

(No Model.)

2 Sheets—Sheet 1.

J. DUNN.
DUMPING SCOW.

No. 315,918.

Patented Apr. 14, 1885.

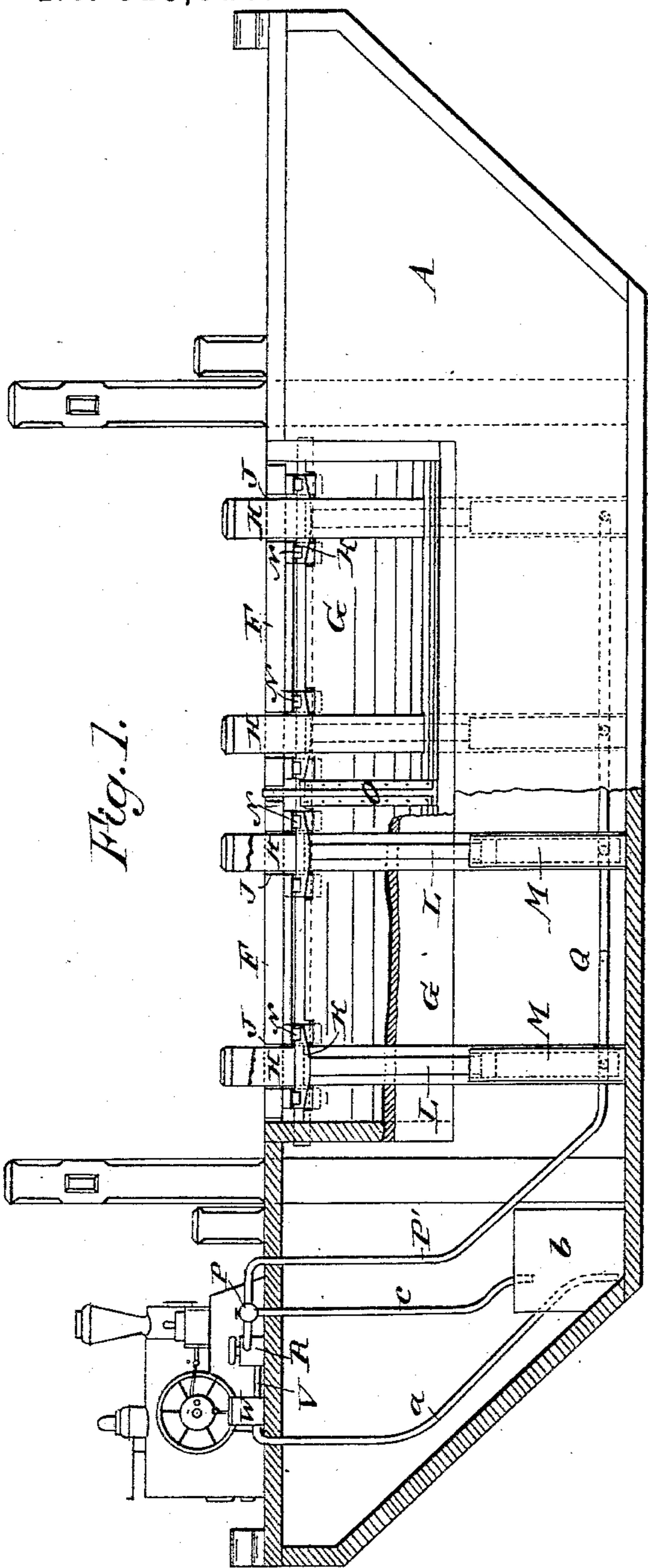


Fig. 1.

