

No. 854,085.

PATENTED MAY 21, 1907.

C. A. GEIGER.
DUMP WAGON.

APPLICATION FILED MAR. 18, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

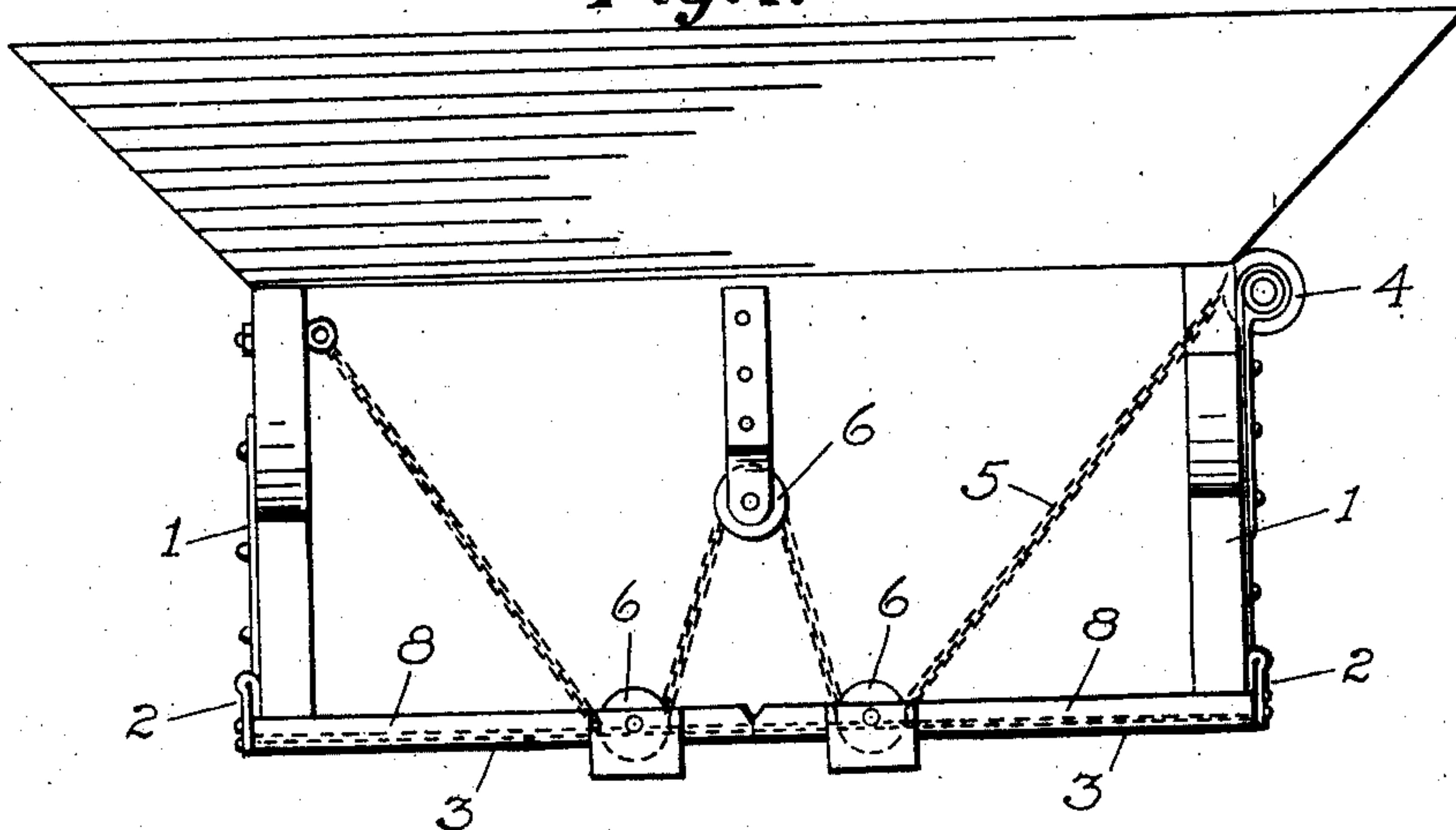


Fig. 2.

