

F. W. WRIGHT.
Grain-Cars.

No. 152,787.

Patented July 7, 1874.

Fig. 1.

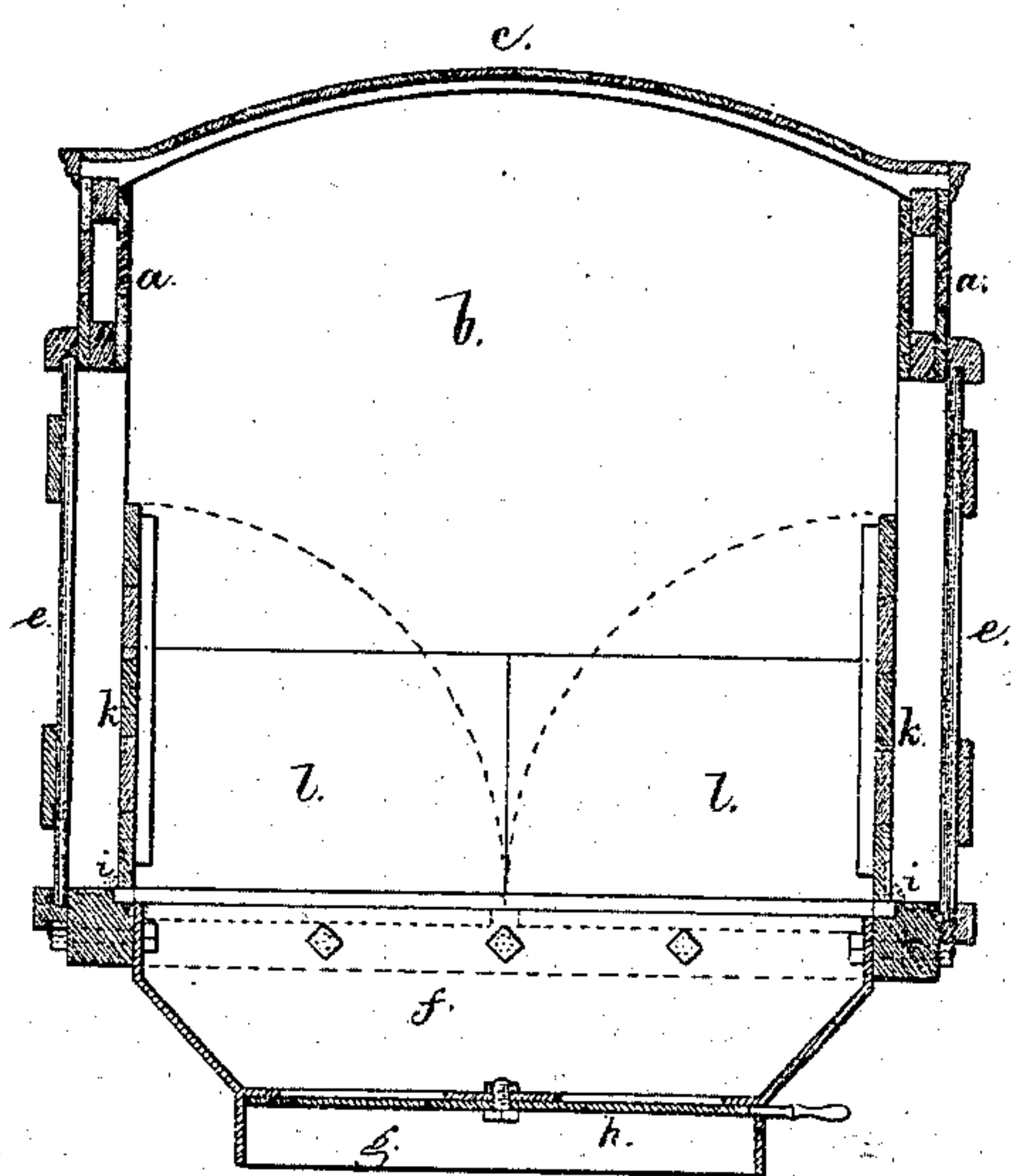


Fig. 3.

