

(No Model.)

J. GRAVES.
SUGAR WAGON.

No. 391,842.

Patented Oct. 30, 1888.

Fig. 1.

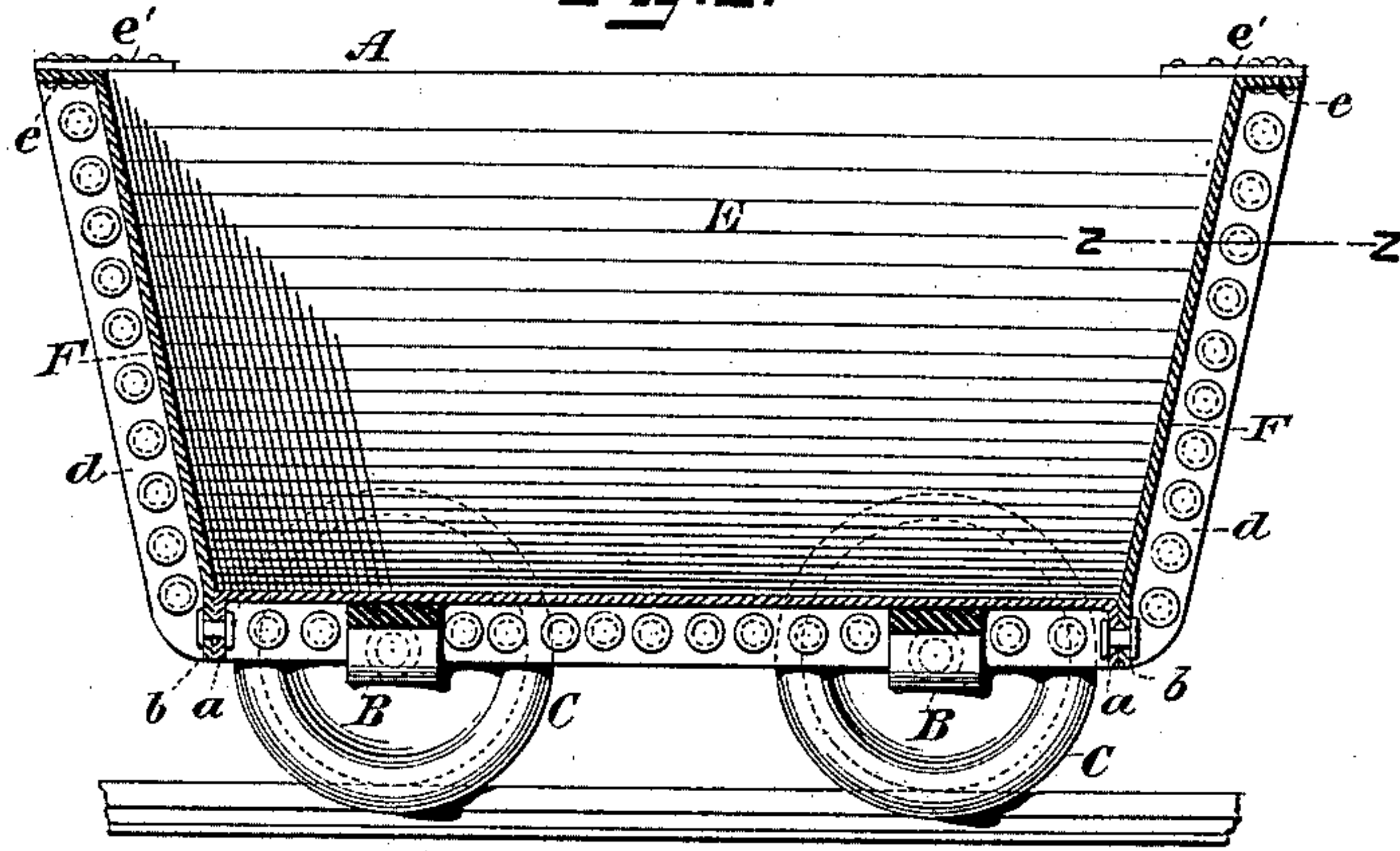


Fig. 2.

