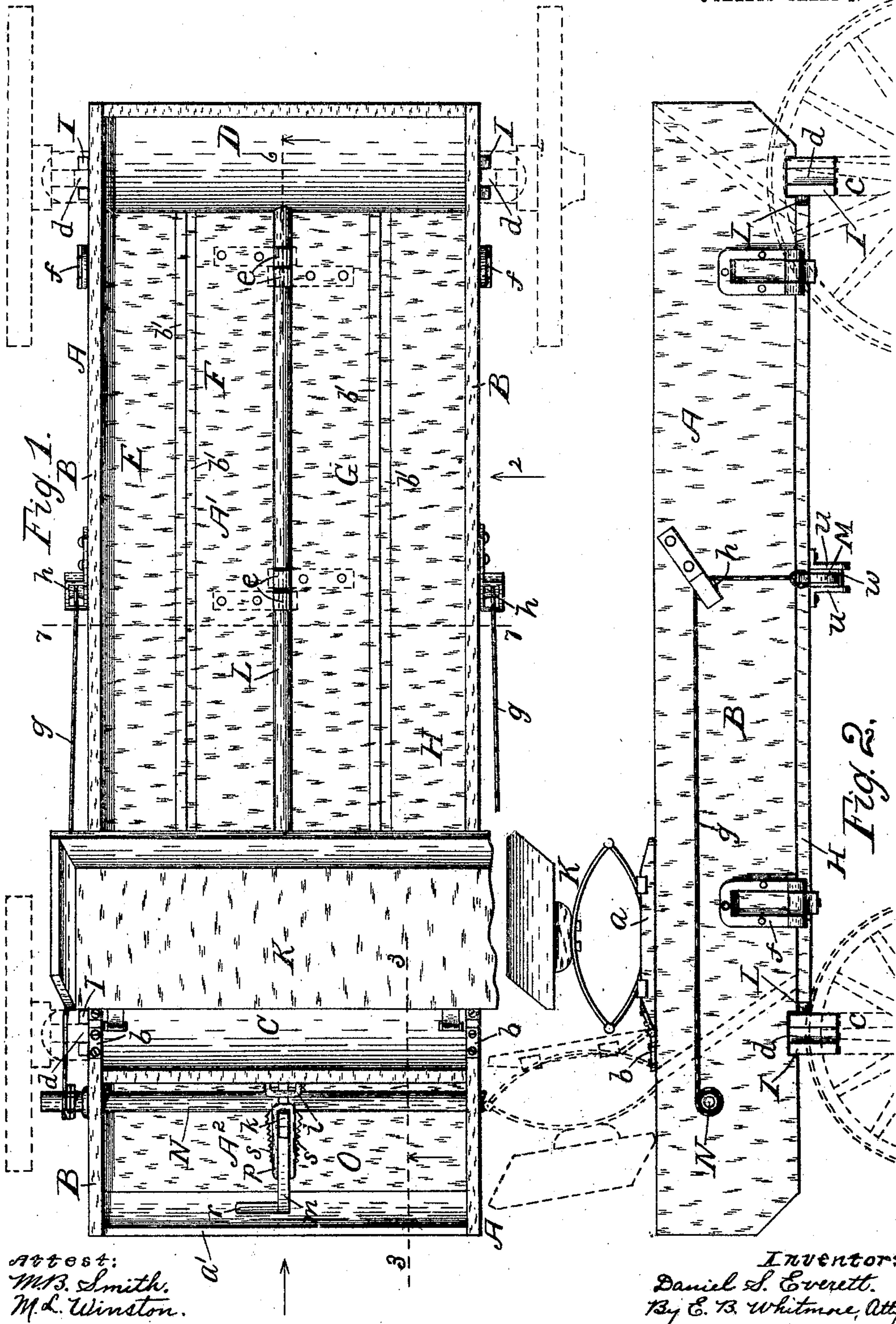


No. 785,160.

PATENTED MAR. 21, 1905.

D. S. EVERETT.  
DUMPING BED FOR WAGONS.  
APPLICATION FILED NOV. 10, 1904.

3 SHEETS—SHEET 1.





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3 SHEETS—SHEET 2.

