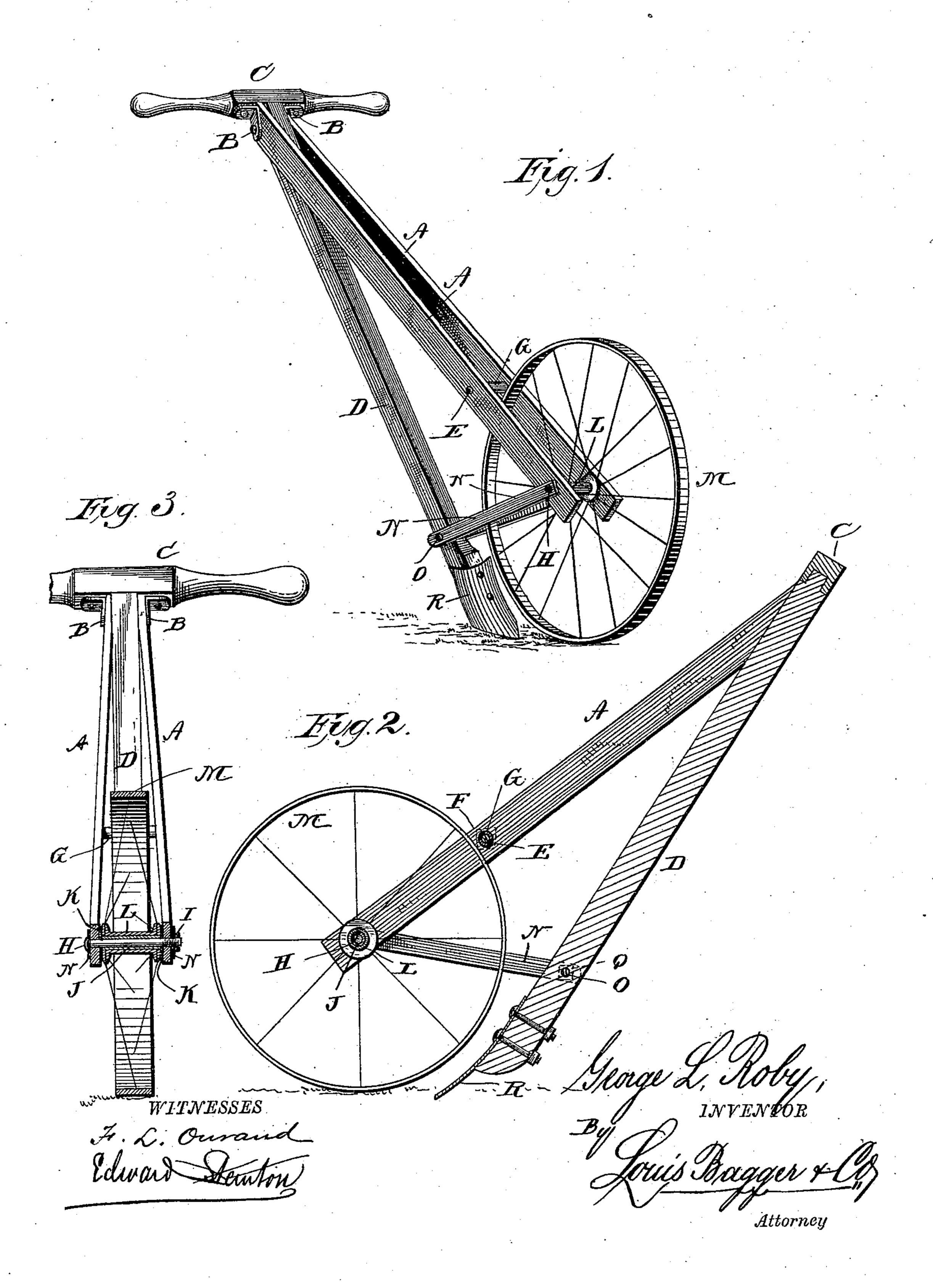
G. L. ROBY.
GARDEN PLOW.

