

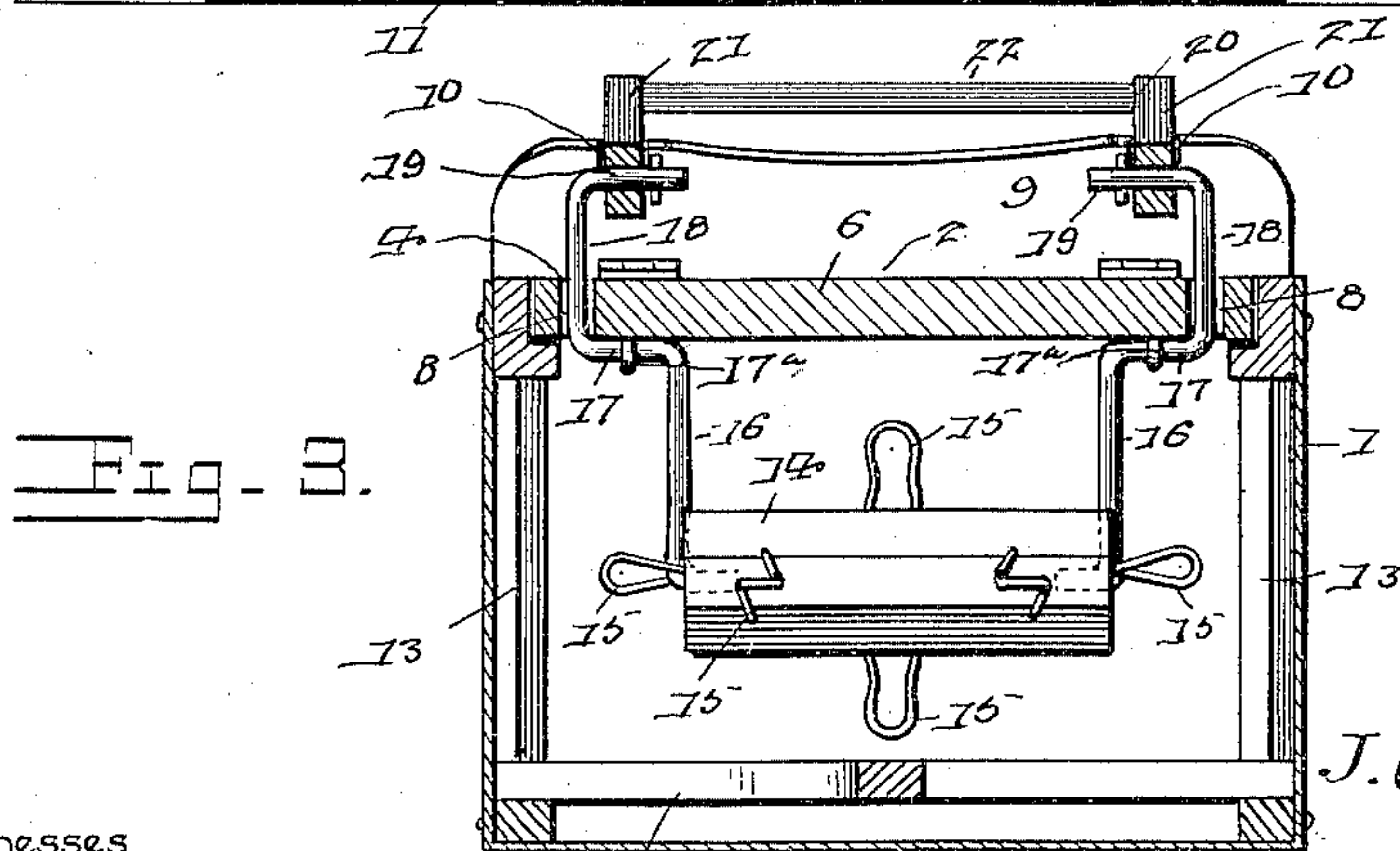
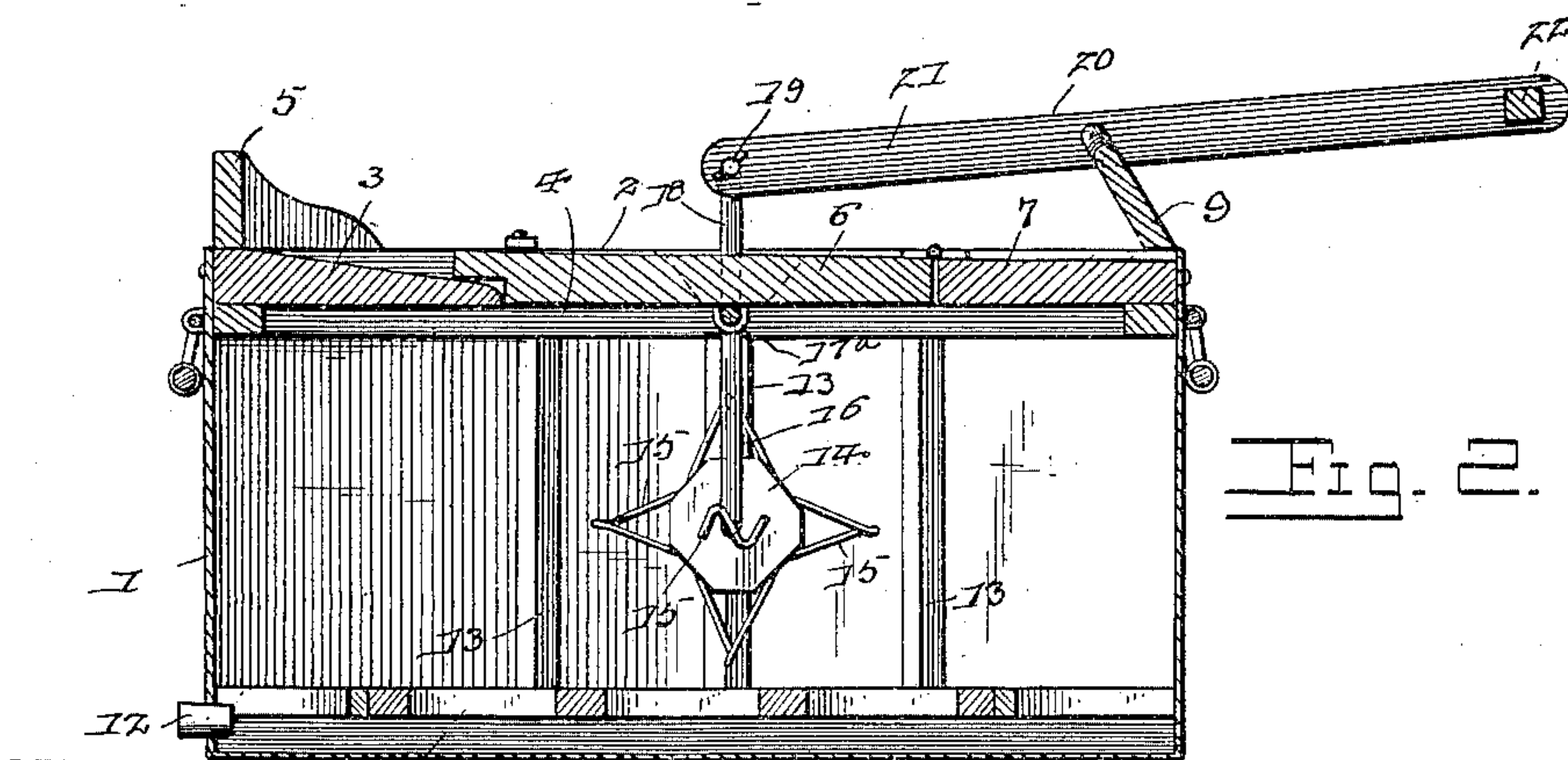
