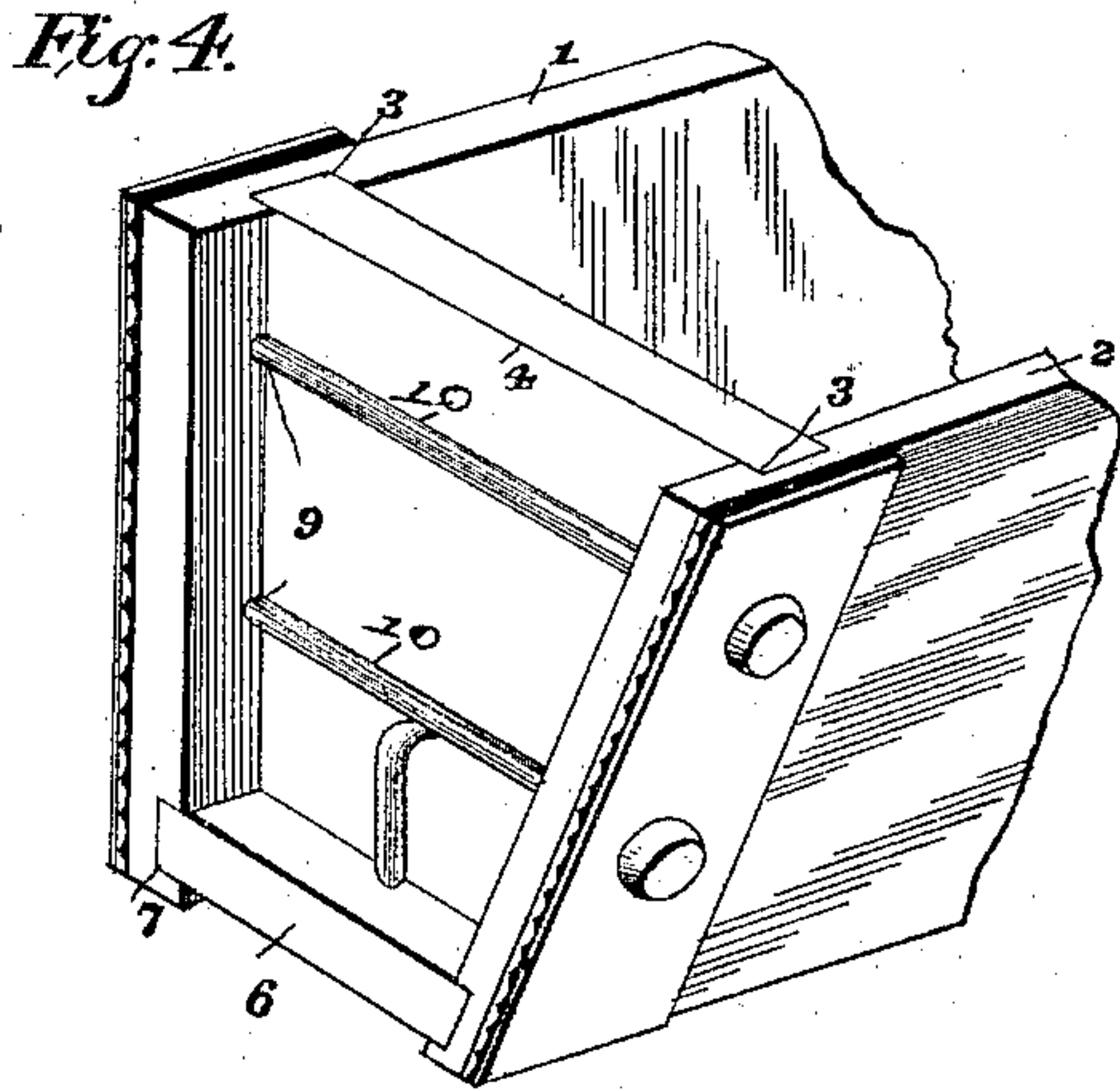
