

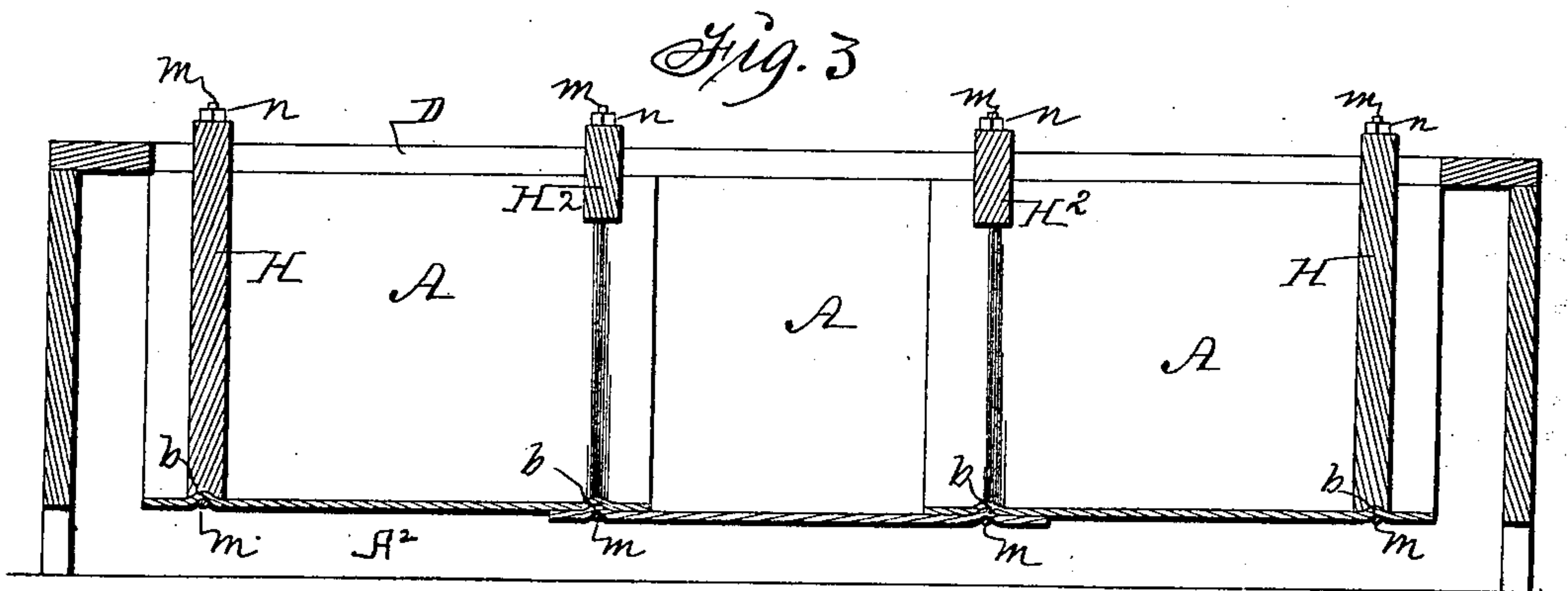
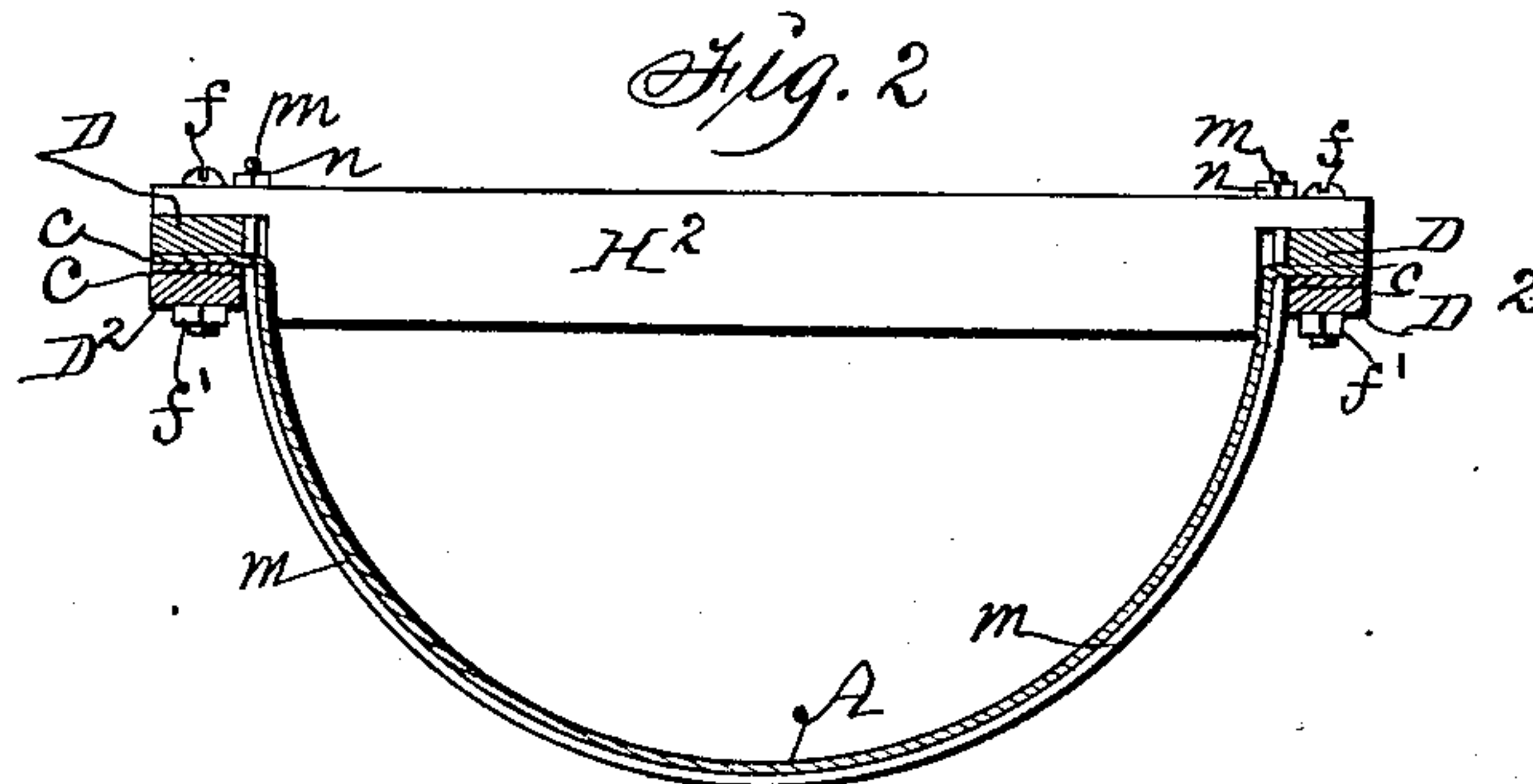
