(No Model.)

P. E. WISTRAND.

CORN PLANTER WHEEL.

No. 476,348. Patented June 7, 1892.

Fig. 1.

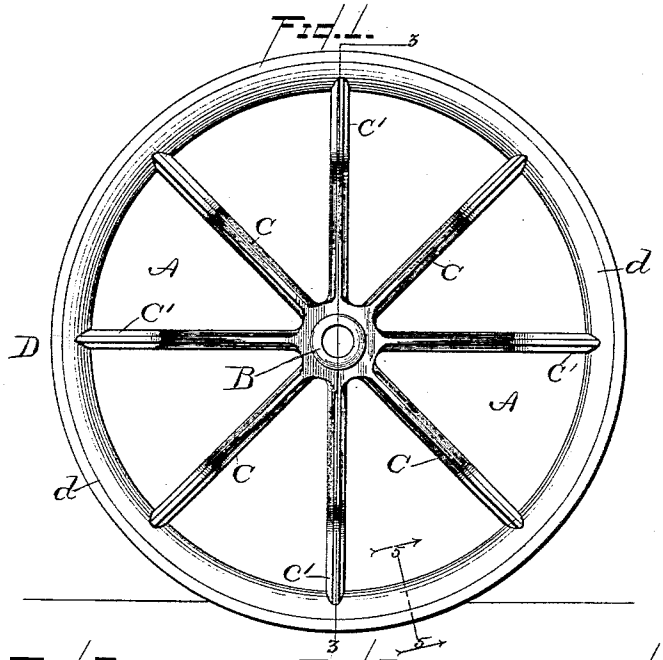

Fig. 2.

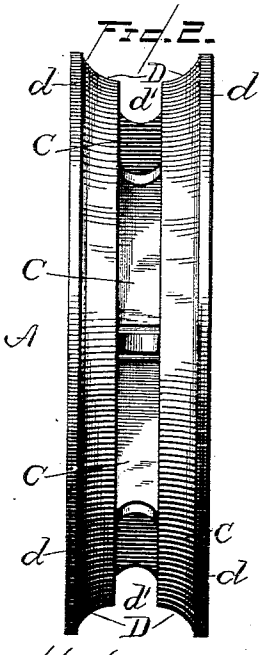

Fig. 3.

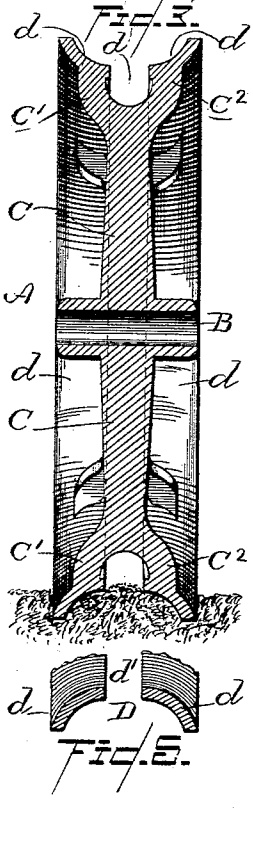

Fig. 4.

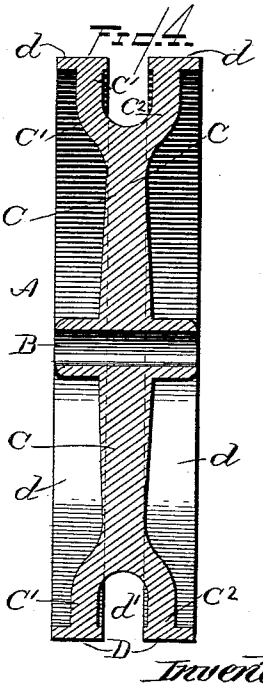

Fig. 5.

Witnesses:
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UNITED STATES PATENT OFFICE.

PETER E. WISTRAND, OF KEWANEE, ILLINOIS, ASSIGNOR TO THE PETERS PUMP COMPANY, OF SAME PLACE.

CORN-PLANTER WHEEL.

SPECIFICATION forming part of Letters Patent No. 476,348, dated June 7, 1892.

Application filed January 28, 1892. Serial No. 419,540. (No model.)

To all whom it may concern:

Be it known that I, PETER E. WISTRAND, a citizen of the United States, residing at Kewanee, in the county of Henry and State of Illinois, have invented certain new and useful Improvements in Corn-Planter Wheels, of which the following is a specification.