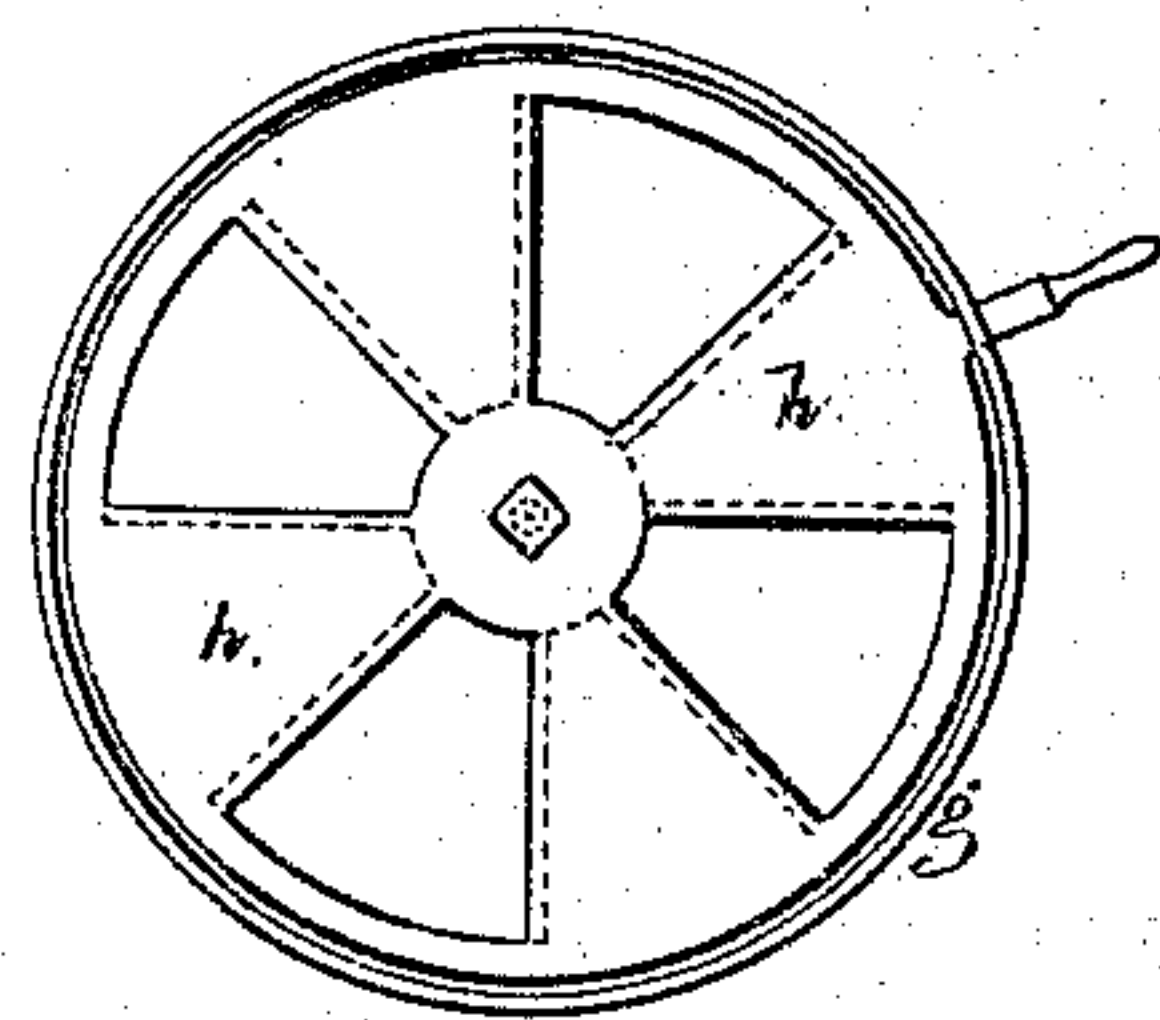
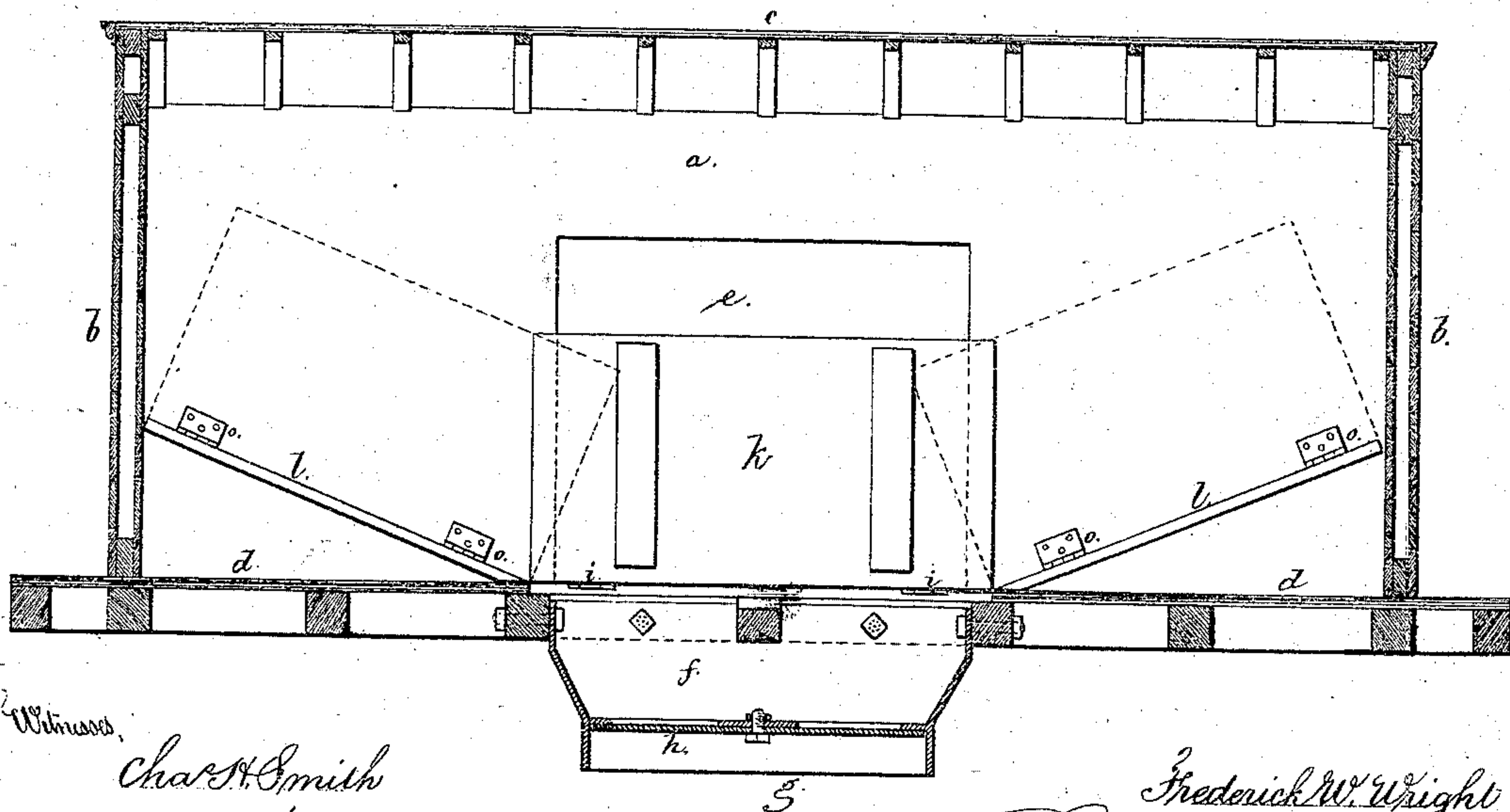