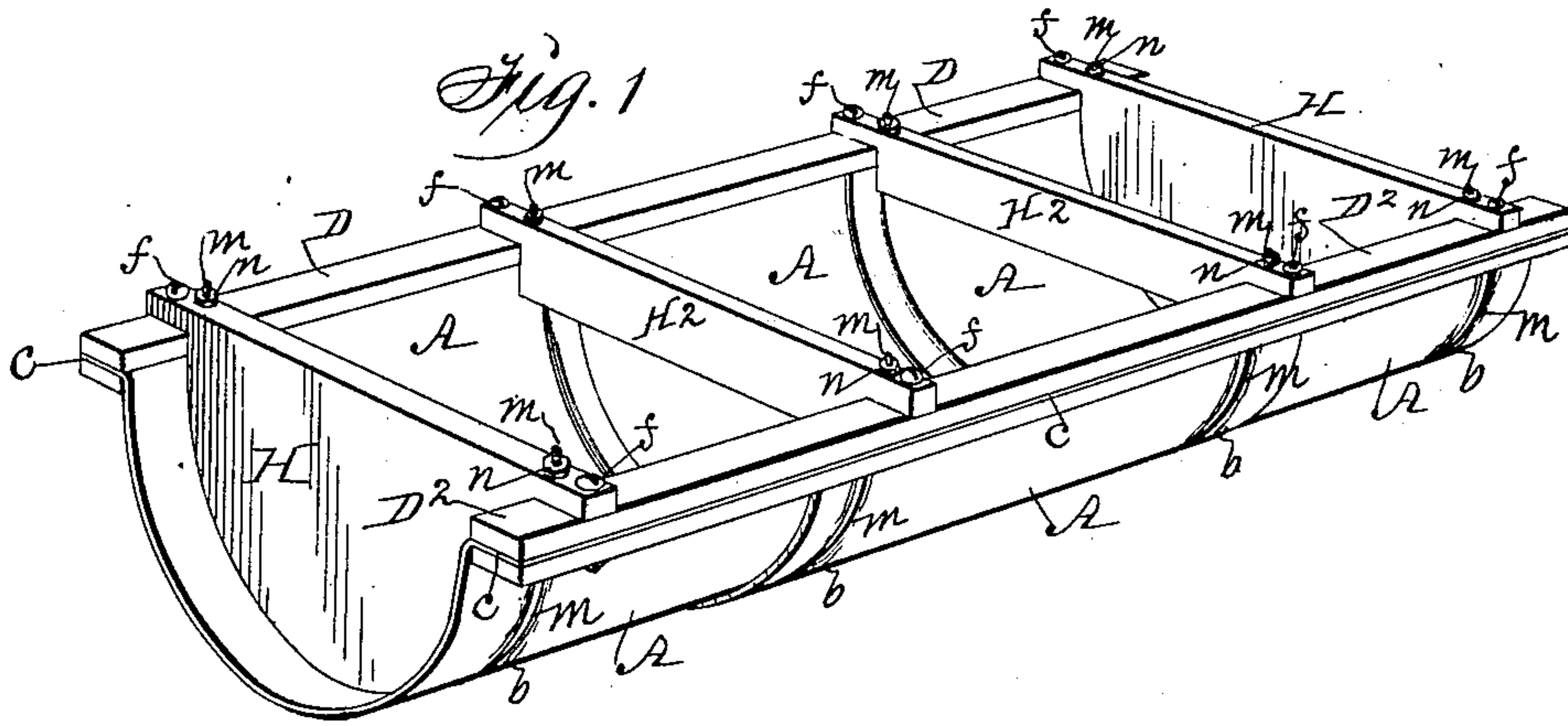
No. 678,913.