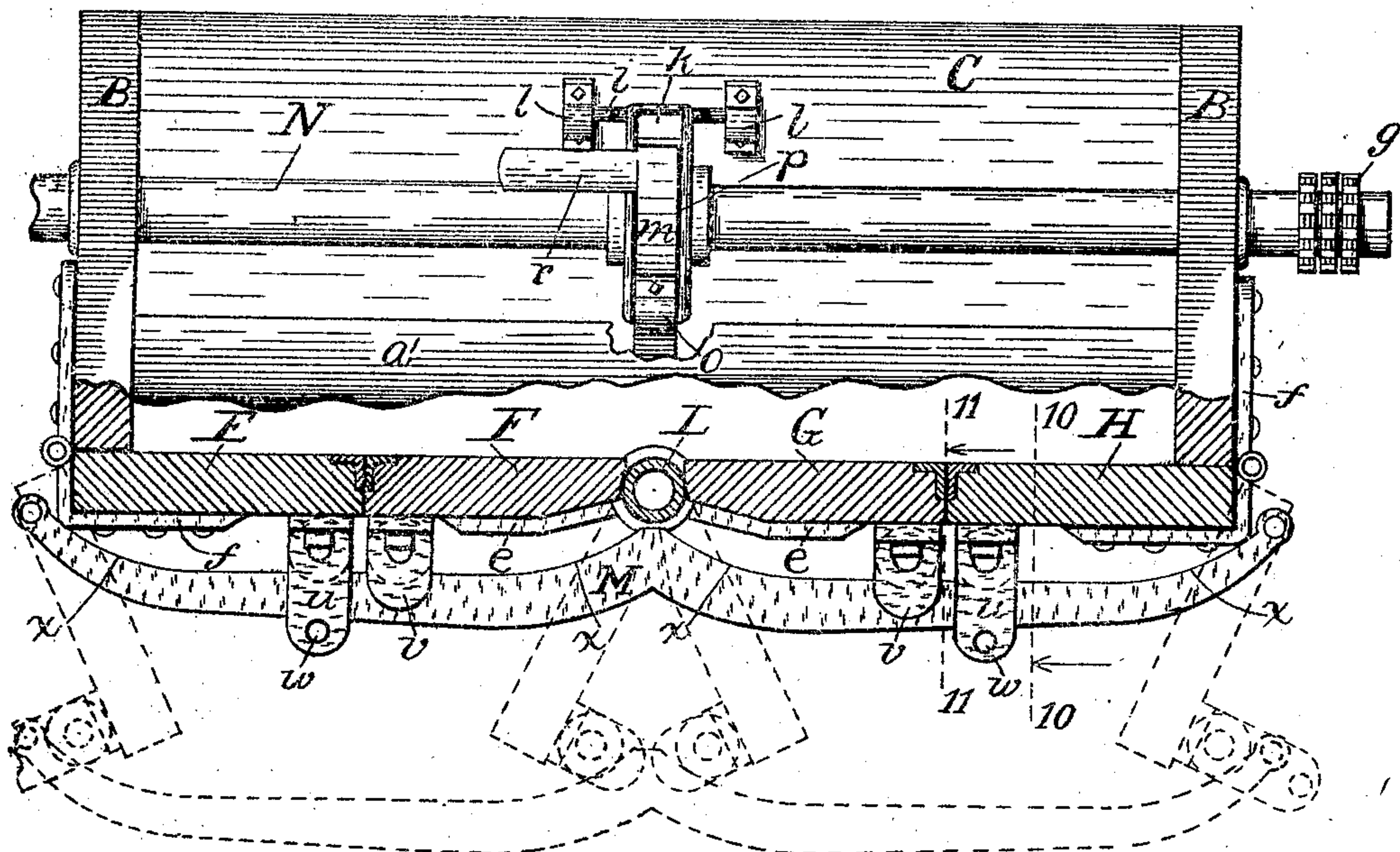
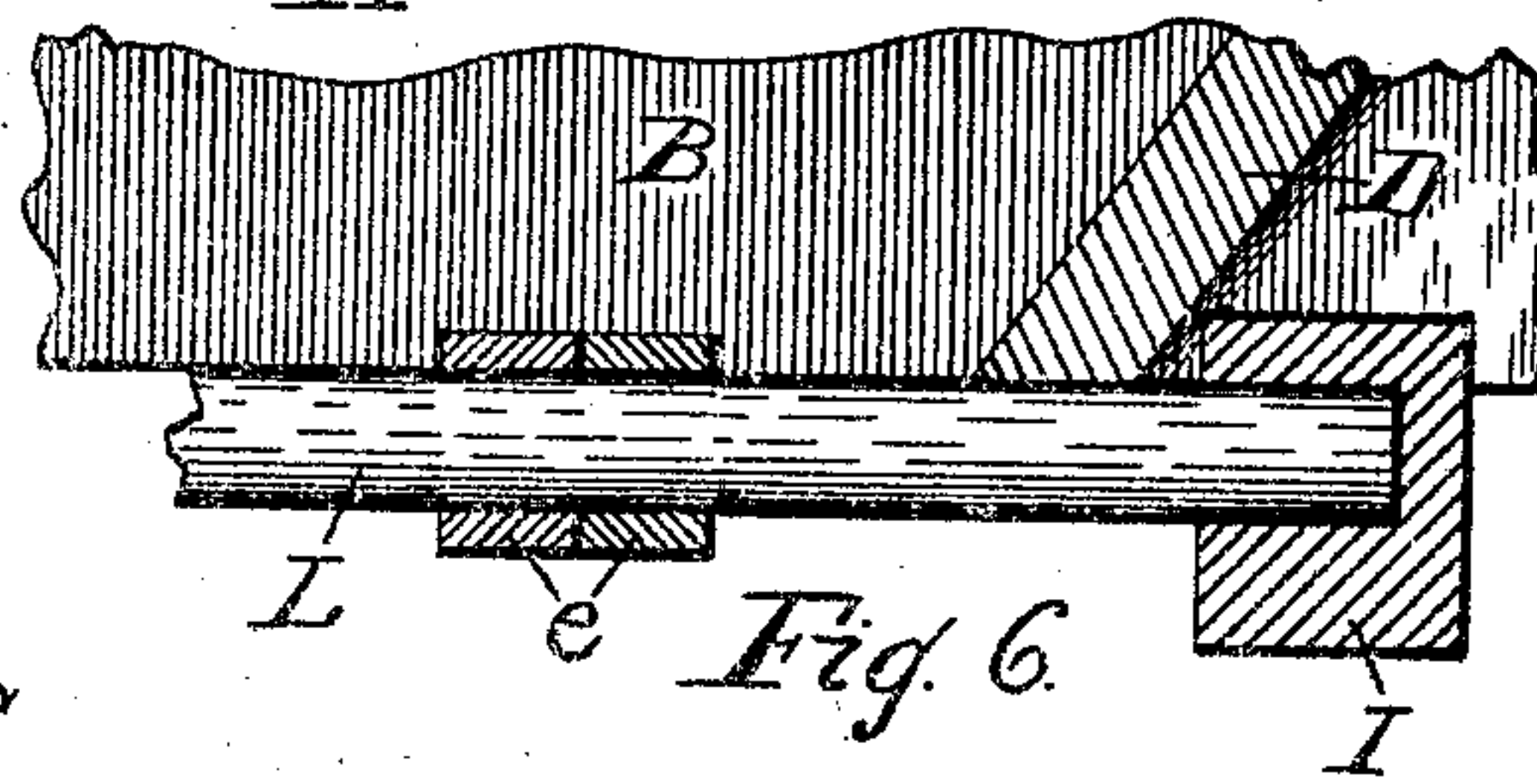
