

W. WILLIAMS.

Land-Roller.

No. 159,784.

Patented Feb. 16, 1875.

Fig. 1.

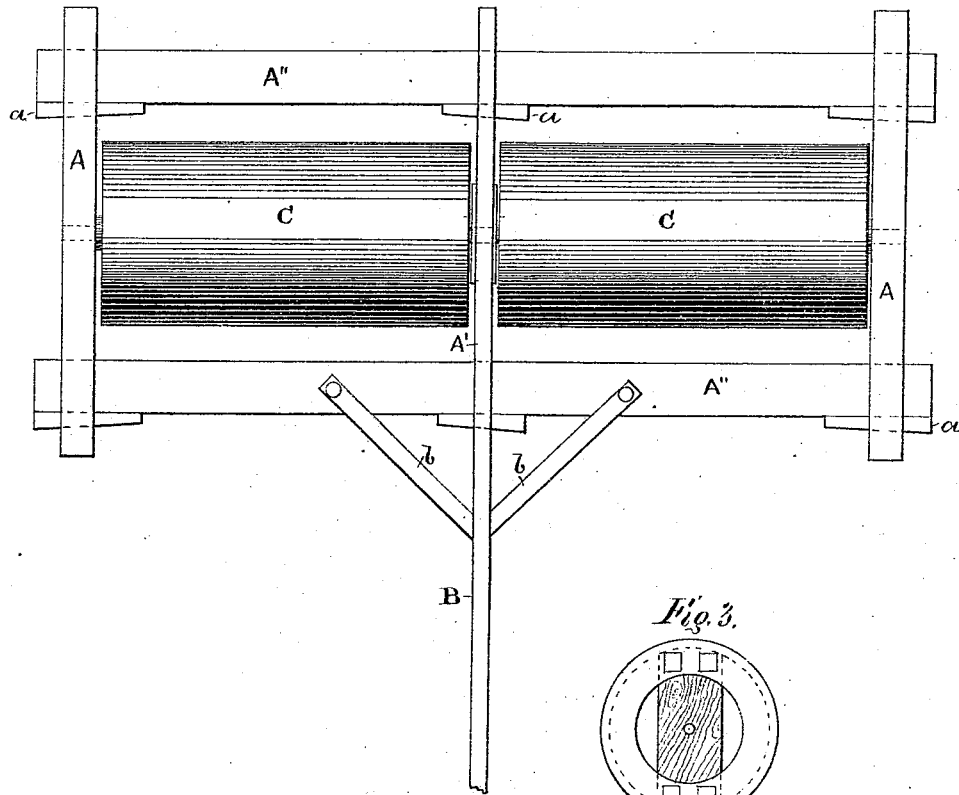


Fig. 3.

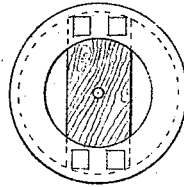
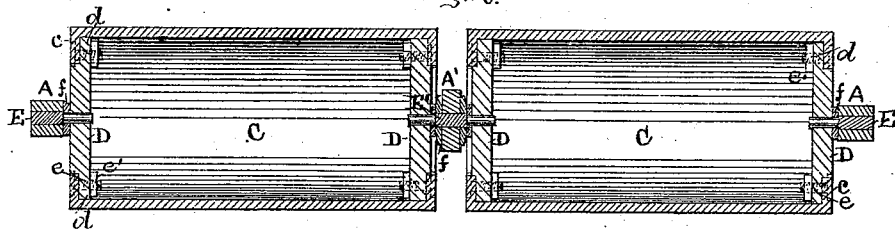


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM WILLIAMS, OF NEW BERLIN, ILLINOIS.

IMPROVEMENT IN LAND-ROLLERS.

Specification forming part of Letters Patent No. 159,784, dated February 16, 1875; application filed January 2, 1875.

To all whom it may concern:

Be it known that I, WILLIAM WILLIAMS, of New Berlin, county of Sangamon and State of Illinois, have invented certain Improvements in Land-Rollers of which the following is a specification:

My invention relates to the construction of land-rollers; and consists in a new and improved mode of journaling iron or metal rollers by means of wooden bars or blocks instead of metal, or combined wood and metal hubs and spokes, whereby the rollers are made cheaper and stronger, and less liable to get broken and more easily repaired, all as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a plan view of the machine. Fig. 2 is a vertical sectional view through the center of the rollers, and Fig. 3 is an end view of one of the rollers.

Referring to the parts by letters, A A represent the two sides, A' the central, and A'' A'' the transverse, connecting-bars of the frame, all the bars being fitted and secured to each other by means of wedges *a*, or in any convenient or suitable manner. B is the tongue or draft-pole, and *b b* are diagonal bars which brace the tongue and forward transverse bar of the frame. C C are the rollers, hollow cast-metal cylinders having annular interior flanges *c* formed on their ends, but without metal spokes or arms to connect their periphery with the hub or spindle, and without any end or internal projection whatever, except the annular flanges *c*. Instead of metal hubs and spokes I use blocks D D, made of hard wood, one at each end of the cylinder or roller, the ends of the blocks being cut or rabbeted, as shown at *d*, so as to fit the flanges *c* of the rollers, to which they are secured by bolts *e* and nuts *e'*, the nuts being in the inside of the roller, as clearly shown by Fig. 2 of the drawings. E

E E' are metallic journal-bolts, portions of which are rectangular in form and secured in the side and central bars of the frame. The other or projecting portions are formed into spindles for the rollers, the spindles passing through holes formed centrally in the blocks D. The central journal, E', may be made with projecting spindles on both ends, as shown in the drawings, or two like the others, E E, may be used for the inner ends of the rollers, as found most desirable. *ff* represent washers, of metal or other suitable material, interposed between the blocks D and bars A A' A''.

With rollers of this construction the metal cylinders can be easily and cheaply cast, and being without metal hubs and spokes, which being so much weaker than the heavy metal of the rollers, are liable to break with the jolting or movement of the latter over rough, uneven ground. They are, in fact, much stronger and less liable to get out of working condition.

It will be obvious that should the wooden blocks D from any cause get broken or worn they can be readily replaced by the farmer without having to send the implement to the blacksmith-shop or factory for repairs, as would be the case were such parts made of metal requiring welding or fitting.

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

The wooden journal-blocks D, in combination with the hollow cast-metal rollers C and annular flanges *c*, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my invention, I affix my signature in presence of two witnesses.

WILLIAM WILLIAMS.

Witnesses:

W. B. RICHARDS,
M. H. BARRINGER.