

(No Model.)

2 Sheets—Sheet 1.

G. VAN WAGENEN.
SUGAR WAGON.

No. 441,264.

Patented Nov. 25, 1890.

Fig. 1.

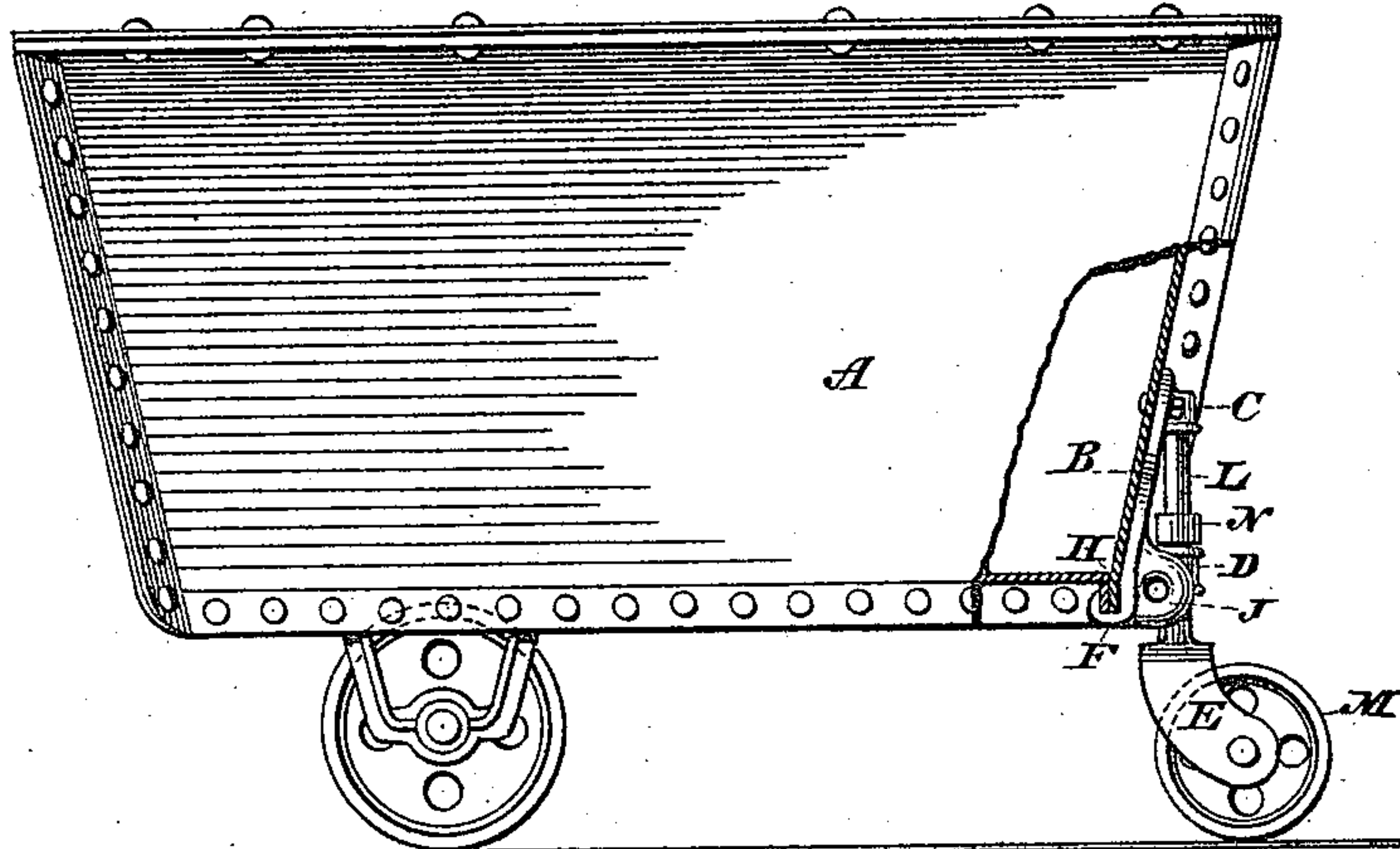


Fig. 4.

