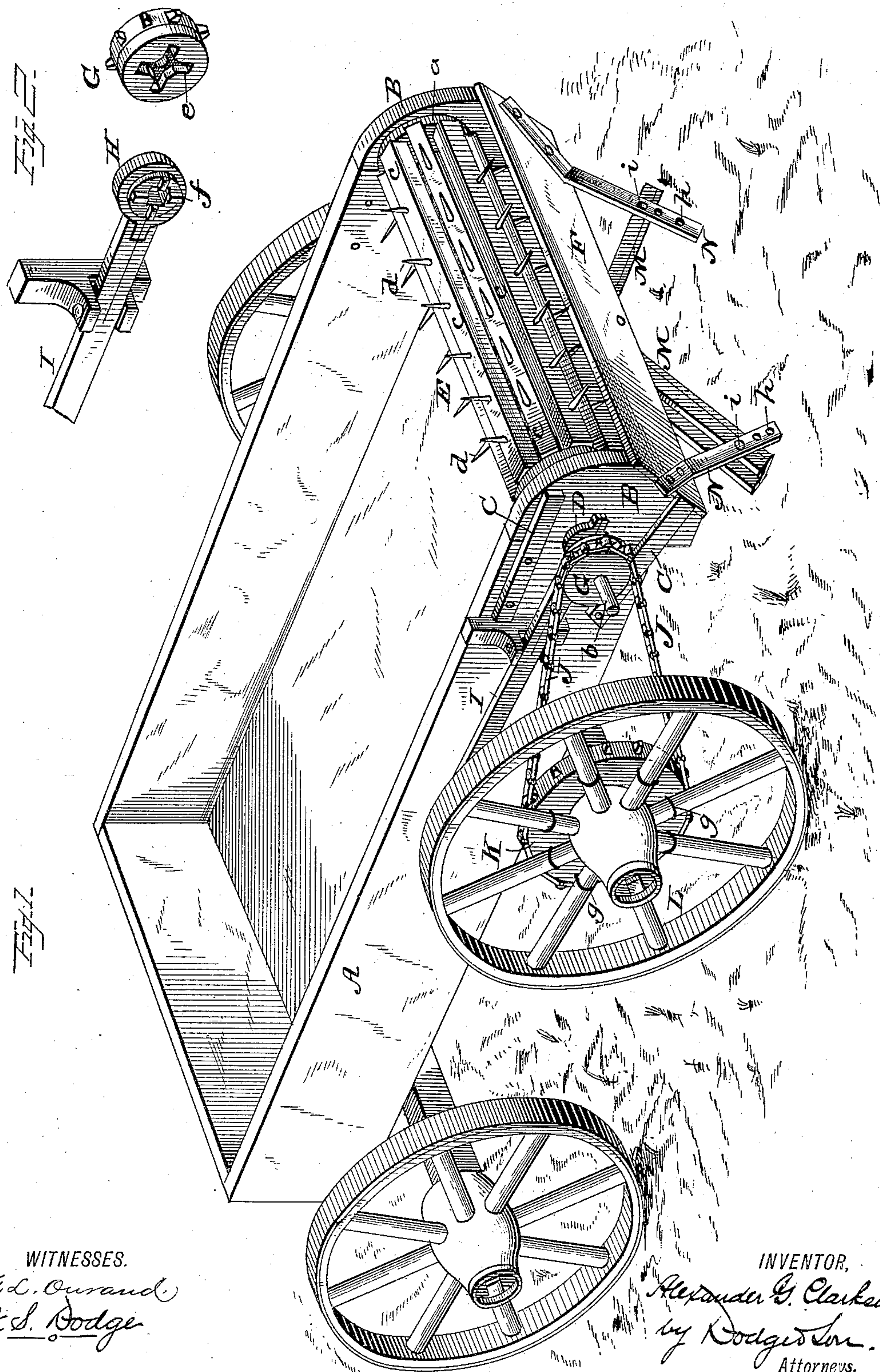


(No Model.)

A. G. CLARKSON.
FERTILIZER DISTRIBUTER.

No. 307,527.

Patented Nov. 4, 1884.



WITNESSES.
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UNITED STATES PATENT OFFICE.

ALEXANDER G. CLARKSON, OF WATEREE, SOUTH CAROLINA.

FERTILIZER-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 307,527, dated November 4, 1884.