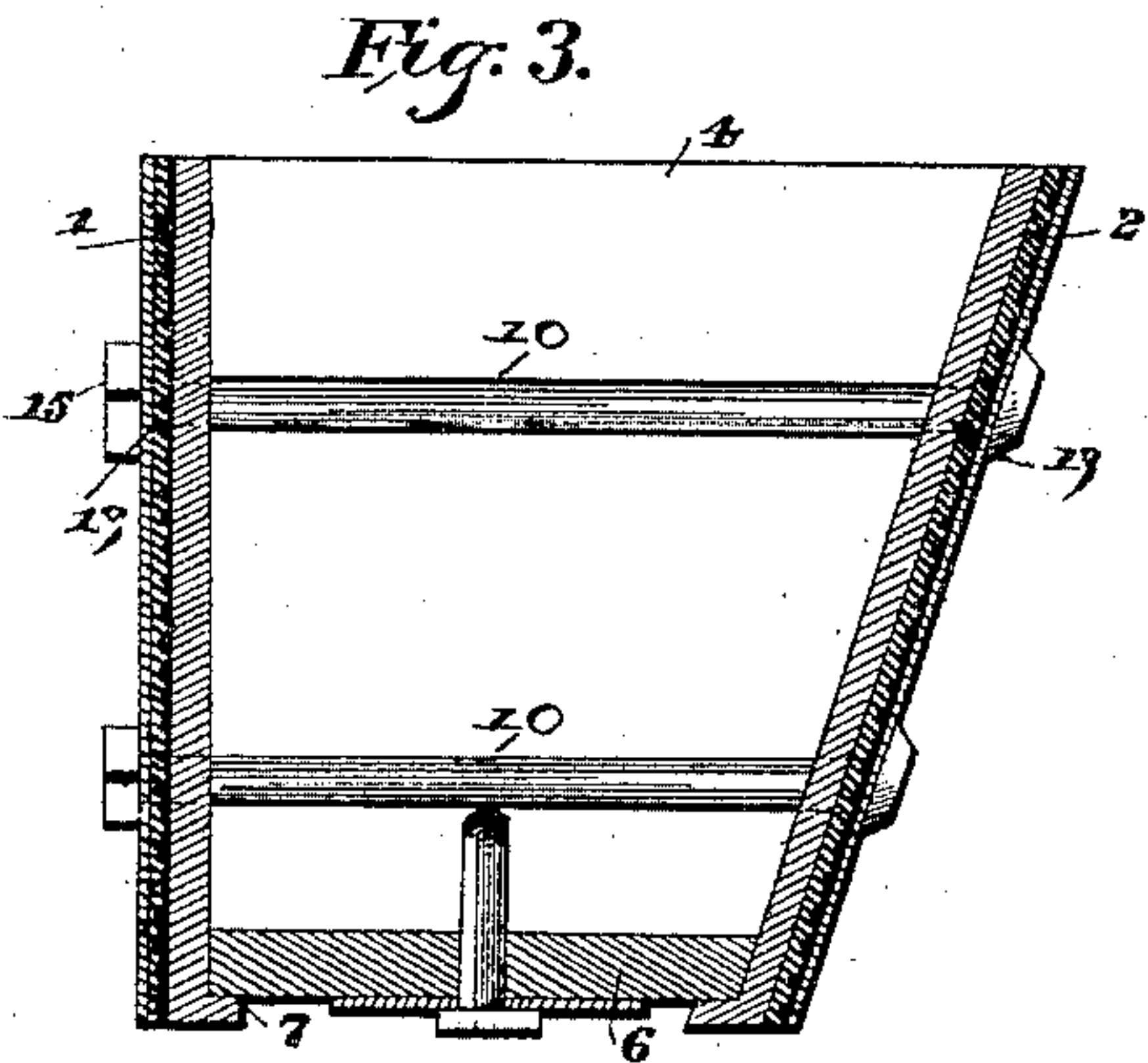
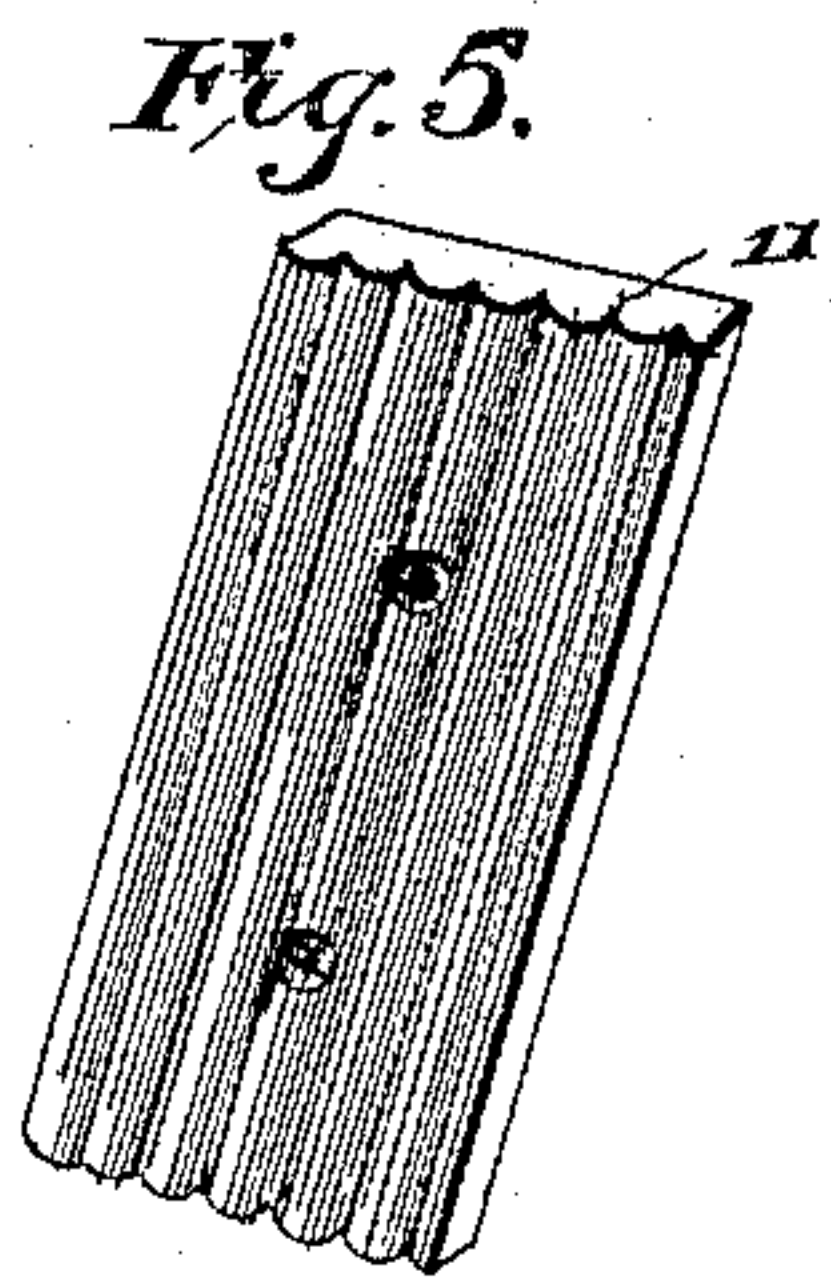
