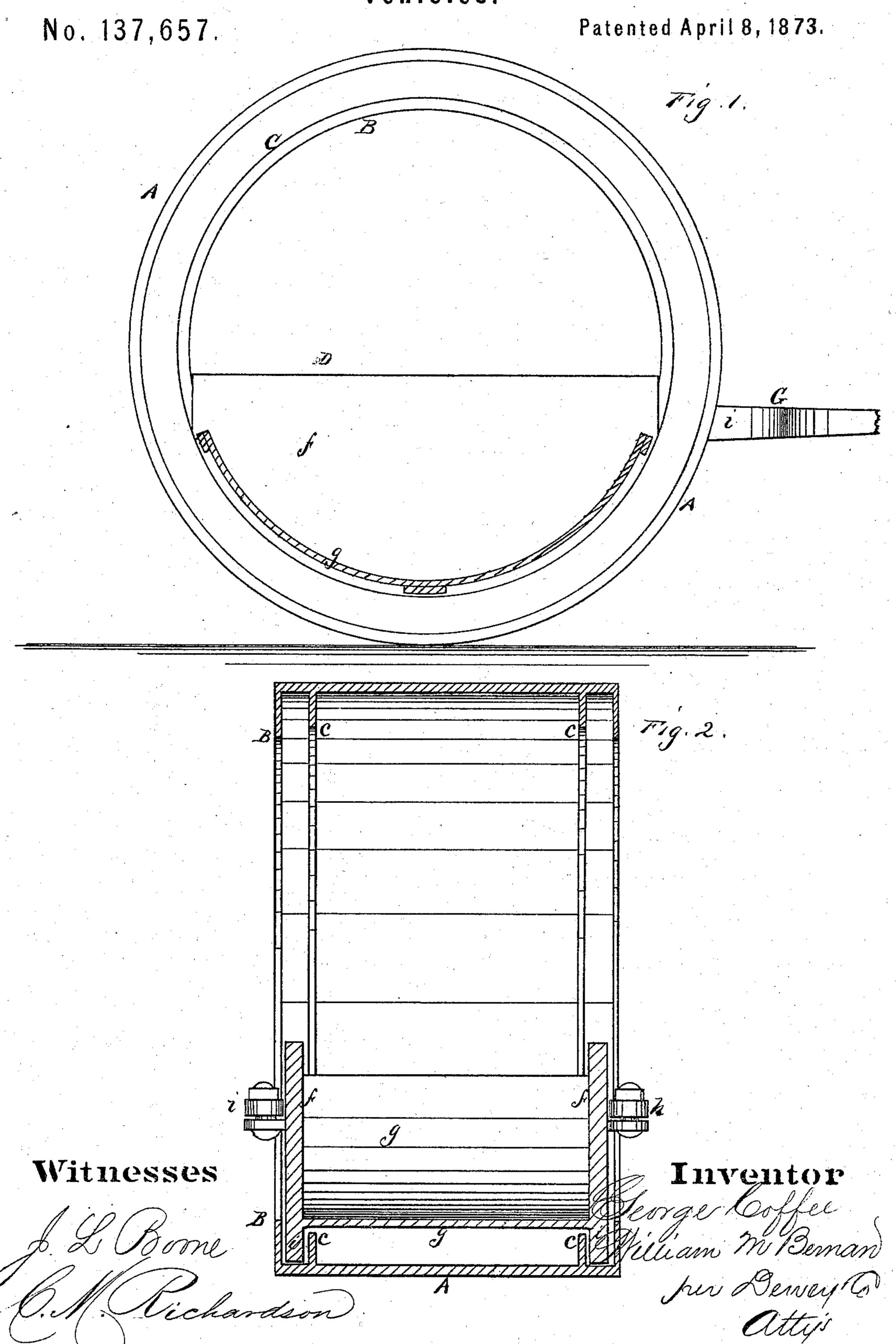
G. COFFEE & W. M. BERNARD. Vehicles.



UNITED STATES PATENT OFFICE.

GEORGE COFFEE AND WILLIAM M. BERNARD, OF DIXON, CALIFORNIA.

IMPROVEMENT IN VEHICLES.

Specification forming part of Letters Patent No. 137,657, dated April 8, 1873; application filed August 23, 1872.

To all whom it may concern:

Be it known that we, George Coffee and William M. Bernard, of Dixon, Solano county, State of California, have invented a Cylinder-Wagon; and we do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use our said invention without further invention or experiment.

Our invention relates to a novel wagon, which is adapted more particularly for farm use; but it can also be used in place of the ordinary wagon in many other places. Our wagon consists of a large hollow drum or cylinder of the desired size, at the opposite inside edges of which is arranged a track. A bed or box, which has semi-cylindrical side boards, is placed inside of the cylinder, so that the circular edges of the side boards will rest in or upon the track. The pole is secured to the bed at one end, and when a draft is applied to the pole the forward pull upon the bed will cause the cylinder to roll forward, while the bed remains at the lowest portion.

In order to more fully illustrate and explain our invention, reference is had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side elevation of our wagon. Fig. 2 is a transverse vertical section.

A represents a large drum or hollow cylinder, which may be made out of sheet metal or other suitable material. A narrow flange, B, extends inward from the outer edges of the cylinder, and a short distance inside of the flange B is another flange, C, the two flanges forming a groove or track entirely around inside of each open end of the cylinder, for the purpose hereinafter mentioned. D is the wagon-bed, and consists of two semicircular side pieces, f f, which may also be made of metal, and between which a curved bottom, g, is secured. The circular edges of the side pieces extend below the curved bottom, as shown at i i, on each side of the bed to a sufficient distance to allow these edges to rest in the bottom of the groove or track formed by the flanges B C, while the curved bottom passes above the inner flanges C C,

and the bed is of the proper width to allow the opposite downward-projecting edges to rest in the opposite tracks. The pole G has its rear end separated into parts h i, and these parts are bent so as to pass to each side of the drum and be fastened to one end of the wagon-bed D.

Now, when power is applied to the pole G, the pressure of the forward end of the bed against the cylinder causes it to revolve, and, as it moves, the bed by its weight remains at the lowest point of the circle in the proper position to keep up the revolution of the cylinder.

Friction-rollers can be secured in the tracks B C, upon which the edges of the side boards may rest, and, as a consequence, the bed will move more freely in the tracks, while the amount of draft required to move the cylinder will be reduced by the loss of friction.

This wagon can be used for most all of the purposes for which an ordinary wagon is employed. It can also be used as a roller for leveling a field and pulverizing plowed ground; and, by attaching proper gearing and a sicklebar, it can be converted into a header, in which case the horses will be hitched to the pole so as to push the cylinder in front of them, while the reaping attachment is secured to the opposite side.

For heavy loads this wagon will be found excellent, as it will move readily over soft and marshy ground without cutting deep into it like an ordinary wheel; besides this, it requires a less amount of power to move it, on account of the great leverage the team has against the cylinder.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The drum A with its flanges B C, in combination with the bed D, constructed with the flanges i i and tongue G, all constructed, arranged, and operated as set forth.

In witness whereof we hereunto set our hands and seals.

GEORGE COFFEE. [L. s.] WM. M. BERNARD. [L. s.]

Witnesses:

J. L. Boone,

C. M. RICHARDSON.