E. ENGLUND.

LAND ROLLER.

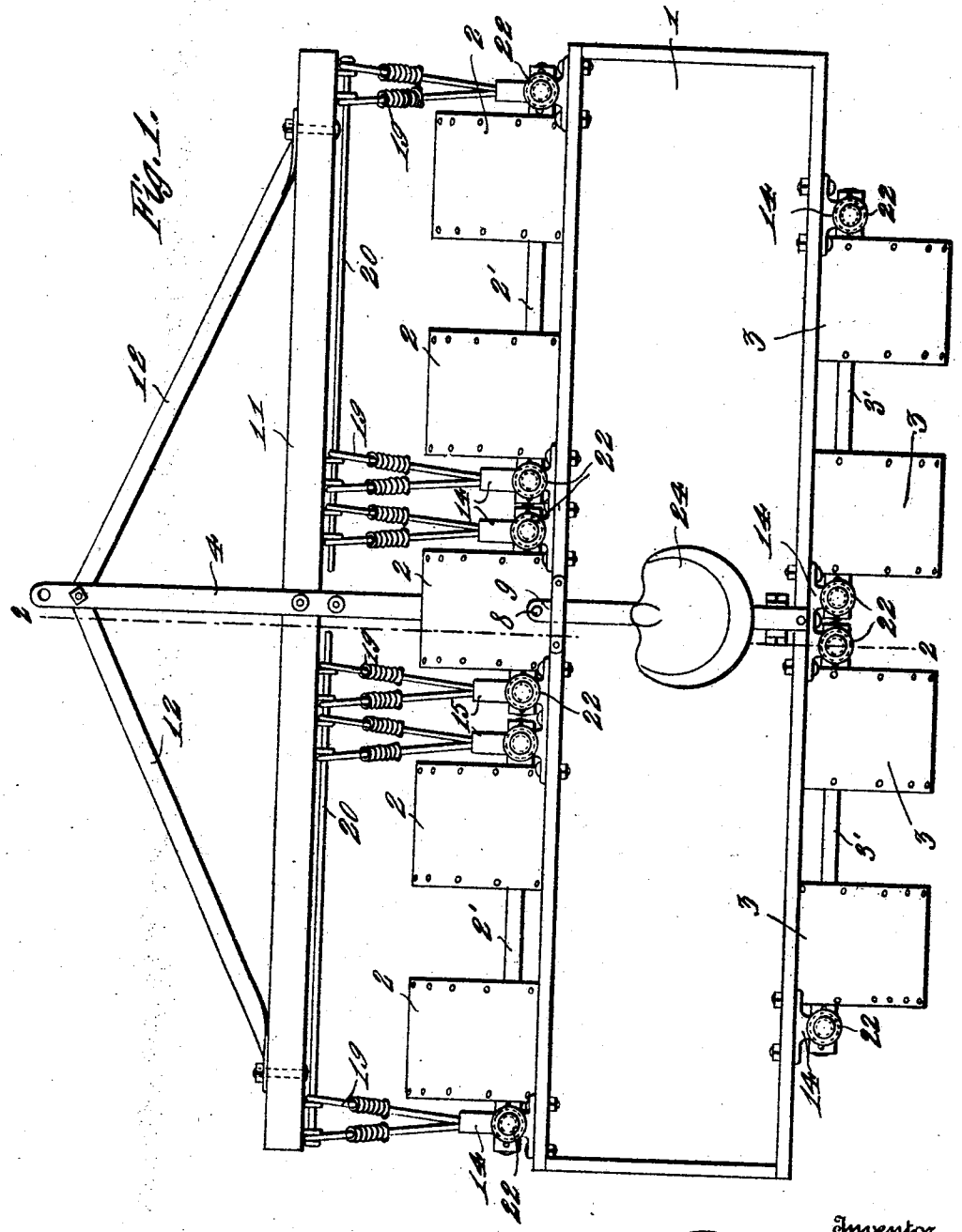
APPLICATION FILED JULY 19, 1909.

941,770.