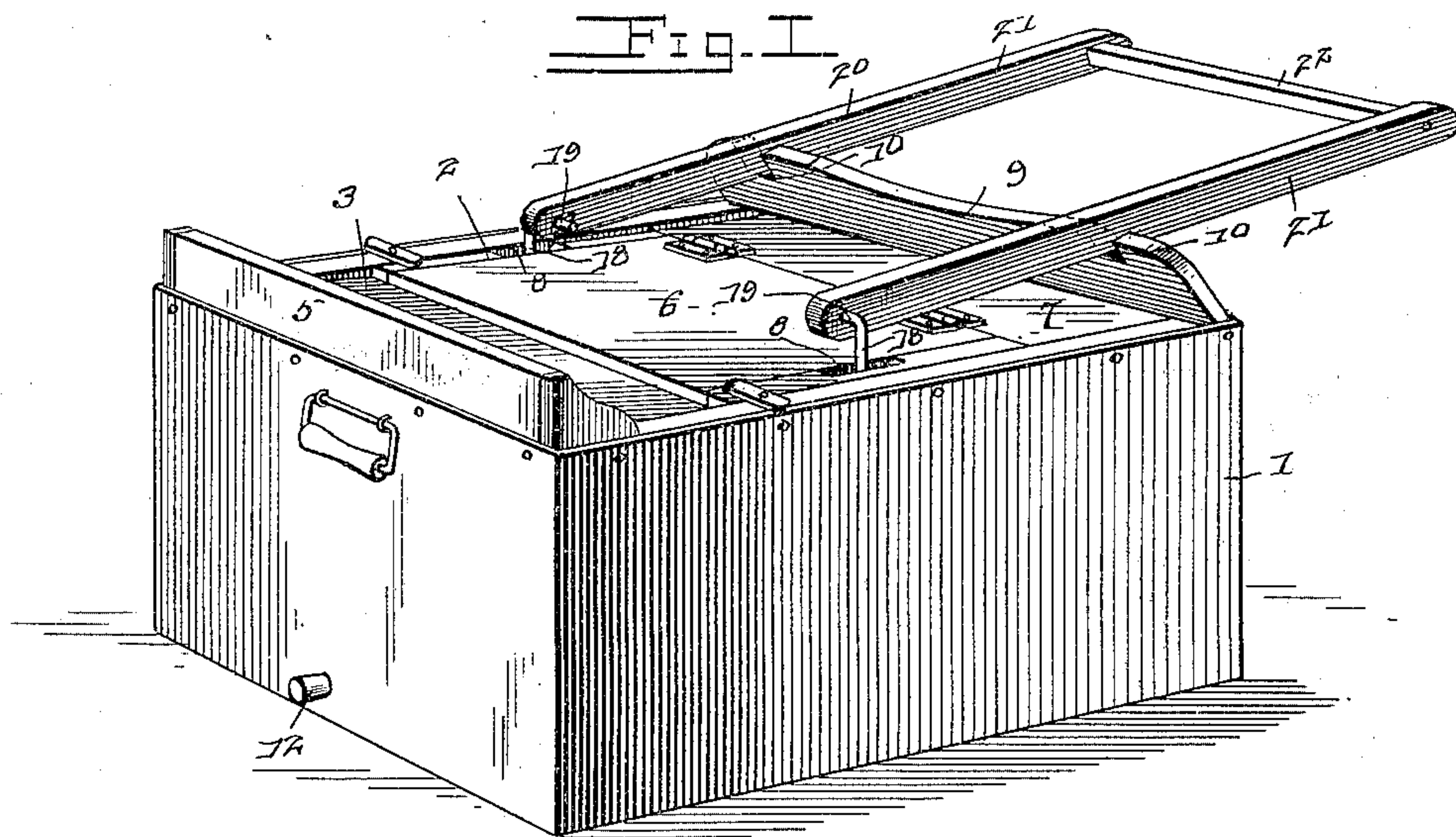
No. 662,795.

