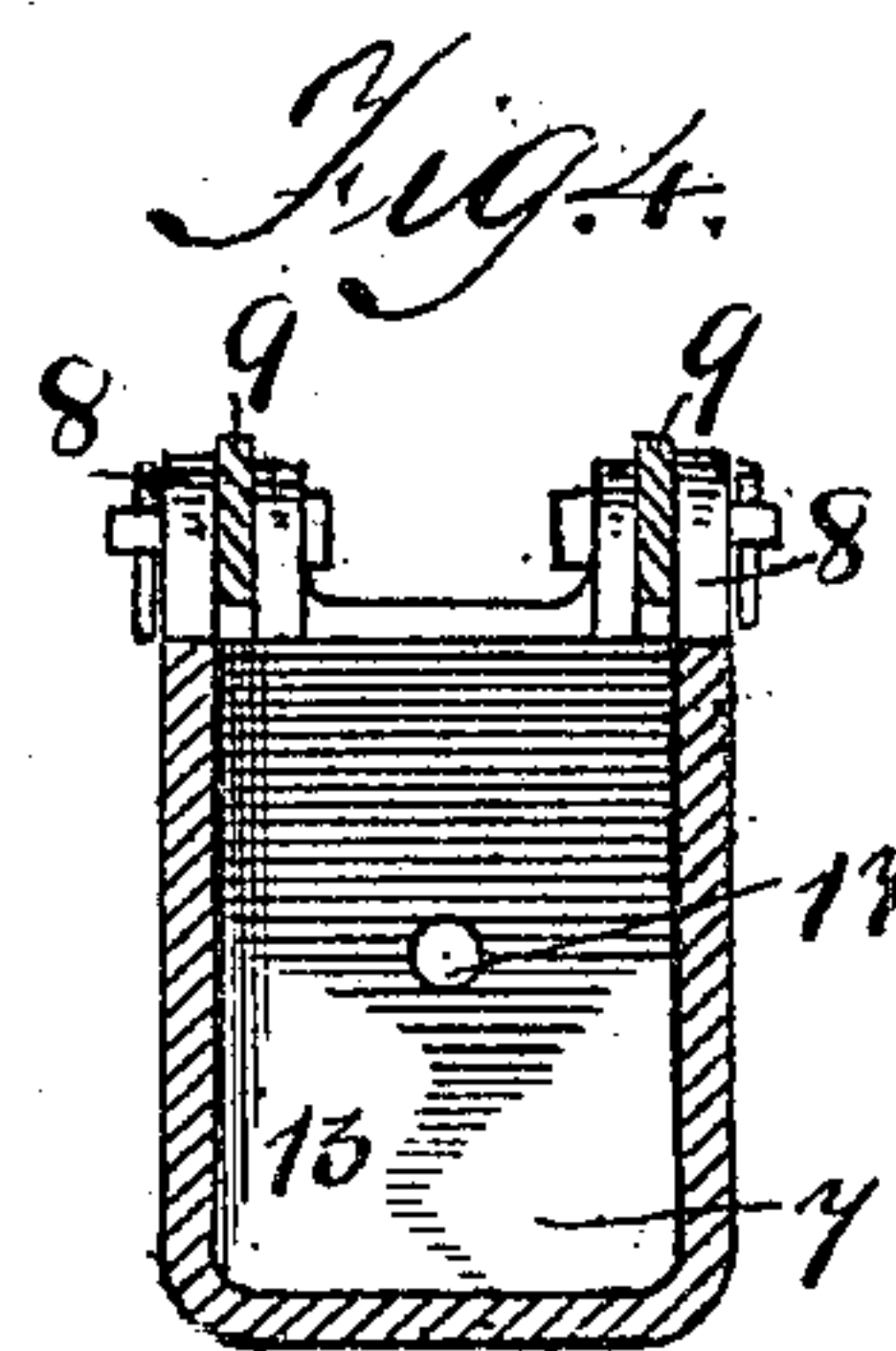