Patented Nov. 30, 1909.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

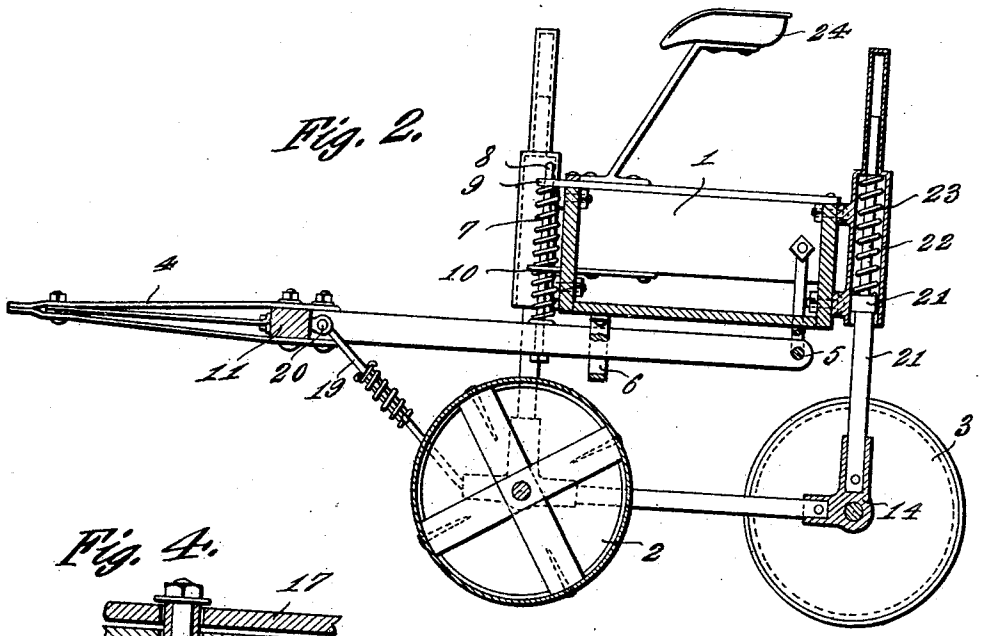


Fig. 4.

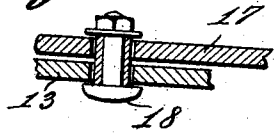
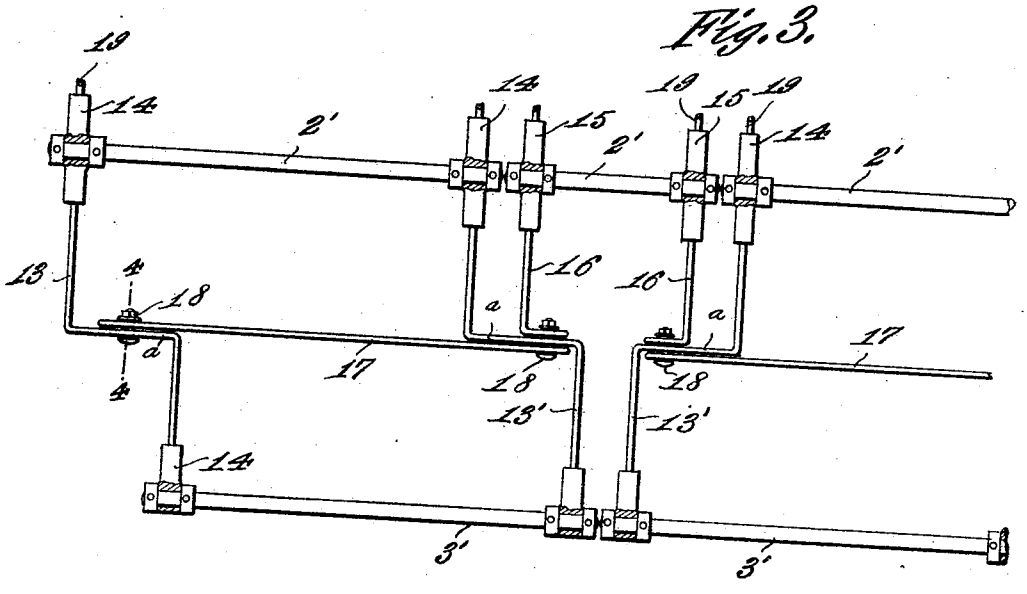


Fig. 3.



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UNITED STATES PATENT OFFICE.

ERIC ENGLUND, OF EL CAMPO, TEXAS.

LAND-ROLLER.

941,770. Specification of Letters Patent. Patented Nov. 30, 1909.

Application filed July 19, 1909. Serial No. 508,431.

To all whom it may concern:

Be it known that I, ERIC ENGLUND, a citizen of the United States, residing at El Campo, in the county of Wharton and State of Texas, have invented certain new and useful Improvements in Land-Rollers, of which the following is a specification.

The object of this invention is to provide new and novel improvements in that type of agricultural implements commonly called land rollers.

The invention is embodied ordinarily in the peculiar and general construction of the implement with respect particularly to the form of frame on which the rollers are mounted, whereby said rollers are adapted for independent movement, and in other features of construction.

For a full understanding of the invention, reference is to be had to the accompanying drawings, in which—

Figure 1 is a top plan view of an implement embodying the invention; Fig. 2 is a transverse sectional view taken about on the line 2—2 of Fig. 1; Fig. 3 is a fragmentary view, certain portions being shown in section, of the supporting frame work for the rollers, and Fig. 4 is a detail sectional view taken about on the line 4—4 of Fig. 3.

Similar reference characters refer to similar parts throughout the drawings and description.

Describing the invention in detail, and referring particularly to the drawings it is contemplated to provide a body 1 in the form of a box, or the like, in which stone or heavy articles may be loaded so as to give sufficient weight to the body which is supported upon a suitable number of rollers 2 and 3. The rollers 2 are arranged below the front portion of the body 1 while the rollers 3 are disposed in rear of the rollers 2, and below the rear portion of the body 1. Furthermore, the rollers 2 and 3 are arranged in staggered relation, or in other words, the rearmost rollers are opposite the spaces between the foremost rollers.