Patented Nov. 27, 1900.

J. G. KINCAID.  
WASHING MACHINE.

(Application filed Aug. 23, 1900.)

(No Model.)



Witnesses  
F. E. Alden.  
Chas. S. Hoyer.

J. G. Kincaid,  
Inventor  
by *Chas. S. Hoyer*  
Attorneys



# UNITED STATES PATENT OFFICE.

JOSEPH G. KINCAID, OF HIAWATHA, KANSAS.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 662,795, dated November 27, 1900.

Application filed August 23, 1900. Serial No. 27,829. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH G. KINCAID, a citizen of the United States, residing at Hiawatha, in the county of Brown and State of Kansas, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention relates to washing-machines; and the object of the same is to provide simple and effective means for operating the rubber and have it readily removable from and insertible in the box or body by attaching it to the hinged lid or cover for the latter, and thereby always insuring an accurate disposition thereof for operation within the box or body and making the washing of clothes convenient and expeditious, as well as affording means for readily clearing the interior of the box or body to have the clothes contained therein easily accessible from all points for disposal therein or removal therefrom.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a washing-machine embodying the features of the invention. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a transverse vertical section of the same.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates the box or body, preferably constructed of non-corrosive sheet metal and provided with a wooden or other top 2, including a drain-board 3, having its upper surface inclined downwardly toward a central opening 4 and surrounded in part by an end guard or rail 5. A lid or cover 6 is hinged to the opposite end cover-strip 7 and provided with a slot 8 at each end, both slots being in parallel relation and extending in the direction of the length of the box or body. At the end of the top of the box or body opposite that having the guard or rail 5 thereon is an upwardly-extending inwardly-inclined support 9, having slots 10 in the upper edge thereof adjacent opposite ends of the same. Within the box or body 1 is a horizontally-disposed drain-rack 11 at an elevation above the bottom, and at one end of the

