R. J. DONOVAN.

BARGE.

APPLICATION FILED MAR. 16, 1907.

973,860.

Patented Oct. 25, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

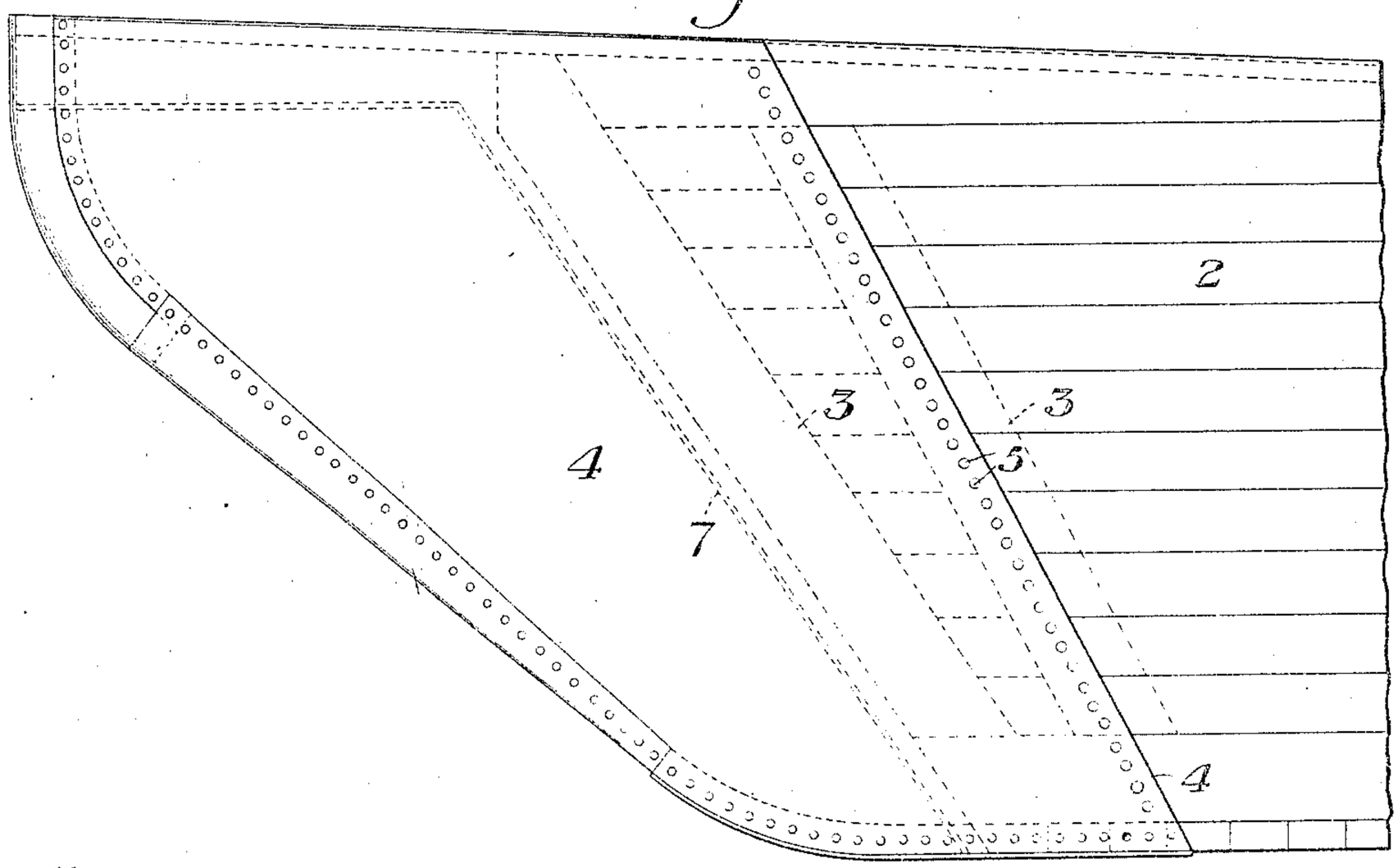
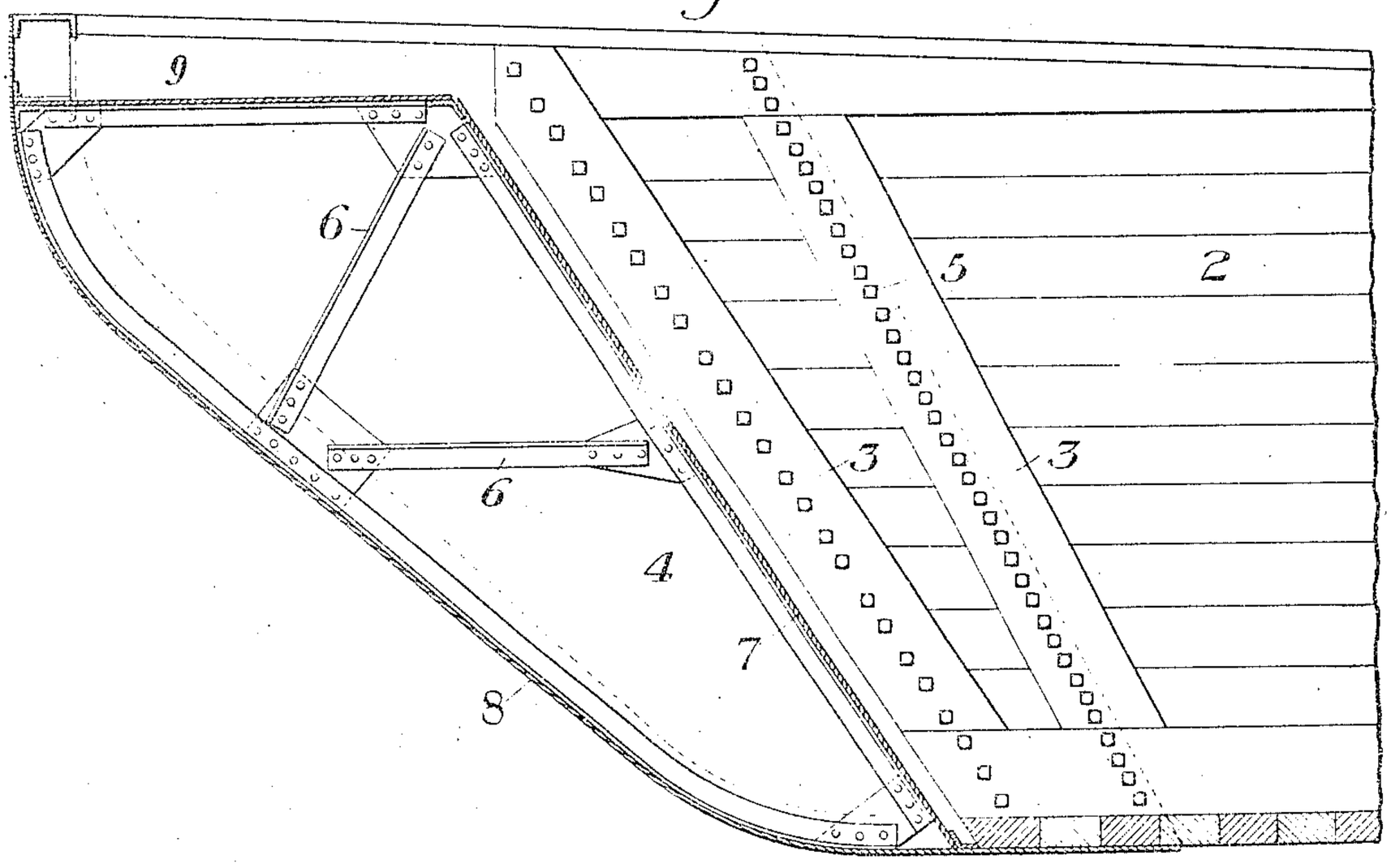