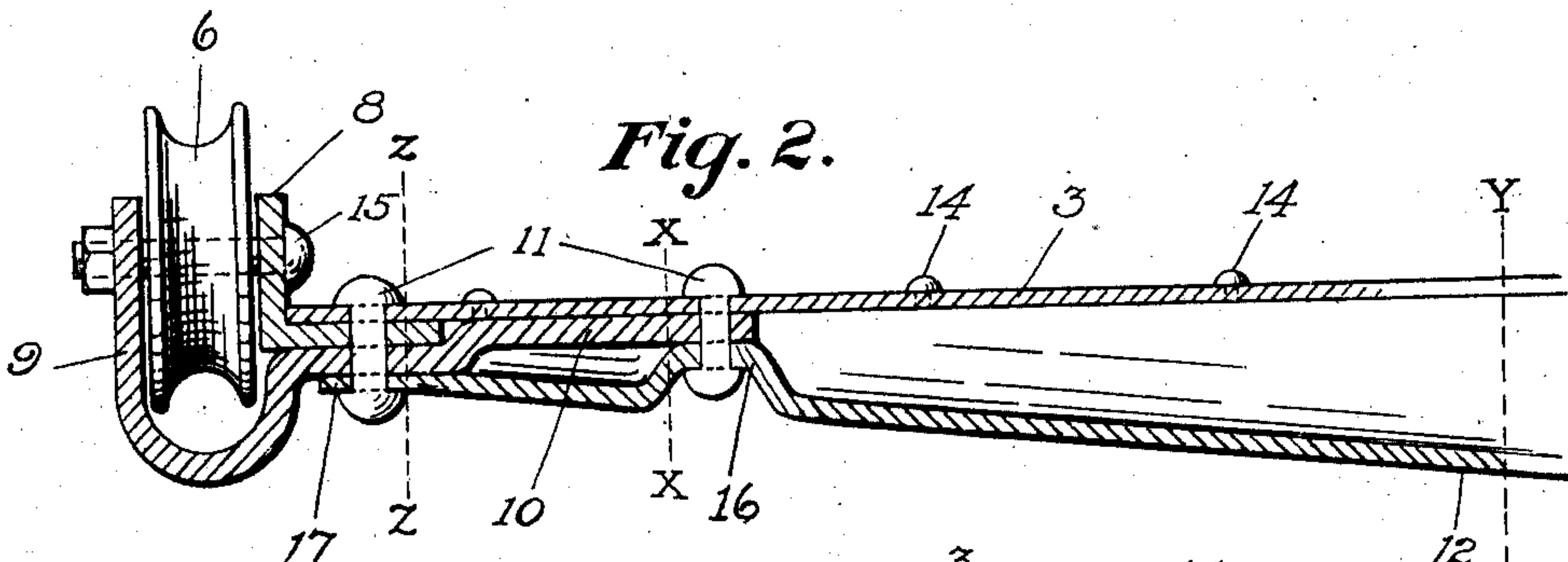


Fig. 5.