Draft means of a peculiar form is provided for the implement and comprising a central tongue or draft bar 4 pivotally connected at its rear end 5 with the rear bottom portion of the box or body portion 1. Said tongue extends forwardly through a stirrup or bracket 6 secured to the underside of the body 1 and forming a guide permitting of slight vertical play or movement of the part 4 with reference to said body. A coiled spring 7 mounted upon a vertical rod 8, the latter being secured to the middle portion of the tongue or bar 4, normally holds the part 4 in a predetermined position, said spring being interposed between a plate 9 on the upper part of the body 1 and passing through a guide plate 10 projecting laterally from the front of the body. A transverse draft beam 11 is carried by the middle portion of the member 4 and has braces 12 connecting its outer ends therewith.

The rollers 2 and 3 are mounted for independent movement so as to accommodate for inequalities in the ground over which the land roller passes. To support the rollers 2 and 3 suitable axles 2′ are mounted in a frame-work below the body 1, said axles having the front rollers 2 mounted thereon. The middle axle 2′ carries a single roller 2 while the outer axles 2′ each have two rollers mounted thereon and supported near the ends of the same. While there are five front rollers 2, there are only four rollers 3 in rear thereof and two axles 3′ are employed to support said rollers 3 each axle carrying a pair of the rollers. The several axles 2′ and 3′ are mounted in a frame consisting of flexibly connected members. Said frame comprises side bars 13 and centrally arranged bars 13′ of a form similar to that of the side bars, each of the bars 13 and 13′ is provided at its opposite ends with couplings 14 having bearings in which the axles 2′ and 3′ are mounted, excepting only however, the middle front axle 2′ which is supported in bearings of couplings 15 which are carried by separate centrally arranged frame bars 16. The bars 13 and 13′ of the frame connect the front and rear rollers together and each has its central portion bent in a transverse direction as shown at *a*. The central portions *a* of each two adjacent outer bars 13 and 13′ are connected by a plate 17 which is pivotally attached at 18 to said bars. The pivot 18 at the innermost end of each bar 17 also permits pivotal connection of the central bars 16 with the adjacent inner frame bars 13′. The various bars or frame members 13, 13′, 16, and 17, are flexibly connected so that the rollers carried upon the axles connected with said bars are adapted for certain vertical movement independently of one another. The couplings 14 and 15 in which the front axles are supported are connected flexibly with the draft beam 11

by means of draft rods 19 the rear ends of which are secured to said couplings and the front end portions of which are pivotally connected with the draft beam 11 by pivotal rods 20.

The independent movement of the several rollers 2 and 3 is permitted by means of vertical standards 21 one of which is connected with each end of the several axles 2′ and 3′. The standards 21 are directly secured to a vertical extension of the couplings 14, the upper portion of each standard being arranged to operate telescopically in a casing 22 attached to an adjacent side of the box or body 1. In each casing 22 is a spring 23 coiled about the upper portion of the standard 21, and bearing downwardly against a shoulder 21′ of said standard to yieldingly hold the roller with respect to the body or box 1 before mentioned. The draft rods 19 are rendered flexible and yieldable by the provision of springs in the length thereof, such structure being necessary to accommodate for the vertical movement of the standards 21 in the casings 22.

Mounted on the box 1 at its central portion is a seat 24 for the operator.

Having thus described the invention, what I claim as new is:—

1. In a land roller, the combination of a body, a plurality of rollers supporting said body, draft means comprising a central tongue pivotally connected at its rear end to the rear portion of the body and projecting forwardly therefrom, a spring connected with the body and with the tongue and arranged in front of said body for normally holding the tongue in a predetermined position relative thereto, a frame arranged beneath the body and on which the rollers are mounted, a transverse beam connected with the tongue and arranged in advance of the body, and a plurality of draft rods connected at their front ends with the beam and at their rear ends with said frame.

2. In a land roller, the combination of a body, a plurality of rollers supporting said body, draft means comprising a central tongue pivotally connected at its rear end to the rear portion of the body and projecting forwardly therefrom, a spring connected with the body and with the tongue and arranged in front of said body for normally holding the tongue in a predetermined position relative thereto, a frame arranged beneath the body and on which the rollers are mounted, a transverse beam connected with the tongue and arranged in advance of the body, the aforesaid frame comprising a plurality of flexibly related members allowing certain independent movement of the rollers, and draft rods pivotally connected at their front with the said draft beam and connected at their rear ends with the front portion of the frame.

3. In a land roller, the combination of a body, a frame arranged below said body and consisting of side bars having couplings at the front and rear ends and provided with bearings, transverse axles mounted in the bearings of the couplings, transverse plates pivotally connected at opposite ends with the side bars of the frame, rollers mounted on the axles, standards projecting upwardly from the couplings of said frame, and means yieldingly connecting said standards to the body to permit certain independent movement of the rollers with reference to one another.

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

ERIC ENGLUND.

Witnesses:
FRANK DEYAR,
SEVER. NORDIN.