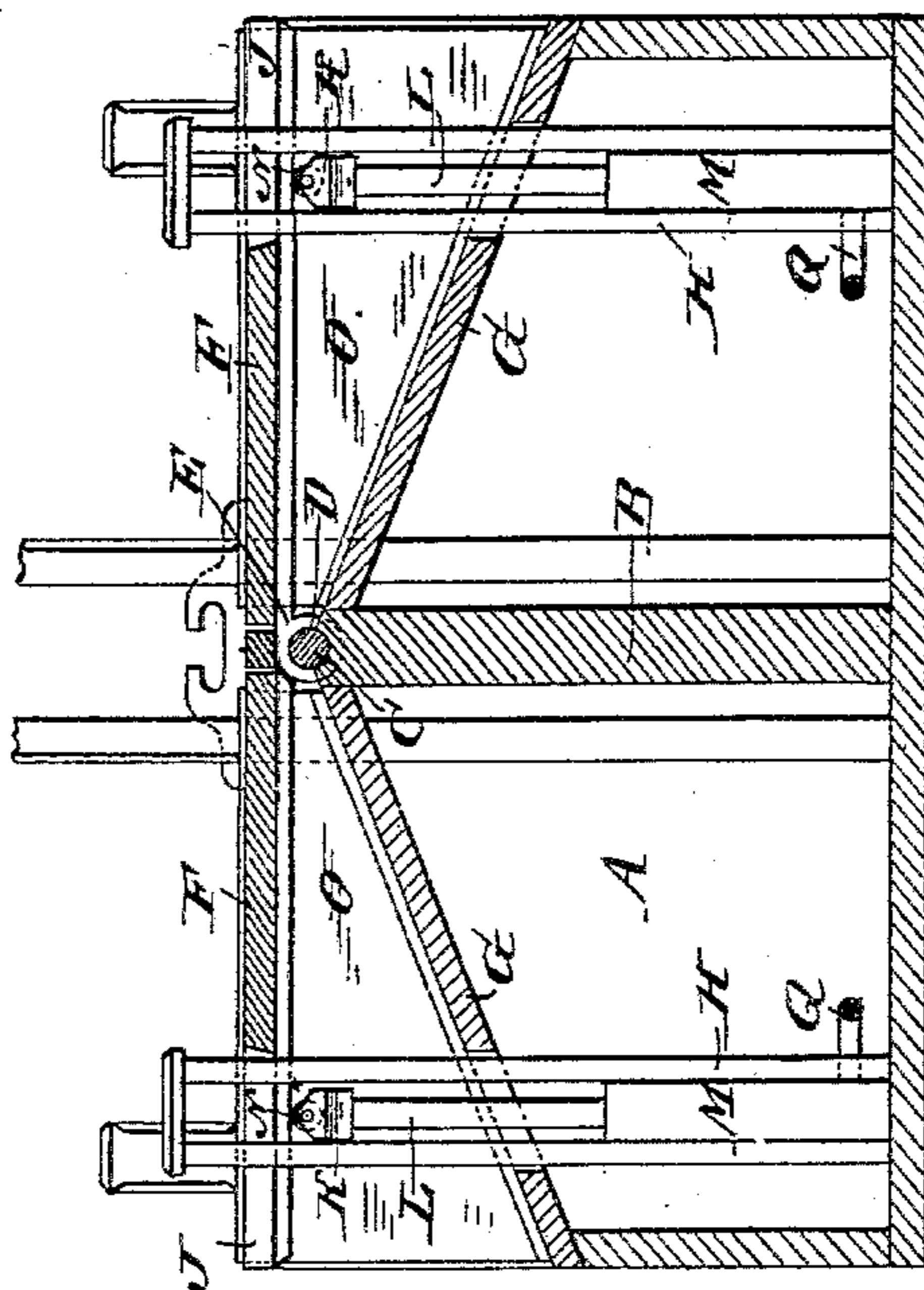


Fig. 2.

WITNESSES:

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INVENTOR:

J. Dunn
BY *Munn & Co*
ATTORNEYS.

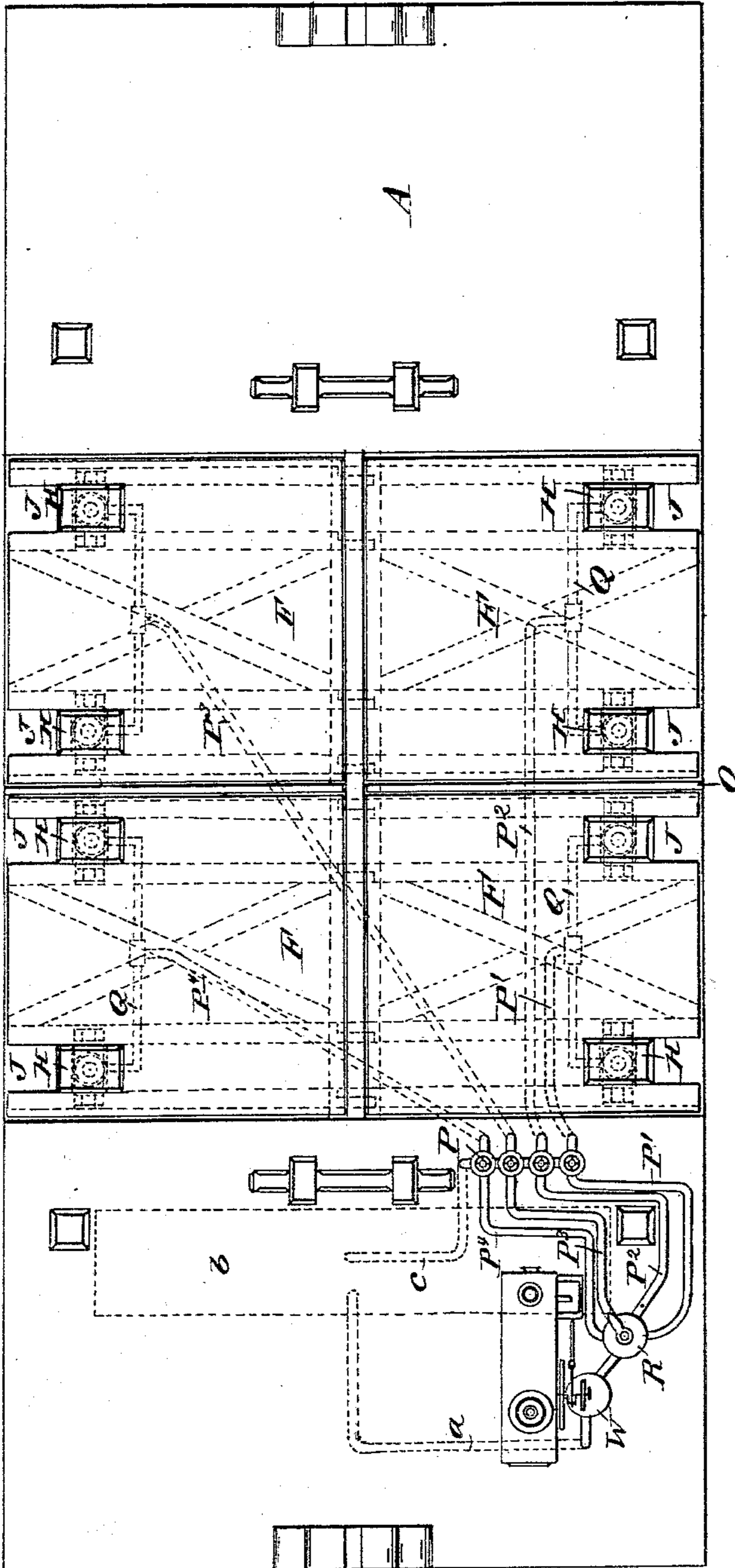
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WITNESSES:

Wm. B. Beyer
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Fig. 3.

Fig. 5.