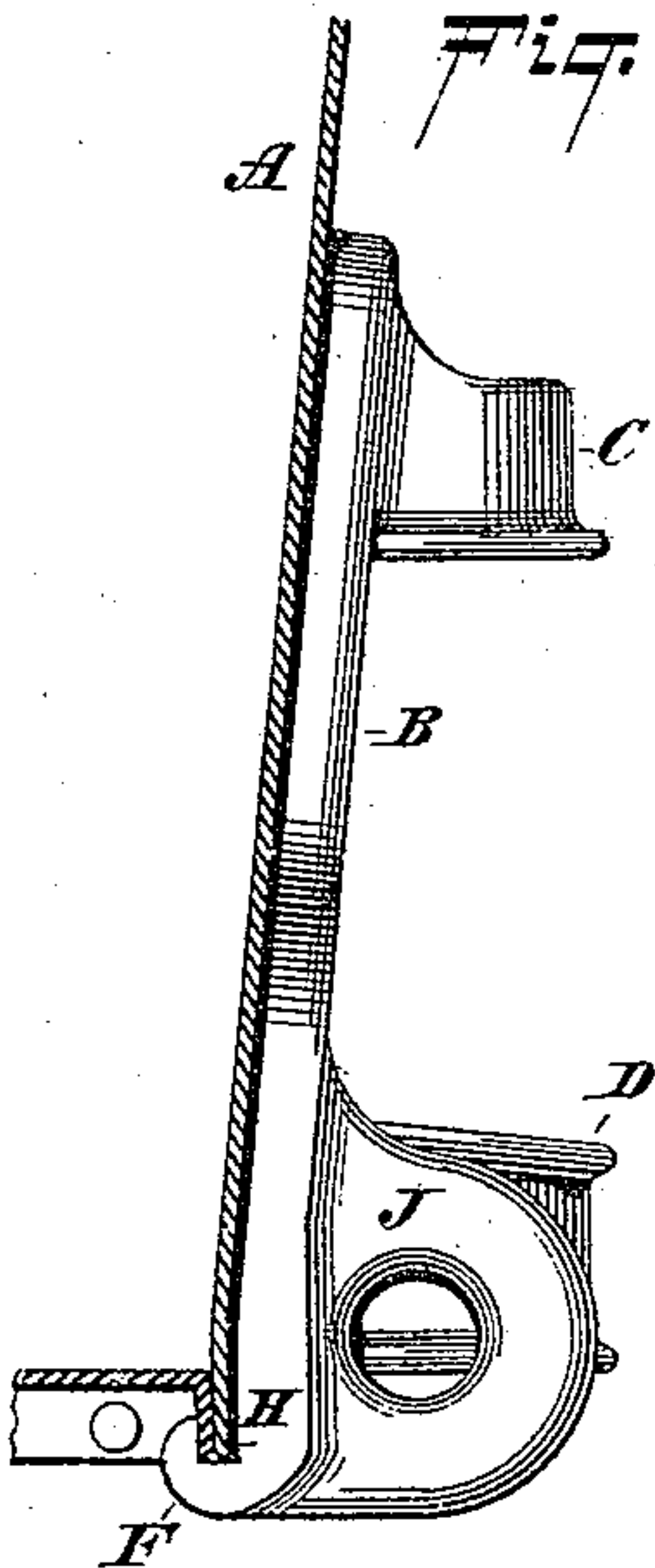


Fig. 2.