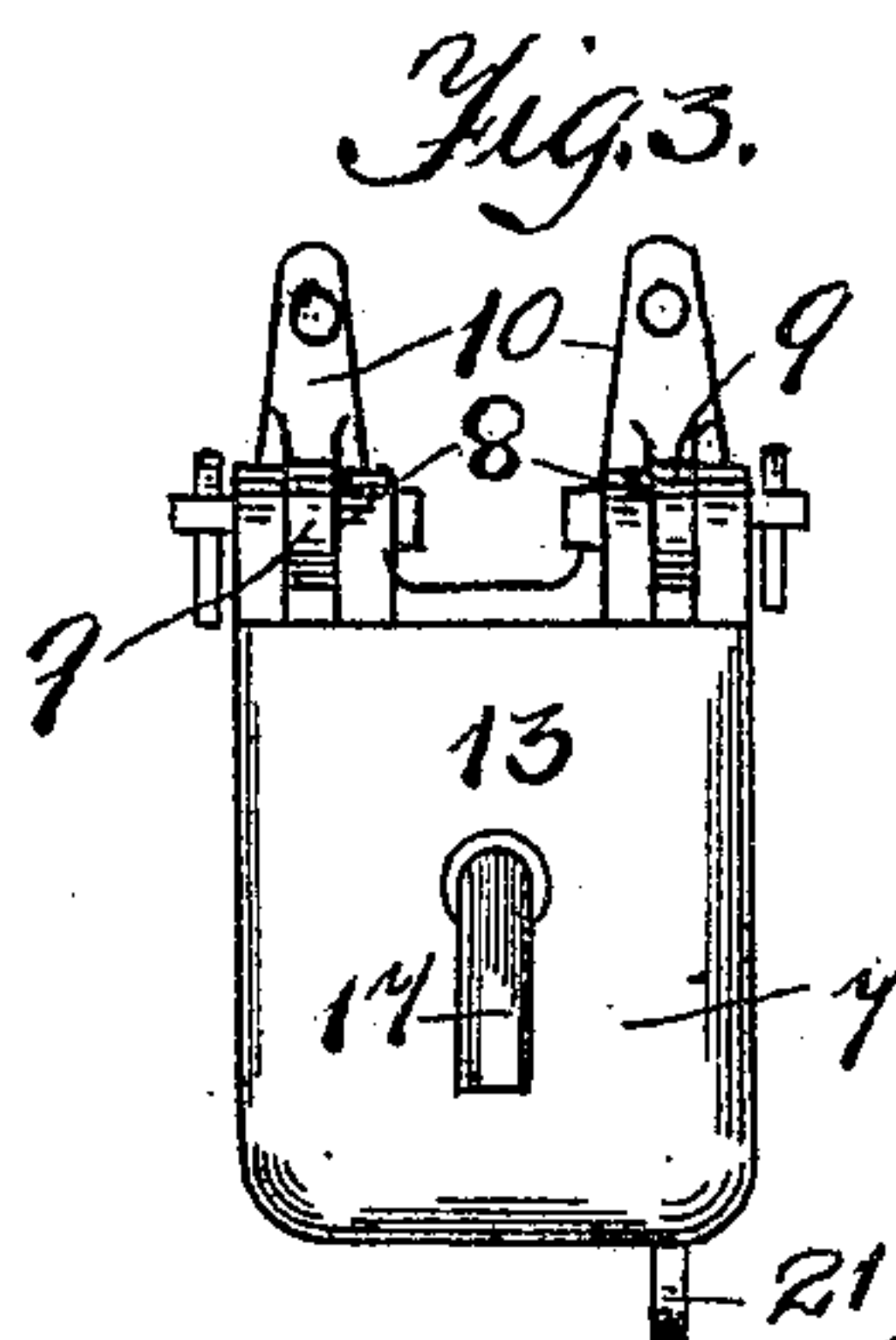