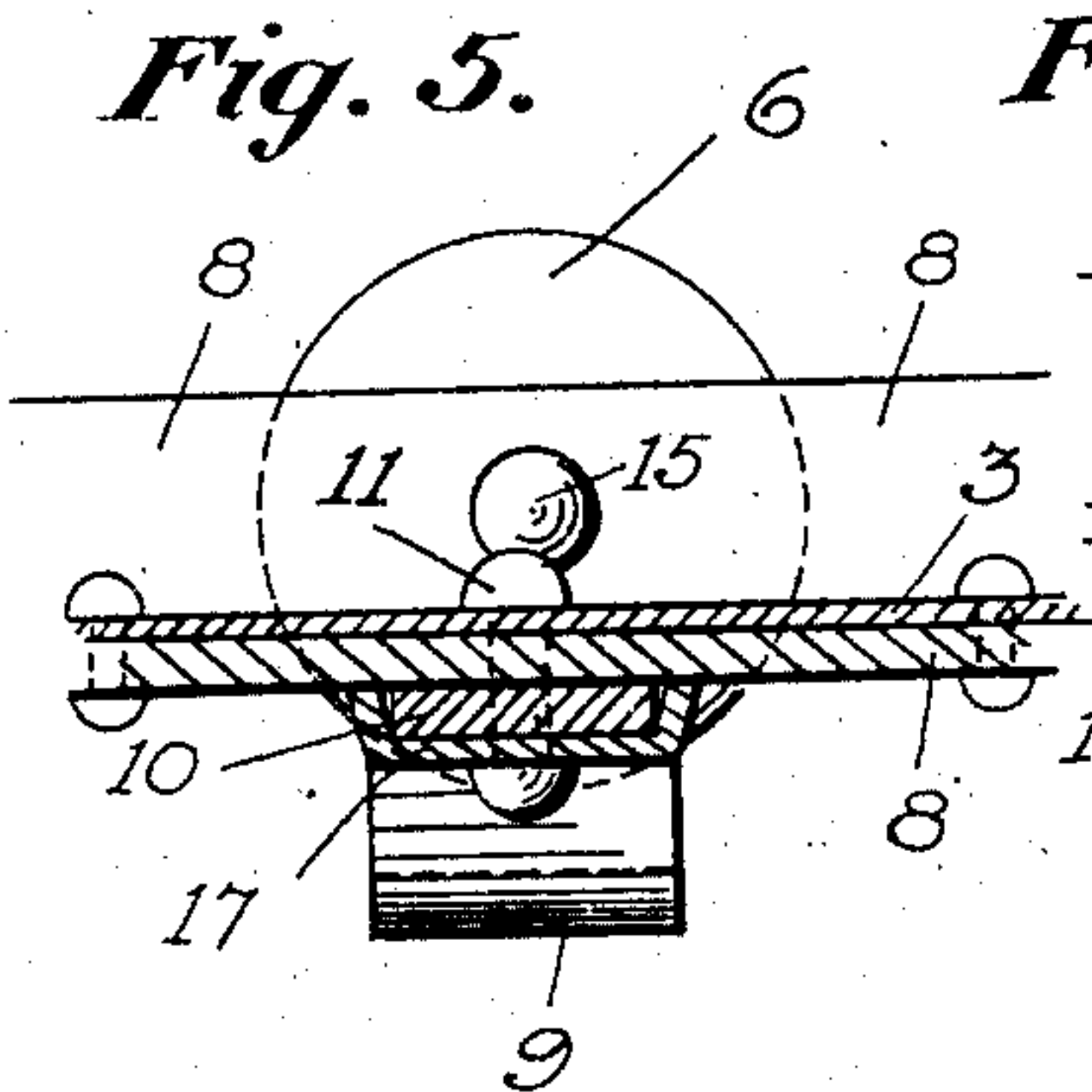


Fig. 3.