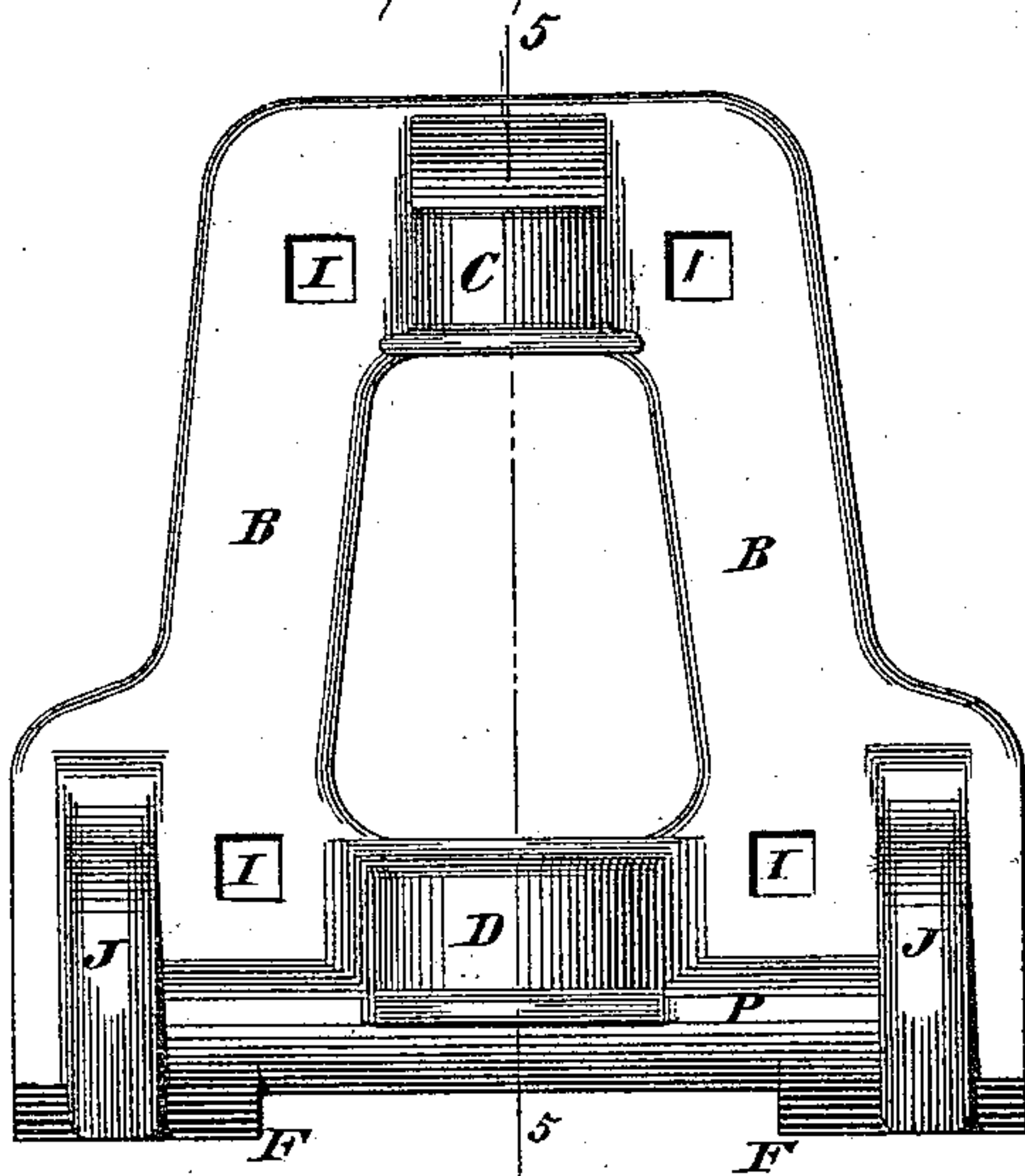


Fig. 5.