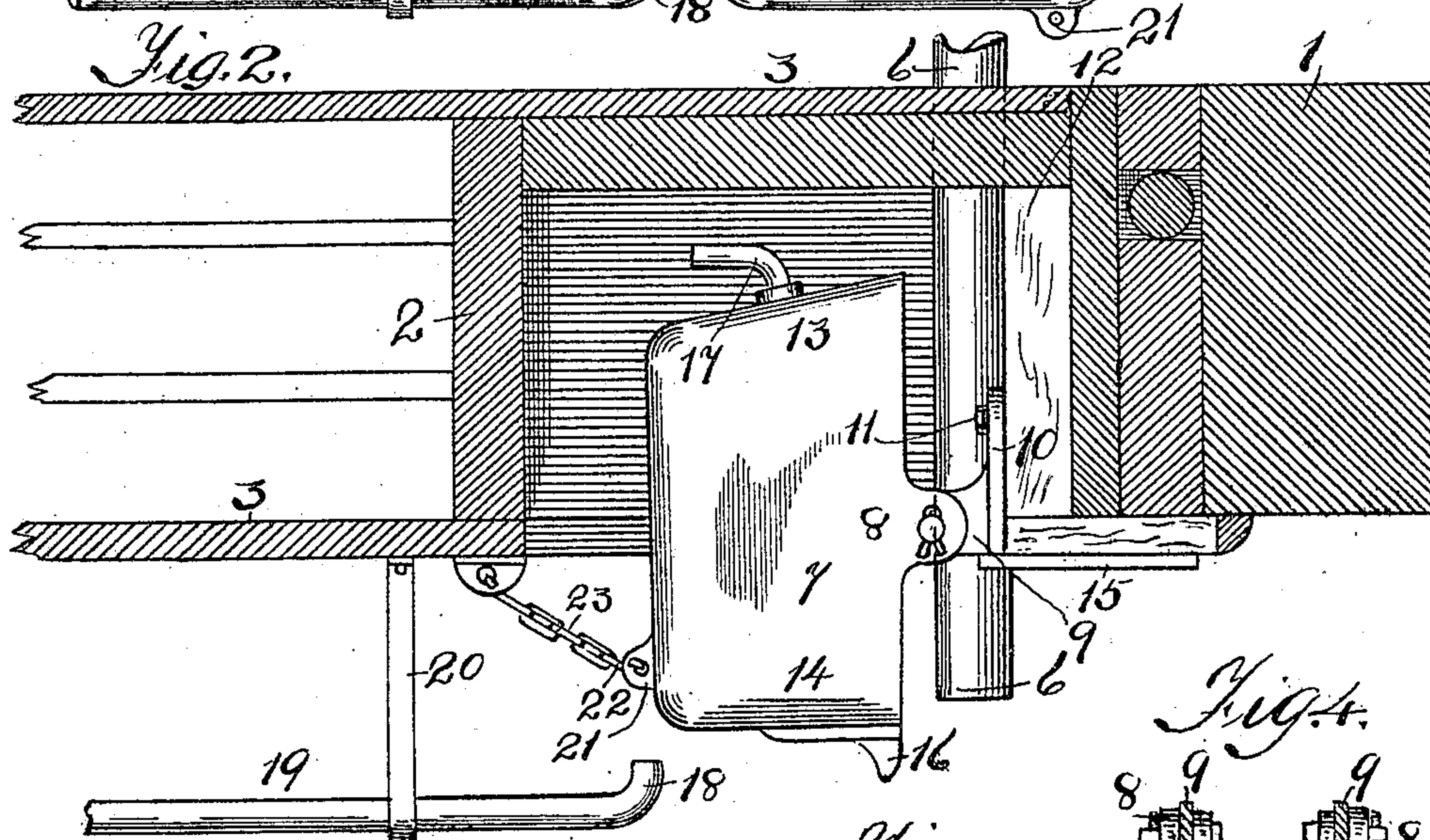
