

H. L. FERRIS.  
FEED AND LITTER CARRIER.  
APPLICATION FILED MAR. 8, 1911.

1,027,715.

Patented May 28, 1912.

2 SHEETS—SHEET 1.

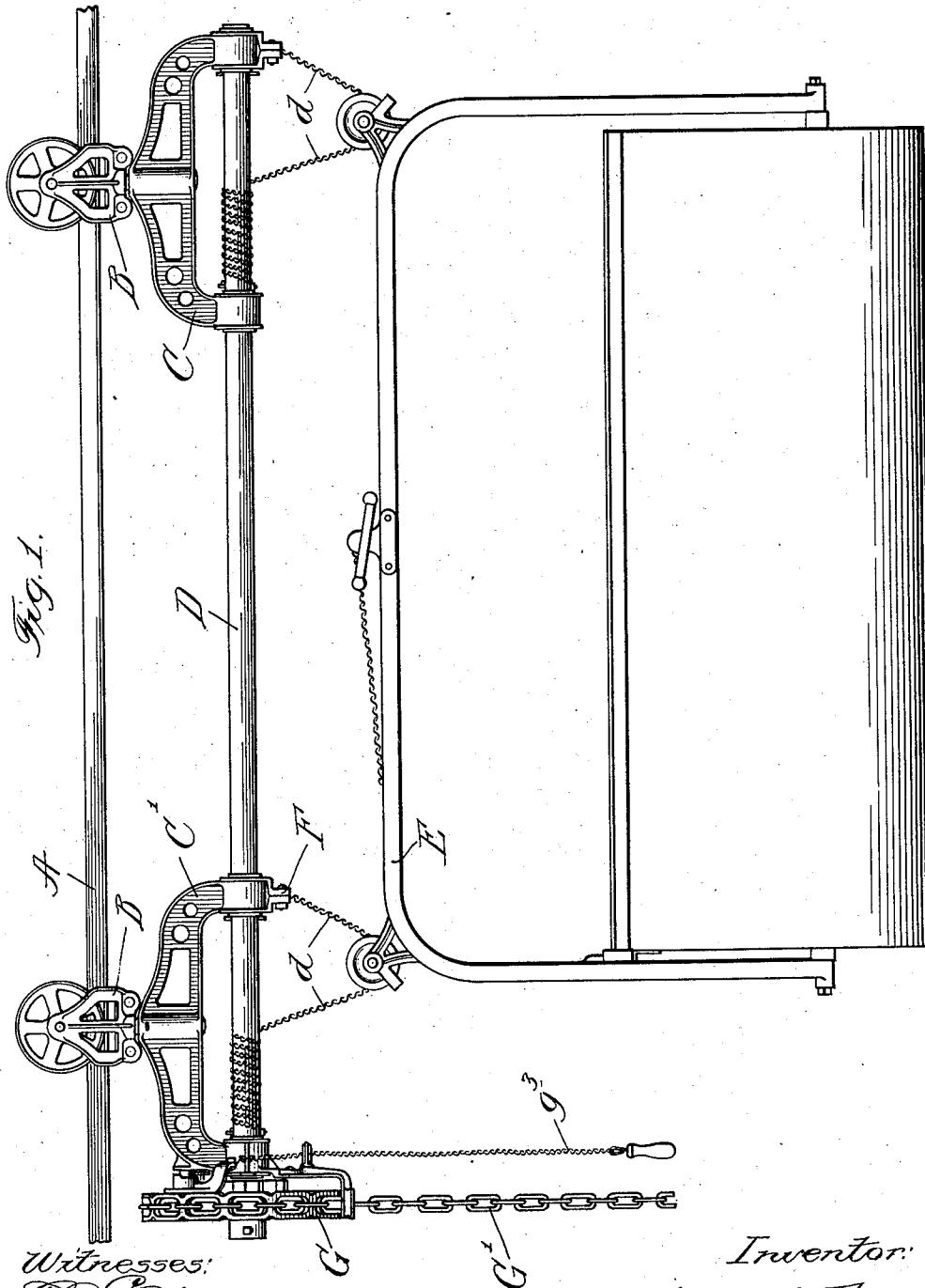


Fig. 1.

Witnesses:

Chas. H. Bull.  
Chas. H. Bull.

Inventor:

Henry L. Ferris.

By Dymally, Lee, Christen & Miles  
Attys. #

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2 SHEETS--SHEET 2.

