

No. 724,494.

PATENTED APR. 7, 1903.

J. PEARSON.
CAR JOURNAL BOX.
APPLICATION FILED AUG. 8, 1901.

2 SHEETS—SHEET 1.

NO MODEL.

Fig. 2.

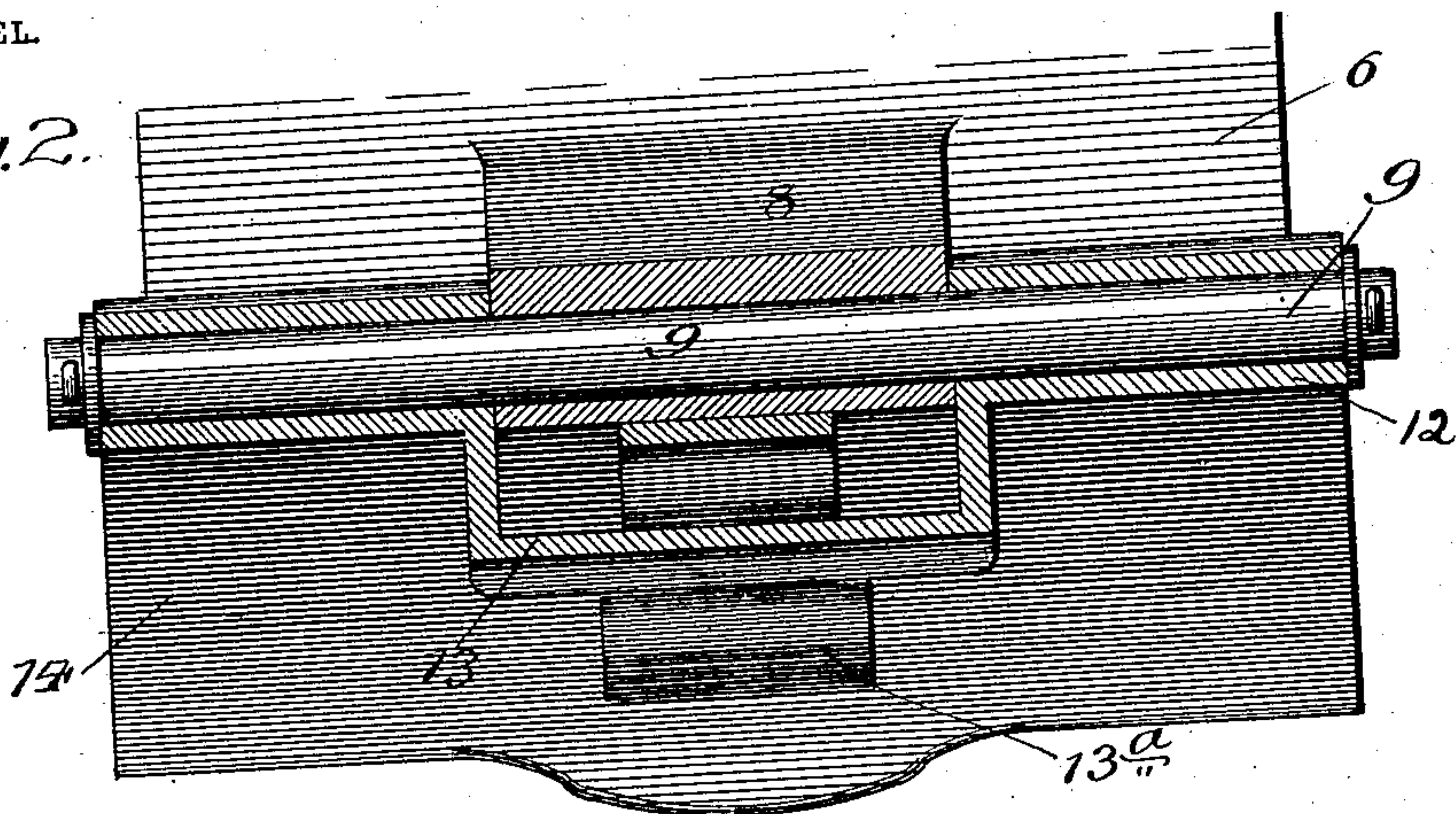
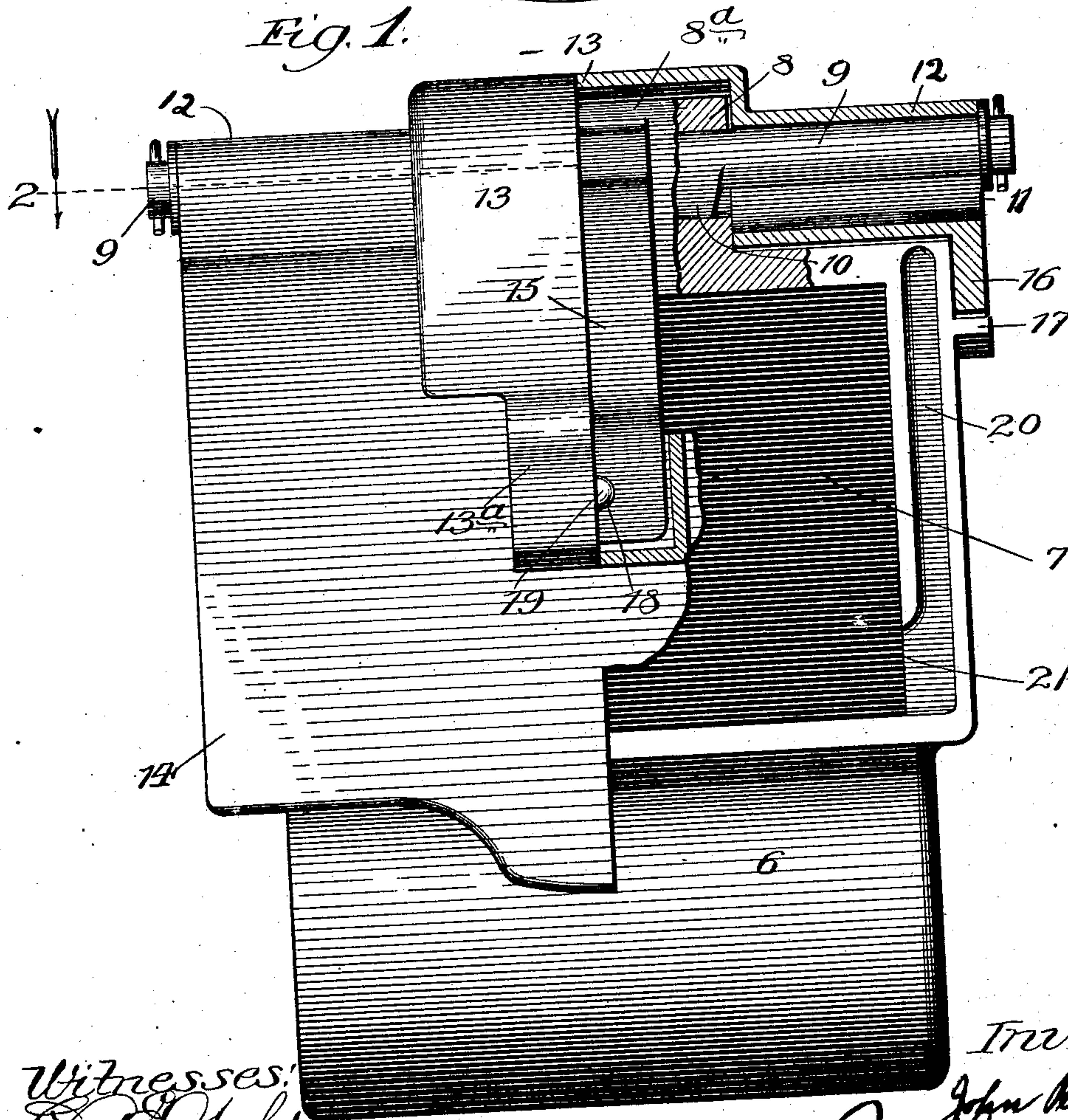


Fig. 1.



