

N. SWICKARD.
WAGON AND CAR UNLOADER.

No. 83,005.

Patented Oct. 13, 1868.

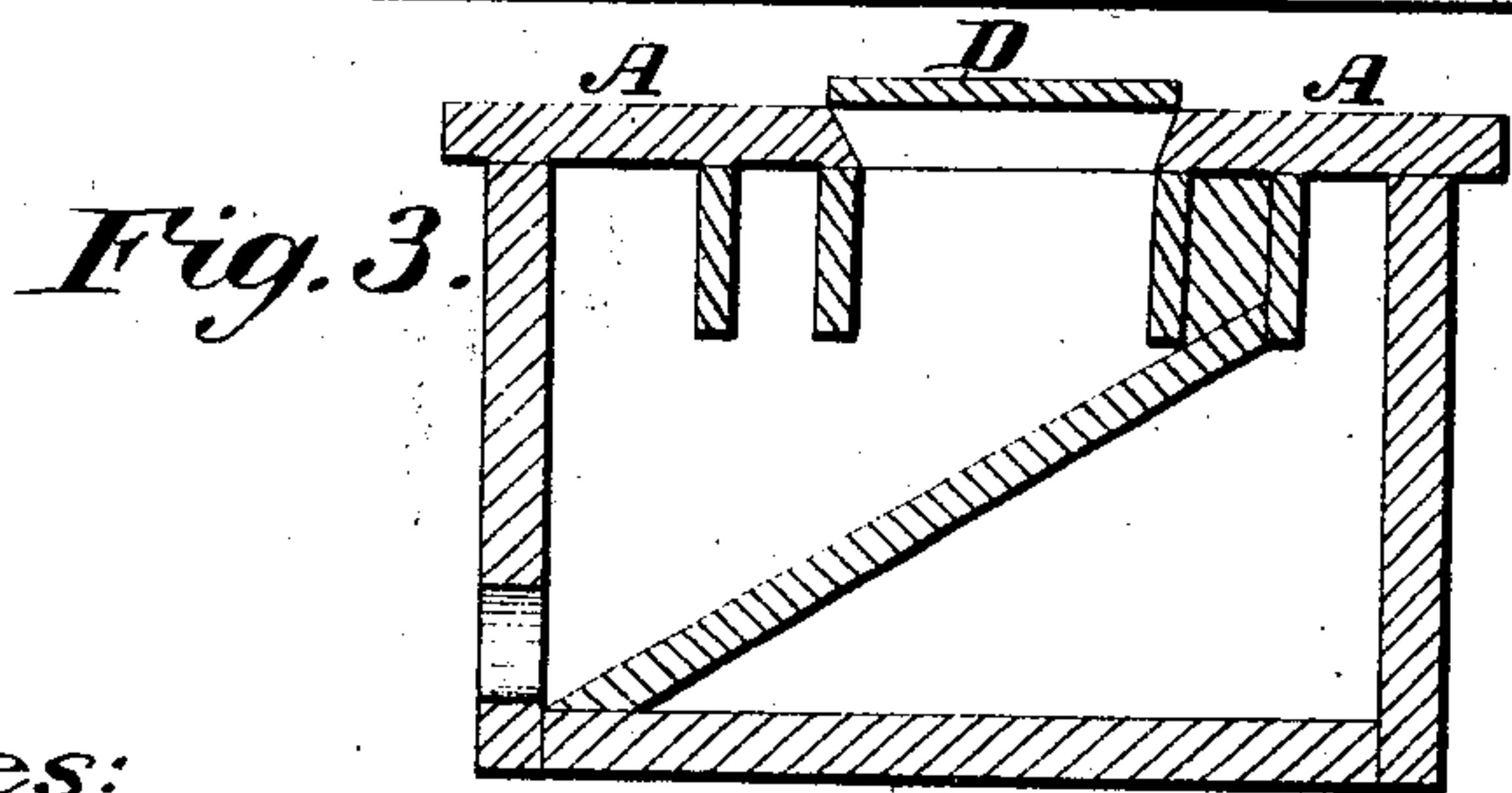
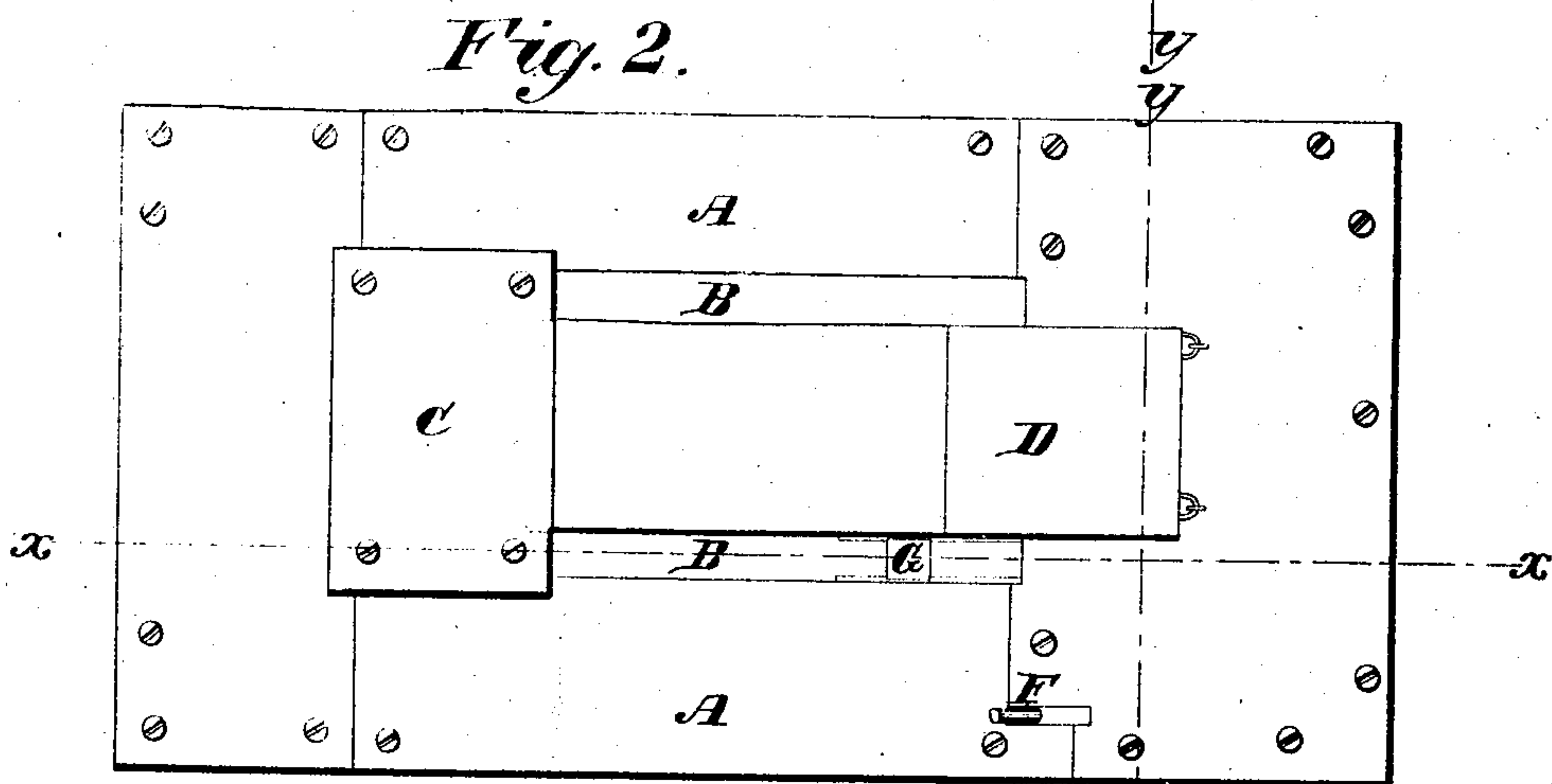