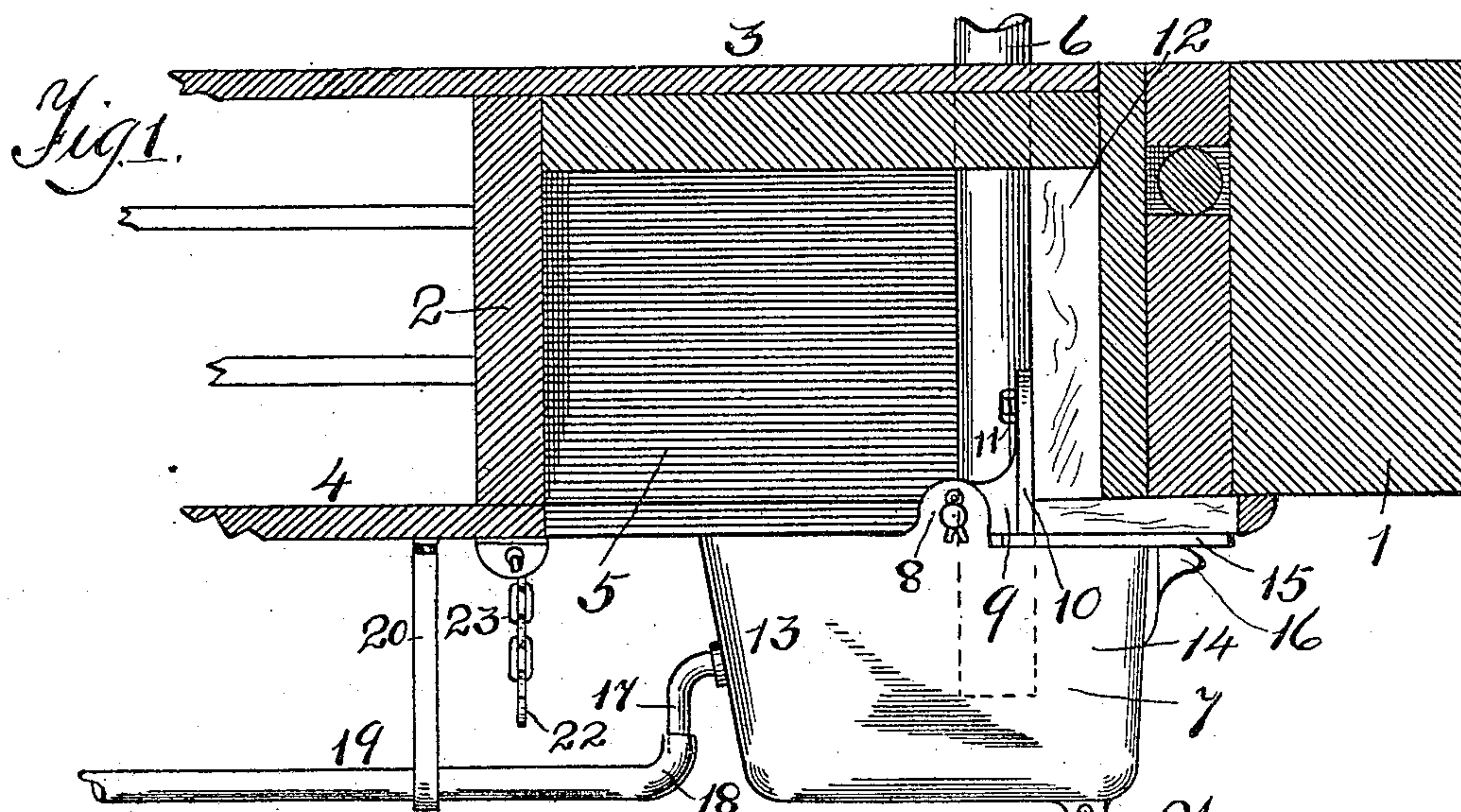