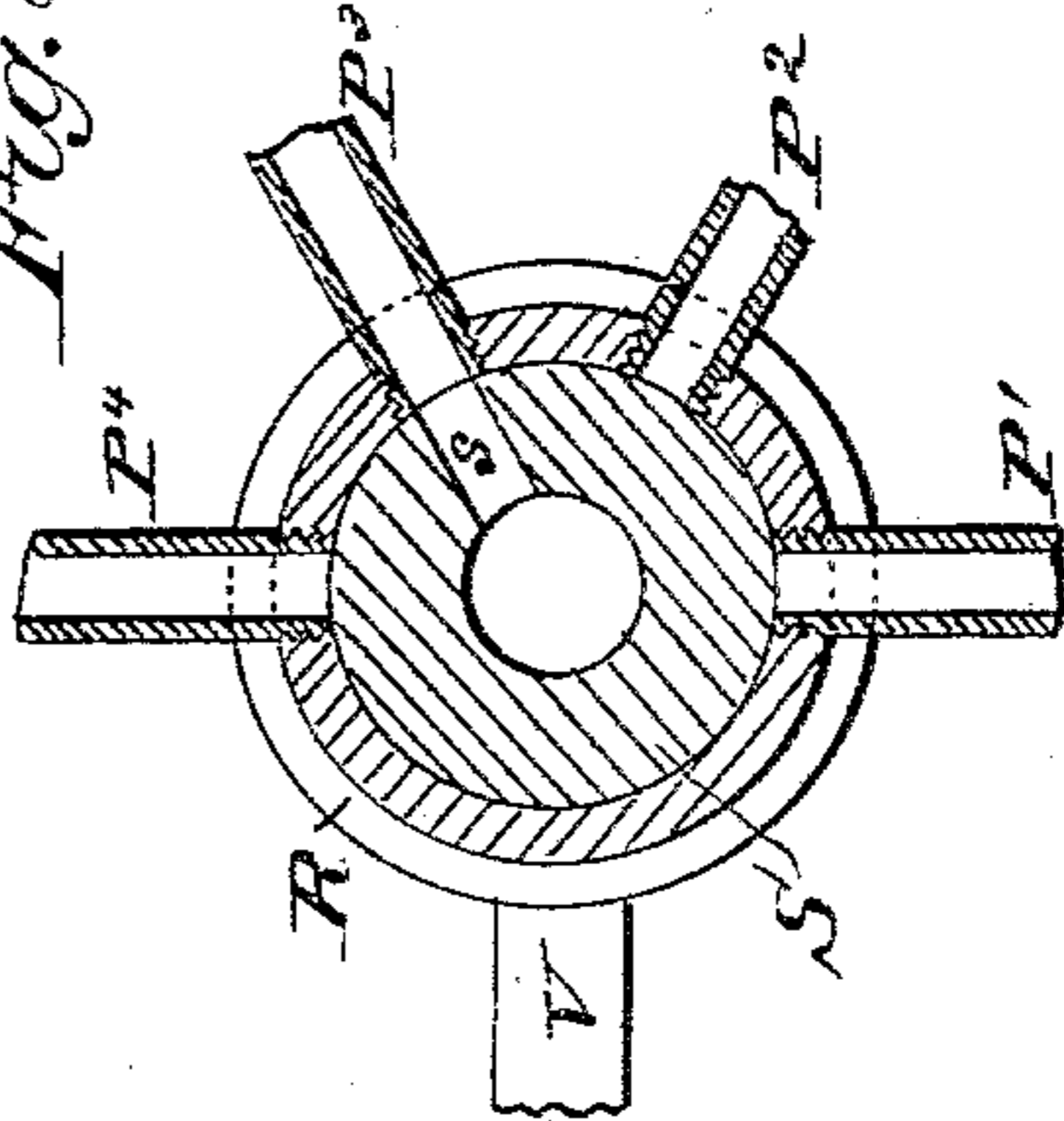
