

No. 844,031.

PATENTED FEB. 12, 1907

T. J. MERRITT.
COTTON PICKER'S VEHICLE.
APPLICATION FILED OCT. 22, 1906.

3 SHEETS—SHEET 1.

Fig. I.

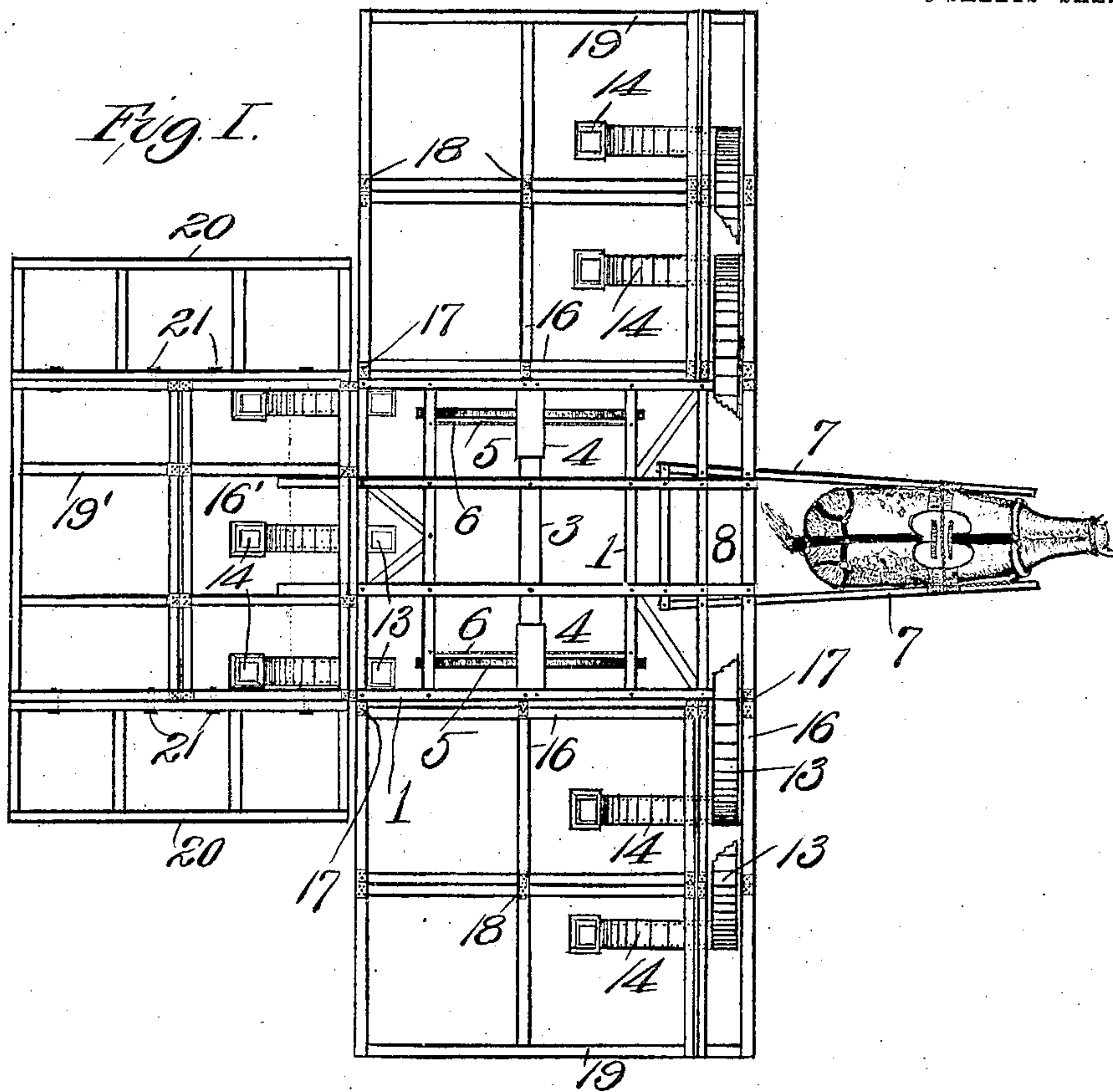
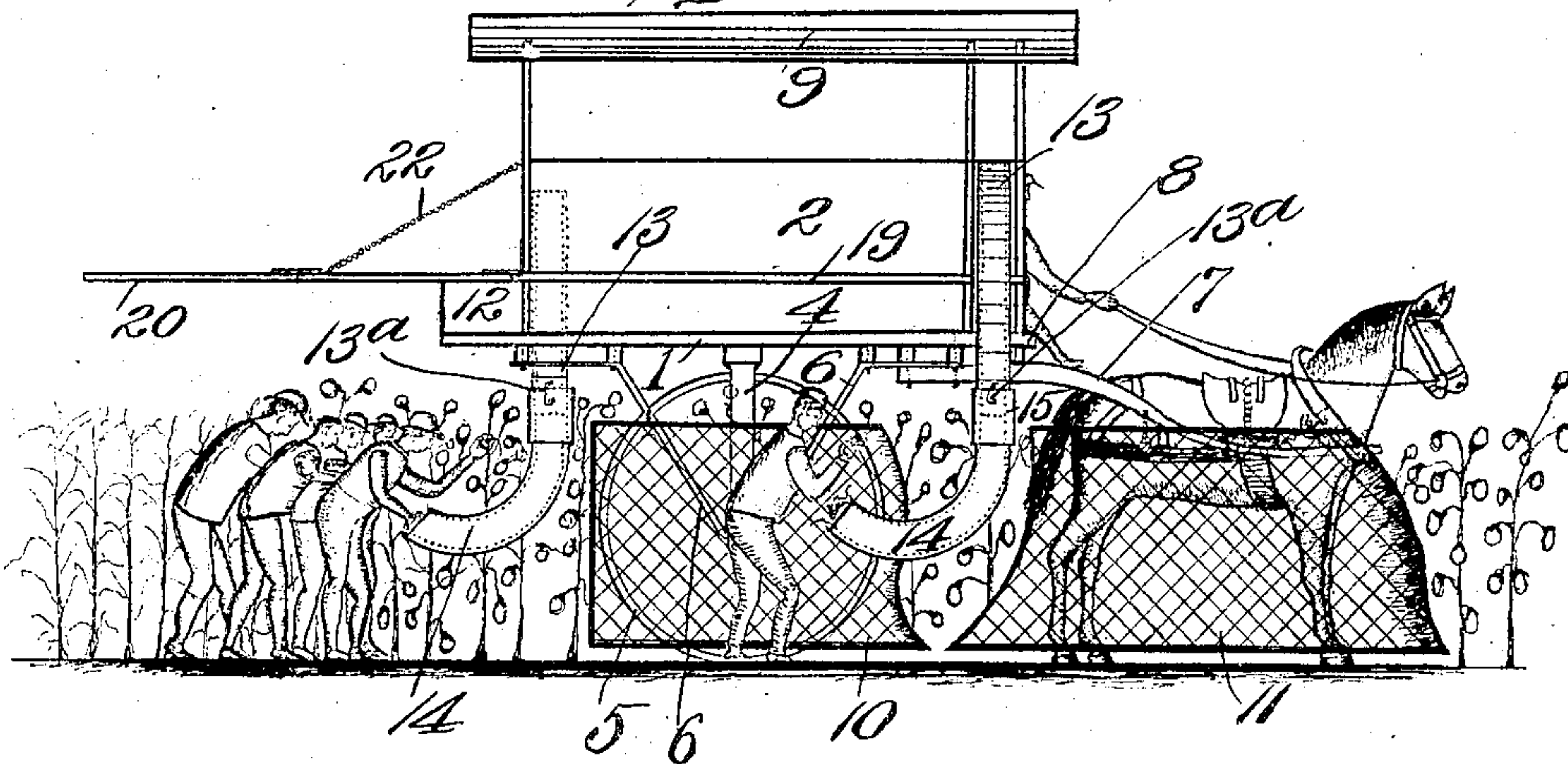


