

No. 703,298.

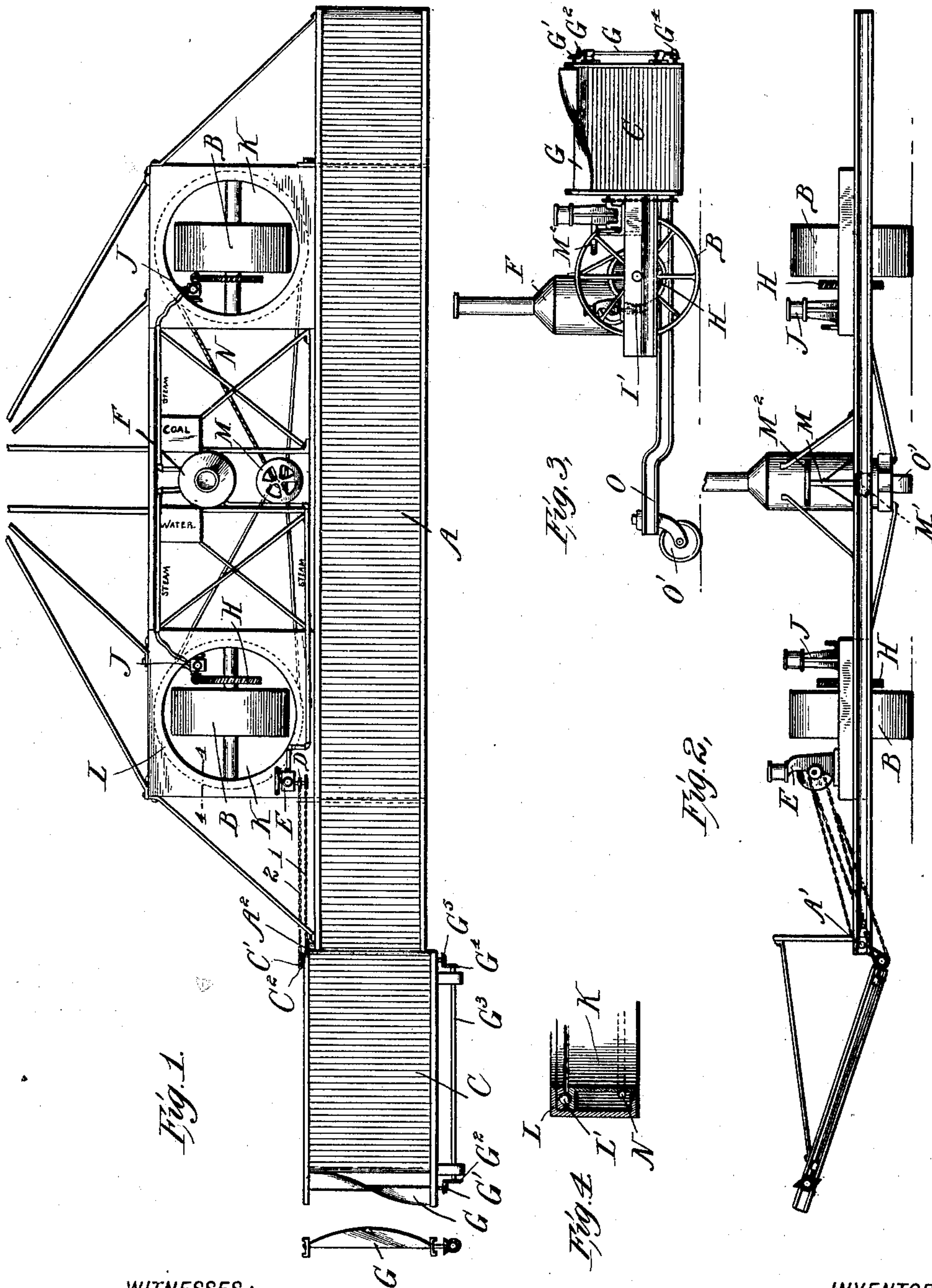
Patented June 24, 1902.

H. S. PADGETT.

CANE LOADER.

(Application filed Mar. 10, 1902.)

(No Model.)



WITNESSES:
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UNITED STATES PATENT OFFICE.

HENRY SPOTSWOOD PADGETT, OF WAIPAHAU, TERRITORY OF HAWAII.

CANE-LOADER.

SPECIFICATION forming part of Letters Patent No. 703,298, dated June 24, 1902.

Application filed March 10, 1902. Serial No. 97,531. (No model.)

To all whom it may concern:

Be it known that I, HENRY SPOTSWOOD PADGETT, a citizen of the United States, residing at Waipahu, in the Island of Oahu and Territory of Hawaii, have made certain new and useful Improvements in Cane-Loaders, of which the following is a specification.

My invention is an improvement in cane-loaders for use in loading cane onto cars or other carriers; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a top plan view of my machine, parts being broken away. Fig. 2 is a front elevation of the machine. Fig. 3 is a side elevation thereof; and Fig. 4 is a detail cross-section on about line 4 4 of Fig. 1, showing the ball-bearings for the turn-

tables.