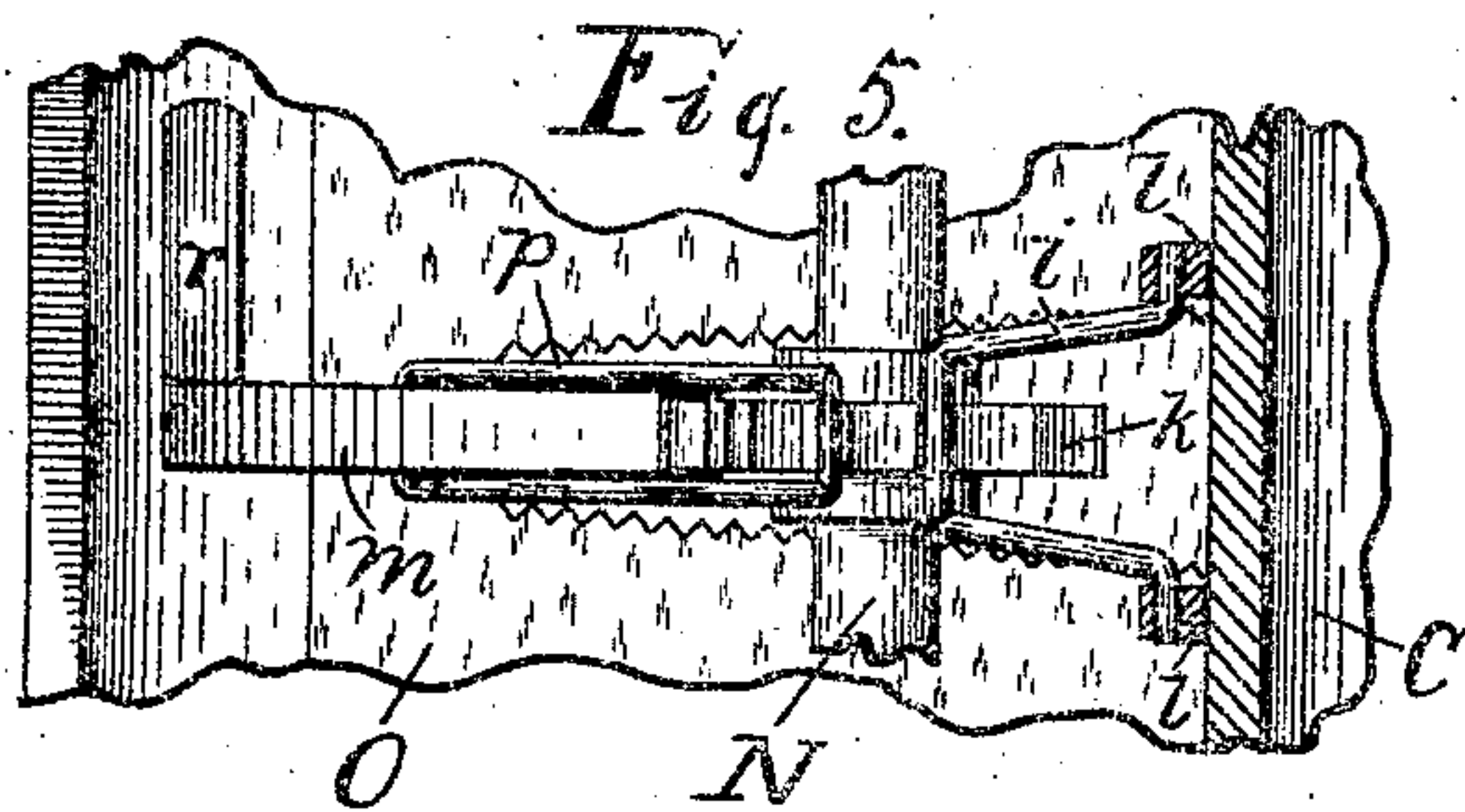