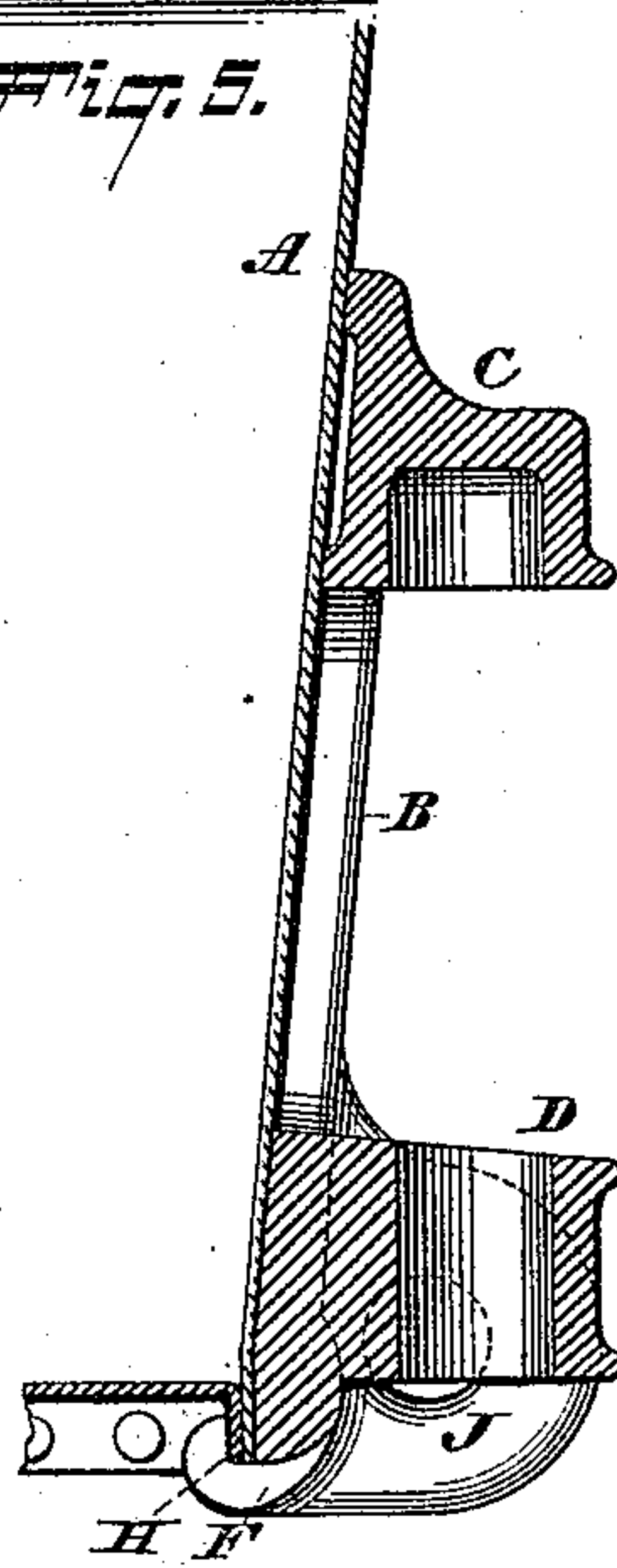
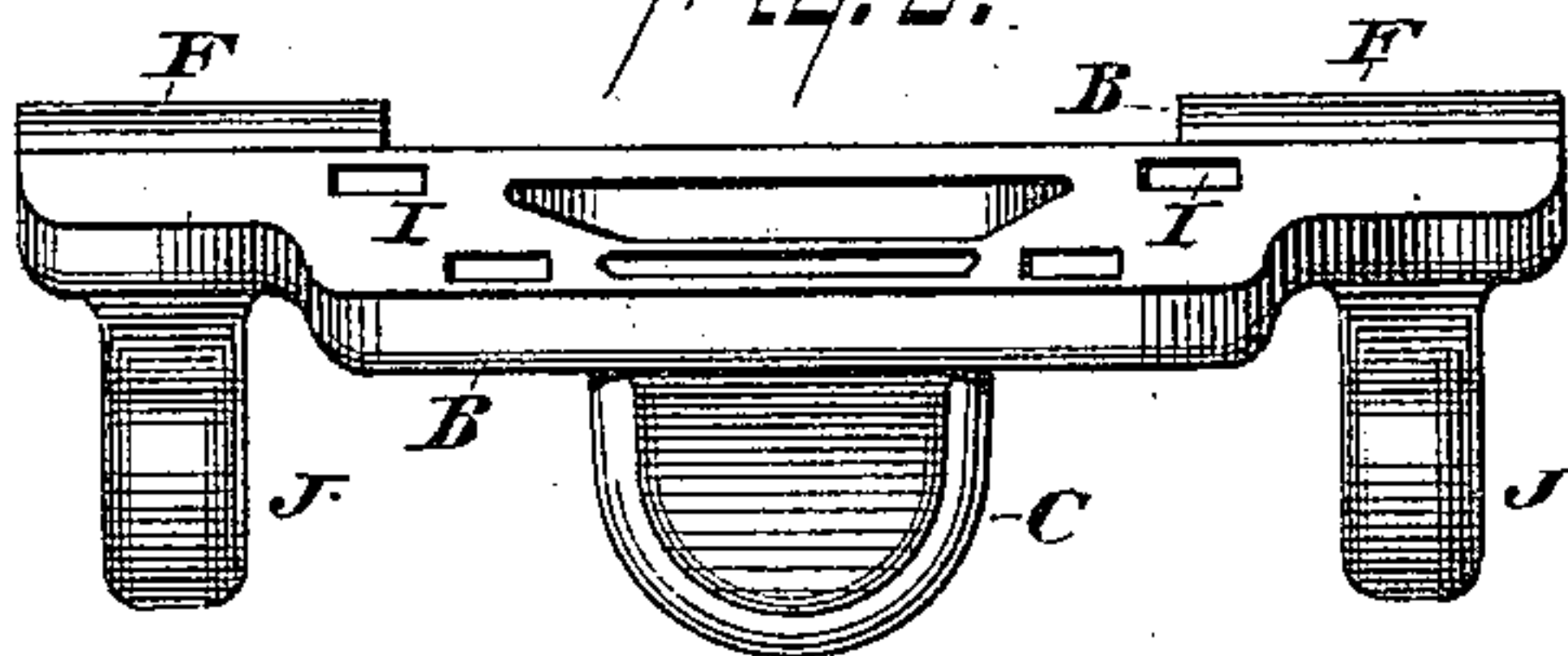