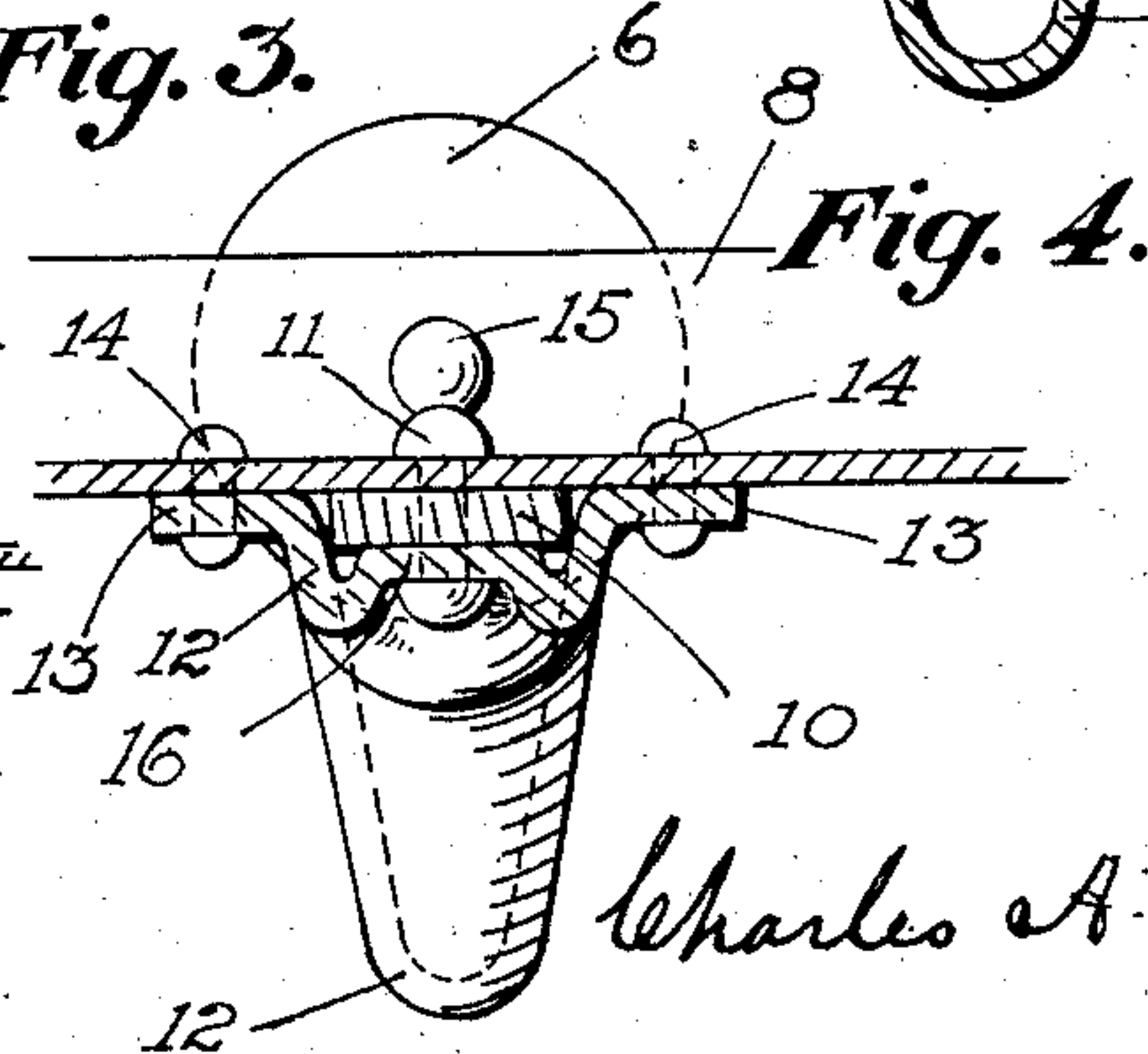