Fig. II.



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Witnesses

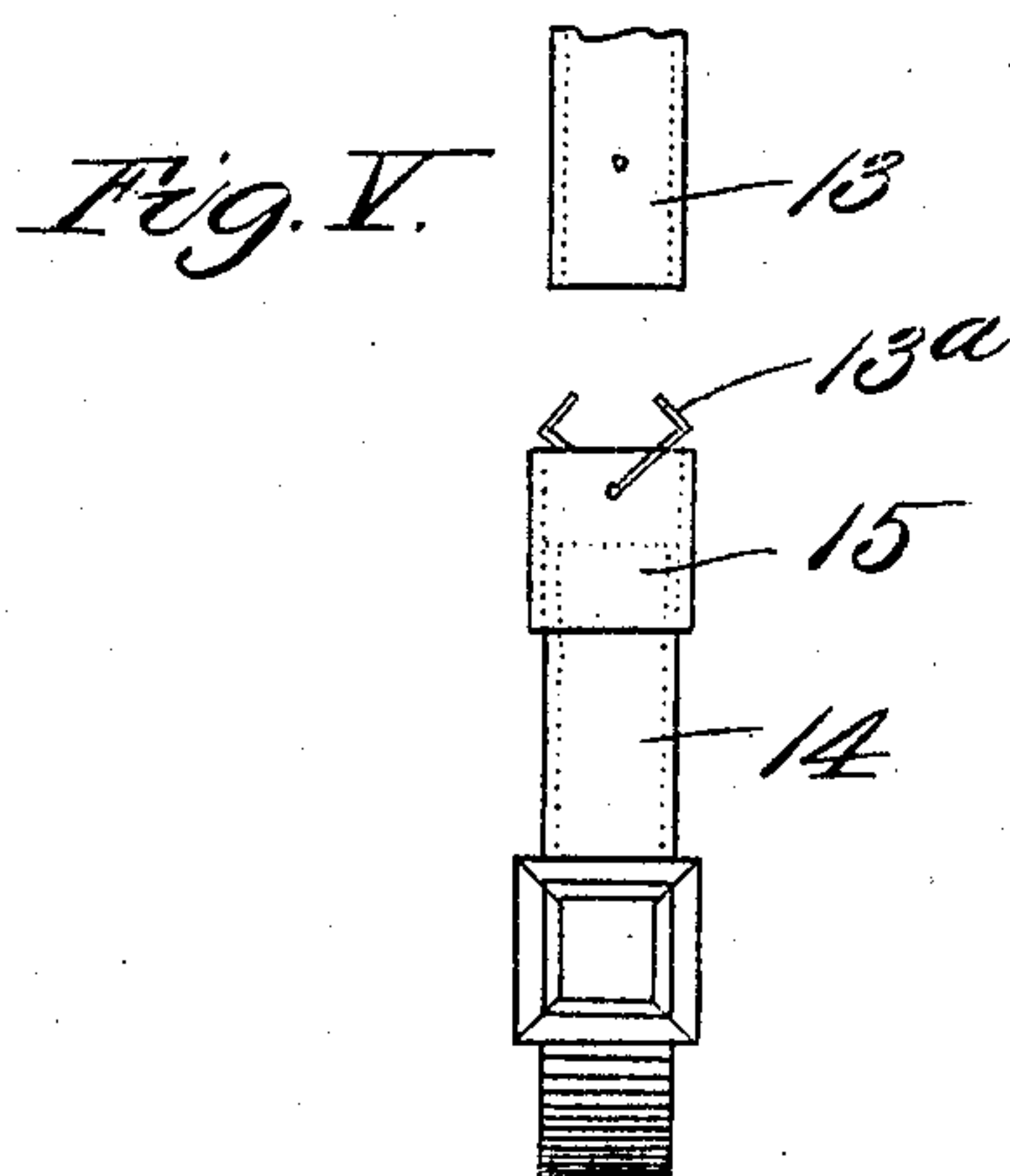
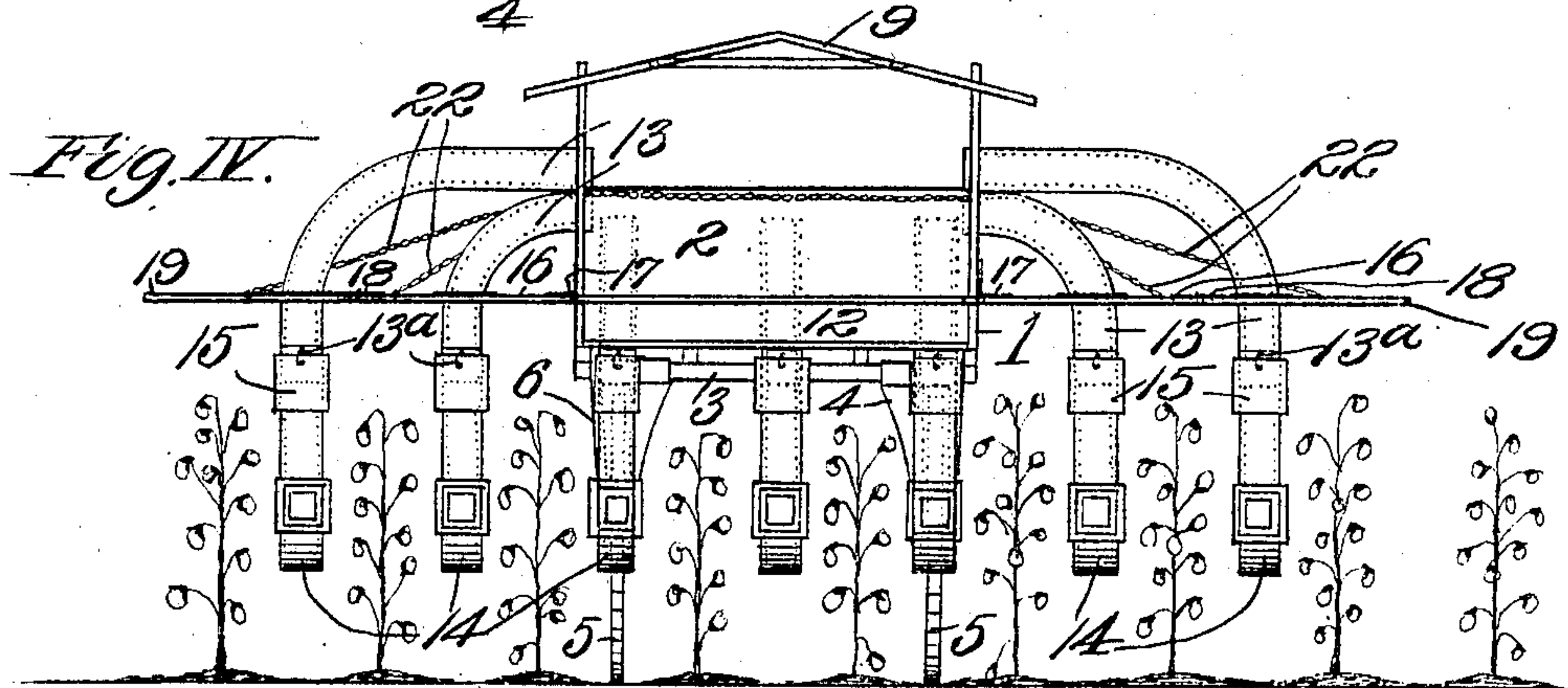
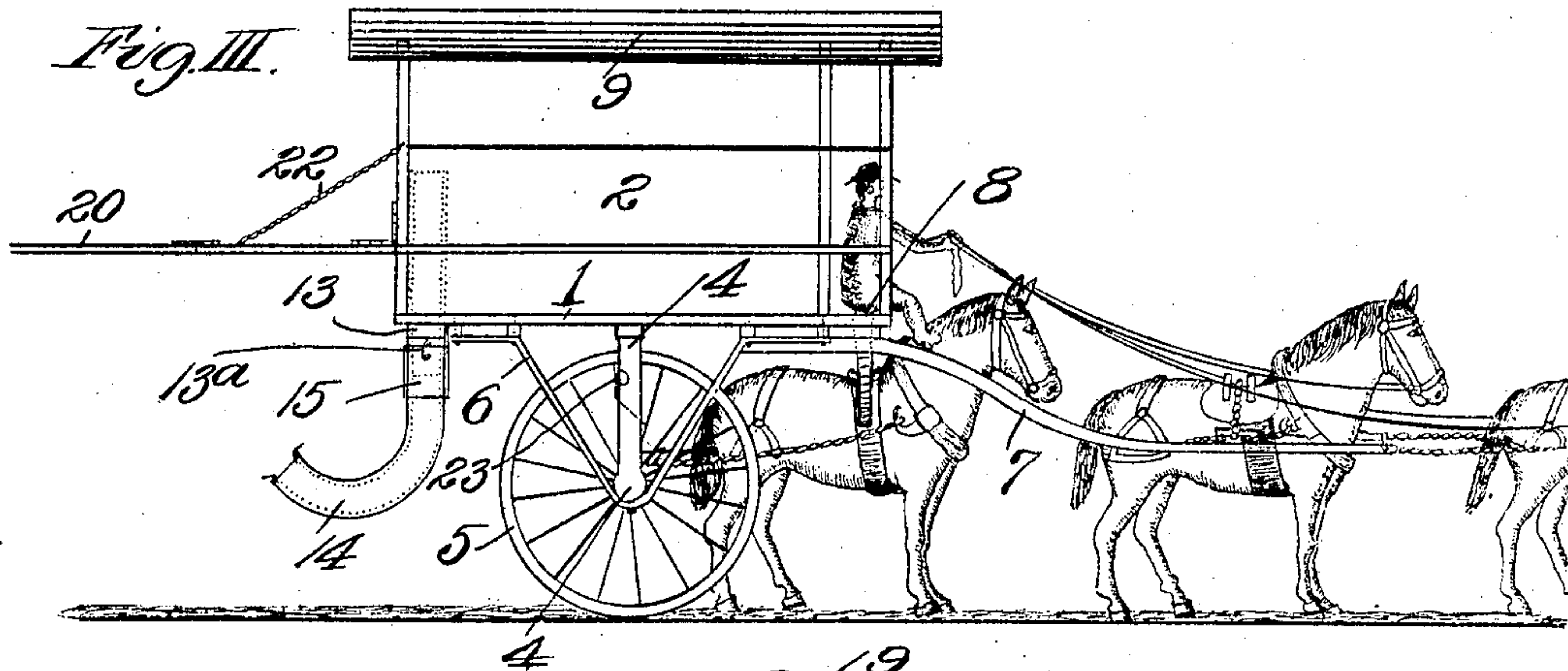
Wm. H. Scott
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3 SHEETS—SHEET 2.