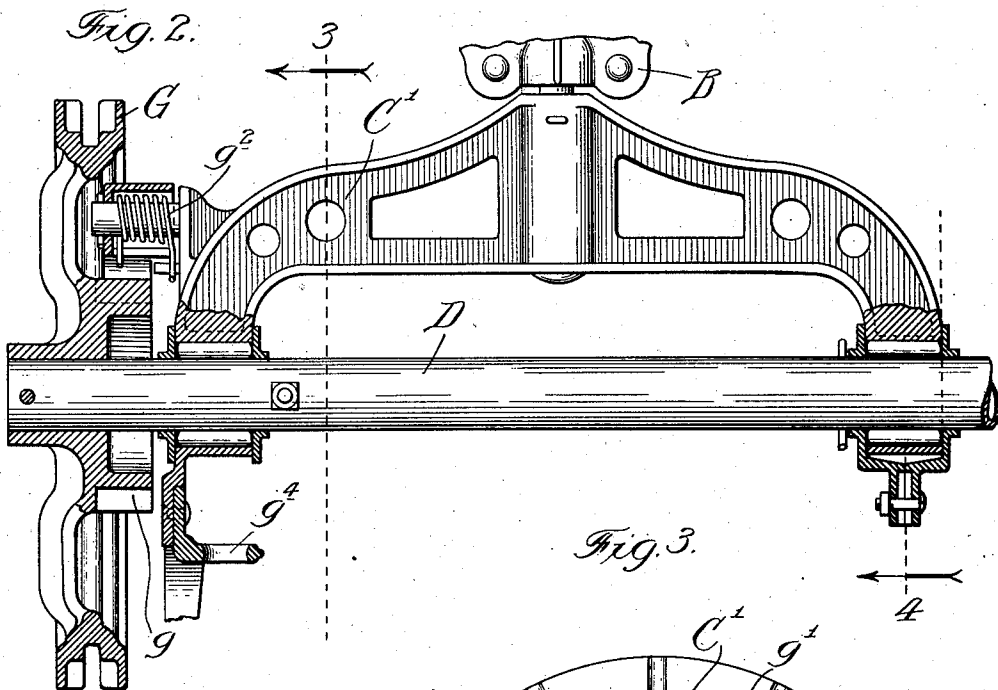
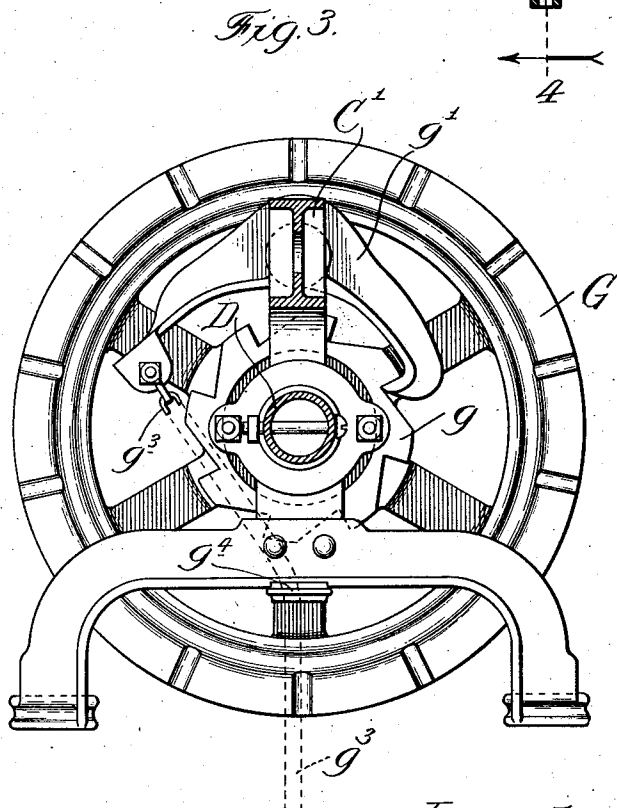
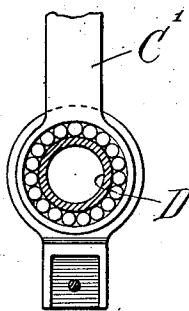


Fig. 4.



Witnesses:  
Ed. G. Lyford,  
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Inventor:  
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# UNITED STATES PATENT OFFICE.