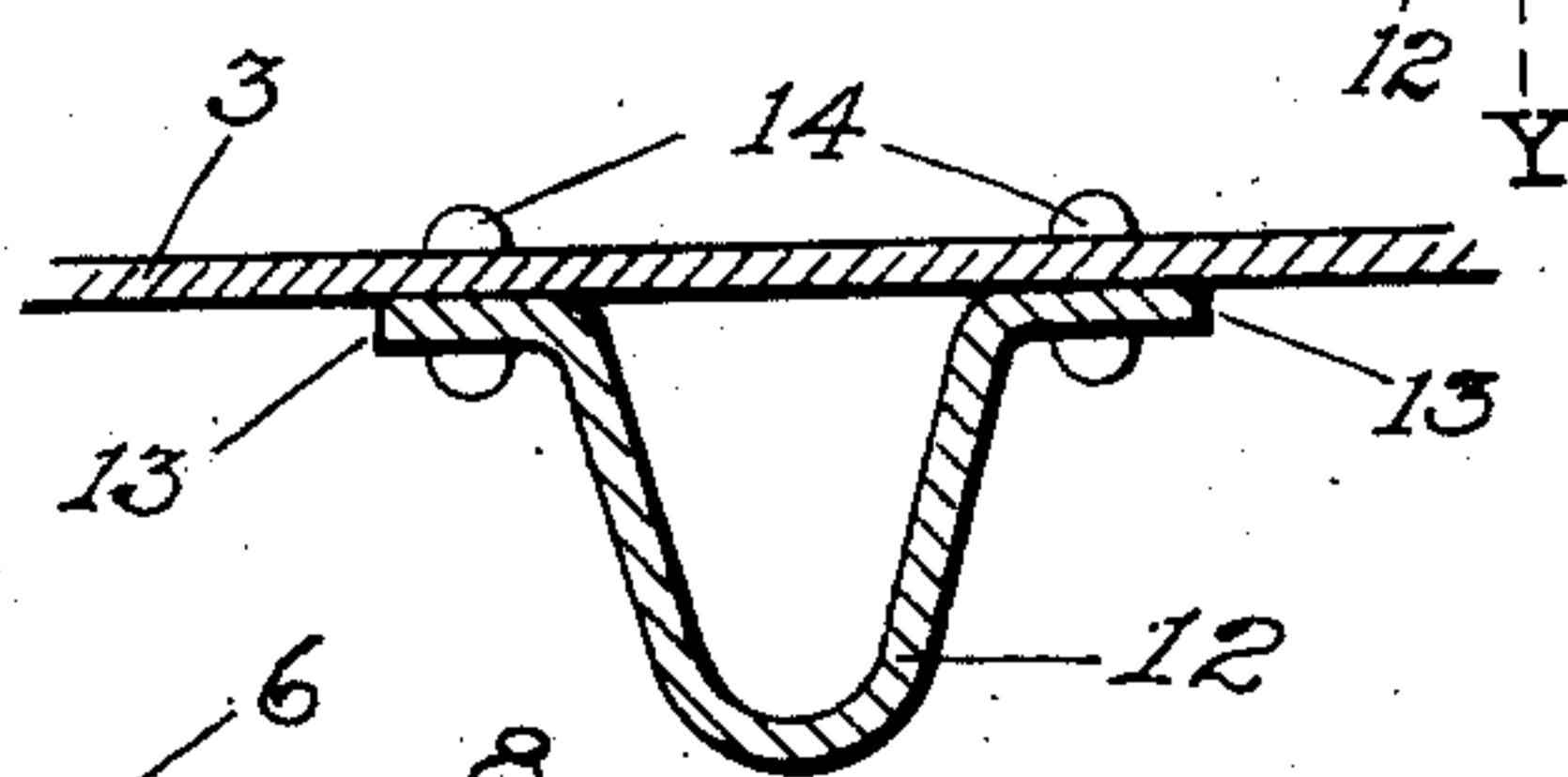