Witnesses

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3 SHEETS—SHEET 3.

Fig. VI.

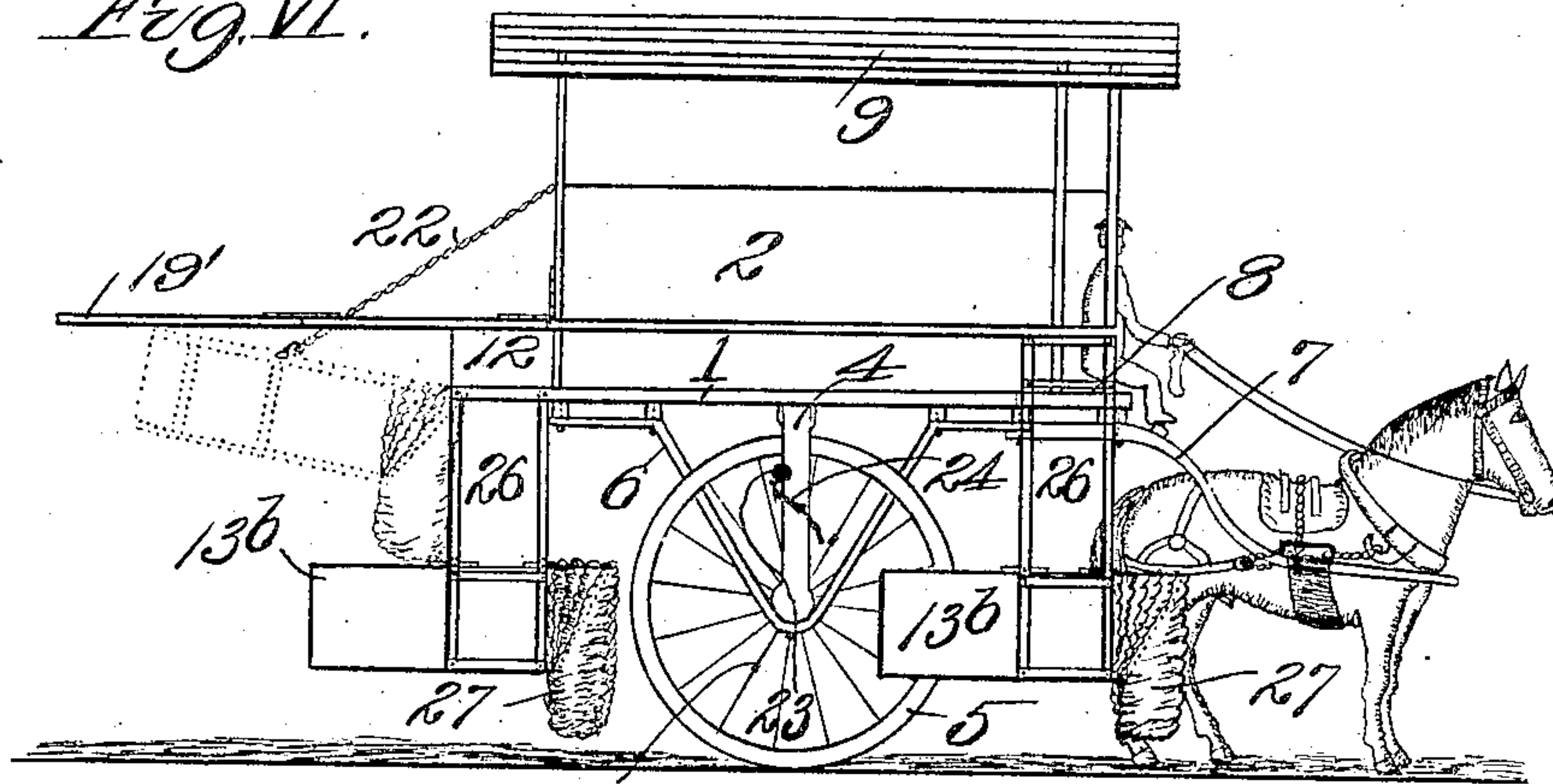