No. 808,010.

PATENTED DEC. 19, 1905.

J. C. CARRY.
COMBINED CAR DRAIN AND TRAP.

APPLICATION FILED APR. 7, 1905.



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JOSEPH C. CARRY, OF CHICAGO, ILLINOIS.

COMBINED CAR DRAIN AND TRAP.

No. 808,010.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed April 7, 1905. Serial No. 254,405.

To all whom it may concern:

Be it known that I, JOSEPH C. CARRY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Combined Car Drain and Trap, of which the following is a specification.

This invention is intended more especially for use on refrigerator-cars, and has for its object to provide a suitable trap to prevent the admission of air into the drain-pipe and at the same time provide a drain adapted to discharge the water near the center of the track to prevent the leakage of water onto the trucks or other operating portions of the car and to prevent its discharge from the side of the car at a point where it would come in contact with the bridgework or other structure of the road liable to be damaged by moisture.

Another object of the invention is to so position the combined trap and drain that it will be out of the road of the operative mechanism, and the final object of the invention is to provide means for raising the drain to obtain access to the drain-pipe for the purpose of cleaning out sediment or impurities which might be lodged therein.

The invention consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings illustrating the invention, Figure 1 is a side elevation of the drain in normal position; Fig. 2, a similar view showing the drain in raised position; Fig. 3, an end elevation of the drain-receptacle, and Fig. 4 a cross-sectional view of the same.

As shown in Figs. 1 and 2, the device is applied to a refrigerator-car having longitudinal side sills 1, intermediate sills 2, an inner flooring 3, and an outer flooring 4. The inner and outer floorings are spaced apart a distance substantially equal to the thickness of the side sills, and the space between the two floors is adapted to be filled with suitable packing or insulation to prevent the admission of outside heat into the car. At a suitable point inside of the longitudinal side sills the outer flooring is cut away to leave an open space 5, through which projects a drain-pipe 6, which terminates at a considerable

distance below the plane of the outer floor and, as shown, projects through the open space 5 near the outer side thereof. A drain-receptacle 7 is suitably positioned to have the end of the drain-pipe project thereinto when in closed position, and said drain-receptacle is provided at its sides with upwardly-projecting ears 8, which ears are pivoted to companion ears 9, secured to a plate 10, which is fastened, by means of bolts 11 or similar attaching means, to a block 12, which is rigidly secured to a suitable portion of the car structure. The ears 8 project upwardly at a suitable point to have the center of weight of the drain-receptacle at a point between the ears and the discharge end 13, which normally projects under the open space 5, as shown in Fig. 1, and is adapted to be turned up into said space, as shown in Fig. 2. The opposite or intake end 14 of the receptacle normally extends outwardly toward the side of the car and is adapted to be held by gravity in abutment with a plate 15, secured to the under face of the car structure, so that under ordinary conditions the weight of the receptacle will hold it level, as shown in Fig. 1, and allow the drain-pipe to project thereinto for the discharge of water. The receptacle is provided with a lug or handle 16 at its intake end for the manipulation of the receptacle, which is pivoted at such a point that it may be swung out of normal position by a slight amount of pressure exerted on the handle. The discharge end of the receptacle is provided with a downwardly-turned spout 17, adapted to project into an upwardly-turned end 18 of a pipe 19, which leads back under the car to a suitable point for discharging the water into the middle of the track and is suspended from the car by means of hangers 20 or other similar attaching means. The receptacle is provided on its bottom with an eye 21 near the outer or intake end 14 of the receptacle, which eye is adapted to cooperate with a hook 22 on a chain 23 for allowing the receptacle to be turned back and held in the position shown in Fig. 2, which allows the insertion of a mop or other cleaning implement into the end of the drain-pipe and also allows the drain-receptacle itself to be cleaned out from a suitable position exterior of the car.

In use the drain-receptacle will normally occupy the level position shown in Fig. 1, and the intake end of the receptacle will be held by gravity against the plate 15 or other suitable portion of the car structure by reason of the distribution of the weight of the receptacle, so that it will not be necessary to provide additional means for holding the receptacle in place. When it is desirable to clean out the drain-pipe, the receptacle will be turned back into the position shown in Fig. 2, allowing the discharge end to turn up into the open space provided therefor, after which the hook 22 will be inserted into the eye 21, holding the receptacle out of the way of the drain-pipe and allowing one or both to be cleaned. The drain-pipe normally projects into the receptacle a sufficient distance to bring its discharge end below the level of the discharge-spout 17, so that the end of the drain-pipe will be always covered with water, thereby preventing the entrance of air through the pipe into the car.

