

No. 688,663.

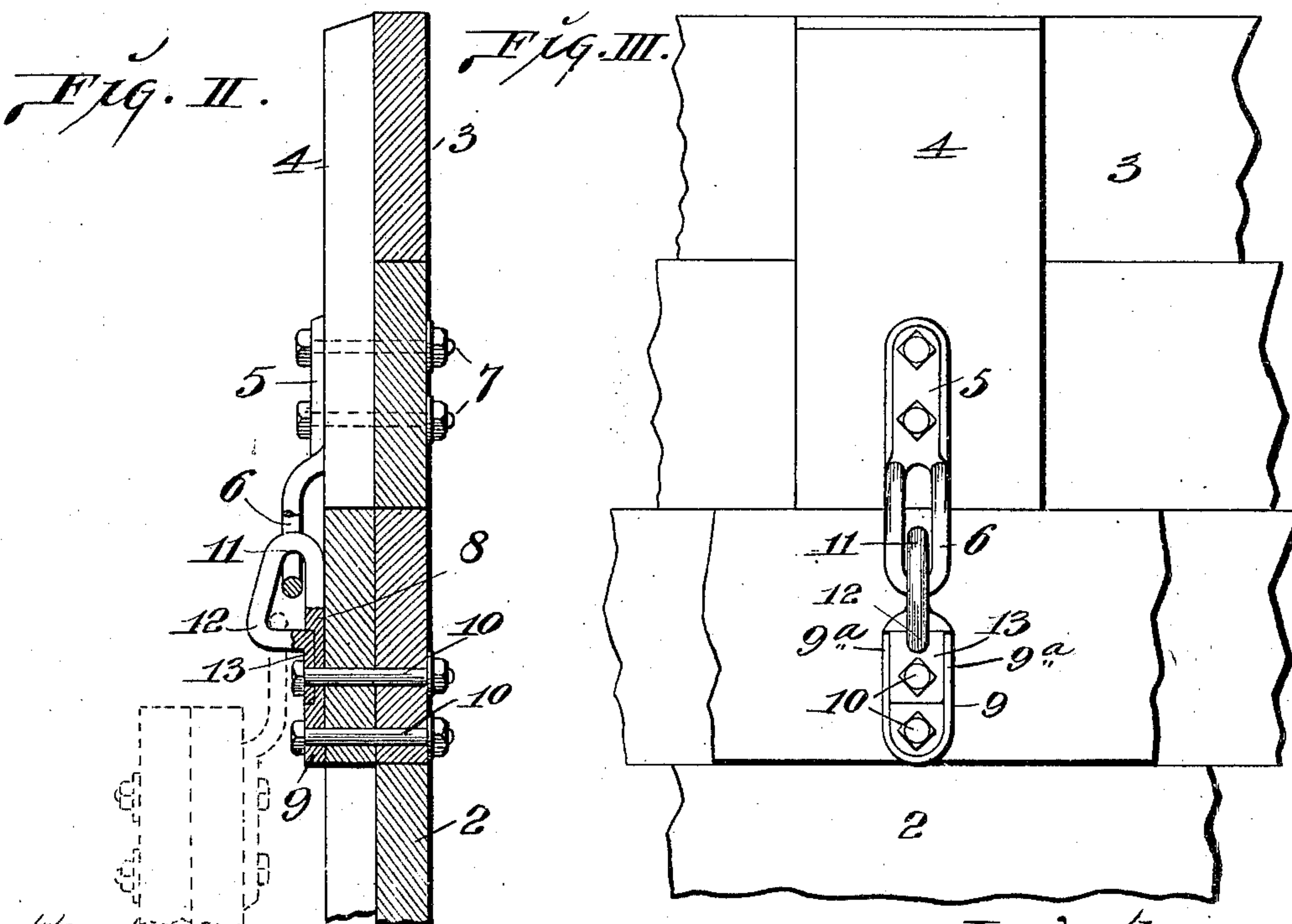