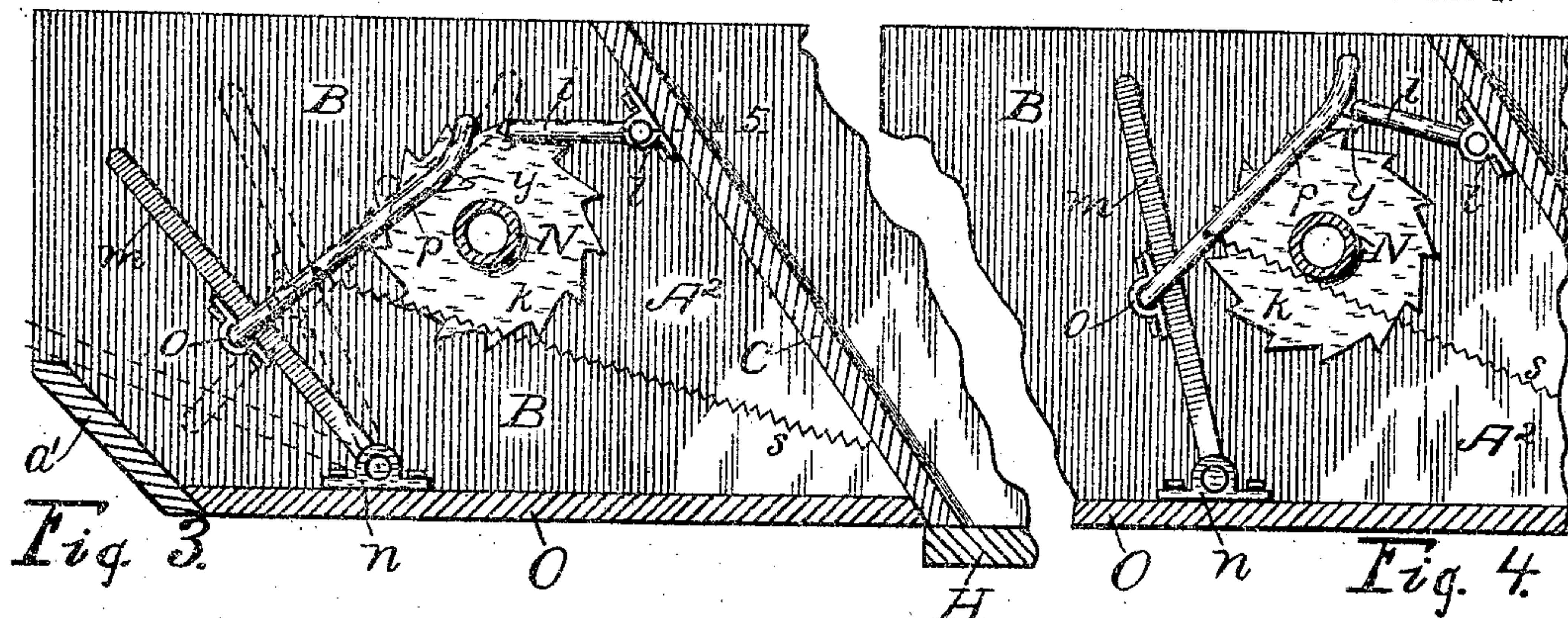


Fig. 7.