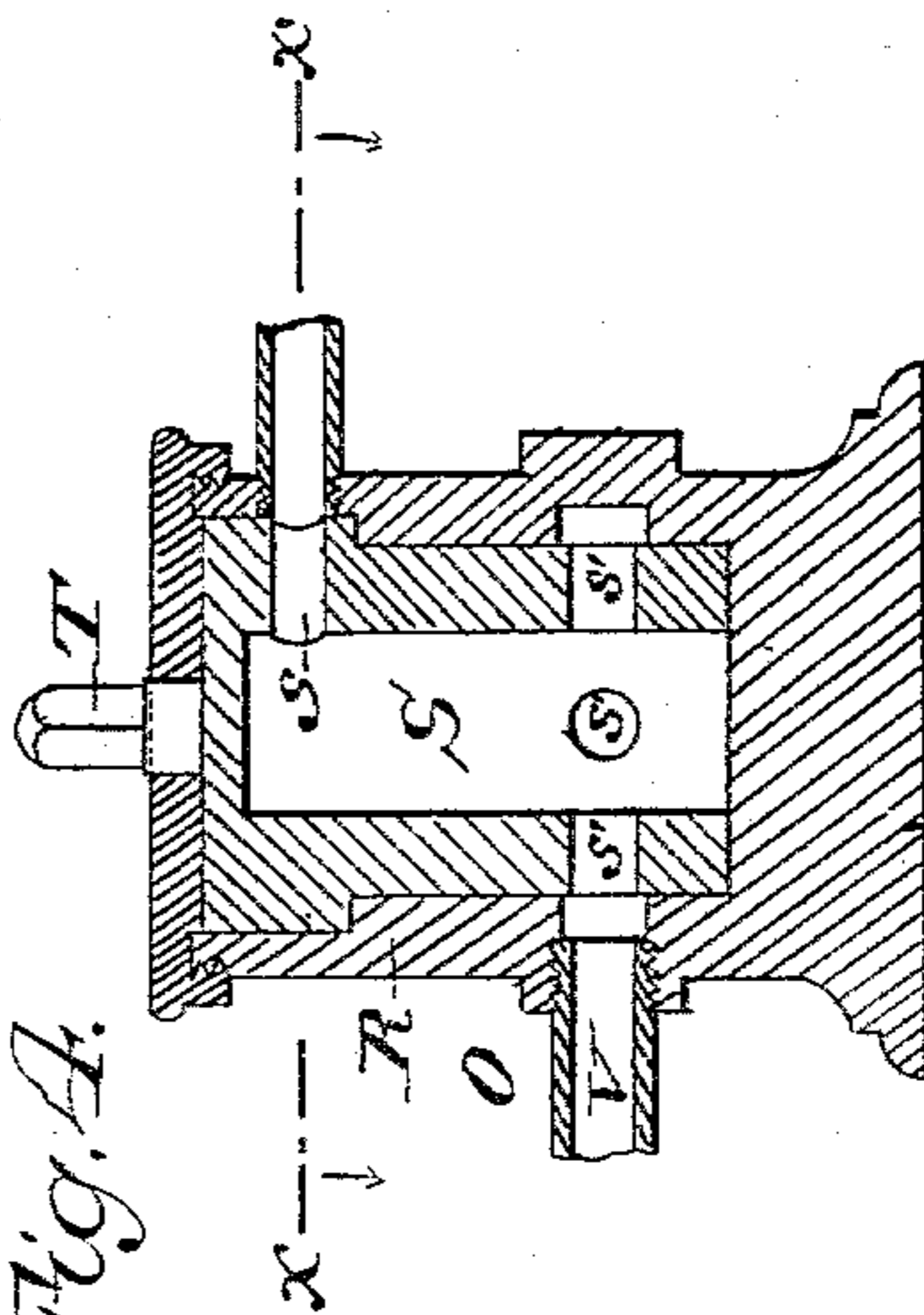