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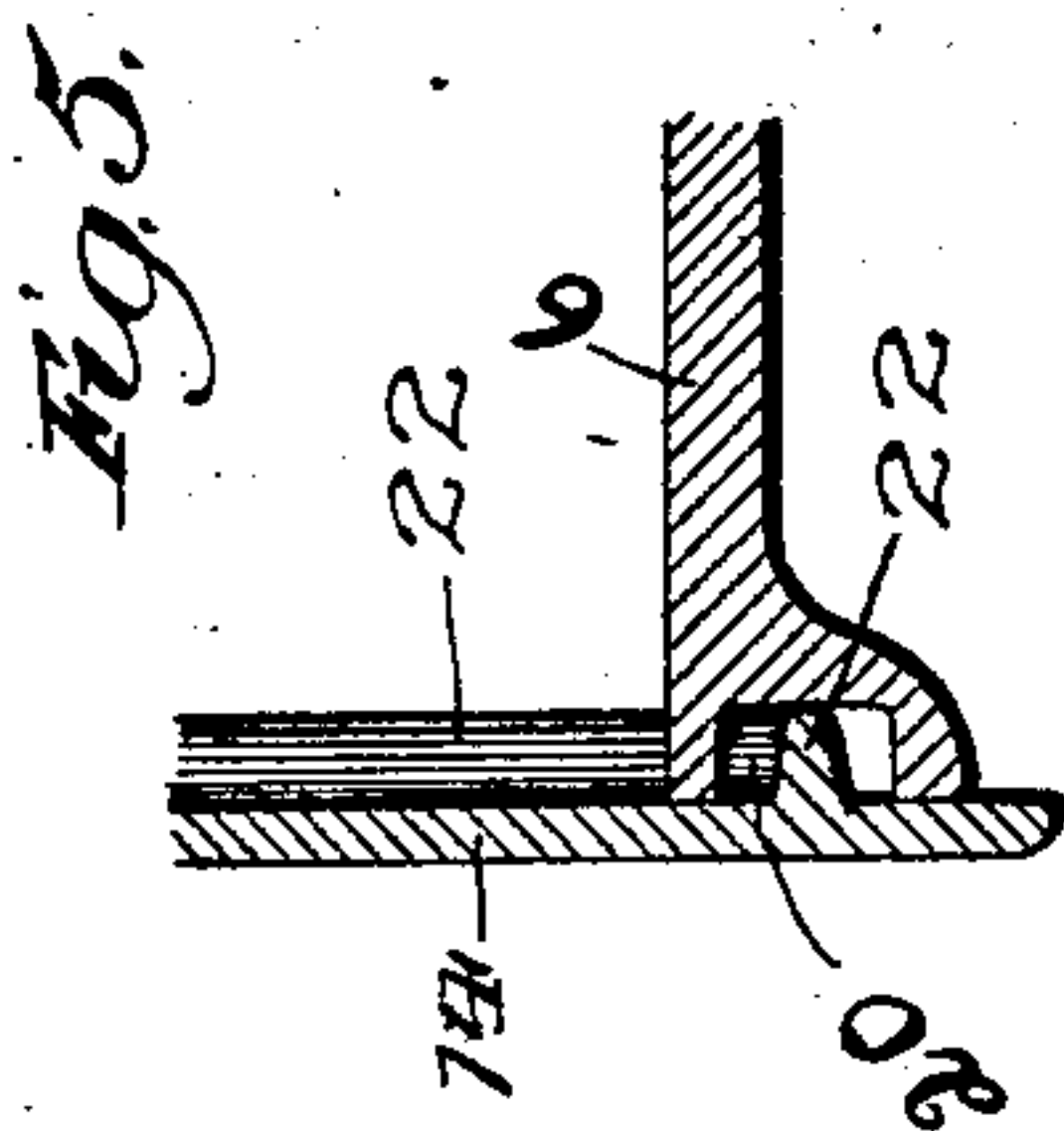
