(No Model.) 2 Sheets—Sheet 1.

A. A. LORIO.

VEHICLE FOR HAULING SUGAR CANE.

No. 571,309. Patented Nov. 10, 1896.

Fig. 1.

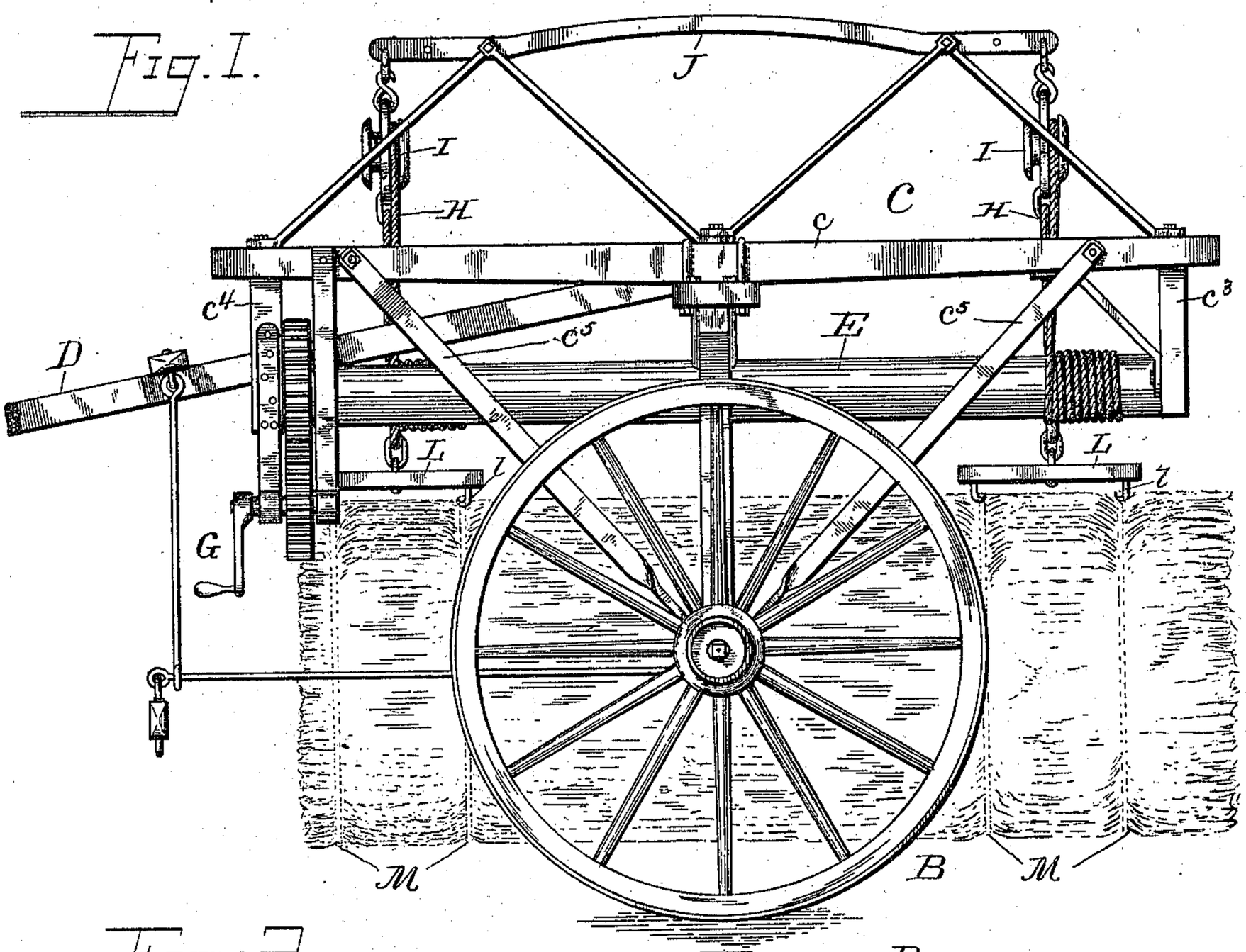
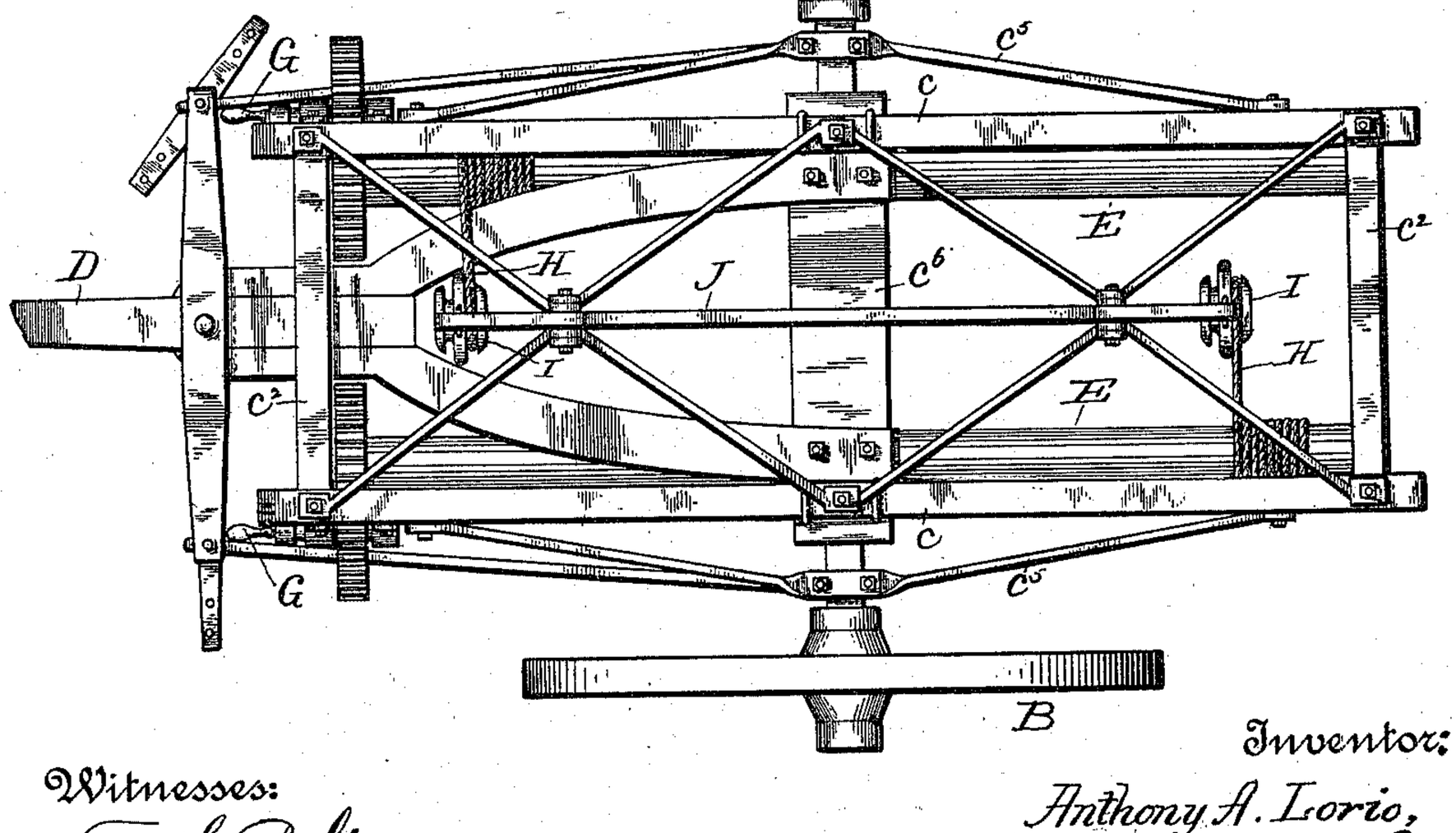