box, below the plane of the said rack, is a suitable drain-opening closed by a removable plug 12. At an intermediate point on opposite sides of the box are vertically-disposed rubbing-ribs 13, which are triangular in cross-section and present opposite inclined faces to the clothes to facilitate the eradication of dirt and the successful cleansing result desired. It is obvious that the clothes can be conveniently drained by resting on the rack during the draw off of the suds or wash-water, and if it is desired at any time to remove the clothes while saturated for the purpose of rearrangement or disposition in the box or body they may be rested on the drain-board 3 with evident advantage.

The rubber is suspended from the inner side of the lid or cover 6 and comprises a rubber-head 14, having projecting looped rubber-arms 15, extending outwardly therefrom, and are arranged alternately in pairs near the ends and individually in the center and also projected outwardly in a transverse direction from opposite ends of the said head. This head is connected to and oscillates with hanger-arms 16, extending up to the inner side of the lid or cover and formed with oppositely-projecting journals 17, freely movable in clip-bearings 17<sup>a</sup>, fastened to the lid or cover, and from the outer terminals of which upwardly-projecting right-angular coupling-extensions 18 pass through the slots 8 of the lid or cover. The said extensions 18 are free to rock or oscillate in the said slots, and to the upper intumed ends 19 thereof the front extremities of a reciprocating frame 20 are movably connected. The said frame comprises opposite or side bars 21, united at their rear ends by a cross-bar 22 and slidably engage the slots 10 of the support 9. The support 9 holds the side bars 21 a proper elevation relatively to the extensions 18 and also prevents any lateral strain being exerted on the bars while in motion and maintains the latter a constant distance apart in a transverse direction to thereby cause all of the applied operating power to be concentrated in a longitudinal direction without any lost motion in a transverse direction.

It will be seen that as the lid or cover is opened or closed the rubber and its operating parts are carried therewith, and in the



closing action of the lid the rubber is automatically or properly disposed in operative position within the box or body. No individual manipulation of the rubber is required  
 5 in either instance, and when the lid or cover is opened the box or body is completely cleared and any part thereof is rendered easily accessible. Moreover, the suspension of the rubber from the lid or cover avoids the  
 10 necessity of interior structures or receptive devices within the box or body for the application of the rubber, as in the ordinary disposition of the latter device, and more washing-surface is produced. There is no liability  
 15 of the clothes being caught on and torn by anything within the box or body, and the change of position of the same within the box can be more quickly effected.

In the operation of the rubber the frame  
 20 is reciprocated in a longitudinal direction solely and the rubber is swung within the area of the box and forces the clothes first toward one end and then toward the opposite end, and an overturn of the same is bound to  
 25 take place from the dash and swirl of the suds or wash-water, and thereby set up a quick washing action.

For convenience in transporting the machine it will be provided with handles at the  
 30 opposite ends, and though the preferred form of the improved device has been described it will be understood that changes in the form,

size, proportions, and minor details may be resorted to without departing from the principle of the invention.

Having thus described the invention, what  
 is claimed as new is—

In a washing-machine, the combination with a box or body having a top opening covered by a hinged lid with arms oscillatably  
 40 suspended therefrom, and movable therewith, said arms projecting above the lid, and a rubber-head carried by said arms, of an upwardly-projecting inwardly-inclined support  
 45 extending transversely across the top portion of one end of the box or body and having slots opening out of the upper edge portion thereof near the opposite ends, and a reciprocal frame including side bars having un-  
 50 connected terminals attached to the upper portions of the said arms, the side bars being freely slidable in the slots in the support and connected at the terminals opposite those attached to the arms, the engagement of the  
 55 bars with the arms maintaining the frame at a proper and positively working angle.

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

JOSEPH G. KINCAID.

Witnesses:

CHAS. P. WASTE,  
 J. W. HORRIE.