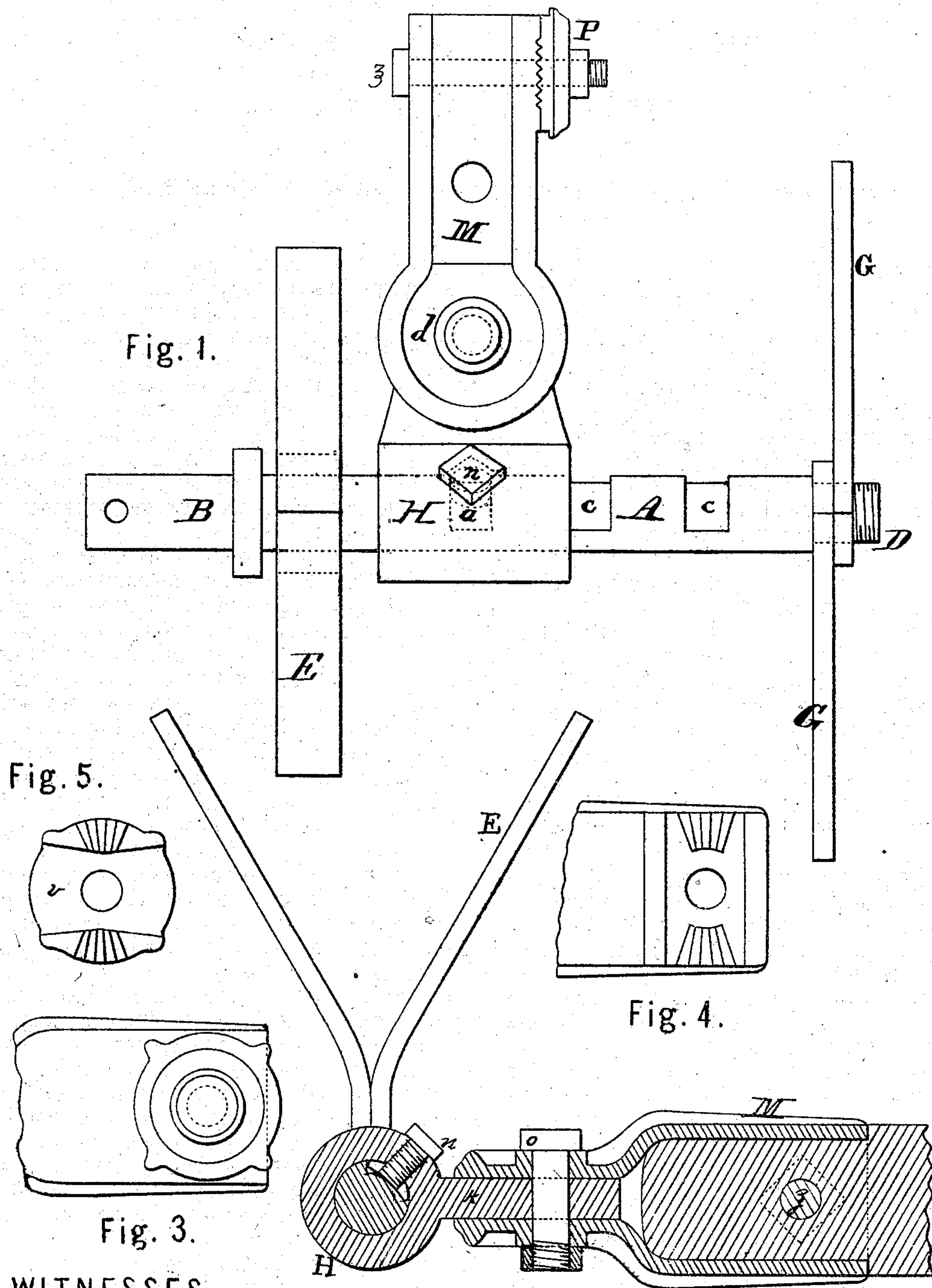


W. H. PLATT.
Cultivators.

No. 137,024.

Patented March 18, 1873.