Fig. 4.



Witnesses

W. Christman,
Chas. J. Welch

By

Charles A. Geiger
Attorney

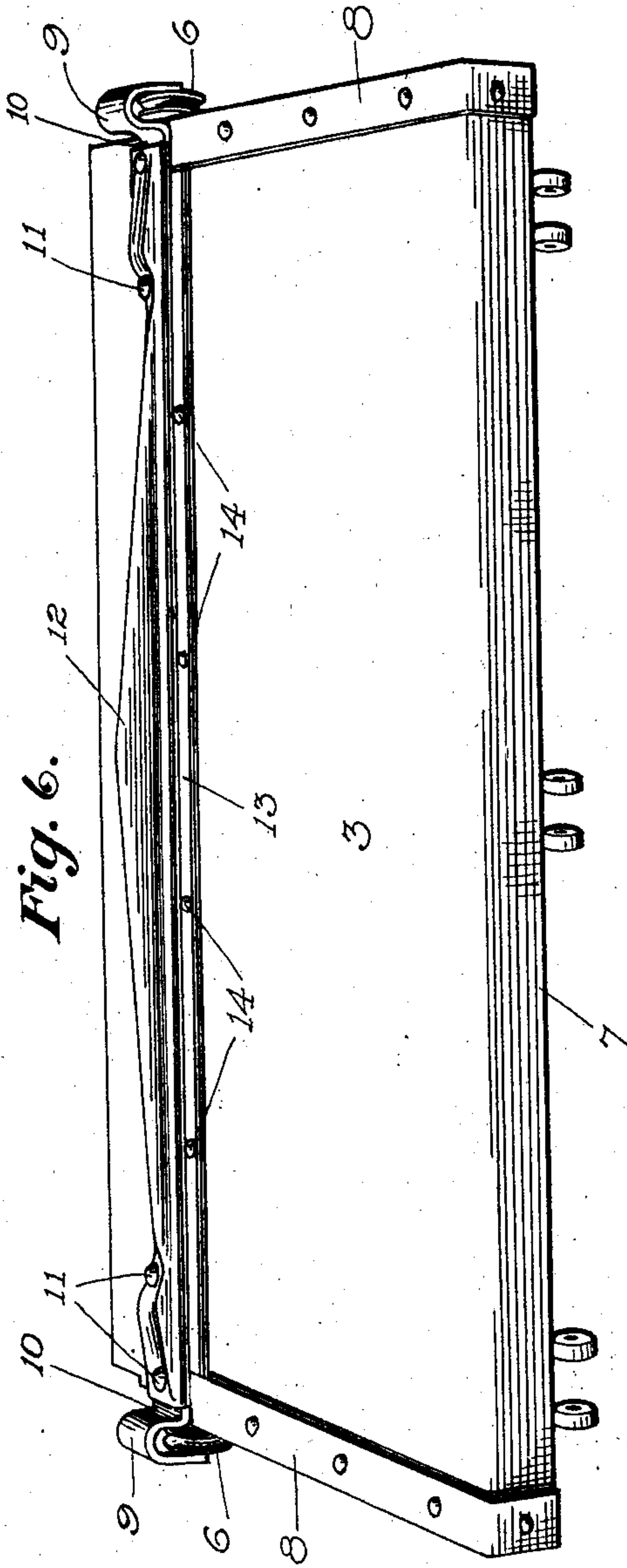
No, 854,085.

PATENTED MAY 21, 1907.

C. A. GEIGER.
DUMP WAGON.

APPLICATION FILED MAR. 18, 1907.

2 SHEETS—SHEET 2.



Charles A. Geiger Inventor

Witnesses

W. H. Christman.
Chas. J. Welch

By Ataley & Borman
Attorneys

UNITED STATES PATENT OFFICE.

CHARLES A. GEIGER, OF TROY, OHIO, ASSIGNOR TO THE TROY WAGON WORKS COMPANY, OF TROY, OHIO, A CORPORATION OF OHIO.

DUMP-WAGON.

No. 854,085.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed March 18, 1907. Serial No. 363,027.

To all whom it may concern:

Be it known that I, CHARLES A. GEIGER, a citizen of the United States, residing at Troy, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Dump-Wagons, of which the following is a specification.

This invention relates to improvements in dump-wagons and more particularly relates to an improved construction of the bottom doors of such wagons; the object of the invention being to provide an improved reinforcement for the doors.

The invention consists in the constructions and combinations of parts hereinafter described and set forth in the claims.

In the accompanying drawings, Figure 1 is a rear elevation of a dump-wagon having bottom doors of the kind to which this invention is applicable. Fig. 2 is a longitudinal sectional view of a part of one of the doors showing the improvement applied thereto. Fig. 3 is a section on the line $x x$ in Fig. 2, looking toward the right. Fig. 4 is a section on the line $y y$ of Fig. 2. Fig. 5 is a section on the line $z z$ of Fig. 2, looking to the left. Fig. 6 is a perspective view of the bottom side of one of the doors showing the improved reinforce applied thereto.