Fig. 3.



WITNESSES:
Gustave Dietrich.
William Goebel.

INVENTOR
George Van Wageningen,
BY
Chas. C. Gill.
ATTORNEY.

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Fig. 7.

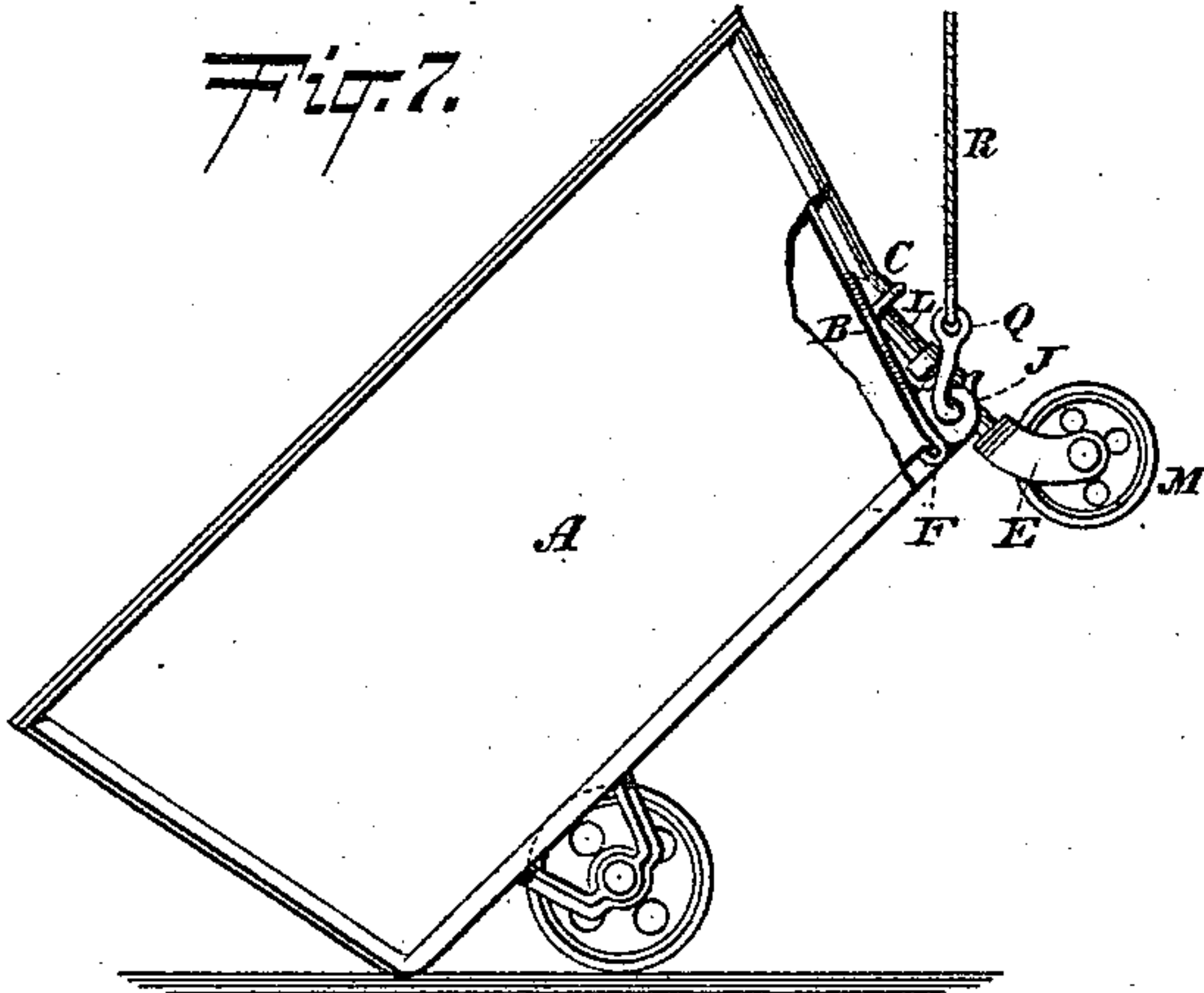


Fig. 8.

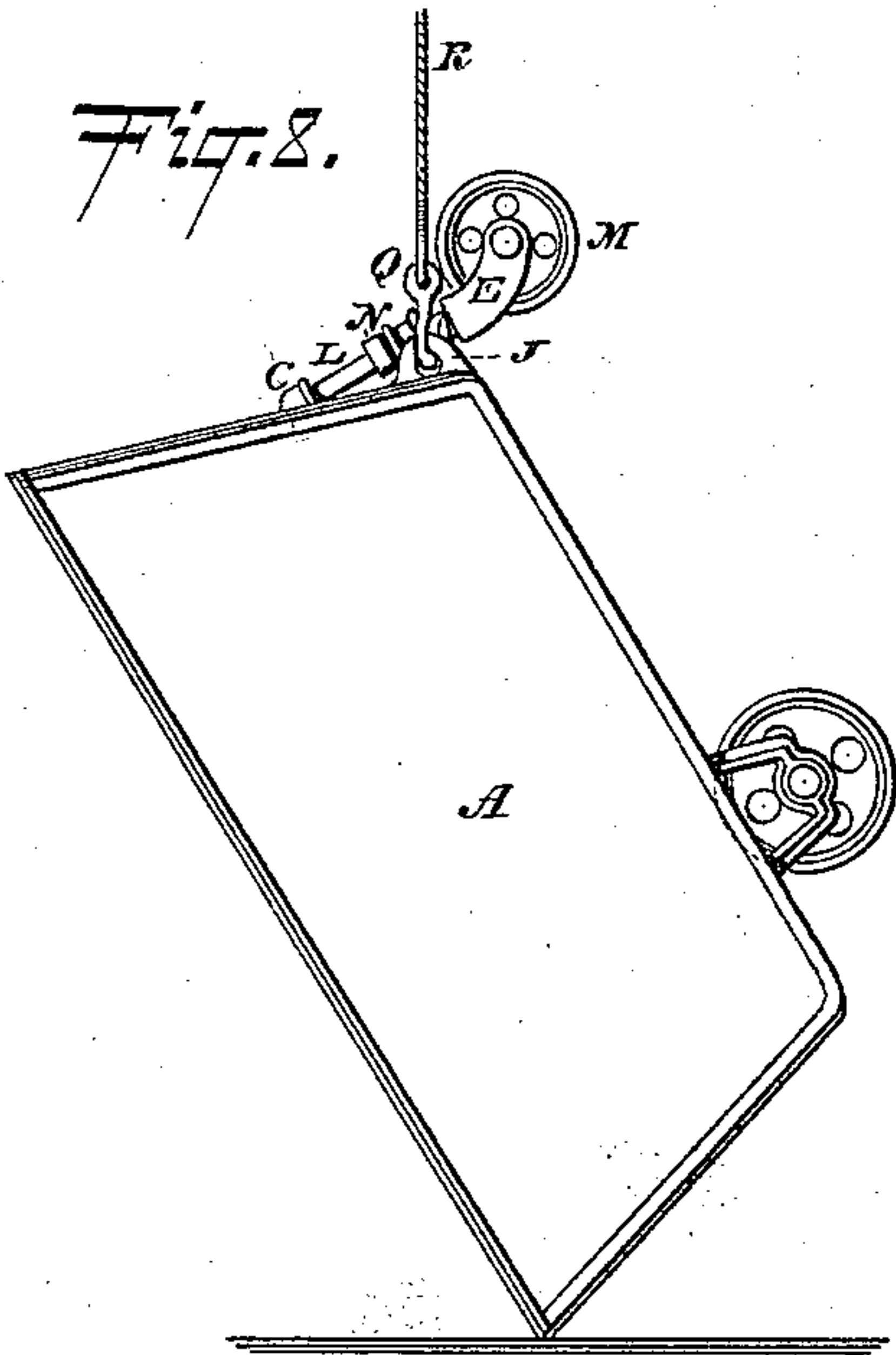


Fig. 9.