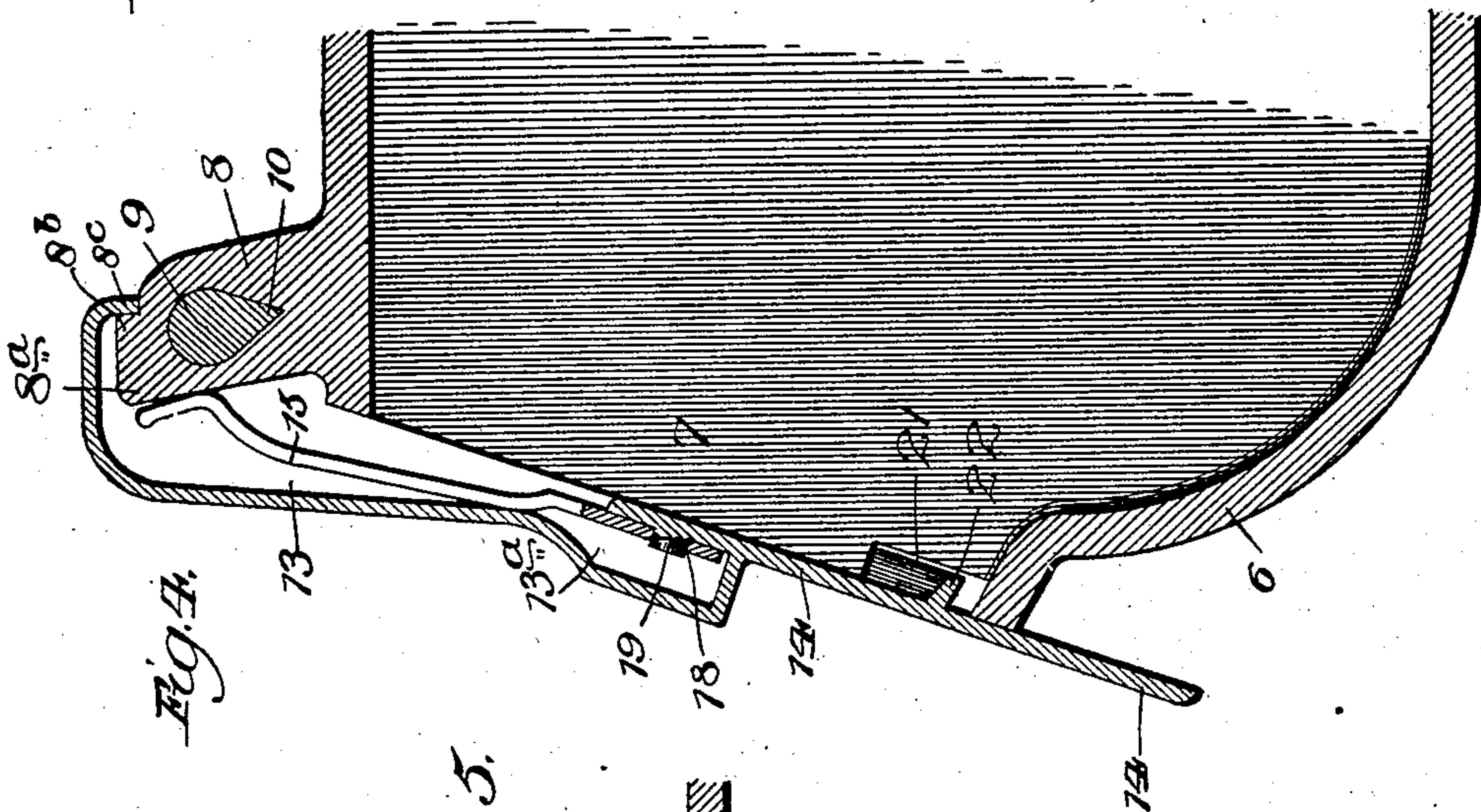
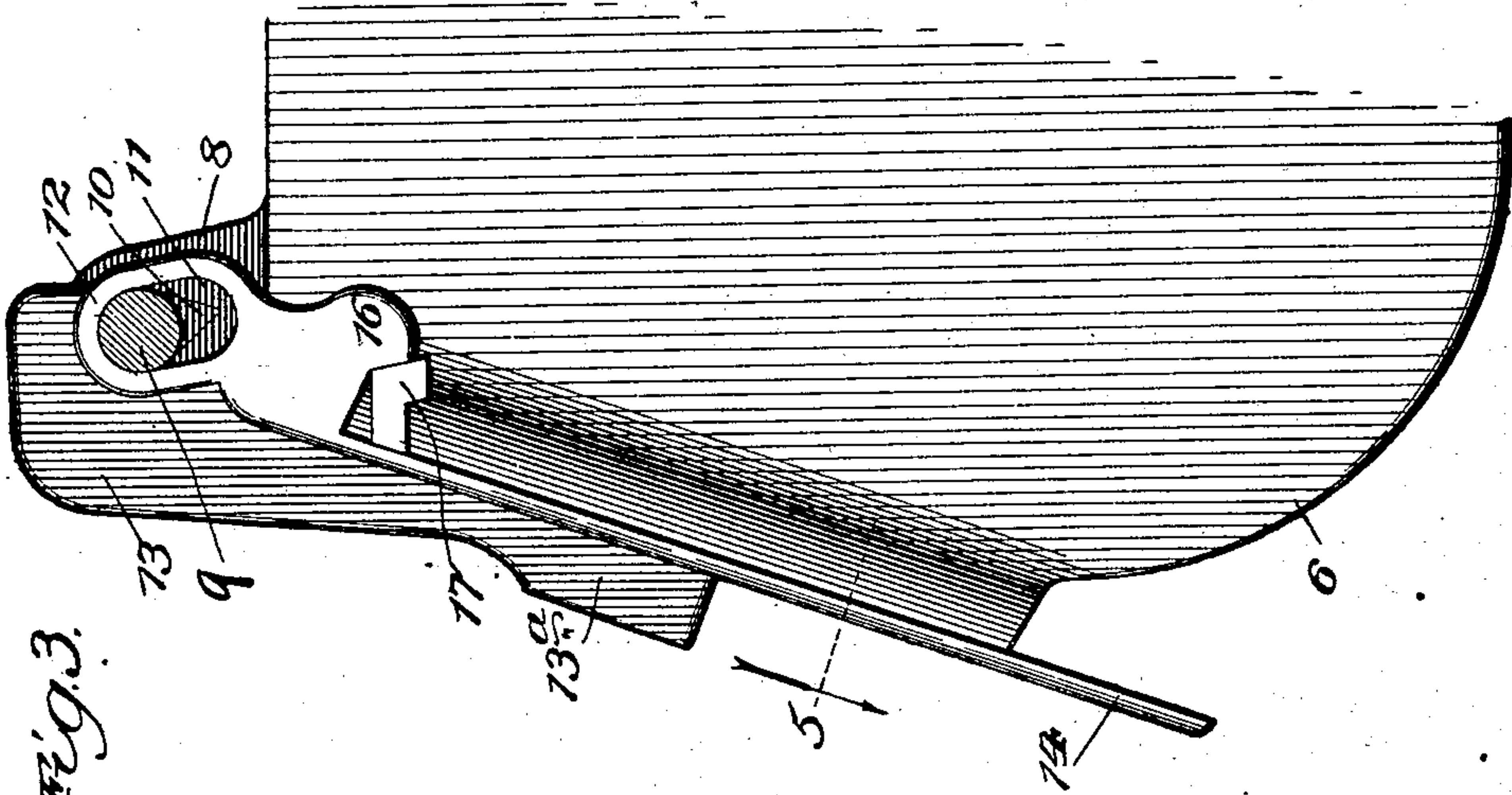
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NO MODEL.