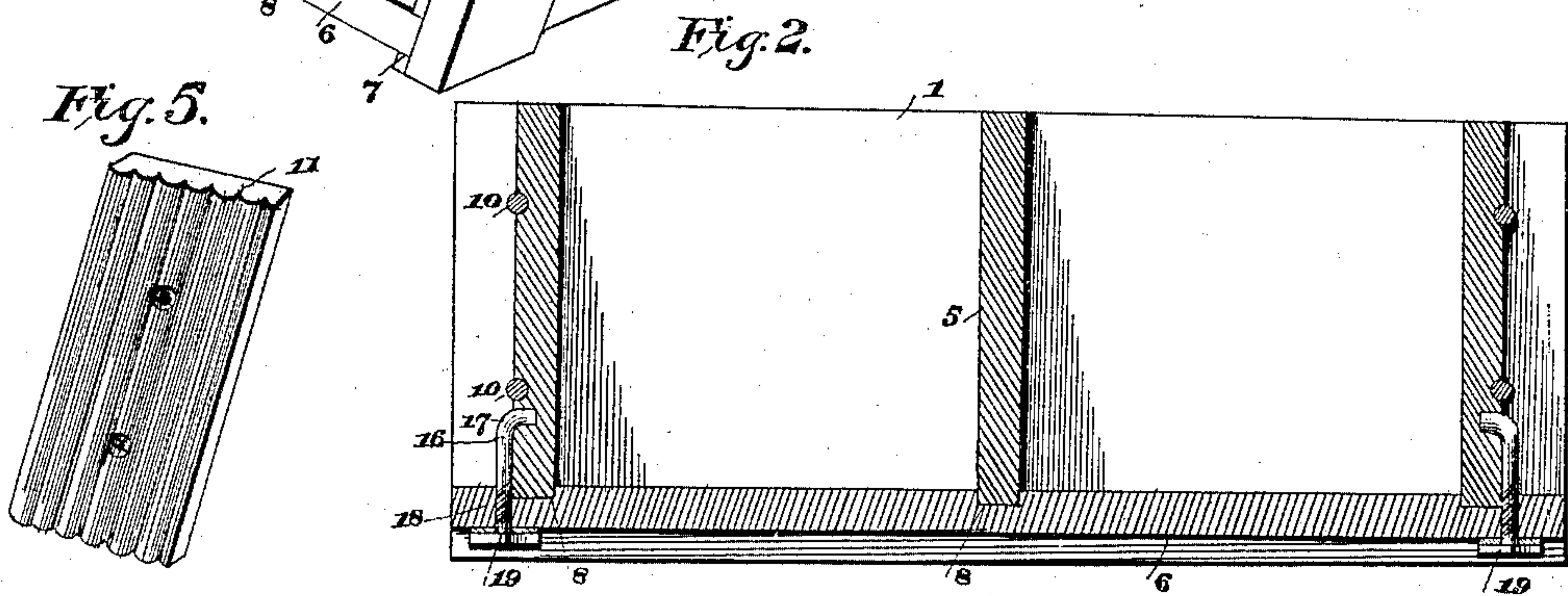