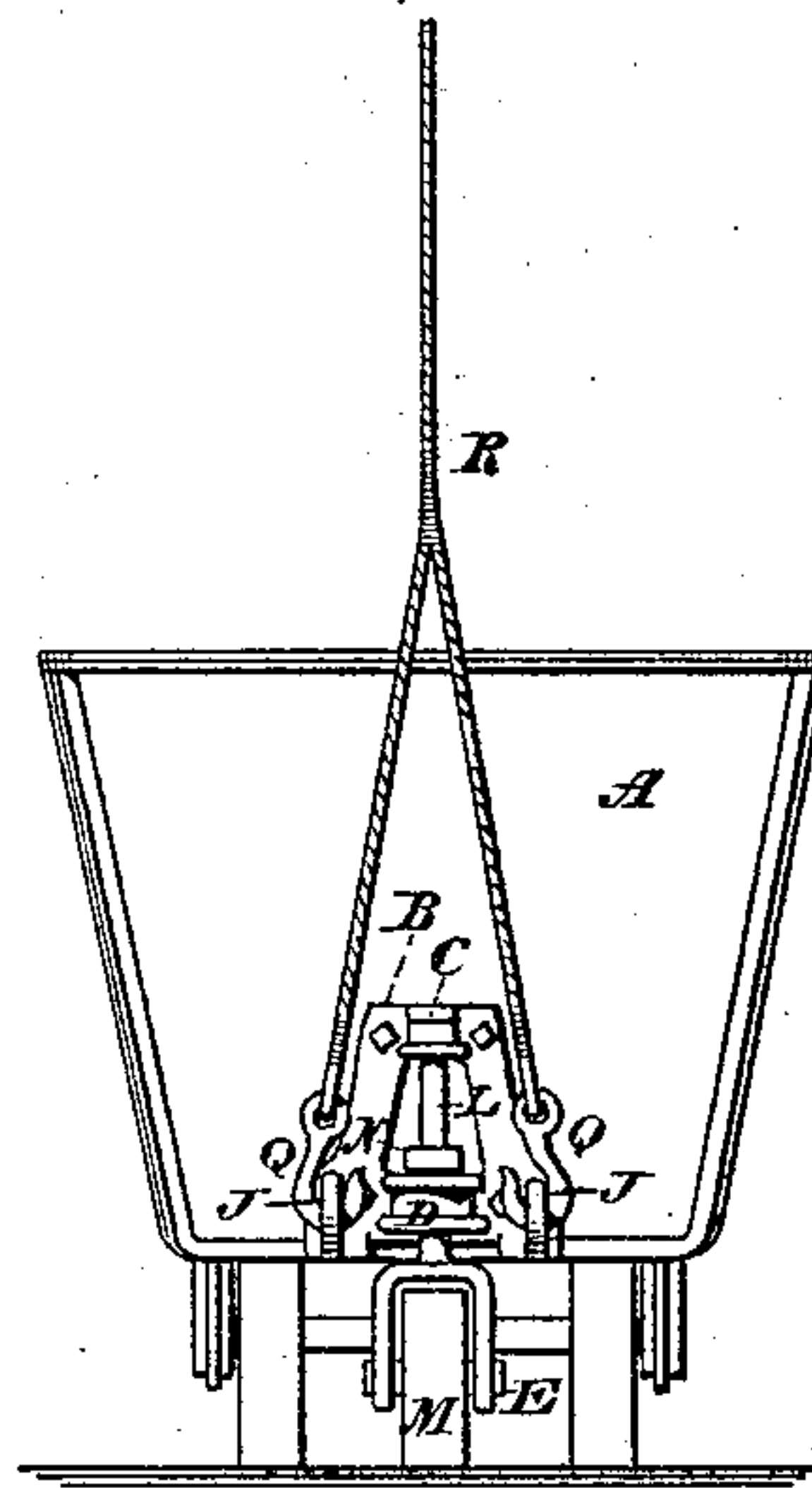
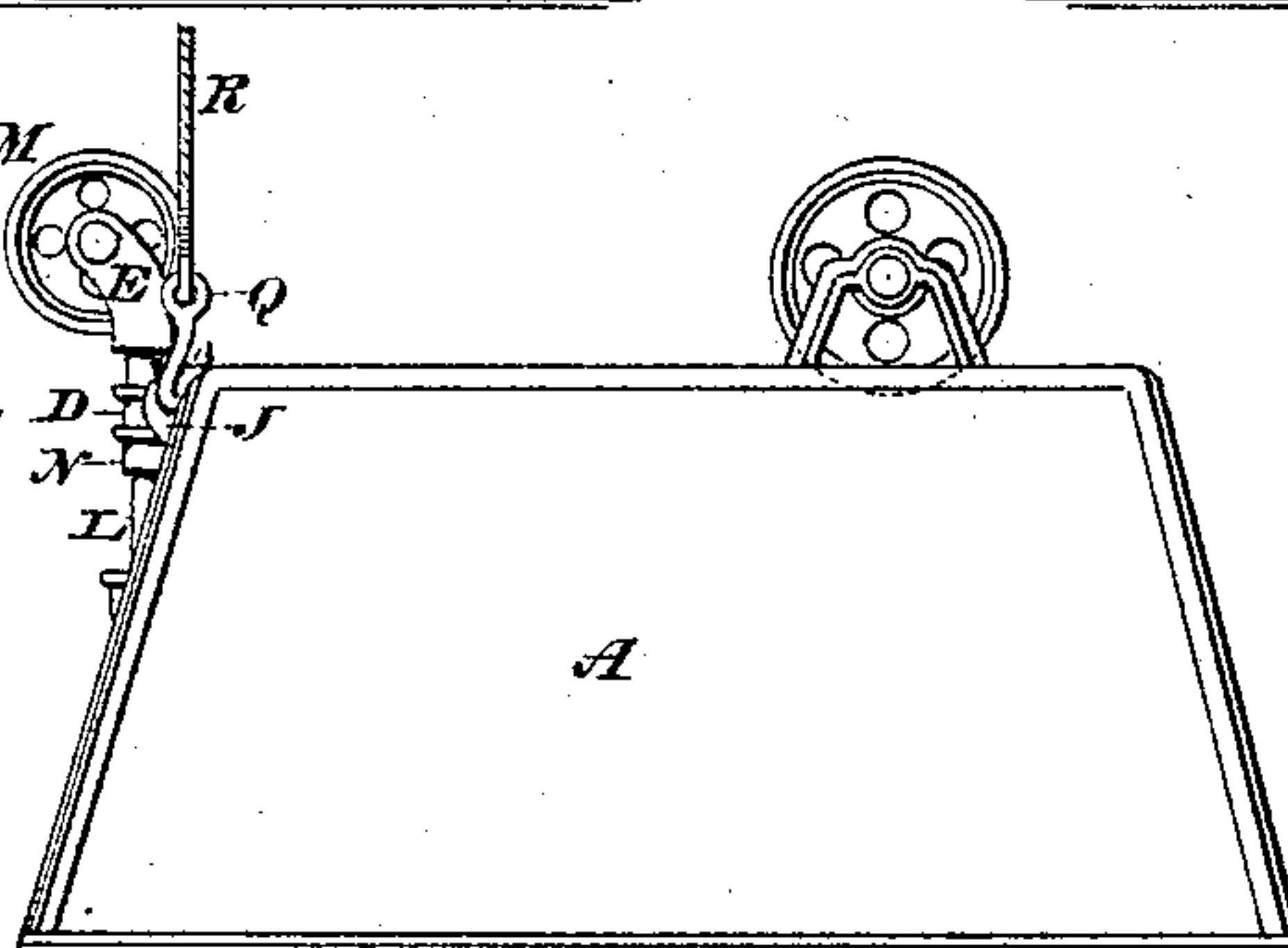