2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

JOHN PEARSON, OF CHICAGO, ILLINOIS.

CAR JOURNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 724,494, dated April 7, 1903.

Application filed August 8, 1901. Serial No. 71,351. (No model.)

To all whom it may concern:

Be it known that I, JOHN PEARSON, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Car Journal-Boxes, of which the following, taken in connection with the accompanying drawings, is a specification.

The first of the objects of my present invention is the provision of a car journal-box in which the lid will be effectively held in closed position when shut, so as not to be forced open by the pressure of the packing material used in the box.

Another object of my invention is the provision of an improved form of joint between the inner face of the lid and the opposing face of the box whereby to make the box more secure against entry of dirt and dust and to prevent leakage of oil out of the box.

Another object of my invention is the provision of a box of improved construction in which the employee engaged in inspecting and oiling car journal-boxes can readily manipulate the lid of the same without the necessity for carrying anything other than the usual common tools employed by such mechanics.

Another object of my improvement is to produce a car journal-box which will have all of the above-enumerated advantages and at the same time be of simple and economical construction.

The above, as well as such objects as may hereinafter appear, I attain by means of the construction which I have illustrated in preferred form in the accompanying drawings, in which—

Figure 1 is an end elevation showing my box with a portion of the lid cut away. Fig. 2 is a plan view, partly in section. Fig. 3 is a side elevation of the end of the box. Fig. 4 is a sectional view of the end of the box. Fig. 5 is a sectional view of a detail, taken on the line 5 of Fig. 3.

In carrying out my invention I employ a box substantially like the construction ordinarily employed, save as to details of the face and attaching-lugs, which will be hereinafter pointed out, and provided with an opening of the usual form and location. The box I

have marked 6 and the opening 7 for convenience of reference. At the upper side of the box, on the outer end thereof, there is a bolt-lug or attaching-lug 8, carrying a hinge-bolt 9, which is formed with an enlargement or irregular-shaped projection 10 thereon in order to prevent rotation of the bolt within the lug 8, in which it fits tightly, the bolt being formed with its ends extending at both sides of the lug 8 and passing through elongated openings 11 in a couple of bolt-lugs 12, formed on either side of a pocket 13 in the lid 14, which when closed covers the opening 7.

As will be clearly seen on examination, especially of Fig. 3, the elongated openings 11, formed in the bolt or hinge-lugs 12 of the lid, are set at an angle which, as shown, is approximately ten degrees from the vertical. This is for the purpose of aiding the operation of the spring 15 in the closing of the lid and of facilitating the engagement between the hooks 16 and the lugs 17, which form the locking device that prevents the forcible opening of the lid from pressure of the contents inside the box. The lugs 17 and the hooks 16 may be arranged to engage upon the outside of the side walls of the box, as shown, or, if preferred, may be placed upon the inside thereof.

As a convenient means of securing the spring 15 in place I provide the same with an opening 18, arranged to engage a stud or projection 19, which is cast with the lid, so as to project into the pocket 13, the spring being inserted from the upper side of the lower enlargement 13^a of the pocket and hooked over the projection 19, as will be readily understood from an examination of Fig. 4.

The contacting surfaces of the hooks 16 and the lugs 17 are made of a bevel or incline shape, so as to draw the lid inward tightly against the face of the box-opening when the hooks and lugs are brought into engagement, and this action is further assured by the action of the spring 15, which by pressing the slot inward on the pin causes the lid to slide downward by reason of the incline of the slots. The bearing-face of the side walls of the box at either side of the opening 7 is made with a recess or chamber 20, as shown, opening at 21 inwardly to the interior of the

box, and the lid is formed with the rib 22, adapted to enter the recess 20 and extend across the lower portion of the opening, as shown in Fig. 4, whereby any oil that may
 5 be thrown against the inside of the lid will be caught by the rib 22 and drip off at the bottom thereof, across the opening 7 and at the side fall into the chamber or recess 20, and thence back into the inside of the box
 10 through the opening 21. The provision of the rib 22, entering the recesses 20, also insures additional protection against the entry into the box of any dirt or foreign matter from the outside, while at the same time it does
 15 not interfere with the facility with which the lid can be opened by the car-men.