WITNESSES.

Geo. E. Upham.
A. A. Kane

Fig. 2.

INVENTOR.
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UNITED STATES PATENT OFFICE.

WILLIAM H. PLATT, OF DAYTON, OHIO.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 137,024, dated March 18, 1873.

To all whom it may concern:

Be it known that I, WILLIAM H. PLATT, of Dayton, in the county of Montgomery and State of Ohio, have invented a new and valuable Improvement in Cultivator; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a top view of my invention. Fig. 2 is a vertical sectional view of the coupling. Figs. 3, 4, and 5, are detail views.

My invention has relation to cultivators and sulky-plows, and consists in the novel construction of the axle, the couplings, and braces, as hereinafter described; and it is peculiarly well adapted to that class of cultivators known as the straddle-row, while it is susceptible of use in other descriptions of plows and cultivators.

A in the drawing represents the axle for one side of the straddle-row cultivator, B representing the spindle upon which the wheel is placed. The letters *c c c* represent recesses cut in the side of the axle to aid in the adjustment of the plow-beam, as mentioned hereinafter; and D is a screw-thread formed upon the inner end thereof to receive and hold the inner braces, as is hereinafter more fully set forth. The letter E represents two braces formed of a single bar of flat metal, the central part being bent in the shape of a ring to clasp around the axle, while the ends are made to separate and flare, as shown, thereby forming the outer braces for supporting the rocking frame, to which the tongue of the cultivator is usually attached. These outer braces have their widest or flattened sides on a line parallel with the axle A. G represents the inner braces, the flattened sides of which are arranged at right angles with the axle, and instead of a central ring, like that of braces E, they have enlarged heads, in which screw-threads are formed to correspond with and operate upon the screw on the inner end of the axle. These braces G are attached to the axle, and ad-

justed in the desired position by means of the screw-threads mentioned, and serve as the inner supports of the rocking frame. By arranging the braces at right angles with the axle, and the braces E parallel therewith, as described, great strength is secured, and the rocking frame is held with firmness, both laterally and vertically. The letter H represents a sleeve cast of a single piece of metal. Heretofore such sleeves have been constructed of two or more pieces, united together by bolts or nuts and screws. I find by experiment that great labor and expense may be saved by my method of construction, and, therefore, have adopted it. I form an opening in this sleeve, as shown at *a*, and cut a screw-thread therein to receive the screw-bolt *n*. When this bolt is on duty its point passes into one of the recesses *c* of the axle, and thereby, while permitting a suitable rotary movement, holds the sleeve laterally in the position desired. The letter M represents my socket for attaching the plow-beam to the axle. It is cast of metal, and forms one piece only. The part *d* is slotted, and adapted to fit over the tongue *k* of the sleeve, thereby forming together a tongue-and-groove joint united by the pivot-pin *o*. The plow-beam is attached to the socket by passing its head therein and securing it in place by means of the bolt *z*. The letter P represents a nut or clamp designed for attaching a removable clod-fender to the socket. It is constructed with a recess, *v*, for receiving the shank of the fender, and has serrated surface, as shown, which corresponds with similar surface on the side of the socket, to the end that when the clamp is firmly screwed down in position by the nut and thread on the end of bolt *z* the fender shall be held in firmness and security.

It is apparent that, by means of the nut and thread of the bolt *z*, the clod-fender is attachable and removable at will. It is also apparent that the sleeve H is placed in position upon the axle by being passed inward over the spindle of the axle, or it may be passed over the opposite end thereof.

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

1. In combination with an axle having recesses *c*, the sleeve *H* cast in a single piece, and having bolt *n*, substantially as specified.

2. The braces *E* and *G*, constructed and arranged as described, in combination with an axle having screw-thread *D*, substantially as described.

3. The socket *M*, cast in a single piece, adapted for holding a plow-beam, and for connection with a sleeve, *H*, and having serra-

tions, as shown, to operate in conjunction with the clamp *P* for holding a clod-fender, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

W. H. PLATT.

Witnesses:

D. D. KANE,

GEO. E. UPHAM.