Patented July 23, 1901.

J. STEPHENSON.
KNOCKDOWN WATER TANK.

(Application filed Apr. 15, 1901.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH STEPHENSON, OF BOONE, IOWA.

KNOCKDOWN WATER-TANK.

SPECIFICATION forming part of Letters Patent No. 678,913, dated July 23, 1901.

Application filed April 15, 1901. Serial No. 55,968. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH STEPHENSON, a citizen of the United States, residing at Boone, in the county of Boone and State of Iowa, have invented a new and useful Knock-down Water-Tank; of which the following is a specification.

My object is to detachably and adjustably connect sections of sheet metal with a frame to make a tank specially adapted to retain water for animals, &c., in such a manner that water-tight joints can be produced and maintained without packing, inside band, cementing, or soldering, and also in such a manner that all the parts can be disconnected to economize space in storing, packing, and shipping the tank.

My invention consists in the construction, arrangement, and combination of parts, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the tank, showing three sections of sheet metal combined with the frame. Fig. 2 is a transverse sectional view of the tank, showing how the overlying ends of the metal sections and the overlying parts of the frame are fitted and clamped together by means of rods and screw-bolts. Fig. 3 is a vertical longitudinal sectional view of the tank and a box in which it is suspended and protected.

The letter A designates pieces of sheet metal of quadrangular form, preferably galvanized sheet-iron, bent into semicircular shape and provided with grooves *b* near their ends and flanges *c* at their parallel sides adapted to be clamped fast between two overlying bars of a rigid frame by bending a portion into horizontal position, as clearly shown in Fig. 2.

D and D² are straight bars of equal length, preferably wood, between which bars the flanges *c* are placed in overlying position at their grooved ends to be securely clamped fast by means of wooden ends H, fitted to the semicircular sheet-metal plates and on top of the straight bars D² and cross-bars H², having shoulders and extensions at their ends and screw-bolts *f* and nuts *f'*.

To clamp the grooved overlying portions of the plates A together to produce water-

tight joints, rods *m* are bent into semicircular form and their ends screw-threaded and extended up through coinciding perforations in the flanges *c* of the plates A and in the straight bars D and D², the ends H, and the cross-bars H² in such a manner that the semicircular rods will rest in the grooves *b* of the sheet-metal plates to clamp the overlying end portions thereof tightly together when nuts *n* are drawn tight on the screw-threaded ends of said rods *m*. By thus providing the parallel top edges of the plates A with flanges extending outward and their ends with grooves the combination of the plates with the frame is facilitated and the joints greatly strengthened and longitudinal movement of the plates relative to each other before they are clamped together prevented.

At the ends of the tank where the ends of plates A overlie the concaved edges of the wooden ends H the sheet metal is clamped thereto by means of rods *m* in the same way to produce water-tight joints. It is obvious a tank of any size desired may be thus advantageously constructed for practical use and the joints maintained water-tight by simply drawing the nuts tighter whenever necessary. It is also obvious the tank may be inclosed by a wooden case or box A², as shown in Fig. 3, or in any suitable way as required to suspend and protect it when in practical use.

Having thus described the construction, arrangement, and combination of the separable parts, the practical operation and utility of my invention will be readily understood by persons familiar with the art to which it pertains, and what I claim as new, and desire to secure by Letters Patent, is—

1. In a water-tank, two metal plates bent into semicircular shape and provided with flanges extending horizontally from their top edges and grooves in their end portions, and said end portions placed in overlying position, straight bars clamped to the under sides and also top sides of said horizontal flanges and a semicircular rod placed in the groove of the under plate and means to clamp the rod to the overlying ends of the plates and to the overlying straight bars to produce a water-tight joint and a detachable connection between all the parts for the purposes stated.

2. A knockdown water-tank consisting of a frame composed of overlying straight bars at the parallel top edges, semicircular ends fitted to said bars, cross-bars fitted to said bars, overlying semicircular ends and overlying straight bars and screw-bolts and nuts for clamping the overlying parts together, metal plates bent into semicircular form and provided with horizontal flanges at their top edges to extend between the overlying straight bars of the frame and provided with grooves in their end portions and the grooves placed in coinciding positions and semicircular rods provided with screws on their ends

placed in the grooves of the under plates and the ends of the rods extended through coinciding perforations in the flanges of the plates in the overlying straight bars and the ends and cross-pieces of the frame and drawn tight by means of nuts, and a case fitted to the trough all arranged and combined to operate in the manner set forth for the purposes stated.

JOSEPH STEPHENSON.

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