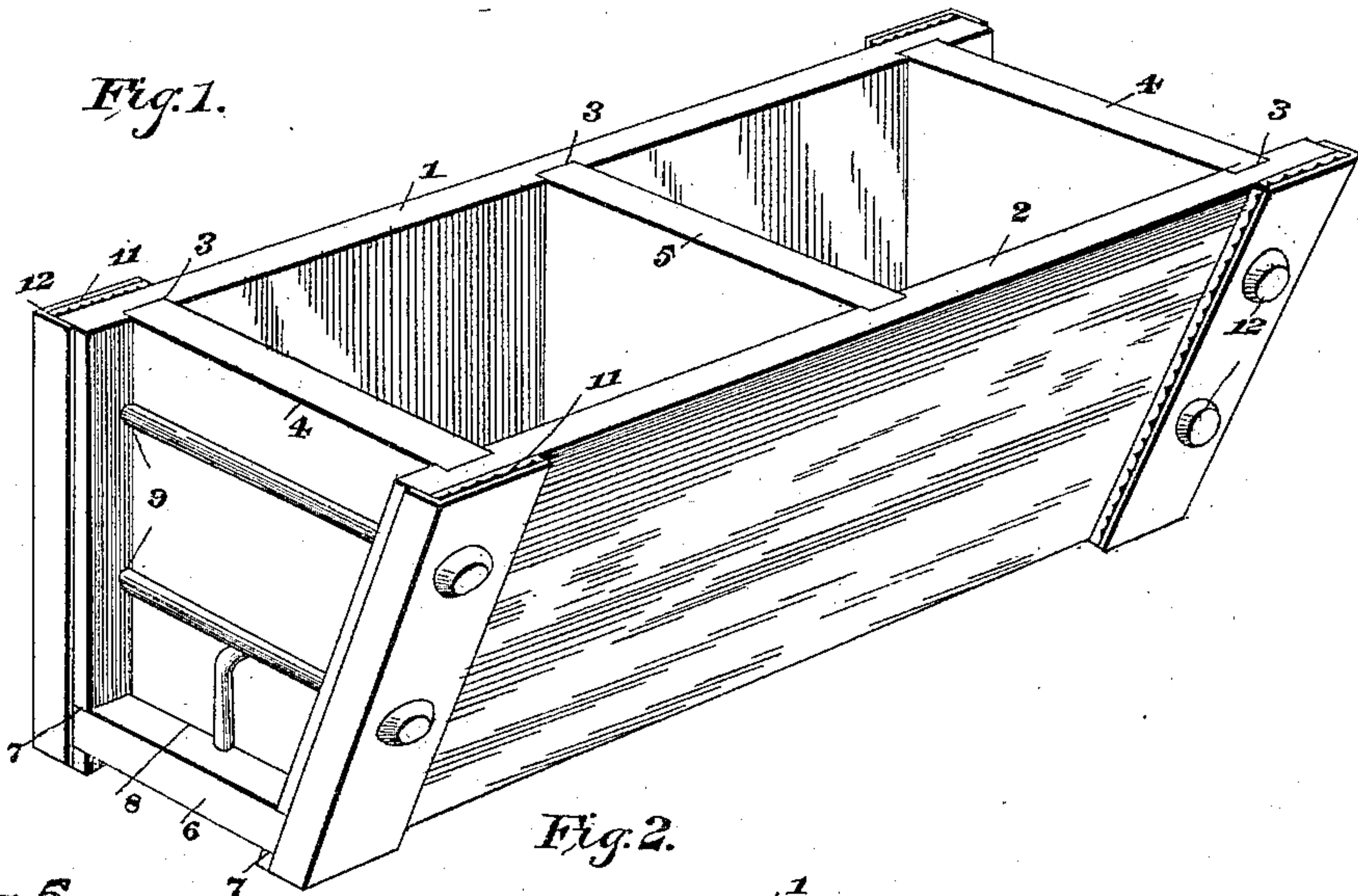