Like parts are represented by similar characters of reference in the several views.

In the said drawings, 1 1 represent the sides of a well-known form of dump-wagon, having hinged thereto at 2 2 laterally-swinging bottom doors 3 3. Mechanism is provided for lowering and closing the doors, but as this mechanism is no part of the invention and is well known, it has not been illustrated with the exception of one of the winding drums 4, its chain 5, and some of the sheaves or pulleys 6 6 6, about which the chain extends; one of these sheaves being located at each end of the door in the manner more fully described hereinafter.

The door is constructed of sheet metal and has at each end and on its outer or hinged side upwardly-extending flanges; the flange on the outer side being formed by bending the edge of the metal composing the door upwardly at right-angles, as shown at 7, and the end flanges being formed of angle iron or steel, 8 8, riveted to the respective ends. Each of the sheaves or pulleys, 6, located on the door, is journaled at the end of the

door through the medium of a pintle, 15, supported by the end flange 8, and by a supporting bracket, 9, the shank, 10, of which is riveted to the under side of the door by rivets 11.

For the purpose of stiffening and strengthening the door, and also for tying the end brackets together so that the strain on the same may be distributed through the length of the door, there is provided a reinforcement bar, preferably pressed steel, indicated by 12. This bar extends for substantially the full length of the door and is formed at its center of a U-shape, as shown in Fig. 4, this central portion gradually tapering in each direction as to its height but being of the same width throughout. The bar is provided with laterally-projecting flanges, 13, secured by rivets, 14, to the door and terminating at the flange, 8, on the end of the door. The rivets 11 which secure the shank of the bracket 9 in place also pass through this bar. As shown in Fig. 3, the bar is bent in against the bracket shank and one of the rivets put in at this point to secure the bar, shank and door firmly together, the said shank having been bent up against the bottom of the door, as shown in Fig. 2. Near its extreme end the bar is still further contracted so as to embrace the shank, and the other rivet 11 at this point passed through the door, its end flange, the shank and the bar. By this construction the door is not only strengthened and stiffened, but the sheaves or pulleys are furnished with a strong support.

Having thus described the invention, I claim:

1. In a dump-wagon, a hinged bottom door formed from sheet metal, and a reinforcing bar for the bottom of said door, said reinforcing bar being formed hollow and of a U-shape and having laterally-extending flanges secured to said door, substantially as specified.

2. In a dump-wagon, a hinged bottom door formed from sheet metal, and a hollow reinforcing bar for the bottom of said door, said bar being formed of a U-shape and being tapered in height from its center toward its respective ends and having lateral flanges secured to said door, substantially as specified.

3. In a dump-wagon, a hinged bottom door, a sheave supporting bracket at each end of said door having an extending shank,

a hollow U-shaped reinforcing bar having lateral flanges secured to said door, said reinforcing bar being tapered in height from its center toward its respective ends and being
5 adapted to embrace said bracket shanks at its ends, and devices for securing the bar, shanks and door together, substantially as specified.

4. In a dump-wagon, a hinged bottom
10 door, angle-shaped pieces secured to the respective ends of said door to provide upwardly-extending flanges for said door, a hollow U-shaped reinforcing bar having lateral flanges secured to said door, said flanges terminating adjacent to said angle-shaped pieces,
15 a sheave supporting bracket at each end of the door having an extending shank, said hollow bar being tapered in height from its

center toward its respective ends and adapted to embrace said shanks, and securing devices to secure the bar, shanks and door together, substantially as specified. 20

5. In a dump-wagon, a hinged bottom door, a sheave supporting bracket at each end of said door having an extended shank, 25 a U-shaped reinforcing bar extending across the bottom of said door and adapted to embrace said shanks at its respective ends, and means for securing the bar, shanks and door together, substantially as specified. 30

In testimony whereof, I have hereunto set my hand this 8th day of March A. D. 1907.

CHARLES A. GEIGER.

Witnesses:

J. C. FULLERTON, Jr.,
NETUM RATHBUN.