Fig. 2.



WITNESSES

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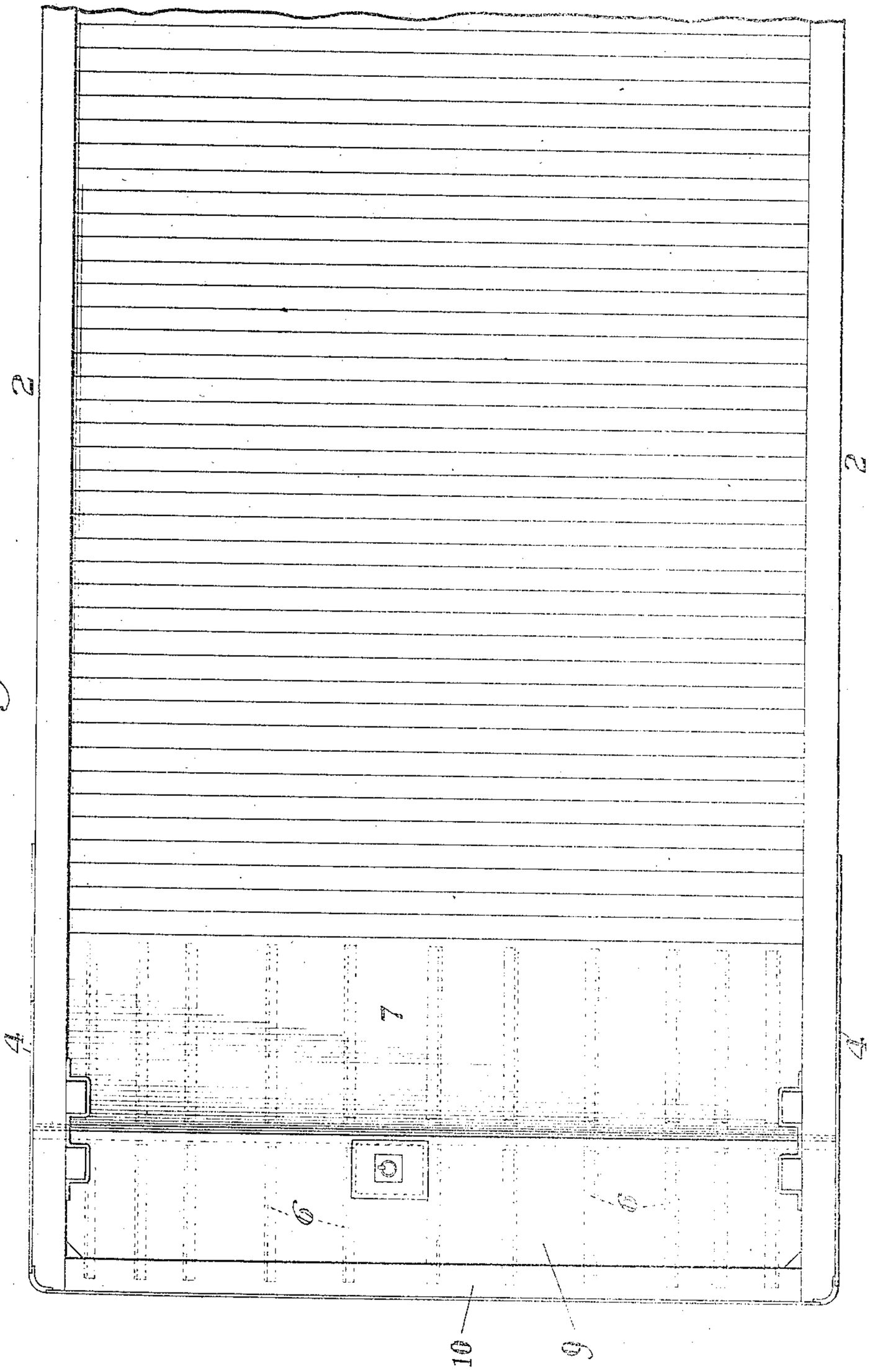
2 SHEETS—SHEET 2.

Fig. 3



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UNITED STATES PATENT OFFICE.

RICHARD J. DONOVAN, OF AMBRIDGE, PENNSYLVANIA.

BARGE.

973,860. Specification of Letters Patent. Patented Oct. 25, 1910.

Application filed March 16, 1907. Serial No 362,694.

To all whom it may concern:

Be it known that I, RICHARD J. DONOVAN, of Ambridge, Beaver county, Pennsylvania, have invented a new and useful Barge, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation showing the end portion of a wooden barge constructed in accordance with my invention; Fig. 2 is a partial longitudinal section, and Fig. 3 a top plan view.

My invention relates to the class of wooden barges, and is designed to provide an improved construction thereof, by which water-tight compartments will be afforded at each end, these compartments being of sufficient capacity to float the barge in case of accident, and prevent the sinking thereof.

In the drawings, 2, 2 represent the wooden side planking of the barge composed of planks, which are secured at their front ends to the vertically inclined interior timbers 3. The front end portions of these planks are covered by the steel sheathing or side plating 4, and the planks and plating are secured by bolts 5 extending through the timbers 3 and having countersunk heads within the side plating 4. The entire end portion of the barge is preferably made of steel plates forming the side plating and the rake plating, these being joined at the corner by any suitable corner plates or corner pieces, the sheathing so formed being filled over the wooden body of the barge at each end.

At each end of the barge within the metal sheathings, I provide an airtight compartment formed by the steel rake bottom plating 8, the steel rake side plating 4, the steel end bulk-head 7, and the steel handling deck 9, with suitable interior bracing 6. The joints of these compartments are calked to make them water-tight and they may be provided with an air-tight entrance hatch, if desired.

10 designates the bumping block formed by a transverse channel member to which the rake plating is fastened, and suitably reinforced by gusset plates 11.

The advantages of my invention result from the providing of the wooden barge with steel ends; and particularly from the use of the end water-tight-compartments. By making these compartments of sufficient size, they will float the barge so if it is sunk it may be raised by merely removing the lading. On taking out the lading the water-tight compartments will cause the barge to float to the surface.

Many changes may be made in the form and arrangement of the framing, the form and size of the water-tight compartments, &c., without departing from my invention.

I claim:—

1. A wooden barge having a steel rake end, consisting of side plating, bottom plating curved upwardly to form the rake, head or bumping block, a steel handling deck, and a steel water-tight bulk head; substantially as described.

2. A wooden barge having a steel rake end; consisting of side plating, bottom plating curved upwardly to form the rake, head or bumping block, a steel handling deck and a steel water-tight bulk head, said end containing a water-tight compartment to thereby give sufficient buoyancy to float the barge; substantially as described.

In testimony whereof, I have hereunto set my hand.

RICHARD J. DONOVAN.

Witnesses:
GEO. B. BLEMING,
GEO. H. PARMELEE.