Fig. VII.

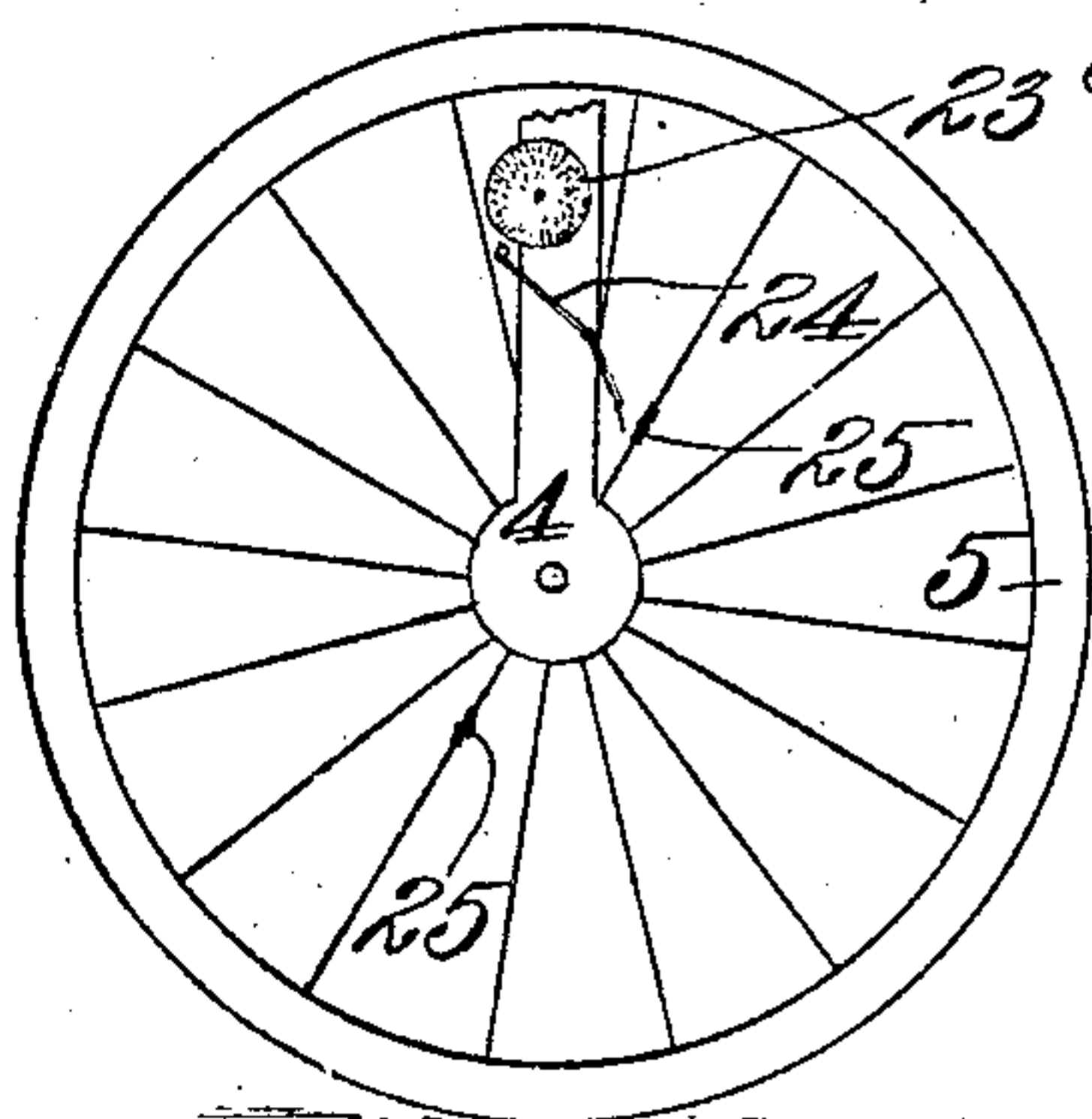
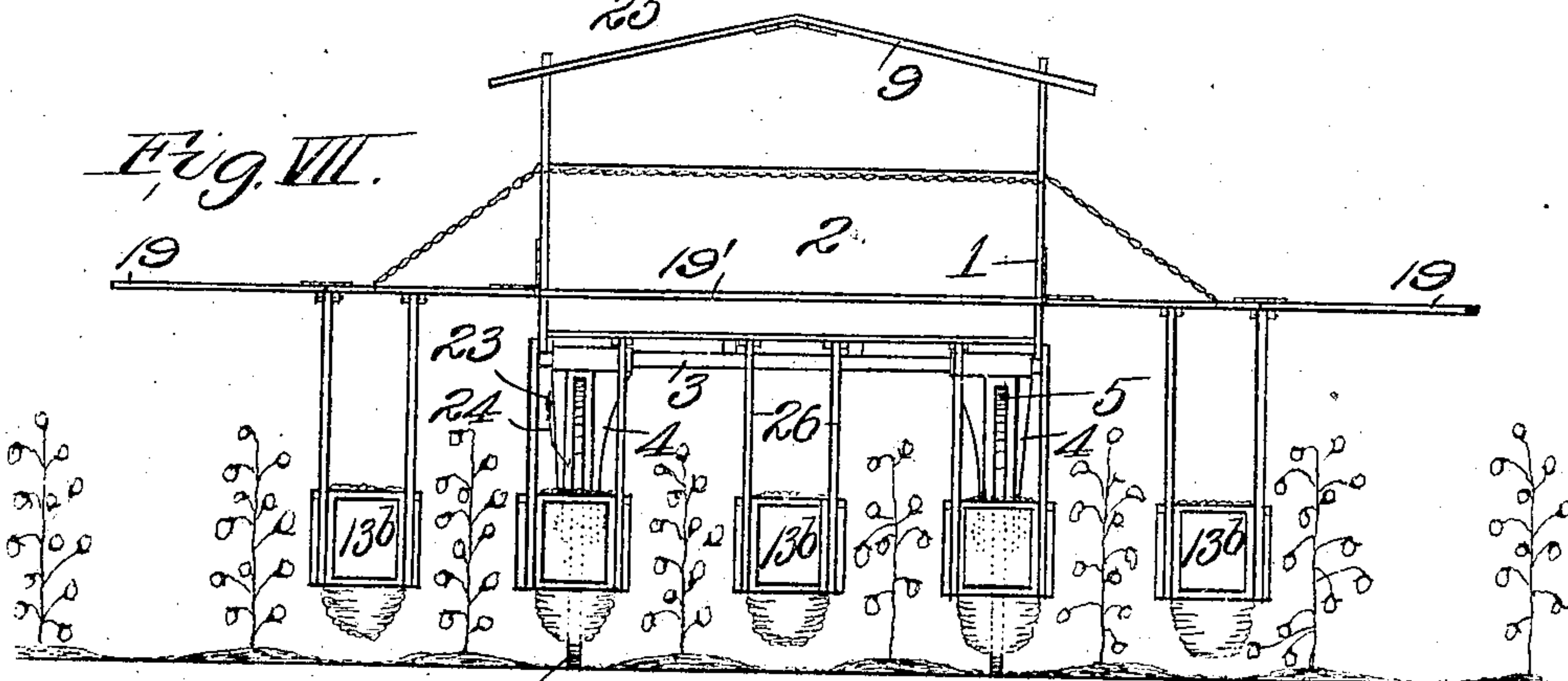