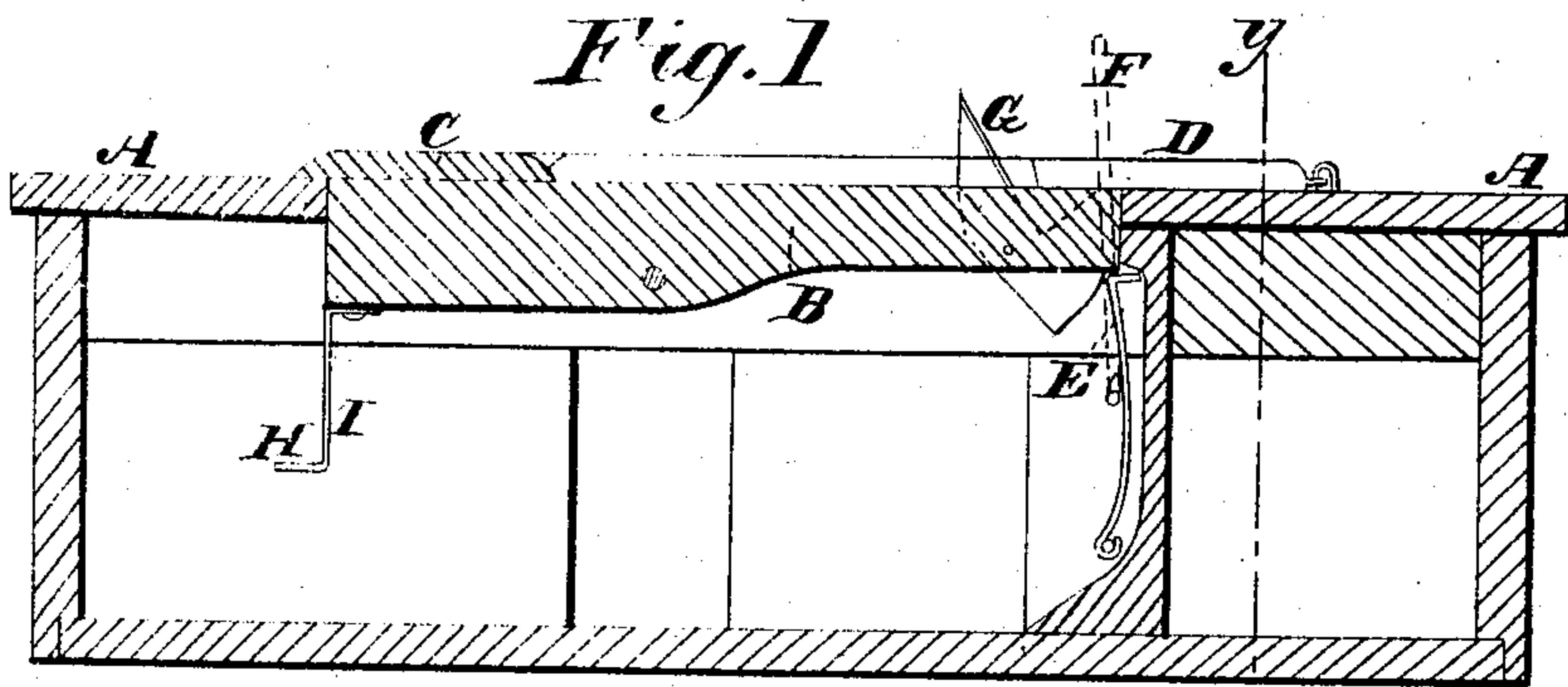
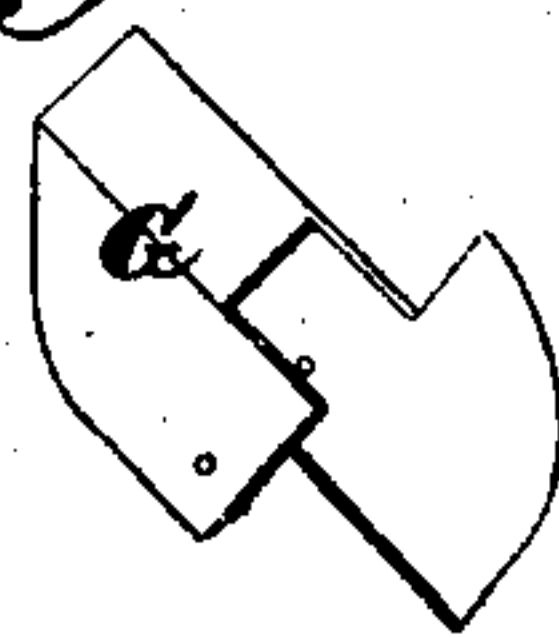