The opening of the box is accomplished by pulling outwardly and upwardly on the lid, when the inclined engaging faces between
 20 the hooks 16 and the lugs 17, together with the inclination of the elongated opening 11, operate to cause the lid to traverse the face of the box in an upward and outward direction until the hooks 16 disengage the lugs 17,
 25 when the lid will begin to turn or revolve about the bolt 9, the spring 15 riding over the point 8^a of the upper end of the projection 8 onto the horizontal surface of such projection. When the spring passes around the
 30 projection or corner 8^a, it will hold the lid in either raised or closed position, as the case may be. The lid may be closed by simply allowing it to drop, when the hook 16 by reason of its inclined faces striking the lug 17
 35 and by aid of the spring 15 will snap over the lug 17, whereupon the pressure of the spring cooperating with the inclined faces of the slot 11 forces the hook 16 down upon the lug 17, so that the lid is positively locked in
 40 place and does not depend upon gravity alone to keep it in place.

In the closing of the lid the engagement of the spring with the corner 8^a tends to hold the lid in the uppermost position, so far as
 45 the elongated opening 11 is concerned, until the hooks 16 have gone in sufficiently far past the lugs 17 to be in position to engage the latter, when the lid will begin to move downwardly and inwardly until it reaches a tight
 50 seat upon the same. The pressure of the spring inward, it will be seen, thrusts the inclined slot on the pin 9 and forces the lid to place, not depending alone on its weight. The inclined faces of the catches 16 cause
 55 them to ride over the lugs 17 and keep a close contact therewith.

As an additional security against the entry of dust or foreign matter I provide the
 60 lug 8 with a shoulder at 8^b and construct the upper part of the lid at 8^c with an inwardly-turned flange, so it will bear against said shoulder when the lid is closed.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. A car journal-box comprising the combination of a body having engaging lugs, a lid having on its sides fixed catch-hooks arranged to engage said lugs, and a spring assisting to hold the lid in closed position, substantially as described. 65 70

2. A car journal-box having a body provided with engaging lugs on its sides, and a lid provided with fixed hooks on its sides constructed to engage said lugs, and a hinge connection between said lid and body, comprising a hinge-pin secured to said body, and engaging oblong openings which are provided in said lid, substantially as described. 75

3. In a car journal-box the combination 80 with a body having engaging lugs on its sides, of a lid with hooks to engage the same, and having a slotted hinge connection with the box, a spring mounted in said lid to thrust the lid inward and assist in engaging and securing the said hook with the said lugs. 85

4. In a car journal-box, in combination with a lid having an oblong hinge-slot therein, a body having a central lug and a hinge fixed therein provided with a sidewise-projecting feather thereon, whereby the bolt may be slid out endwise but may not rotate in its place. 90

5. A car journal-box comprising a body with a central projecting hinge-lug and lugs 95 on its sides, a lid having oblong hinge-slots and fixed hooks to engage the lugs on the body, a hinge-bolt working in said slots and fixed in the body-lug, there being recesses in the bearing-face of the walls of the box and ribs on the lid cooperating with the said recesses. 100

6. A journal-box having a lug, a hinge-bolt fixed thereon, there being an indented shoulder (8^a) upon said lug, and a cooperating lid having oblong slots engaging the bolt and a hooked inturned lip (8^c) engaging the said shoulder when the lid is closed, substantially as described. 105

7. A car journal-box provided with a central lug, a fixed bolt mounted in said central lug and fixed side lugs on the said box, in combination with a lid hinged to said bolt by slotted openings inclined at an angle to the lid and having sloping-faced hooks engaging the lugs on the box and a spring mounted to press inward upon the lid and cooperating with the slotted hinge to force the hooks into engagement with the side lugs, substantially as described. 110 115

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses. 120

JOHN PEARSON.

In presence of—

H. W. SMALLEY,
 FRANK O. GREEN.