(No Model.)

J. KELLOW.
WASH TUB.

No. 445,643.

Patented Feb. 3, 1891.



Witnesses:

B. S. Owen
W. S. Sewall

Inventor
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UNITED STATES PATENT OFFICE.

JOSEPH KELLOW, OF BROOKLYN, NEW YORK.

WASH-TUB.

SPECIFICATION forming part of Letters Patent No. 445,643, dated February 3, 1891.

Application filed June 3, 1890. Serial No. 354,186. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH KELLOW, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Slate Tub, of which the following is a specification.

This invention has relation to improvements in slate tubs usually employed for laundry purposes; and the objects of the invention are to improve the general construction of the tub, and especially to provide for an expansion of the sides of the tub when hot water is introduced therein, and to obviate the usual crushing strain brought upon the slaty material by the bolts by reason of such expansion, and withal to provide a tight and efficient joint.

With the above main objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a tub constructed in accordance with my invention. Fig. 2 is a longitudinal vertical section. Fig. 3 is a transverse section at one side of one of the end walls. Fig. 4 is an end perspective of a portion of the tub, illustrating a modification of the binding-plate. Fig. 5 is a detail in perspective of the elastic pad.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention I provide the usual vertical rear wall 1, and the usual inclined front wall 2, each of which is near its two ends and at its center provided with vertical grooves or recesses 3 for the introduction of the two end walls 4 and the central partition 5. By reason of the location of the outer grooves 3 the ends of the walls 1 and 2 extend beyond the outer sides or surfaces of the end walls 4.

6 designates the bottom of the tub, and the same is let into a longitudinal groove 7, formed in each of the walls 1 and 2 near their lower edges, and said bottom is provided with opposite transverse end and central grooves 8, which receive the lower rabbeted edges of the walls 4 and partition 5. The parts as thus constructed are cemented by some suitable cement so as to form thoroughly watertight joints, as is usual in this class of tubs.

Near their outer ends each of the side walls 1 and 2 is provided with opposite pairs of bolt-openings 9, which openings register with each other and with grooves 10 formed in the outer surfaces of the end walls 4. Opposite the openings 9, and upon the outer sides of the front and rear walls, are applied rubber pads or washers 11, which pads or washers are preferably upon one of their surfaces provided with a series of in this instance longitudinal serrations or grooves, or, as will be apparent, said serrations may be omitted. The openings 9 are continued through these pads and also through opposite binding-plates 12, as at 13, which are applied to the outer sides of each of the pads or washers. Binding-bolts 14 are now passed through the openings 9, 10, and 13, and to the ends of the same are applied binding nuts or caps 15.

16 designates inverted-L-shaped binding-bolts, which, after entering sockets 17, formed in the outer walls 4, have their lower stems or threaded ends projecting down through openings 18 formed at the outer ends of the bottom section 6. One of these bolts is employed at each end of the tub and serves to hold the bottom snugly in position. The lower ends of the bolts are provided with nuts 19, and between the nuts and the bottom section are binding-plates 20.

In the main figures of the drawings I have illustrated the binding-plates 13 as being formed of light angle-iron; but it will be apparent that plain sheet-iron may be employed, as shown in the modification heretofore mentioned.

From the above construction it will be apparent that the strain of the bolts comes against the slate sections only through the rubber packings or washers, which obviates the crushing strain which has heretofore been a great drawback to the practicability of this class of tubs. The resiliency or elasticity of the rubber packing is bountifully sufficient to permit of any ordinary expansion of the sides of the tub without in any way endangering the same or rendering it liable to fracture.

Having thus described my invention, what I claim is—

1. In a tub of the class described, the combination, with opposite side and end sections, the latter being let into and within the edges of

the former, of a series of binding-bolts passing through openings formed in the sides and provided with binding-nuts, and a series of clamping-plates and interposed packings of
5 rubber or other elastic material located between the nuts and heads and the sides, said elastic packings having their faces serrated, substantially as specified.

2. In a tub of the class described, the combination, with the opposite side, end, and bottom sections, suitably connected or jointed, said sides beyond the ends being provided with pairs of opposite openings and the ends with transverse grooves aligning with the
10 openings, of transverse binding-bolts provided with binding-nuts, clamping-plates mounted between the nuts and heads of the

bolts and the sides, rubber packings mounted between the plates and the sides, and inverted-L-shaped bolts, one located at each end of
20 the tub, and having their L ends projected into sockets formed in the ends and their lower ends extending through openings formed in the bottoms, securing-plates mounted over the ends of said bolts, and caps
25 mounted on the bolts over the plates, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOSEPH KELLOW.

Witnesses:

B. R. SPELMAN, Jr.,
G. W. PALMER.