Fig. 4.



Witnesses:

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NOAH SWICKARD, OF GALVA, ILLINOIS.

Letters Patent No. 83,005, dated October 13, 1868.

IMPROVEMENT IN WAGON AND CAR-UNLOADER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, NOAH SWICKARD, of Galva, in the county of Henry, and in the State of Illinois, have invented certain new and useful Improvements in Self-Acting Wagon and Car-Unloader; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction of a self-acting wagon or car-unloader, which is calculated to be used for unloading all loose grain in wagons or cars.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a longitudinal section, taken through the line *x x*, fig. 2;

Figure 2 is a plan view; and

Figure 3 is a transverse section, taken through the line *y y*, figs. 1 and 2.

Figure 4, perspective of a self-acting dog used.

A represents the level part of the platform or floor, in which the drop or dump is placed. This platform is provided with two slots, at suitable distance from each other, running parallel, in which slots the balance-bars B B are pivoted. A plank or board, C, is secured to the front ends of said bars, so that they cannot work independently or separate from each other, but must raise or lower at the same time. The bars B B are so pivoted that they balance perfectly.

At the rear ends of the bars B B is the lid D to the receiving-bin, which lid also serves as a guide to the wagon while being driven on the dump. The rear ends of the balance-bars are held up level with the platform A, closing the slots therein, by means of toggle-keys E E, made self-acting by the use of spring, and a lever, F, operates, by means of projections on the shaft to which it is attached, so as to remove these keys from the ends of the bars preparatory to unloading.

At the front end of the bars B B are wooden or metal bars, I I, secured, which latter extend downward, and are provided with cross-bars or stops H H, as shown in fig. 1, to prevent the front ends of the bars B B from rising higher than is required, and at

the same time closing the slots at the front ends, to prevent any accidents from the team, which might otherwise occur if not so closed.

Near the rear end of one or both of the bars B B, I pivot a self-acting dog, G, which holds the wagon or car while unloading. This dog G is so constructed that it always stands up, but closes down when the wheels of the wagon pass over it. As soon as the wheels have passed, it rises again, and prevents the wagon from moving backwards.

When the wagon is driven on to the platform, the lid D guides it, so that the wheels will pass on to the balance-bars B B, and when in proper position to be unloaded, the lid D is raised to allow the grain to pass into the hopper. By moving the lever F, the keys E E are detached, and by a slight pressure on the hind part of the wagon, the bars B B dump and unload it, the self-acting dog G holding it, and the bars H H preventing it from going too far. As soon as unloaded, the team is started, and by its own weight the wagon will raise the bars B B up again, and the spring-keys E E move in proper position to hold them up for the next load.

Cars may be unloaded with the same device, by merely placing rails in proper manner along the bars B B.

Having thus fully described my invention,

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

1. The slotted platform A, in combination with the pivoted balance-bars B B, board C, end-bars I I, and stops H H, all constructed and operating substantially as and for the purposes herein set forth.

2. The pivoted balance-bars B B, provided with one or more self-acting dogs, G, in combination with the spring toggle-keys E E and key F, all constructed and operating substantially as and for the purposes herein set forth.

3. The arrangement of the slotted platform A, balance-bars B B, and lid D to the hopper, substantially for the purposes set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 1st day of September, 1868.

NOAH SWICKARD.

Witnesses:

ISAAC GRANT,
N. E. PHILLIPS.