Fig. 10.



WITNESSES:

Gustave Dietrich
William Goebel

INVENTOR

George Van Wageningen

BY

Chas. O. Hill

ATTORNEY.

UNITED STATES PATENT OFFICE.

GEORGE VAN WAGENEN, OF NEW YORK, N. Y.

SUGAR-WAGON.

SPECIFICATION forming part of Letters Patent No. 441,264, dated November 25, 1890.

Application filed September 16, 1890. Serial No. 365,163. (No model.)

To all whom it may concern:

Be it known that I, GEORGE VAN WAGENEN, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Sugar-Wagons, of which the following is a specification.

The invention relates to improvements in sugar-wagons, and particularly to the class of wagons shown and described in Letters Patent of the United States No. 428,790, dated May 27, 1890, and No. 431,826, dated July 8, 1890, both having been issued to the Geo. Van Wagenen Company, as assignee.

The present invention consists in a novel bracket for supporting the swivel at the front end of the wagon, and also in novel means whereby the sugar may be conveniently and successfully removed from the wagon at the proper time. It is probably well known that the sugar while hot is placed in the wagons and then allowed to cool, and that in view thereof the sugar forms itself into a compact mass of considerable weight. The removal of the sugar from the wagon is often attended with difficulty in view of its great weight and the solidity with which it compacts itself while cooling, and it is the object of the second part of my invention to overcome this difficulty and render the removal of the sugar from the wagon convenient and rapid.

By means of my invention the wagon may be quickly and completely emptied, and the use of instruments for breaking up the sugar in or for prying it from the wagon dispensed with, and the consequent injury to the wagon from said instruments avoided.

Referring to the accompanying drawings, Figure 1 is a side elevation, partly broken away, of a wagon constructed in accordance with the invention; Fig. 2, a detached enlarged front elevation of the swivel-bracket; Fig. 3, a perspective view of same, looking at its upper end; Fig. 4, an edge view of same, and illustrating in section a portion of the front and bottom of the wagon; Fig. 5, a vertical section of same on the dotted line 5 5 of Fig. 2, and showing, also in section, a portion of the front and bottom of the wagon; Fig. 6, a front view of the wagon with the tackle or cable in position for elevating the wagon and causing the sugar to fall therefrom; Fig. 7, a

side elevation of same, partly broken away, and illustrating the wagon as partly elevated by the tackle or cable; Fig. 8, a side elevation of the wagon in its completely elevated position, and Fig. 9 is a like view of same in its lower position with its open end downward.