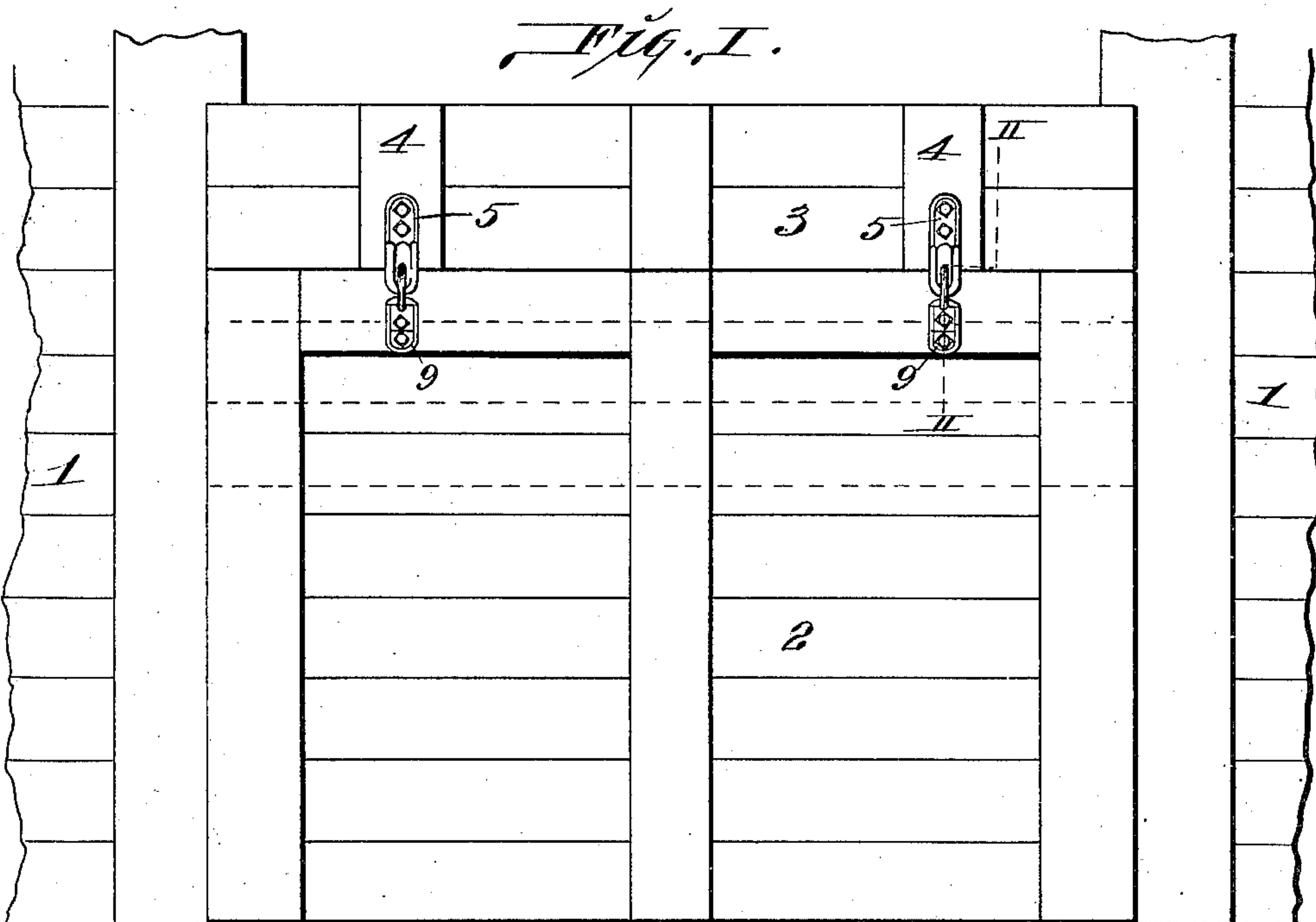
Patented Dec. 10, 1901.