Fig. VIII.

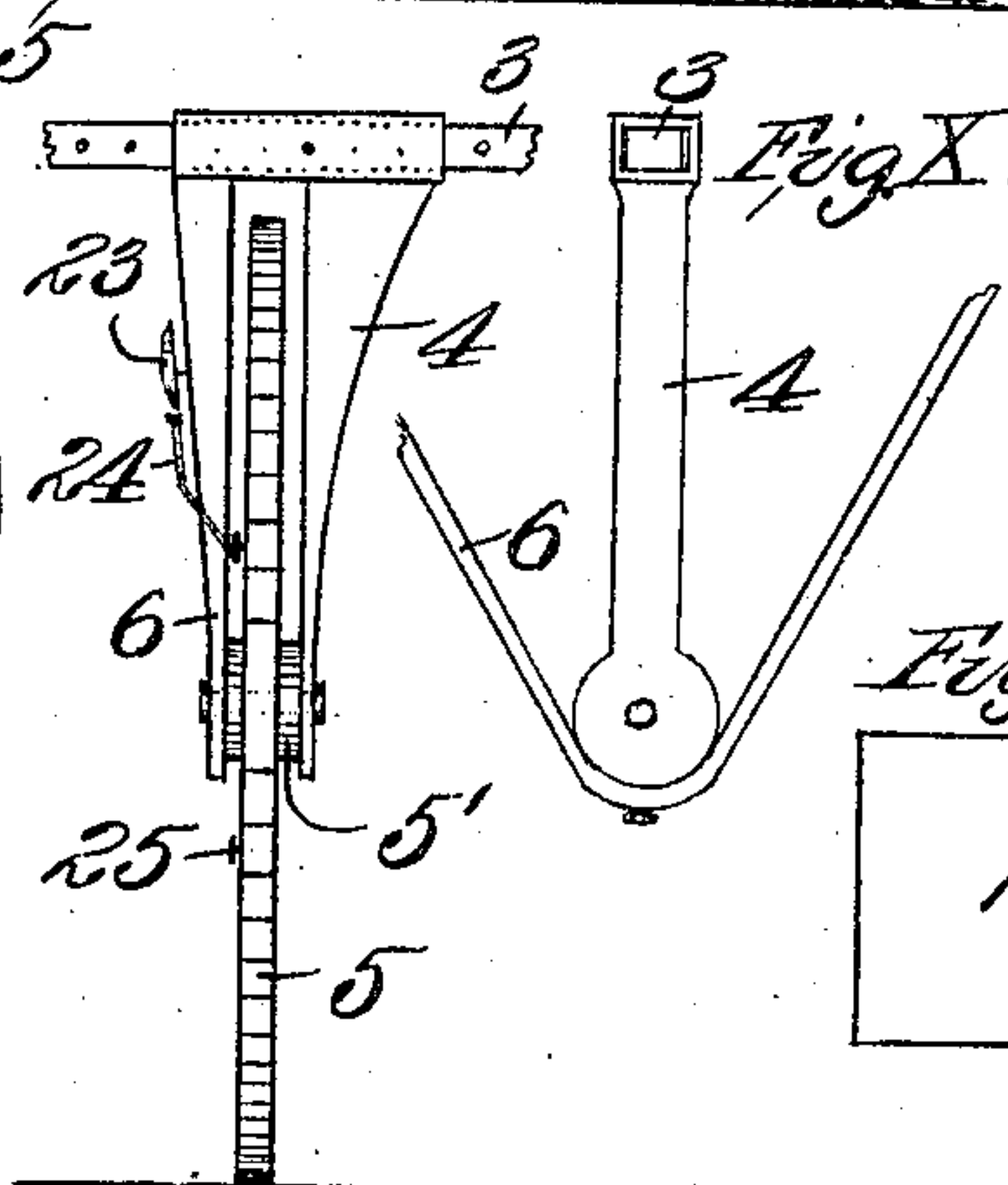


Fig. IX.