No. 354,739.

Patented Dec. 21, 1886.



## UNITED STATES PATENT OFFICE.

GEORGE L. ROBY, OF WATERLOO, INDIANA.

## GARDEN-PLOW.

SPECIFICATION forming part of Letters Patent No. 354,739, dated December 21, 1886.

Application filed July 12, 1886. Serial No. 207,803. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. ROBY, a citizen of the United States, and a resident of Waterloo, in the county of De Kalb and State 5 of Indiana, have invented certain new and useful Improvements in Garden-Plows; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my im-15 proved garden-plow. Fig. 2 is a longitudinal vertical sectional view of the same, and Fig. 3 is a vertical transverse sectional view on line x x, Fig. 2, looking toward the handle.

Similar letters of reference indicate corre-

20 sponding parts in all the figures.

My invention has relation to that class of garden plows or cultivators in which a shovel | is secured to the rear of a wheel having suitable handles for propelling it in front of the 25 person using the implement; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letters A 30 A indicate two forwardly-projecting framepieces, converging at the rear ends and secured to lips BB, secured to the middle of the transverse handle C, and the upper end of the standard D is secured between the rear ends of the 35 frame-pieces, being secured with a tenon into a mortise in the middle of the handle. The frame-pieces are connected a distance from their lower ends by a bolt, E, having a nut, F, upon its threaded end, and having a sleeve, 40 G, placed upon it, bearing with its ends against the inner sides of the frame-pieces, the said sleeve spacing the frame-pieces from each other. A bolt, H, passes through the lower ends of the frame-pieces, having a nut, I, upon upon the bolt, having its ends bearing against washers K K, interposed between the ends of the sleeve and the inner sides of the framepieces upon the bolt, and the tubular hub L 50 of the metallic wheel M fits and turns upon the sleeve or spindle, having its ends bearing against the washers.

Two braces, N N, are secured with their forward perforated ends upon the ends of the 55 pivotal bolt, being confined by the head and l by the nut of the bolt, and the rear ends of these braces are perforated and secured upon a bolt, O, which passes through one of a series of perforations, P, in the lower end of the standard, the said bolt having a nut, Q.

The shovel R is of the usual construction, and is suitably bolted or otherwise secured to

the lower end of the standard.

It will be seen that by changing the bolt at the rear ends of the braces from one perfora- 65 tion to another the frame-pieces and the wheel may be drawn closer to or farther from the shovel, changing the pitch of the shovel, the upper ends of the frame-pieces being secured movably to the lips on the handle by 70 bolts S, so that the shovel may be adjusted to either stir the ground or to scrape the surface of the ground, as desired.

The sleeve or spindle upon the bolt at the lower ends of the frame-pieces will serve to 75 space the ends of the frame-pieces, and at the same time it will revolve upon the bolt and have the tubular hub of the wheel revolving upon it, thus reducing the frictional resistance for the revolutions of the wheel, as the sleeve 80 or spindle will revolve upon the bolt and the hub will revolve upon the sleeve or spindle, distributing the frictional resistance between the bolt and the sleeve and the sleeve and the hub, the sleeve and the hub performing each 85 a portion of each revolution.

Having thus described my invention, I claim and desire to secure by Letters Patent of the

United States—

In a garden-plow, the combination of a 90 standard having a shovel at its lower end and a transverse handle at its upper end and formed with a series of perforations near the lower end, a lip secured to said handle at each side of said standard, two frame-pieces having a 95 wheel journaled between their lower ends and pivoted at their upper ends to said lips, and two braces pivoted to the lower ends of the frame-pieces and having a bolt at the rear 45 its threaded end, and a sleeve, J, fits and turns | ends fitting in the perforations in the lower 100 end of the standards, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

GEORGE L. ROBY.

Witnesses:

T. J. WOMACK, M. R. DURLING.