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

1. A combined drain and trap consisting of a drain-pipe, a drain-receptacle pivoted at such point that the portion of the drain-receptacle on one side of the pivotal point will be heavier than the portion on the other side of the pivotal point, an abutment adapted to be contacted by the lighter end of the receptacle and held in abutment by the heavier end of the receptacle, and a spout at one end of the receptacle above the end of the drain-pipe and below the top of the receptacle and adapted to keep the end of the drain-pipe immersed under normal conditions, substantially as described.

2. A combined drain and trap consisting of a drain-pipe and discharge-pipe, a drain-receptacle pivoted at such point that the portion of the receptacle at one side of the pivotal point will be heavier than the portion at the other side of the pivotal point, an abutment adapted to be contacted by the lighter end of the receptacle and held in abutment by the weight of the heavier end of the receptacle, a spout at one end of the receptacle having its mouth normally in line with the intake end of the discharge-pipe and having a vertical elevation above the end of the drain-pipe and below the top of the receptacle and adapted to keep the end of the drain-pipe immersed under normal conditions, an eye at the lighter end of the receptacle, and a hook adapted to cooperate therewith for holding the receptacle swung out of normal position for the purpose of exposing the end of the drain-pipe, substantially as described.

3. In combination with a car having a recess cut in its bottom, a drain-pipe passing through the recess near one side thereof, a

discharge-pipe, a receptacle into which the drain-pipe normally projects, means for pivoting the receptacle at such point that the portion of the receptacle at one side of the pivotal point will be heavier than the portion at the other side of the pivotal point for causing the lower end of the receptacle to abut against the car structure at one side of the recess, and a discharge-spout at the heavier end of the receptacle normally in line with the discharge-pipe and adapted to be swung up into the recess in the bottom of the car for exposing the discharge end of the drain-pipe, substantially as described.

4. In combination with a car having a recess cut in its bottom, a drain-pipe passing through the recess near one side thereof, a receptacle into which the drain-pipe normally projects, means for pivoting the receptacle off center and allowing the lighter end thereof to abut against the car structure at one side of the recess, a discharge-spout at the heavier end of the receptacle adapted to be swung up into the recess in the bottom of the car for exposing the discharge end of the drain-pipe, an eye on the bottom of the receptacle at the lighter end thereof, and a hook adapted to cooperate therewith for holding the discharge end of the receptacle swung up into the recess provided therefor, substantially as described.

5. In combination with a car having a recess cut in its bottom, a drain-pipe passing through the recess near one side thereof, a receptacle into which the drain-pipe normally projects, means for pivoting the receptacle off center and allowing the lighter end thereof to abut against the car structure at one side of the recess, a discharge-spout at the heavier end of the receptacle adapted to be swung up into the recess in the bottom of the car for exposing the discharge end of the drain-pipe, an eye on the bottom of the receptacle at the lighter end thereof, a hook adapted to cooperate therewith for holding the discharge end of the receptacle swung up into the recess provided therefor, and a discharge-pipe leading to a suitable point of discharge and adapted to have the discharge-spout projected therein when the receptacle is in normal position, substantially as described.

6. In combination with a car having a double flooring with a recess formed therein, a drain-pipe passing through the recess near the outer side thereof, a receptacle provided with ears upwardly extending from its sides and off center with respect to the weight of the receptacle, fixed ears secured to the car structure, to which the first-mentioned ears are pivoted for allowing the intake end of the receptacle to abut against the car structure for normally holding the receptacle in level

position and allowing the heavier discharge
end of the receptacle to be swung up into the
recess provided therefor, a spout on the dis-
charge end of the receptacle having a verti-
5 cal elevation sufficient to keep the discharge
end of the drain-pipe normally immersed,
and means for holding the discharge end of

the receptacle in raised position for the pur-
pose of cleaning the drain-pipe, substantially
as described.

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