Fig. 2.



Witnesses:
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his attorney.

(No Model.) 2 Sheets—Sheet 2.

A. A. LORIO.

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No. 571,309. Patented Nov. 10, 1896.

Fig. 3.

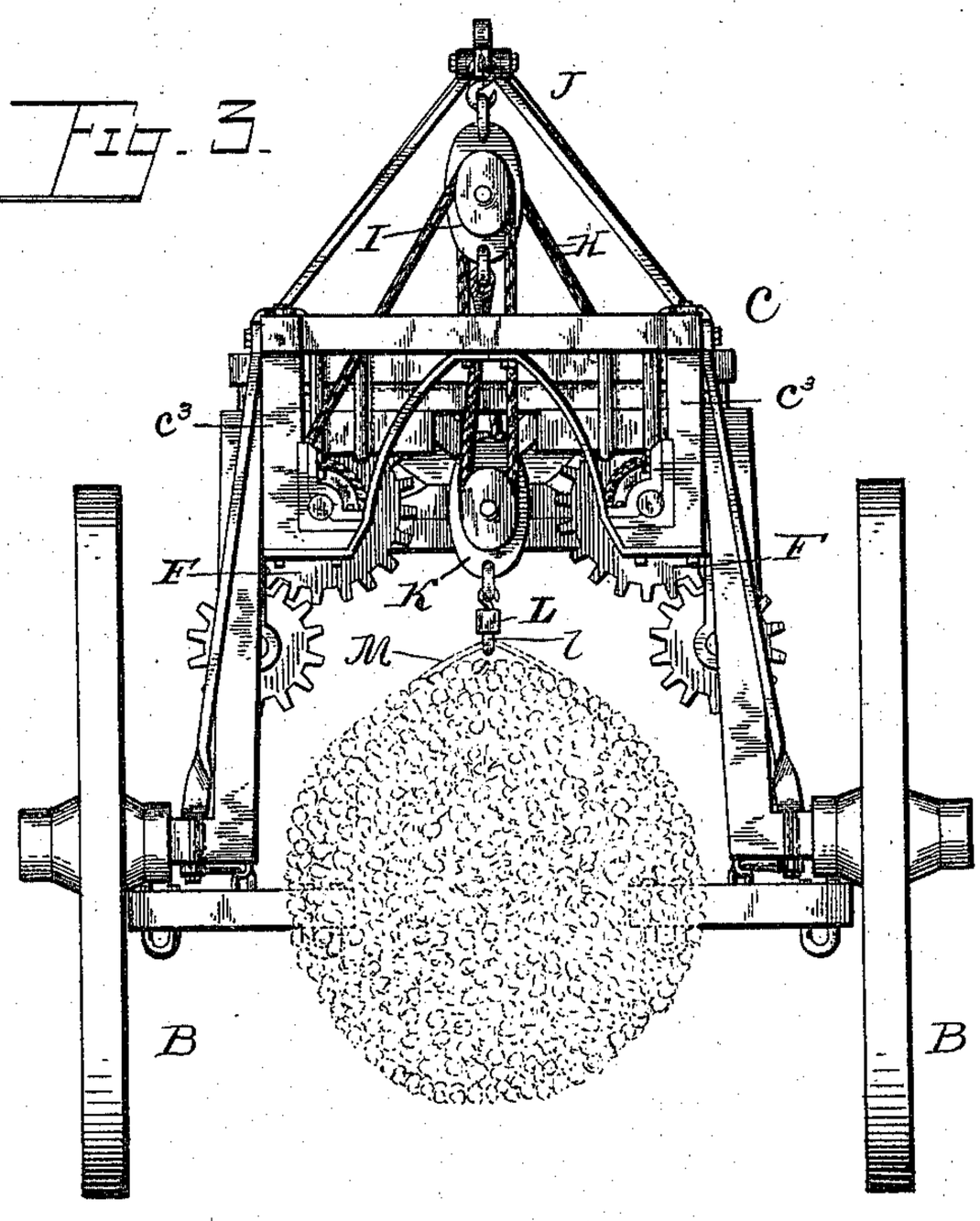
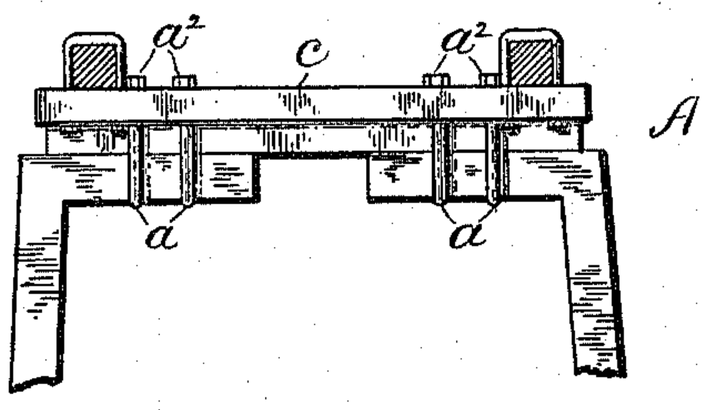


Fig. 4.



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UNITED STATES PATENT OFFICE.

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VEHICLE FOR HAULING SUGAR-CANE.