In connection with suitable framing, including truss-rods, bolts, &c., I provide at the front of the machine a transversely-extending endless carrier or apron A, which extends from side to side of the machine and beyond the wheels B and discharges at one end to an upwardly-inclined endless elevator C, which is designed to discharge the cane into a car or other receptacle, it being the usual practice to run cars on portable tracks in convenient position to receive the cane. The carrier A is provided at one end with a drive-shaft A', having a pulley A², while the carrier C has a drive-shaft C', provided with a pulley C², and these pulleys A² and C² are connected by belts 1 and 2 with pulleys on the drive-shaft D of an engine E, which may be suitably supplied with steam from a boiler F, carried by the framework. By this means the endless carrier A is driven and the elevator C is also driven, both being driven from the same engine, as will be understood from Fig. 1 and the foregoing description. At the upper end of the elevator C, I provide cutting mechanism, consisting, preferably, of the revolving knife G, whose shaft has a beveled gear G', meshed by a beveled gear G² on a shaft G³, which also has a beveled gear G⁴, meshing with a similar gear G⁵ on the shaft C', so the revolving cutter will also be operated from the engine E, as best shown in

Fig. 1 of the drawings. By this means the cane is cut in short lengths and drops when so cut into the car or other receptacle.

The wheels B have their axles provided with worm-wheels H, suitably fixed with respect to the wheels and meshed by worms I' on shafts I, which are driven by the engines J, which engines may receive steam from the boiler F and are supported and turn with the turn-tables K, in which the wheels B are supported. I thus carry the engines for driving the wheels B on the turn-tables which support said wheels, so the engine will move with the wheels in adjusting the turn-tables and will always be in proper relation to the said wheels, as may be desired. The turn-tables K operate within rings L, formed to receive them, and ball-bearings L' may be provided between the turn-tables and their rings to properly reduce friction, as may be desirable.

To operate the turn-tables in order to properly steer the machine, I provide a steering-shaft M, having a suitable drum M', which is connected by means of cables N with the opposite turn-tables K, as shown in Fig. 1, so the turning of the steering-shaft and its drum will operate to similarly adjust the turn-tables to cause the wheels B to incline in one direction or the other or straight ahead, according to the direction in which it is desired to move the machine. It will also be noticed that the wheels B are driven by independent engines, so one wheel may be driven faster than the other to facilitate the steering in connection with the inclination of the wheels in one direction or the other, thus enabling me to quickly and accurately steer the machine as may be desired. In this connection it will be understood that one wheel may be driven forward and the other back and the turn-tables be turned in order to secure an accurate steering of the machine.

The rear end of the frame is extended at O and has a caster-wheel O', as shown in Fig. 3, the machine being supported by the wheels B and O', as shown. By this means I am able to make the frame approximately V shape, so the machine can go up or down hill and on the side of a hill and can be steered by turning the turn-tables or by such operation combined with varying the speeds of the opposite

wheels B. It will also be noticed that by arranging all of the supporting-wheels in rear of the carrier A cane can be put on any portion of the drapery of the apron, and by moving the said drapery independently of the machines for propelling the machine over the ground the drapery can be operated when the machine is at rest or while the machine is being moved from place to place, as may be desired.

While it may be preferred to employ steam-engines at J and D and to supply them with steam from the boiler F, it will be understood that these motors J and D may be of different varieties—such, for instance, as electric motors, in which event they could be suitably supplied with current from any source of power.

The shaft M for steering the machine may be supplied with a hand-wheel M² or other suitable means for convenient manipulation by the operator.

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

1. A machine for loading sugar-cane, comprising the framing, the main wheels provided with worm-wheels, the turn-table supporting said main wheels, the motors carried on said turn-tables and having drive-shafts provided with worms meshing with the worm-wheels of the supporting-wheels, the rings in which said turn-tables are supported and turned, the steering-drum, the cables connecting said drum with the opposite turn-tables, the endless carrier extended across the front of the machine, the elevator at one end of said carrier, the cutter at the upper end of the said elevator, the drive-shaft for the elevator, gearing between the drive-shaft and the cutter, and the motor connected with and operating the elevator drive-shaft, substantially as and for the purposes set forth.

2. A machine for loading cane, comprising the framing, the endless carrier extended across the front thereof, the elevator, means for operating the elevator and the carrier, the turn-table rings supported by the frame, the turn-tables turning in said rings, the steering devices connected with said turn-tables, the main wheels supported in the turn-tables, and the motors supported by the turn-tables

and connected with the main wheels, whereby to drive the same, substantially as set forth.

3. The combination in a machine, substantially as described, of the framing, having the turn-table rings, the carrier extended across the front of said frame, the turn-tables operating in their rings, means whereby said turn-tables may be turned in unison, and means for operating the main wheels, substantially as set forth.

4. A machine substantially as described, comprising the framing provided at its front side with the endless carrier and having the rearward extension and the caster-wheel therein, the turn-table rings supported in the main frame, the turn-tables in said rings, means for turning said turn-tables in unison, the main wheels supported in the turn-tables and motors carried by the turn-tables and connected with the main wheels whereby to drive the same, substantially as set forth.

5. The combination with the main frame and the carrier extended across the front side thereof and the elevator at one end of said carrier and provided at its end with a revolving knife, the engine geared with the carrier and elevator and arranged to operate the revolving knife, the turn-table rings, the main wheels supported by the turn-tables, the motors carried by the turn-tables and arranged to operate their respective main wheels and means whereby the turn-tables may be turned in unison, substantially as set forth.

6. The combination in a machine, substantially as described, of the endless carrier and elevator, a motor for operating said carrier and elevator, the main wheels, and motors for operating said main wheels, such motors being independent of each other and of the motor for operating the carrier and elevator, substantially as set forth.

7. The combination in a machine, substantially as described, of the frame, the main wheels, the turn-tables supporting said wheels, means for adjusting said turn-tables, and means for operating the main wheels independently of each other, all substantially as and for the purposes set forth.

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Witnesses:

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