Fig. 2.



Witnesses,

Chas. H. Smith
Geo. A. Maer.

Frederick W. Wright

Lemuel W. Perrell atty.

UNITED STATES PATENT OFFICE.

FREDERICK W. WRIGHT, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN GRAIN-CARS.

Specification forming part of Letters Patent No. **152,787**, dated July 7, 1874; application filed January 8, 1872.

To all whom it may concern:

Be it known that I, FREDERICK W. WRIGHT, of Jersey City, in the county of Hudson and State of New Jersey, have invented and made an Improvement in Grain-Cars; and the following is declared to be a correct description thereof.

Grain is often transported by railroad in bulk, and for this purpose cars have been made with doors on the inside to retain the grain; but in unloading these cars the services of a large number of men are required to shovel out the grain and empty the cars, and in so doing the grain is liable to be injured, and a loss result from the scattering of the grain. Cars have been made with hopper-shaped bottoms; but they are not adapted to anything but grain, and would have to be returned empty to the grain-supply market.

The object of my invention is to adapt the car to transporting either grain or general merchandise. I accomplish this by employing a hopper beneath the bottom of the car, and at the ends of the car are inclined movable platforms that serve to shoot the grain into the hopper. These can be moved out of the way when the car is used for freight or general merchandise.

In the drawing, Figure 1 is a cross-section of the car in condition to receive grain, and Fig. 2 is a longitudinal section of the same.

The sides *a*, ends *b*, top *c*, bottom *d*, and doors *e* are of the usual character employed in freight or merchandise cars, with the exception that the bottom *d* is made with a central hopper, *f*, at the bottom of which is the discharge-tube *g* and gate *h*. This gate *h* is made as shown in plan, Fig. 3, with triangular radial segments united in a circular plate

or ring, and a similar plate cast with or attached to the discharge-tube, so the delivery-openings between these triangular segments may be opened or closed by turning the gate *h*. A lock should be provided for this gate. Above the hopper is the sectional platform *k*, resting in rabbets, so as to be level with the floor when closed down, as shown by dotted lines; but when turned up, as indicated by full lines, these platform-sections form the interior doors at the openings of the grain-cars. These sections of the platform should be hinged at *i*. The movable platforms *l l*, toward the ends of the car, are placed at such an angle that grain can run down the same, and these are to be taken out of the way when the car is not employed for grain.

I prefer that these inclined platforms should be made of iron, and each in two parts, hinged at *o o*, at the outer edges, to the interior of the car, so as to allow of being turned up against the sides of the car, as shown by dotted lines, when the car is being used for transporting ordinary merchandise.

I prefer that the hopper *f* should be made of metal, so as to be strong, and not liable to allow of waste through crevices, and for this purpose either cast or wrought iron may be employed.

I claim as my invention—

The inclined platforms *l*, introduced toward the ends of the car, and made removable, in combination with a delivery-hopper, substantially as set forth.

Signed by me this 3d day of January, 1872.

FREDERICK W. WRIGHT.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.