Fig. X.

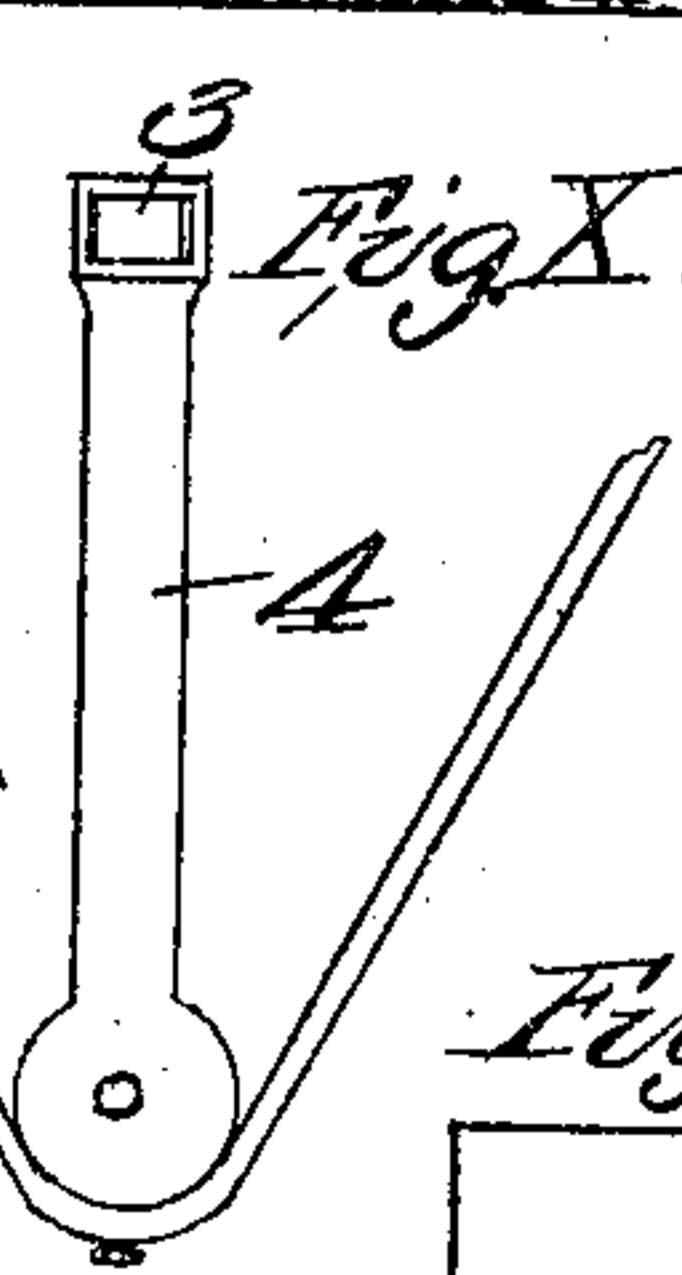


Fig. XI.

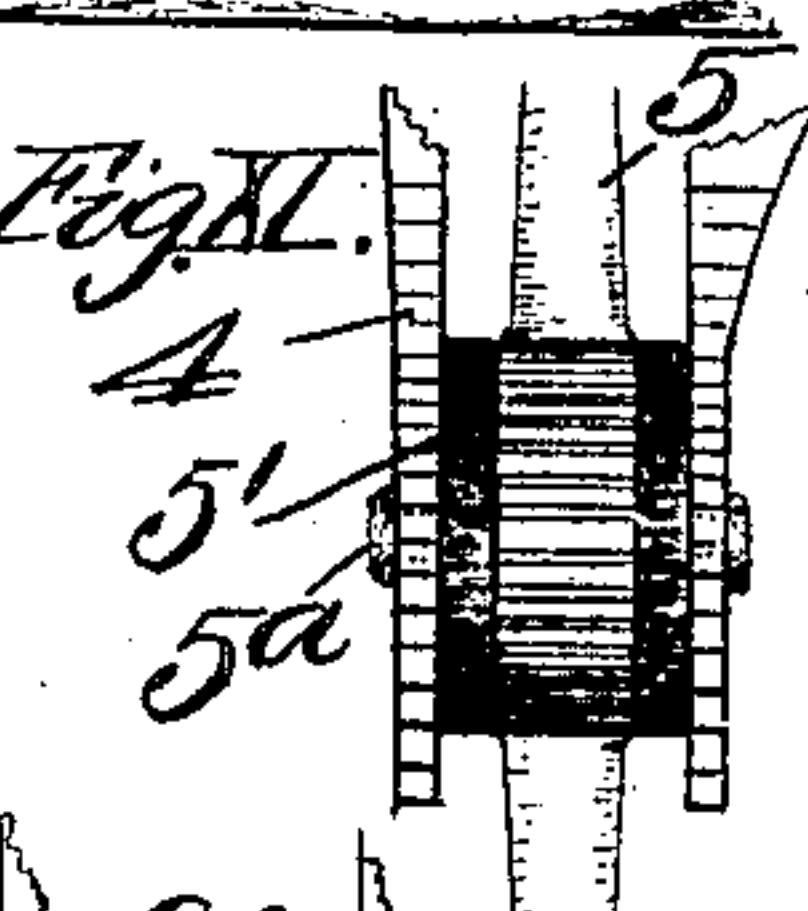
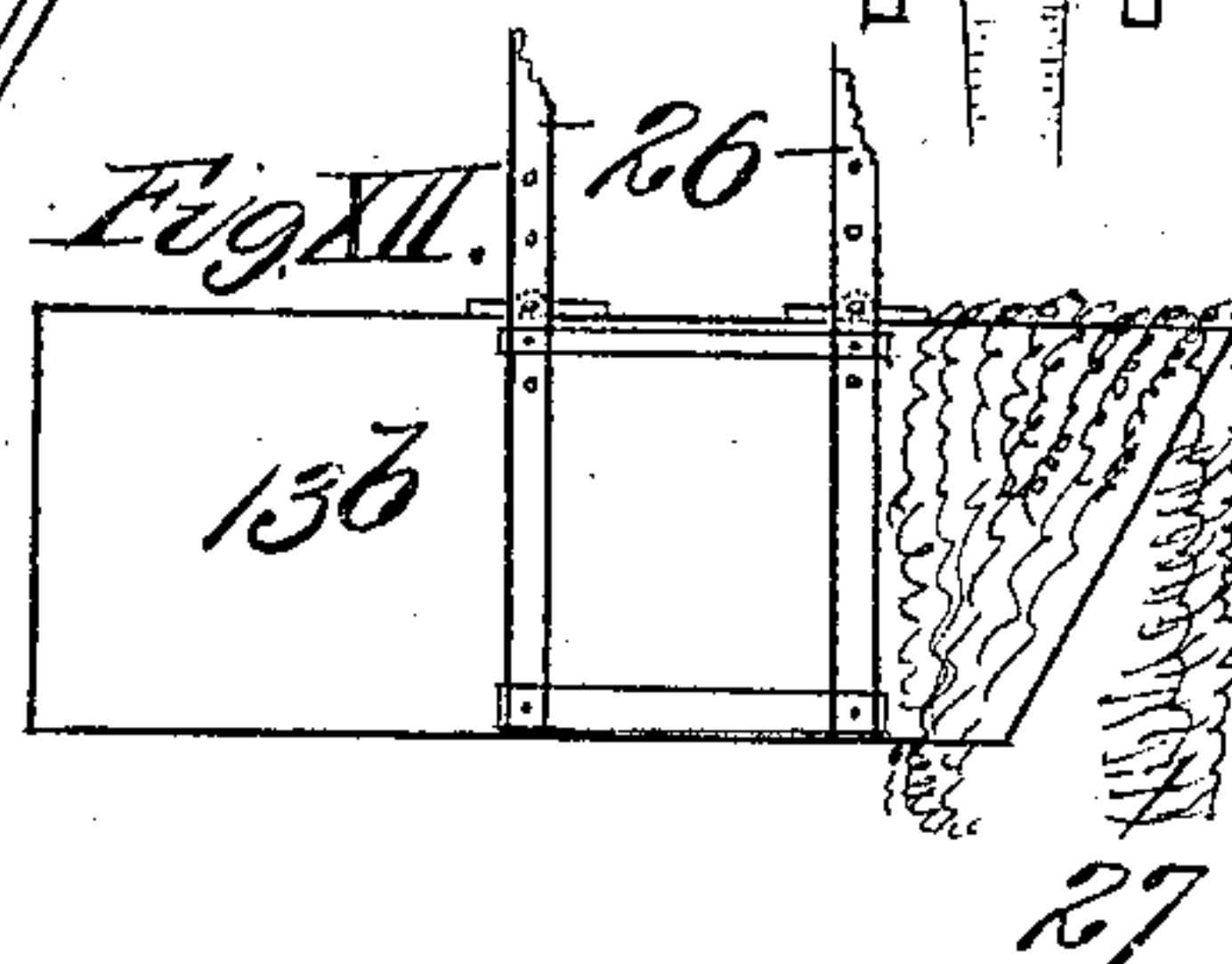