As generally constructed and organized, corn-planting machines have wheels which follow in the path of the seed-depositing mechanism for the purpose of pressing the soil into place over the deposited seed, which wheels in certain types of corn-planters also serve as supporting-wheels for all or a portion of the planter and in other types are used only for pressing the soil into place over the seed; and the object of my invention is to provide improved corn-planter wheels for such purposes, which wheels shall embody and combine strength, lightness, durability, cheapness of construction, and efficiency in operation in their improved construction; and to this end and object my improvement consists in a cast or other metal wheel the spokes of which radiate in substantially the same plane from the hub and the outer ends of which are bifurcated or forked and carry the rim of the wheel, which is in two parts with a space between said parts, both of which parts have outer surfaces which incline inwardly or obliquely toward the hub from their outer edges to their inner or adjacent edges, and thus produce a rim supported on a single set of spokes and which may be described as a rim with its outer side or surface concave in its cross-section and with its central part removed to leave an open place between the two sides of the rim, all as will be hereinafter more fully explained and described, and also pointed out in the claims hereto appended.

As my invention relates wholly to improvements in the wheel of a corn-planting machine, I will show and especially explain only the wheel of such machine, as its application to a planter is so obvious as to need no description herein, and showing its application thereto would not aid in understanding my improvement.

The preferred construction of wheel embodying my invention is shown in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved wheel; Fig. 2, an edge elevation; Fig. 3, a sectional elevation in the line 3 3 in Fig. 1; Fig. 4, a modification; Fig. 5, a sectional elevation of the wheel-rim alone in line 5 5 in Fig. 1.

In the several figures of the drawings the same part is designated by the same reference-letter.

My improved wheel is formed or made of cast-iron or other suitable material or different parts of different material, as desired. The hub B is an ordinary hub, from which the spokes C project radially, all in same or approximately the same plane at a right angle, or substantially so, to the axial line of the wheel-hub. The outer end of each spoke C is bifurcated or formed in two branches c' c^2. The wheel-rim D is formed of two parts d d, one of which parts is fixed to the branches c' on one side of the spokes and the other to the branches c^2 on their other sides. The parts d are preferably curved in their cross-sections, substantially as shown, and are also inclined in their cross-sections toward the hub at their adjacent edges, which edges are a short distance apart; or, in other words, the rim D may be described as a rim with an outer surface which is concave in its cross-section and which rim is in two parts, or has an opening d' extending centrally of and entirely around the rim. These wheels having rims in two parts with a space between them, as shown and described, are superior in use to wheels having a one-part rim, and especially so when the rim is concave in its outer surface. As will be obvious, the concave rim such as I have shown in operation will only come into actual rolling contact with the soil at but a small portion of its surface. The other portions of its surface, having more or less frictional and sliding contact with the loose soil, will tend to force the soil toward the center of the wheel, and thus effectually close the opening made by the seed-depositing runner and tube and cover the seed effectually and with a covering of soil which will not be compacted immediately over the deposited seed.

The modification of my wheel shown at Fig. 4 shows a flat wheel-rim formed in two parts supported by bifurcated spokes, as hereinbefore described. This wheel has all the advantages of construction of the wheel shown by the other figures in the drawings, but will not cover the deposited seed quite so well as the concave rim when formed in two parts, for the reasons hereinbefore stated.

By the construction of wheel hereinbefore described I produce a wheel with the two-part rim without the use of two wheels or two sets of spokes to do so. I thus not only reduce the expense of manufacturing the wheel, but also produce a stronger simpler wheel and evidently more durable, and a wheel which will not interfere with the operations of planting in any manner and which by reason of its concave rim with its central part removed will force the soil toward both sides of the row of deposited seed.

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

1. A corn-planter wheel consisting of a hub, spokes radiating therefrom having forked outer ends, and a split tire, the two parts of which are formed with concaved outer faces and separated from each other to form an intervening space, substantially as described.

2. In a corn-planter wheel, the combination, with a hub and spokes, of a split tire on the spokes, the two parts of which are separated from each other and which tire has an outer concave face obliquely arranged at its inner adjacent edges, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

PETER E. WISTRAND.

Witnesses:
WM. GUNTHER,
CHARLES W. PETERSON.