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN DUNN, OF JACKSONVILLE, FLORIDA, ASSIGNOR TO HIMSELF AND A.
AMES HOWLETT, OF SYRACUSE, NEW YORK.

DUMPING-SCOW.

SPECIFICATION forming part of Letters Patent No. 315,918, dated April 14, 1885.

Application filed October 3, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN DUNN, of Jacksonville, in the county of Duval and State of Florida, have invented a new and Improved
5 Dumping-Scow, of which the following is a full, clear, and exact description.

The object of my invention is to facilitate the dumping of a load from a scow, either all together or in separate parts or quantities, as
10 may be desired.

The invention consists of the combination, with a scow, of a tilting deck or decks; and it consists, further, of details of construction and combinations therewith of other parts, sub-
15 stantially as hereinafter more fully set forth and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate
20 corresponding parts in all the figures.

Figure 1 is a longitudinal elevation of my improved dumping-scow, parts being in section. Fig. 2 is a cross-sectional elevation of the same. Fig. 3 is a plan view of the same.
25 Fig. 4 is a vertical sectional view of the five-way cock. Fig. 5 is a sectional plan view of the same on the line *x x*, Fig. 4.

The scow A is provided in its well with a bulk-head, B, running fore and aft, and pro-
30 vided in its top with a longitudinal groove, C, for receiving a trunnion rod or bar, D, surrounded by eyes E, secured to the under sides of wings, leaves, or platforms F at their inner ends, thus adapting the said leaves to swing
35 up and down. The free ends of the said leaves extend to the sides of the scow. Below the leaves platforms G are arranged, which extend from the top of the bulk-head downward and outward to the sides of the well. At
40 the outer end of each swinging leaf or wing F two standards, H, project upward from the bottom of the scow, one at each side of each wing or platform, the said standards project-
ing through notches or recesses J in the ends
45 of the leaves or platforms. The standards are each formed of two posts, between which a cross-head, K, is adapted to slide vertically, the said cross-head being secured to the upper end of a piston-rod, L, projecting from

the top of a cylinder, M, held vertically be- 50
tween the posts of the standard, at the lower ends of the same. Anti-friction rollers N are held in the upper edge of the cross-head outside of the standard H, and on the said rollers the leaves or wings F rest at their free 55
ends. Between the wings or leaves F upright sheet-metal partitions O are formed on the inclined platform, G, to prevent the load on one leaf or wing, when the same is lowered, from
60 sliding on the platform G under the adjacent raised wing or leaf F. The two cylinders M of each leaf or wing F are connected by a pipe, Q, and the several pipes Q are connected by
65 the pipes P' P² P³ P⁴ with a closed cylindrical vessel or cup, R, in which an inverted cylindrical cup, S, is held to turn, the cup S hav-
ing an aperture, *s*, in its side near the top, and four apertures, *s'*, in its side near the bot-
70 tom. A square-headed round boss, T, projects from the inverted cup S through the top plate of the cup R, and serves to turn the cup S in the cup R. The cup S is connected by a
pipe, V, with the pump-cylinder W, also con-
75 nected by a pipe, *a*, with an oil or water tank, *b*, connected by four pipes, *c*, with the four
pipes P' P² P³ P⁴, the said pipes being provided with three-way cocks P at their junctions with the pipes *c*.

The scow is operated in the following manner: Before the scow is loaded oil or water is 80
forced into the several cylinders M, to force the several piston-rods L upward, whereby the outer ends of the wings or leaves F are raised and the leaves brought into a horizontal position or flush with the deck of the scow, as
85 shown in Fig. 2. The load is then deposited on the leaves or wings F. When the scow is to be emptied, the wings are lowered together or separately by permitting the oil or water
90 to pass from the cylinders M, through the pipes Q, P', P², P³, and P⁴, and *a*, into the tank *b*. The leaves descend until they rest on the inclined platforms G below them, and then the
95 load on the wings, which are now inclined, slides down the said wings or leaves and drops into the water. The wings or leaves are again raised, when they are ready to receive a fresh load. The scow can be dumped or unloaded

without requiring it to be tilted or traps in the bottom to be opened.

Having thus fully described my invention, I claim as new and desire to secure by Letters
5 Patent—

1. In a dumping-scow, the inner hinged decks or wings, disposed to stand normally flush with the main or fixed deck, said inner decks having their opposite hinged edges supported about centrally of the boat, and their
10 outer free edges arranged to have movement within a well in the boat below the plane of the main deck, substantially as and for the purpose set forth.

15 2. In a scow, the combination, with the bulk-head B, of the trunnion-bar D on the top of the same, the inclined platforms G, the wings or leaves F, hinged on the said bar, and of devices for raising and supporting the wings
20 at their free ends, substantially as herein shown and described.

3. In a scow, the combination, with the hinged wings or leaves F, of the standards H, passing through slots in the leaves or wings,
25 the cylinders M, and the piston-rods L, supporting the outer free ends of said leaves or wings, substantially as herein shown and described.

4. In a scow, the combination, with the hinged wings or leaves F, of the standards H, 30 passing through slots in said leaves or wings, the cylinders M, and the piston-rods L, having the cross-heads K, provided with the rollers N, supporting the outer free ends of the said leaves or wings, substantially as herein shown 35 and described.

5. In a scow, the combination, with hinged wings or leaves, of cylinders arranged below the free ends of the wings, and containing piston-rods moving in guides and supporting the outer free ends of said wings or
40 leaves, and a pump for pumping oil or water into the cylinders, substantially as herein shown and described.

6. In a scow, the combination, with hinged 45 wings or leaves, of cylinders below the free ends of the wings, and containing pistons supporting the outer free ends of said wings or leaves, and of a multiple-way cock connected with a pump and with the cylinders below the
50 several wings by pipes, substantially as herein shown and described.

JOHN DUNN.

Witnesses:

O. J. H. SUMMERS,
S. F. SHAD.