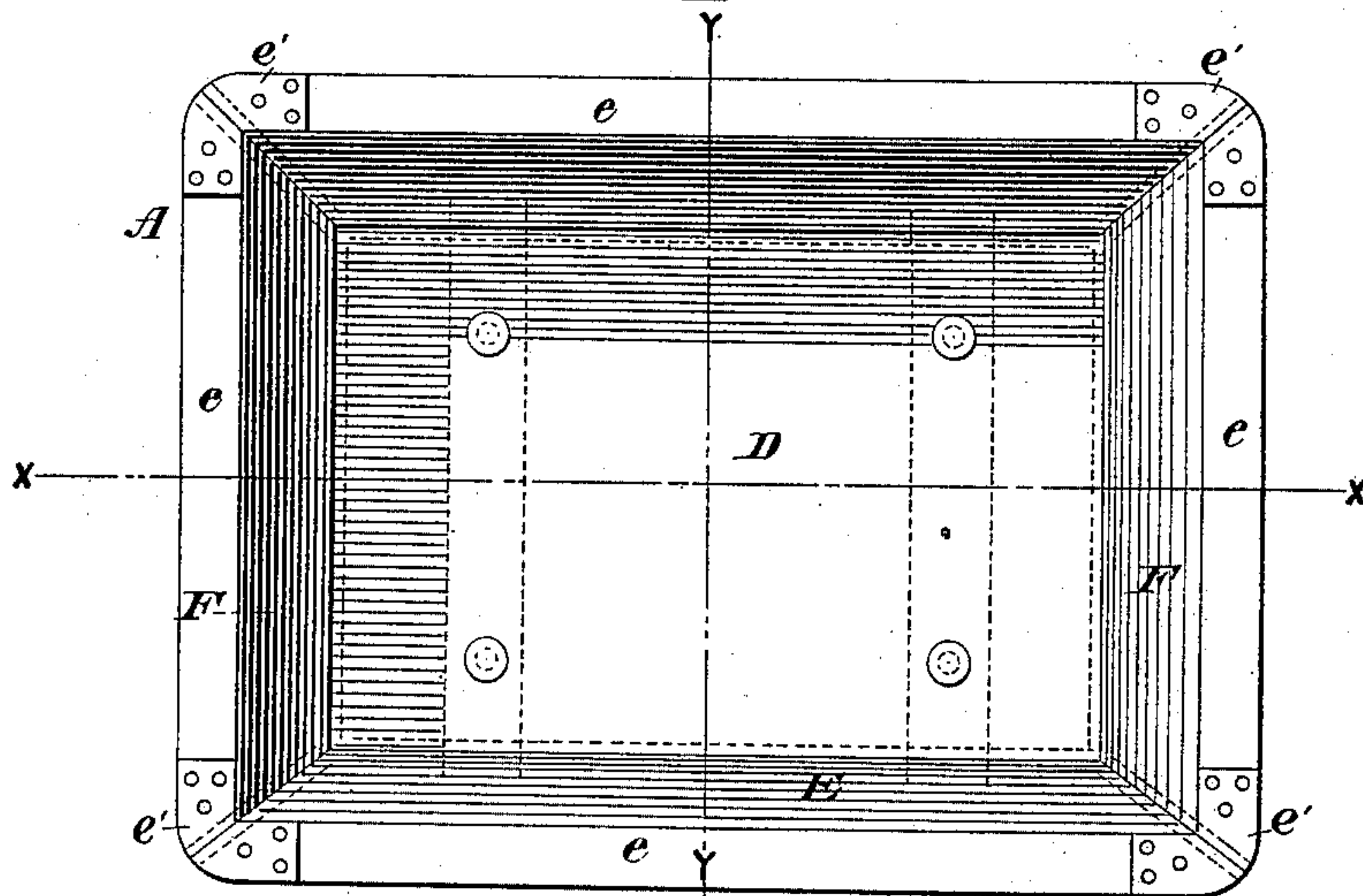


Fig. 4.