In the drawings, A designates the wagon composed of the sides, ends, and bottom, said wagon being open at the top and adapted to be transported from place to place, as desired.

Upon the lower central front portion of the wagon is secured by bolts or rivets the bracket B, which constitutes the essential feature of the first part of my invention and is formed with the hollow cap C at its upper end, the sleeve D at its lower central portion, and the hooks F F at its lower edge, which hooks pass upon and engage the flanges H, formed at the adjoining ends of the front and bottom of the wagon, as shown more clearly in Fig. 5. The bracket B has also an open center and is formed with the apertures I for the bolts or rivets, and with the eyes J J at its opposite sides, the purpose of the eyes being to receive the hooks attached to the tackle or cable by which the wagon is handled in the removal of the sugar therefrom, as hereinafter more fully described.

The bracket B is secured in place by bolts or rivets passing through the apertures I and receives the swivel-rod L within the sleeve D and cap C, the latter inclosing and forming a bearing for the upper end of the rod and the former encompassing and sustaining the said rod adjacent to the frame E, which is secured to the lower end of the rod and carries the wheel M. Upon the rod L is affixed the collar N, which is close against the sleeve D and prevents the swivel from slipping from the bracket. The open center of the bracket enables me to use an appropriate thickness of metal without rendering the bracket unsightly or bulky and affords adequate space for the collar N during the rotation of the swivel-rod in its bearings. The hooks F F aid in firmly securing the bracket B to the wagon-body and in enabling the bracket to withstand the strain exerted against it during the operation of emptying the wagon by means of the tackle or cable engaging the eyes J J. The lower edge of the bracket B is also pro-

vided with a strengthening-rib P, extending between the eyes J J.

In the use of the wagon, the latter being full of sugar, and it being desired to remove the same, the hooks Q of the tackle or cable R will be placed in engagement with the eyes J J, as shown in Fig. 6, whereupon the tackle or cable will be drawn upward until the wagon successively assumes the positions shown in Figs. 7 and 8, in which latter figure it will be observed that the main bulk of the sugar is left unsupported and in position to fall out of the wagon of its own specific gravity. If, however, the condition of the sugar is such that it does not readily leave the wagon, the latter by gradually slackening the cable may be given the position shown in Fig. 9, when, there being no support whatever for the sugar, it will leave the wagon entirely. It is important to note that the eyes J J are at the lower portion of the wagon-body, and that by reason thereof when the wagon is suspended by the cable, as shown in Fig. 8, the perpendicular plane through the points of suspension—viz., the hooks and eyes—will not be on the vertical center of the suspended wagon, but will be at one side thereof and toward the open top, whereby the center of gravity of the sugar is brought beyond the end of the wagon in such line that the bulk of the sugar is left unsupported. The eyes J J, being at the lower portion of the wagon-body, effect a further important function, in that after the wagon has been suspended, as shown in Fig. 8, and it is found that the sugar does not readily fall out, the slackening of the cable will cause the wagon to naturally and gradually lower with its open top downward, as shown in Fig. 9. The elevation of the wagon to the suspended position shown in Fig. 8 and its depression to the position illustrated in Fig. 9 may be accomplished quickly and conveniently and without injurious jar or strain to the wagon. By means of the eyes secured to the lower portion of the wagon-body it will be observed that the removal of the sugar ceases to be a laborious operation, and no danger of injuring the wagon by instruments for breaking or prying the sugar is incurred. The handling of the sugar is cheapened and facilitated and rendered easy and convenient.

In the construction shown in the drawings the eyes J J, for convenience, are cast with the bracket B; but I do not limit the invention in its broader scope to the union of the eyes with the bracket, and reserve the right to secure them at any point along the lower portion of the wagon-body at will for accomplishing the functions and objects above described. Neither do I confine the invention to the employment of eyes J J, in a technical sense, since said eyes are simply a means for engagement with the hooks on the cable or tackle, and if the eyes were on the cable and the hooks on the wagon-body the results accomplished would be exactly the same. By the term "eyes" in this connection, therefore, I mean to embrace what are technically eyes as well as any equivalent means fulfilling like purposes.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a sugar-wagon, the swivel-bracket B, secured thereto, said bracket having the hollow cap, sleeve, and hooks, substantially as set forth.
2. In a sugar-wagon, the swivel-bracket B, secured thereto, said bracket having the open center, the hollow cap, the sleeve, and hooks, substantially as set forth.
3. In a sugar-wagon, the swivel-bracket secured thereto, said bracket having the eyes for engagement with the tackle, substantially as set forth.
4. In a sugar-wagon, the swivel-bracket secured thereto, said bracket having the hooks reaching under the edge of the wagon, and also eyes for engagement with the elevating-tackle, substantially as set forth.
5. The sugar-wagon having eyes at its lower portion for engagement with the elevating-tackle, substantially as and for the purposes set forth.

Signed at New York, in the county of New York and State of New York, this 15th day of September, A. D. 1890.

GEORGE VAN WAGENEN.

Witnesses:

CHAS. C. GILL,
R. A. PORTEOUS.