HENRY L. FERRIS, OF HARVARD, ILLINOIS, ASSIGNOR TO HUNT, HELM, FERRIS & COMPANY, OF HARVARD, ILLINOIS, A CORPORATION OF ILLINOIS.

## FEED AND LITTER CARRIER.

1,027,715.

Specification of Letters Patent.

Patented May 28, 1912.

Application filed March 8, 1911. Serial No. 613,115.

*To all whom it may concern:*

Be it known that I, HENRY L. FERRIS, a citizen of the United States, residing at Harvard, in the county of McHenry and State of Illinois, have invented a new and useful Improvement in Feed and Litter Carriers, of which the following is a specification.

My invention relates to certain new and useful improvements in feed and litter-carriers, and is fully described and explained in the specification and shown in the accompanying drawings, in which:

Figure 1 is a side elevation of my improved device; Fig. 2 is a central longitudinal section (partly in elevation) of the mechanism illustrated in the upper left-hand corner in Fig. 1; Fig. 3 is a section in the line 3 of Fig. 2, and Fig. 4 is a section in the broken line 4 of Fig. 2.

Referring to the drawings, A is a track which may be of any form and upon which run hangers B, each of which supports a downwardly turned fork, the fork at the right being indicated by C, and that at the left by C<sup>1</sup>. The forks C and C<sup>1</sup> have at the lower end of their arms journals through which extends a shaft D. Anti-friction rollers are interposed between the shaft and journals. Chains Z, each having one end attached to the shaft D are let down in the form of bights, which support a tub-frame E of ordinary form, the other ends of said chains being attached to clips F. These clips each consists of two vertical plates which surround the shaft D, lying on opposite sides of the corresponding ends of the forks C and C<sup>1</sup>, respectively. The plates, of which the clips are thus seen to be composed, fit the shaft D tightly and thus serve as means for holding the anti-friction rollers in proper position within the journals. The plates forming the clips are brought together beneath the forks and are held together by small bolts, which support the ends of the chains Z, in the manner fully illustrated. From this construction it will be obvious that as the shaft is rotated the tub can be raised and lowered in an obvious manner.

For the purpose of its rotation the shaft is provided with a wheel G, encircled by an endless chain G<sup>1</sup> through the medium of which it can be rotated. The wheel G carries a ratchet wheel g which is adapted to be engaged by a pawl g<sup>1</sup> pivotally mounted upon a stud carried by the fork C<sup>1</sup>, and normally spring-pressed by a spring g<sup>2</sup> in a direction to hold same in engagement with the ratchet. For the purpose of raising the dog or pawl g<sup>1</sup>, a cord or chain g<sup>3</sup> is attached to its opposite end and then led through a central eye g<sup>4</sup> carried by the lower end of the fork C<sup>1</sup>, and thence downward, so as to be engaged by the hand. This chain or cord g<sup>3</sup>, it will be seen, is thus led out of the vertical line of either portion of the endless chain G<sup>1</sup>, so that there is no danger of it being accidentally grasped by the operator so as to release the dog or pawl g while pulling upon the chain G<sup>1</sup> for the purpose of raising the tub.

It will be seen that the construction thus described is a simple one for its purpose, and that it combines several features of desirable construction.

While I have set forth here the preferred form of my construction, I do not intend, by such detailed description as I have above given, to be specifically limited thereto; my intention being in the following claims to set forth all the novelty inherent in this construction as broadly as the state of the art will permit.

I claim as new and desire to secure by Letters Patent—

1: In a feed and litter-carrier, members provided with rollers adapted to run upon a track, a shaft journaled between said members, anti-friction rollers interposed between the shaft and its journals, clips surrounding the shaft and lying on opposite sides of the journals, chains connected to the shaft and to said clips forming a bight therebetween, and a tub supported in the bights thus formed.

2. In combination, hangers, inverted forks carried by the hangers, a shaft journaled in the lower ends of the forks, anti-friction rollers interposed between the shaft and its

journals, means for rotating the shaft, clips embracing certain of the journals to hold the roller bearings in place, chains, each attached at one end to the shaft and  
5 running downward to form bights and thence upward to the clips, and a tub-frame carried by the bights.

In testimony whereof I have hereunto

set my hand and affixed my seal this 3rd day of March, 1911.

HENRY L. FERRIS. [L. s.]

In the presence of two subscribing witnesses:

R. N. JACOBS,

R. A. HEMENWAY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."