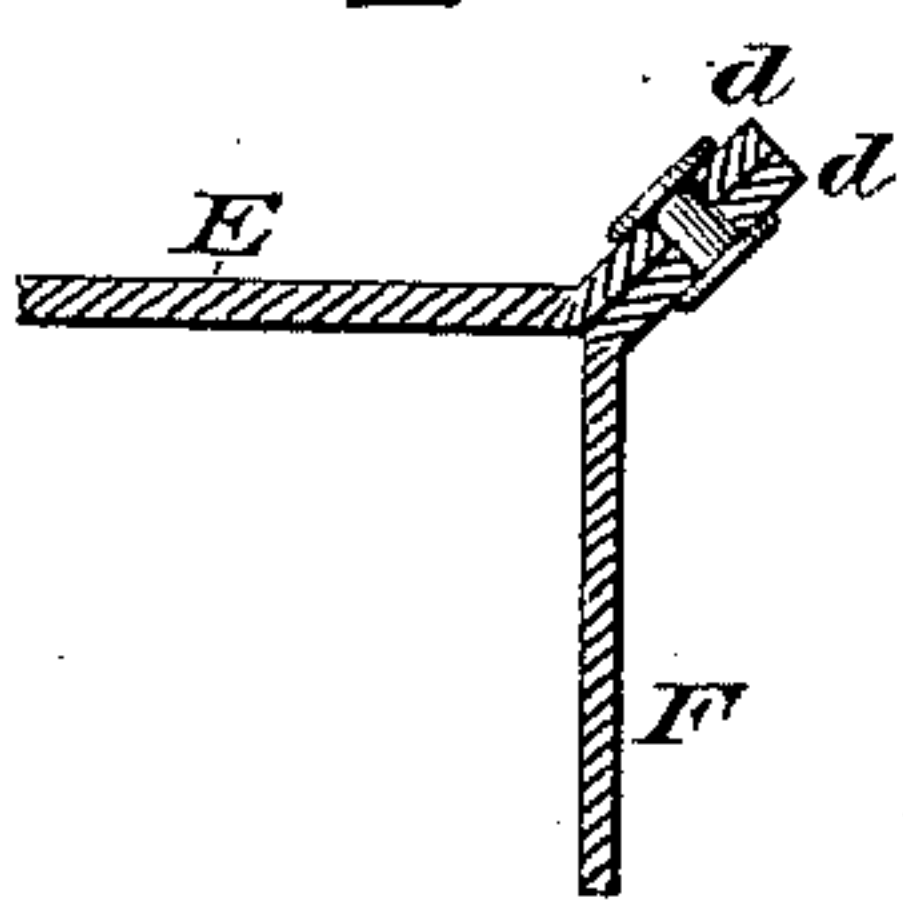
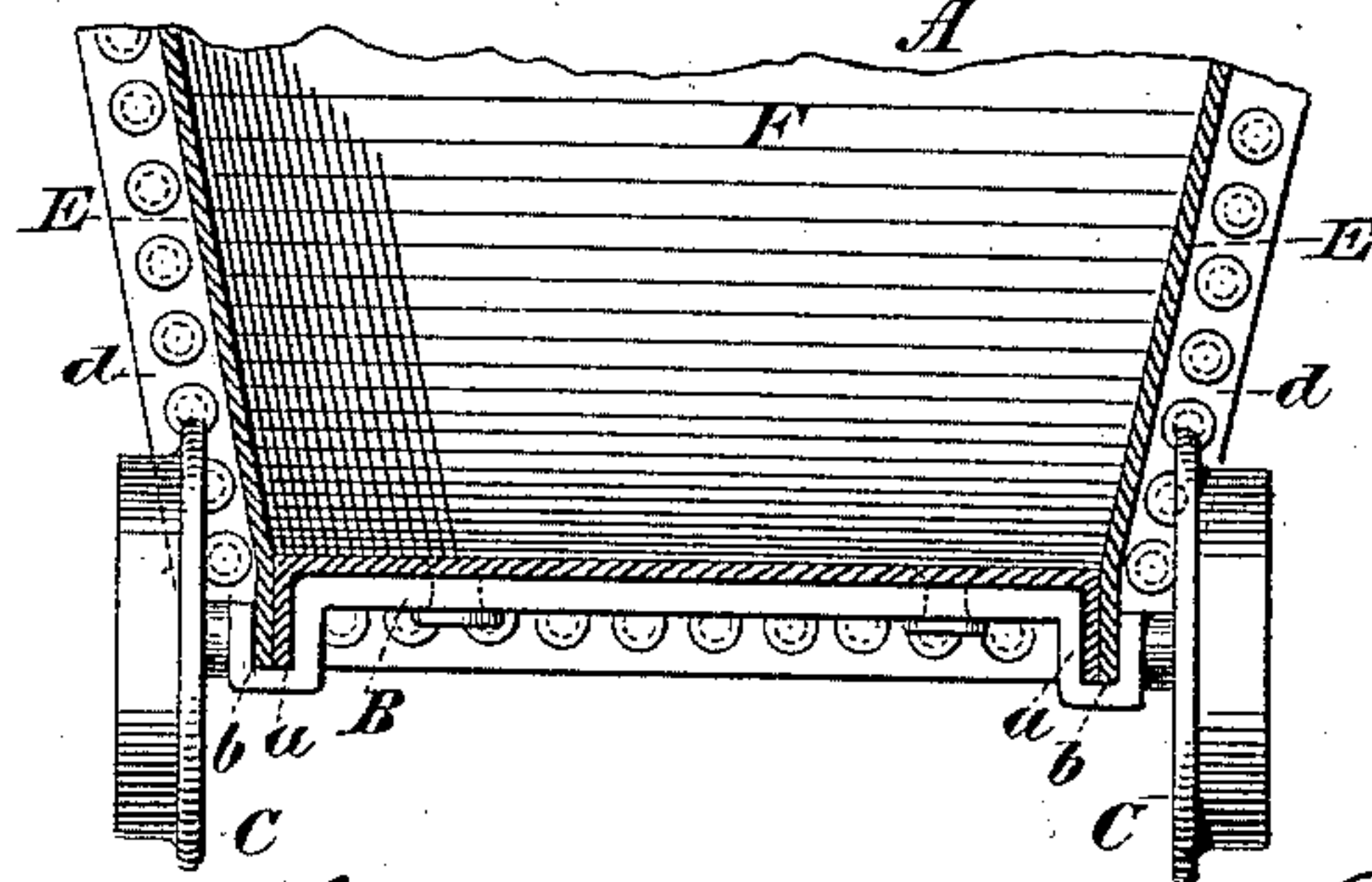