Fig. XII.



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UNITED STATES PATENT OFFICE.

THOMAS J. MERRITT, OF ST. LOUIS, MISSOURI.

COTTON-PICKER'S VEHICLE.

No. 844,031.

Specification of Letters Patent.

Patented Feb. 12, 1907.

Application filed October 22, 1906. Serial No. 339,931.

To all whom it may concern:

Be it known that I, THOMAS J. MERRITT, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Cotton-Pickers' Vehicles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a vehicle for use in cotton-fields to receive the cotton as it is gathered by the pickers and transport it during the gathering operation, the vehicle being provided with suitable conveyers or receptacles into which the cotton is placed and either delivered into a suitable box or bed forming a part of the vehicle or sacks that are carried by the vehicle. The vehicle also includes screens, by which the pickers are protected from the hot rays of the sun, and various other appurtenances.

Figure I is a top or plan view of my vehicle with the bed thereof and the coverings of the screen-frames omitted. Fig. II is a side elevation of the vehicle shown in Fig. I as it appears when in use. Fig. III is a side elevation of the vehicle with the fenders for the draft-animal and the wheels of the vehicle and a portion of the conveyer omitted. Fig. IV is a rear elevation of the vehicle as seen in Figs. II and III. Fig. V is an elevation of one of the sectional conveyer tubes. Fig. VI is a side elevation of a modified form of the vehicle in which provision is made for the support of cotton-receiving sacks and the delivery thereinto of the cotton. Fig. VII is a rear view of the vehicle shown in Fig. VI. Fig. VIII is an enlarged elevation of one of the ground-wheels, a portion of the yoke in which said wheel is fitted, and a signal mechanism associated with said parts. Fig. IX is a front or rear elevation of the ground-wheel, the yoke in which said wheel is fitted, and the signal mechanism. Fig. X is an enlarged side elevation of one of the ground-wheel yokes and brace connected thereto. Fig. XI is an enlarged elevation of the hub of one of the ground-wheels. Fig. XII is an enlarged elevation of one of the boxes used in the modified form of my vehicle and the lower portion of a hanger-frame supporting said box.

Referring first to Figs. I to IV, inclusive, and VIII to XI, inclusive, 1 designates the

main frame of my vehicle, and 2 the bed of the vehicle, which is supported by said frame. 3 is an axle which is suitably attached to the main frame and to which are adjustably attached ground-wheel yokes 4, that contain short spindles 5^a for the hubs of the ground-wheels 5, that operate within said yokes. The yokes 4 are adjustably fitted to the axle (see Fig. IX) in order that the ground-wheels may be spaced more or less widely apart to travel between rows of cotton, according to the spacing of such rows. The yokes 4 are of inverted-U shape and of such vertical length as to position the axle 3 of the vehicle and the parts supported by said axle at a sufficient elevation to prevent any of such parts striking against the cotton-plants over which they move. Said yokes being of narrow form, as illustrated, they move readily with the ground-wheels between the rows of cotton-plants, and therefore there is no liability of injury to the cotton by the yokes striking thereagainst. The wheels 5 are narrow, and the hub 5' of each wheel, which is preferably of metal, is provided with flat sides that rest against the inside faces of the yoke-arms, whereby the wheels are steadied within the hubs, and a narrow wheel and hub may be utilized, with a result of preventing injury to the cotton-plants by said wheel. 6 are braces connected to the yoke 4 and adjustably attached to cross members of the main frame 1 in order that they may be shifted with said yokes. 7 are the shafts of the vehicle that are connected to the main frame and to which the draft-animal is attached, the shafts being so located that the draft-animal may walk between two adjacent rows of cotton-plants, while the ground-wheels move in paths outside of said rows. The main frame is extended beyond the bed of the vehicle to provide a driver's seat 8. 9 is a top surmounting the vehicle-bed. 10 and 11 are fenders inclosing the ground-wheels and draft-animal, as seen in Fig. II, utilized to fend the cotton-plants from the ground-wheels and animal in order that they may not be knocked down. These fenders may, however, be dispensed with, as illustrated in Fig. III. 12 is a receptacle mounted at the rear end of the main frame and within which water for drinking purposes and cotton-receiving sacks may be carried. 13 designates conveyer-tubes proper, the upper ends of which extend to or into the vehicle-bed 2

in order that cotton fed into said chutes may be delivered into said bed. The conveyer-tubes proper have connected to them and forming parts thereof receiving-tubes 14, that are connected by couplings 15 through the medium of hooks 13^a. The receiving-tubes are made detachable in order that they may be disconnected from the conveyer-tubes proper when the vehicle is being turned at the ends of rows of cotton-plants into other rows from which the cotton has not been picked, whereby injury to the cotton-plants is avoided, such as would occur if the receiving-tubes remained in positions where they would strike against the plants. The conveyer-tubes are located in various positions relative to the main part of the vehicle—namely, at the sides and rear of the vehicle—in order that several pickers gathering the cotton may walk between the rows of cotton-plants, pick the cotton, and feed it into the conveyer-tubes, through which it is gradually pressed by hand to be finally discharged into the bed of the vehicle.