SPECIFICATION forming part of Letters Patent No. 571,309, dated November 10, 1896.

Application filed February 14, 1896. Serial No. 579,281. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY A. LORIO, a citizen of the United States of America, residing at Lakeland P. O., in the parish of Pointe Coupée and State of Louisiana, have invented certain new and useful Improvements in an Apparatus for Handling Sugar-Cane; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to apparatus for handling sugar-cane.

The object is to provide an apparatus that may be operated with readiness and ease to lift a bundle of sugar-cane free from the ground and hold it suspended while being conveyed to a place of discharge or of storage; furthermore, to provide an apparatus in which the carrying capacity may be increased or diminished at will.

With these objects in view the invention consists in the novel construction and combination of parts of an apparatus for handling sugar-cane, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like letters of reference indicate corresponding parts, I have illustrated an embodiment of my invention, it being understood that other forms of embodiment thereof may be employed without departing from the spirit of the same, and in the drawings—

Figure 1 is a view in side elevation of the apparatus as it appears when ready for use. Fig. 2 is a view in plan. Fig. 3 is a rear end view showing the position of the load when raised from the ground. Fig. 4 is a detail view in elevation showing the peculiar construction of the supporting-axle.

Referring to the drawings, A designates the supporting-axle, and B the supporting-wheels mounted thereon. The axle is made in this instance in three parts, whereof two are approximately Z-shaped in elevation and the other straight, the three parts being held together by means of strap-bolts a, the ends of which pass through a cross-piece c^6 of the frame C and are held in place by means of nuts a^2. The object for having this three-part axle is to increase or diminish the carrying capacity of the apparatus, as by loosening the nuts a^2 and bringing the end sections of the axle toward each other the carrying capacity of the apparatus will be diminished, a reverse movement of the sections of the axle operating to increase its carrying capacity. A further reason for having the axle constructed as shown is to enable the operator to bring the bundle well up into the apparatus, so as to keep it clear of the ground and of obstructions.

The frame C, to which reference has been made, consists of two side pieces c, connected by end pieces c^2, two vertical end posts c^3 and c^4, depending from the outer portion of the side pieces, and side braces c^5, secured to the axle and to the side pieces of the frame and serving to brace the frame on the axle. In addition to the cross-pieces mentioned there is the center cross-piece c^6, before referred to, to which the hounds of the tongue D are secured, the latter being provided with the usual singletrees commonly employed.

Mounted in suitable journals on the end posts c^3 c^4 are windlass-rollers E, which are operated by a train of gearing F through a crank G. Upon each of these rollers is wound a rope or chain H, the free end of each of which is secured to a hook depending from a block I, swiveled or otherwise secured to an overhead support J, extending longitudinally of the apparatus. The intermediate portion of each of the ropes is engaged by a block K, and to the latter are attached bars L, having hooks l for engaging the binders of the bundle of cane. The overhead support J may be of any preferred construction, the form shown being one that will answer all ordinary requirements, and the blocks I and K may also be of other forms than those shown.

The operation of the apparatus is as follows: The cane having been assembled by means of suitable binders M, the apparatus is driven over the bundle, and the ropes are unwound from the rollers until the hook-bars L are sufficiently lowered to admit of the hooks l thereof being brought into engagement with the binders M, as clearly shown in Fig. 1. The cranks G are now turned, thereby wind-

ing the ropes upon the windlass-rollers E and lifting the bundle free from the ground and up between the sections of the axle, suitable pawls being employed for the purpose of holding the rollers in the proper position. The apparatus is now driven to the place of deposit or of storage, and by releasing the rollers the bundle may be deposited.

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

1. An apparatus for handling sugar-cane comprising a wheeled frame, an overhead support thereon carrying blocks, windlass-rollers or drums mounted on the frame, ropes wound upon the rollers and engaging the blocks on the overhead support, blocks supported by the ropes, hook-carrying bars depending from these latter blocks, and mechanism for turning the rollers, substantially as described.

2. An apparatus for handling sugar-cane comprising a wheeled frame having an extensible axle on which are mounted the supporting-wheels, windlass-rollers carried by the frame, ropes wound upon the rollers, blocks supported by the ropes, hook-carrying bars depending from the blocks, and mechanism for turning the rollers, substantially as described.

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

ANTHONY A. LORIO.

Witnesess:

RICHARD P. WHITE,

A. LE BLANC.