Application filed November 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER G. CLARKSON, of Wateree, in the county of Richland and State of South Carolina, have invented certain Improvements in Fertilizer-Distributers, of which the following is a specification.

My invention consists in a fertilizing-distributing attachment for ordinary farm-wagons, as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 represents a perspective view of a wagon provided with my improvements, and Fig. 2 a perspective view of the clutch detached.

The need of an efficient fertilizer-distributer is well known and appreciated, and various machines for the purpose have been devised, some of which give very good results. Such machines are, however, expensive, and as they are used but a short time each year few farmers can afford to pay the price thereof. The purpose of this invention, therefore, is to provide a cheap and simple attachment which may be quickly and easily applied to ordinary farm-wagons and made to serve the purpose of the more costly machines specially designed to perform the same class of work. To this end I construct the device in the following manner:

A indicates the body of an ordinary farm-wagon, and B B two plates or boards, each provided with a forwardly-extending arm or bar, C, to fit against and to be bolted to the sides of the body A, and each having boxes or bearings D to carry the journals of a rotary cylinder, E, which extends across the rear end of the body from side to side, and serves to draw the material therefrom and discharge it into a hopper, F, beneath.

The cylinder E may be made either of wood or of metal, and may conveniently consist of circular heads *a*, secured upon the shaft *b*, and connected by longitudinal slats or bars *c*, carrying spikes or teeth *d*, to loosen up and draw out the material placed in the wagon-body.

The shaft *b* carries at one end a loose sprocket or band wheel, G, the hub of which is formed with seats or recesses *e* on its side face to lock with teeth or projections *f*, formed on a sliding collar, H, which is prevented by a spline or feather from rotating independently of shaft *b*, though free to move longitudinally thereon. A shifting-lever, I, pivoted to the end plate,

B, serves to shift the collar H and to engage or disengage the clutch, as required, said lever being advisably provided with a locking or friction device to hold it in its adjusted position.

Motion is imparted to the cylinder E by a belt, chain, or band, J, passing about the wheel G, and also around a similar wheel, K, applied to one of the wheels, L, of the wagon.

In order that the wheel K may be conveniently applied to any ordinary wagon-wheel, it is made of annular form with a central opening large enough to pass over any ordinary hub, and is perforated to receive bolts or screws *g*, by which it may be secured either to the spokes or to the hub of the wheel.

For the purpose of regulating the points of delivery of the material and the width of space covered thereby, I place beneath the hopper F two hinged or swinging troughs or spouts, M, which are pivoted at or about the middle of the trough, and free to rise and fall at their outer ends when not held at a determined position by means provided for the purpose.

N indicates a swinging bar or metal strap, attached at its upper end to the hopper F, and provided with a series of perforations, *h*, to receive a stud or pin, *i*, applied to the trough, the strap being free to swing laterally to cause any of the holes *h* to register with the stud *i*, according to the desired adjustment. If the spouts be allowed to hang down vertically, or to be removed entirely, the material will be spread broadcast, or the entire width of the wagon-body; but by raising the spouts more or less they will be caused to discharge at their ends with any desired interval or space between the two falling streams of material. When the device is not in use, it can be quickly removed from the wagon and the latter used in its ordinary capacity.

It is particularly to be noted that the cylinder F projects inward over the floor of the wagon, and is thus made to draw the material therefrom without aid or assistance of other mechanism or of attendants.

I do not claim, broadly, all forms of distributing attachments capable of application to wagons; but,

Having thus described my invention, what I claim is—

1. The herein-described fertilizer-distribut-

- ing attachment for ordinary wagons, consisting of plates B B, adapted to be secured to the wagon-body, cylinder E, journaled in said plates, adapted to project inward over the floor 5 of the wagon-body when applied thereto, and provided with band-wheel G, band-wheel K, adapted to be secured to a wheel of the wagon, and driving-band J, all substantially as described and shown.
- 10 2. In combination with an ordinary wagon, plates B B, detachably secured to the body thereof, cylinder E, journaled in said plates, and provided with loose wheel G, clutch-collar H, lever I, pivoted to plate B, and removable therewith, wheel K, detachably secured 15 to a wheel of the wagon, and band J, passing about the wheels G H, all substantially as described and shown.

ALEXANDER G. CLARKSON.

Witnesses:

J. H. PEARSON,

GEO. W. PARKER.