In view of the fact that cotton-pickers in gathering cotton cannot readily pick the cotton from the plants in following rows thereof as rapidly as a horse or other draft-animal walks in drawing the vehicle I provide signal means adapted to be actuated at predetermined intervals during the movement of the vehicle. This signal means comprises a gong 23, carried by one of the yokes 4 of the vehicle, a hammer 24, pivoted to said yoke and adapted to strike said gong, and trips 25, carried by the wheel operating in the yoke and so positioned as to trip said hammer and sound the gong each time that the ground-wheel moves a certain distance. I preferably provide two of the trips upon the ground-wheel located at diametrically opposite positions in order that the gong will be sounded twice during every revolution of the wheel. When the gong is sounded, the draft-animal may be stopped by the driver. It is obvious, however, that after the draft-animal has become accustomed to being stopped each time that the gong is sounded he will stop of his own accord thereafter.

For the purpose of furnishing shade for the cotton-pickers I mount at each side of the main frame of the vehicle a screen-frame 16, that has a suitable covering, such as canvas or other cloth, applied to it and which are connected to the main frame by hinges 17 in order that the screens may be elevated against the vehicle-bed when not needed to furnish shade or when the vehicle is being transported. Each screen-frame 16 has connected to it by hinges 18 an auxiliary screen-frame 19, that is covered with screen-cloth and constitutes an extension-screen which is adapted to be folded onto the screen-frame 16 previous to its being folded into a position of non-use. The screens at the sides of the

vehicle furnish shade for the pickers working at such sides, and for the purpose of furnishing shade for the pickers working at the rear of the vehicle I provide complementary screens 16' and 19', the former of which is hinged to the main frame of the vehicle and the latter of which is hinged to the former in a manner similar to that described relative to the side screens.

20 are supplemental screens that are connected to the rear screens 16' and 19' by pins or bolts 21 and which when not needed may be entirely removed from the vehicle. The screens are all supported by chains or cords 22, that connect them to the main part of the vehicle, as seen in Figs. II and IV, inclusive.

Referring next to the vehicle illustrated in Figs. VI and VII, the main parts of the vehicle, as shown in these views, including the screens, are similar to corresponding parts as previously described with the exception of the conveyer-tubes, which are dispensed with. Instead of using said tubes I provide hanger-frames 26, suspended from the main frame of the vehicle and from the screen-frames, and mount in said hanger-frames cotton-receiving boxes or conveyers 13^b, into which the cotton may be placed as it is picked. These boxes are open at both ends and are adapted to have fitted to one end of each of them a sack 27 to receive the cotton, which is introduced into the boxes at their ends opposite to those to which the sacks are fitted. By this arrangement the pickers may each fill individual sacks and by doing so be constantly in possession of knowledge of the amount of cotton picked individually. The hanger-frames 26 are swingingly and foldingly connected to the supports from which they are suspended, (see Fig. X,) and the boxes 13^b are swingingly connected to said hanger-frames in order that both the hanger-frames and the boxes may be moved into elevated positions, as illustrated in dotted lines, Fig. VI, to be upheld in such positions when the vehicle is being turned at the ends of rows of cotton-plants.

All of the parts of my vehicle are detachably united to each other or foldingly connected, thereby rendering the vehicle of knockdown form and providing for the shipment of the vehicle in such form, in which much less space is occupied by it during shipment.

I claim—

1. In a cotton-picker's vehicle, the combination of running-gear, and a tubular cotton-conveyer carried by said running-gear, substantially as set forth.

2. In a cotton-picker's vehicle, the combination of running-gear, a receptacle supported by said running-gear, and tubular conducting means through which cotton is delivered to said receptacle, substantially as set forth.

3. In a cotton-picker's vehicle, the combination of running-gear, a bed carried by said running-gear, and a tubular conveyer-chute leading to said bed, substantially as set forth.

5 4. In a cotton-picker's vehicle, the combination of running-gear, a bed carried by said running-gear, and a conveyer-chute leading to said bed; said conveyer-chute being provided with a detachable portion, substantially as set forth.

10 5. In a cotton-picker's vehicle, the combination of running-gear, a bed carried by said running-gear, a conveyer-chute proper leading to said bed, a receiving-chute detachably fitted to said conveyer-chute proper and provided with a coupling, and means for connecting said coupling to said conveyer-chute proper, substantially as set forth.

20 6. In a cotton-picker's vehicle, the combination of a main frame, an axle attached to said main frame, ground-wheels, and means in which said ground-wheels are journaled shiftably fitted to said axle, substantially as set forth.

25 7. In a cotton-picker's vehicle, the combination of a main frame, an axle attached to said main frame, ground-wheels, and yokes in which said ground-wheels are journaled shiftably fitted to said axle, substantially as set forth.

30 8. In a cotton-picker's vehicle, the combination of running-gear a main frame carried by said running-gear, means for receiving cotton carried by said frame-gear, and sectional screens hinged to said frame and projecting outward therefrom, substantially as set forth.

35 9. In a cotton-picker's vehicle, the combination of running-gear having a main frame,

cotton-receiving means carried by said running-gear, main screens hinged to said main frame, and auxiliary screens hinged to said main screens, substantially as set forth.

10. In a cotton-picker's vehicle, the combination of running-gear having a main frame, cotton-receiving means carried by said running-gear, main screens hinged to said main frame, and supplemental screens detachably connected to said main screens, substantially as set forth.

11. In a cotton-picker's vehicle, the combination of running-gear, cotton-receiving means carried by said running-gear, draft-shafts attached to said running-gear and adapted to receive a draft-animal, and a fender carried by said shafts, substantially as set forth.

12. In a cotton-picker's vehicle, the combination of running-gear including ground-wheels, and a signal carried by said running-gear and adapted to be operated through the medium of said ground-wheels, substantially as set forth.

13. In a cotton-picker's vehicle, the combination of a main frame, yokes supporting said main frame, ground-wheels journaled in said yokes, a gong supported by one of said yokes, a hammer supported by said yoke adjacent to said gong, and a trip carried by the ground-wheel associated with said yoke and adapted to engage said hammer during the movement of said ground-wheel, substantially as set forth.

THOS. J. MERRITT.

In presence of—

NELLIE V. ALEXANDER,
BLANCHE HOGAN.