A. MILLER.

LINK HINGE FOR GRAIN CAR DOOR APRONS.

(Application filed July 15, 1901.)

(No Model.)



attest:
M. Smith
E. S. Knight

Inventor;
August Miller;
By Knight & Broady's.

UNITED STATES PATENT OFFICE.

AUGUST MILLER, OF ST. LOUIS, MISSOURI.

LINK-HINGE FOR GRAIN-CAR-DOOR APRONS.

SPECIFICATION forming part of Letters Patent No. 688,663, dated December 10, 1901.

Application filed July 15, 1901. Serial No. 68,286. (No model.)

To all whom it may concern:

Be it known that I, AUGUST MILLER, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Link-Hinges for Grain-Car-Door Aprons, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a link-hinge for use in connecting aprons or extension members to grain-car doors at the tops thereof; and the invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a view in elevation looking at the inside of a grain-door and an apron connected thereto by my link-hinges. Fig. II is an enlarged vertical sectional view taken on line II II, Fig. I. Fig. III is an enlarged detail view of one of the hinges and fragments of the door and apron connected thereby.

1 designates the walls of a car, and 2 the grain-door located at the doorway or said car.

3 is the apron that surmounts the door 2 when the car is filled with grain and is adapted to hang depended from said door, as is seen in dotted lines, Fig. II, when the car is not filled or when the quantity of grain in the car is not sufficient to extend above the level of the usual door. The apron 3 is provided with cleats 4.

5 designates hinge members provided with link-eyes 6 and connected to the apron 3 by bolts 7, that pass through the panels of said apron and through the cleats 4, by which the panels are connected.

8 designates hinge members having shanks 9, through which bolts 10 are passed and by which the hinge members 8 are connected to the door 2. The hinge members 8 are provided with link-eyes having contracted upper ends 11 and enlarged lower ends 12, arranged to receive the link-eyes 6 of the hinge members 5, that play therein. Each of the hinge members 8 is of open form and provided with an apertured tongue 13, that is adapted for connection to the shank 9 of the hinge member by one of the bolts 10, which passes there-through and holds the link-eye of the hinge member in closed condition when applied to the door. The tongue 13 when connected to the shank 9 rests between ribs 9^a, which project outwardly from the shank 9 and prevent lateral movement of the tongues. The

hinge members 8 are contracted in the form described in order to provide for the ready connection of the link-eyes 6 of the hinge members 5 thereto, such connection being easily accomplished when the tongues 13 are separated from the shanks 9, as the link-eyes may be then passed over said tongues and into the link-eyes of the hinge members 8, and when so connected are prevented from displacement by the attachment of said tongues to the shanks of the hinge members by which they are carried. By making the hinge members 8 with link-eyes contracted at their upper ends lateral play on the link-eyes 6 is limited therein when the apron 3 surmounts the door 2, while at the same time sufficient play is permitted to allow for all necessary movement of the link-eyes 6 consequent upon sagging of the door. By enlarging or widening the lower ends of the link-eyes of the hinge member 8 sufficient space is provided at such lower ends of the eyes to enable the proper positioning of the link-eyes 6 when the apron 3 hangs suspended from the door, as seen in dotted lines, Fig. II, in order that said apron will hang freely suspended from the door hinge members without exerting strain on said members.

I claim as my invention—

1. In a link-hinge for grain-car-door aprons, the combination of an apron hinge member having a link-eye, and a door hinge member provided with a link-eye; the link-eye of said door hinge member being contracted at its upper end and enlarged at its lower end, substantially as described.

2. In a hinge for grain-car-door aprons, the combination of an apron hinge member having a link-eye, of a door hinge member having a shank and a link-eye, and a tongue whereby the link-eye of said door hinge member is connected to said shank, substantially as described.

3. In a hinge for grain-car-door aprons, the combination of an apron hinge member having a link-eye, a door hinge member having a shank provided with ribs and a link-eye, and a tongue carried by the link-eye of said door hinge member adapted to fit between the ribs of said shank and adapted for connection to said shank, substantially as described.

AUGUST MILLER.

In presence of—

E. S. KNIGHT,
M. P. SMITH.