolts passing through the said lugs and through the said foot. Upon the

base of each of the feet Q is formed an inwardly-projecting flange, U, having holes formed through it to receive the bolts to secure the cutter-plates V to said flanges when the scraper-plates S have been removed. The cutter-plates V are designed to work just beneath the surface of the ground, in nearly a horizontal position, to cut off the grass and weeds without materially disturbing the soil.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The detachable feet Q constructed and se-

cured to the standards P, substantially in the manner herein shown and described, to receive the scraper-plates S, as set forth.

2. The flanges U, formed upon the sides of the bases of the feet Q to receive the cutter-plates S, substantially as herein shown and described, and for the purpose set forth.

WARREN M. PITTS.

Witnesses:

WILLIAM B. NEWMAN,
JAMES E. HUTCHISON.

(84)