Fig. 3.



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JOHN GRAVES, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO ROBERT DEELEY AND THOMAS E. DEELEY, OF SAME PLACE.

SUGAR-WAGON.

SPECIFICATION forming part of Letters Patent No. 391,842, dated October 30, 1888.

Application filed March 21, 1888. Serial No. 267,983. (No model.)

To all whom it may concern:

Be it known that I, JOHN GRAVES, 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 wagons, and particularly to that part of the wagon known as the "body."

The invention consists of a wagon-body made from sheet metal, the ends, sides, and bottom of the body being flanged and riveted together in the manner hereinafter described, and the purpose being to produce a wagon-body which will be strong, comparatively inexpensive, and capable of being quickly and readily constructed.

The particular use to which the body constructed according to the invention is adapted is in connection with sugar-wagons; but it is not to be understood, however, that the invention is confined to this one particular class of wagons.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a central vertical longitudinal section through a sugar-wagon, the section being on the dotted line *x x* of Fig. 2, which is a top view of the wagon. Fig. 3 is a central vertical transverse section of the wagon on the dotted line *Y Y* of Fig. 2, and Fig. 4 is a detached transverse section on the dotted line *Z Z* of Fig. 1.

In the drawings, *A* designates the body of the wagon; *B B*, the axles thereof, and *C C* the wheels. The body *A* consists of sections of sheet metal stamped up to form the bottom *D*, sides *E*, and ends *F*, the bottom having the flange *a* extending downward entirely around it, and the sides and ends having the flanges *b* at their lower edges, the flanges *d* at their end edges, and the flanges *e* at their upper edges. The flanges *e* extend horizontally outward from the sides and ends of the wagon-body, and the flanges *d* extend diagonally outward from the corners of the body and in close relation to each other, as shown more distinctly in Fig. 4, in which position they are riveted together, and thus made instrumental in securing the sides and ends together. The bottom *D* is secured in place by rivets pass-

ing through its flange *a* and the flanges *b* formed at the lower edges of the sides and ends of the wagon-body. It will thus be seen that the body is made from five pieces of sheet metal secured together by a single row of rivets around its bottom and along its corners, the inner surfaces of the body being left perfectly smooth, and the position of the rivets being such that they may be secured in place by a riveting-machine applied wholly on the outside of the wagon-body. The flanges *e* form a border around the upper edge of the body, which materially increases its strength and durability without any substantial addition to the expense of manufacture, and these flanges *e* are connected at the corners of the wagon by angle-plates *e'*, which materially strengthen the structure. The flanges *a b d e* form angles in the metal all around the edges of the wagon-body and impart very material strength to the same, at the same time affording surfaces which may very readily be riveted together.

The axles *B B* are riveted to the body *A*, and are bent to pass around the flanges *a b*, as shown in Fig. 3, for the purposes of strength and compactness.

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

1. The wagon-body hereinbefore described, consisting of the bottom *D*, having flange *a*, and the sides *E* and ends *F*, having flanges *b*, *d*, and *e*, the whole being made from sheet metal and secured by rivets passing through the said flanges *a b* and *d d*, respectively, substantially as set forth.

2. The wagon-body hereinbefore described, consisting of the bottom *D*, having downwardly-extending flange *a*, and the sides *E* and ends *F*, having the downwardly-extending flanges *b*, outwardly-extending vertical flanges *d*, and the horizontal flanges *e*, forming the upper edges of the wagon-body and being connected by angle-plates *e'*, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 16th day of March, A. D. 1888.

JOHN GRAVES.

Witnesses:

CHAS. C. GILL,
HERMAN GUSTOW.