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3 SHEETS—SHEET 3.

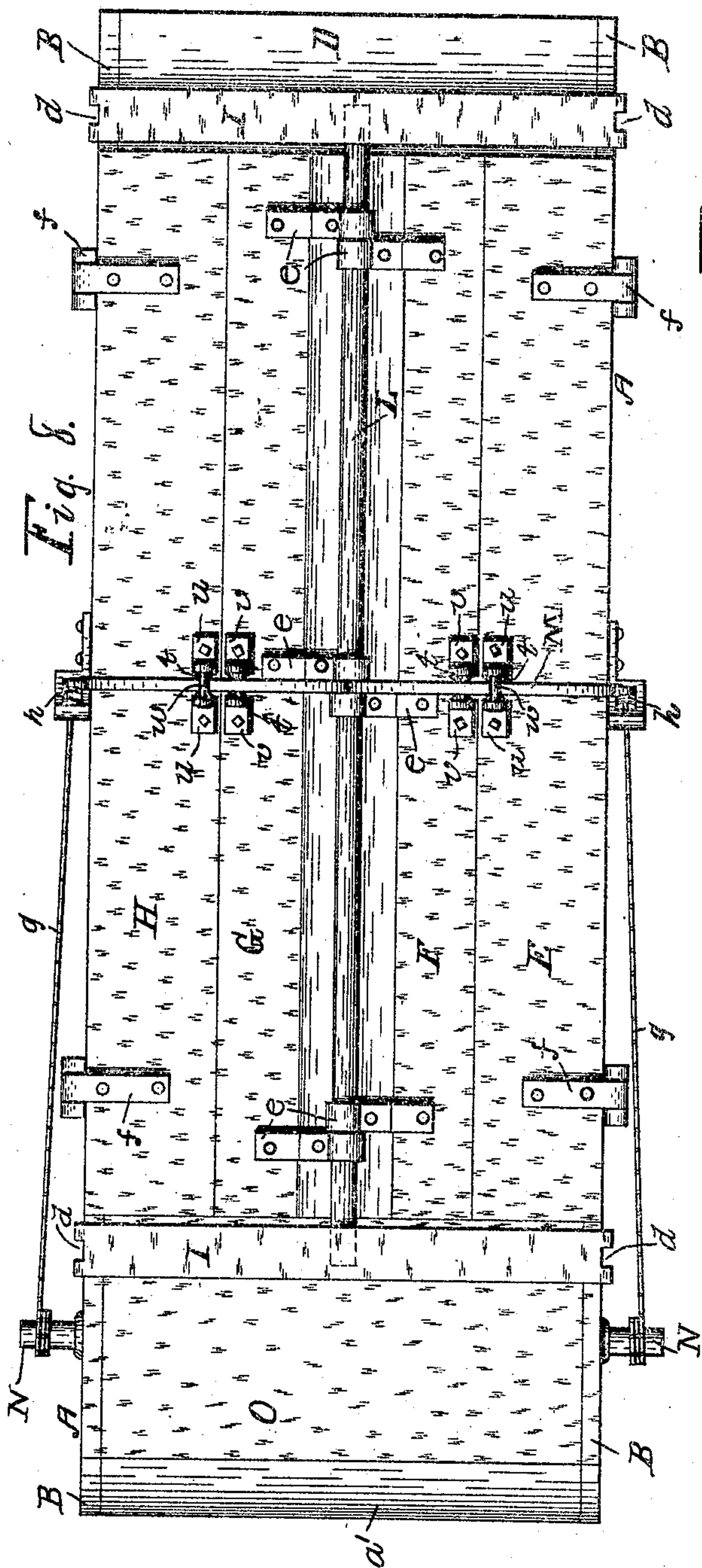
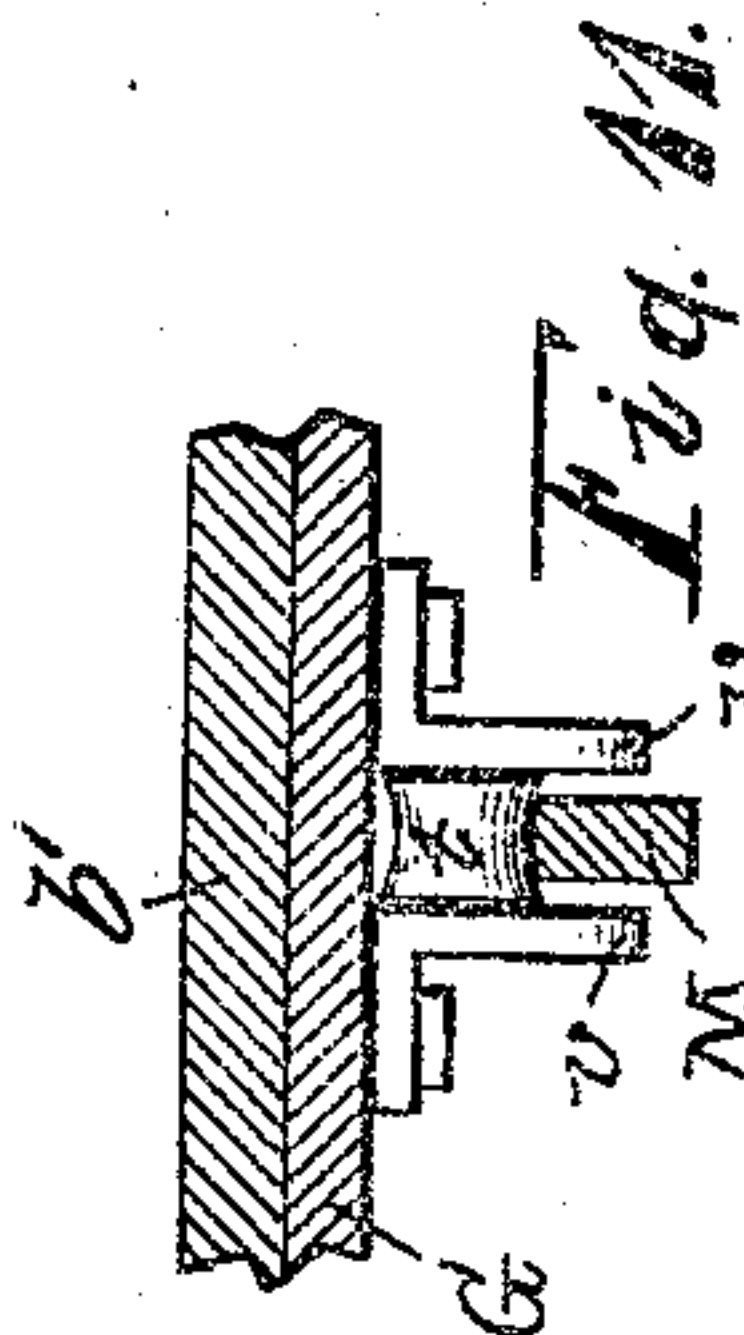
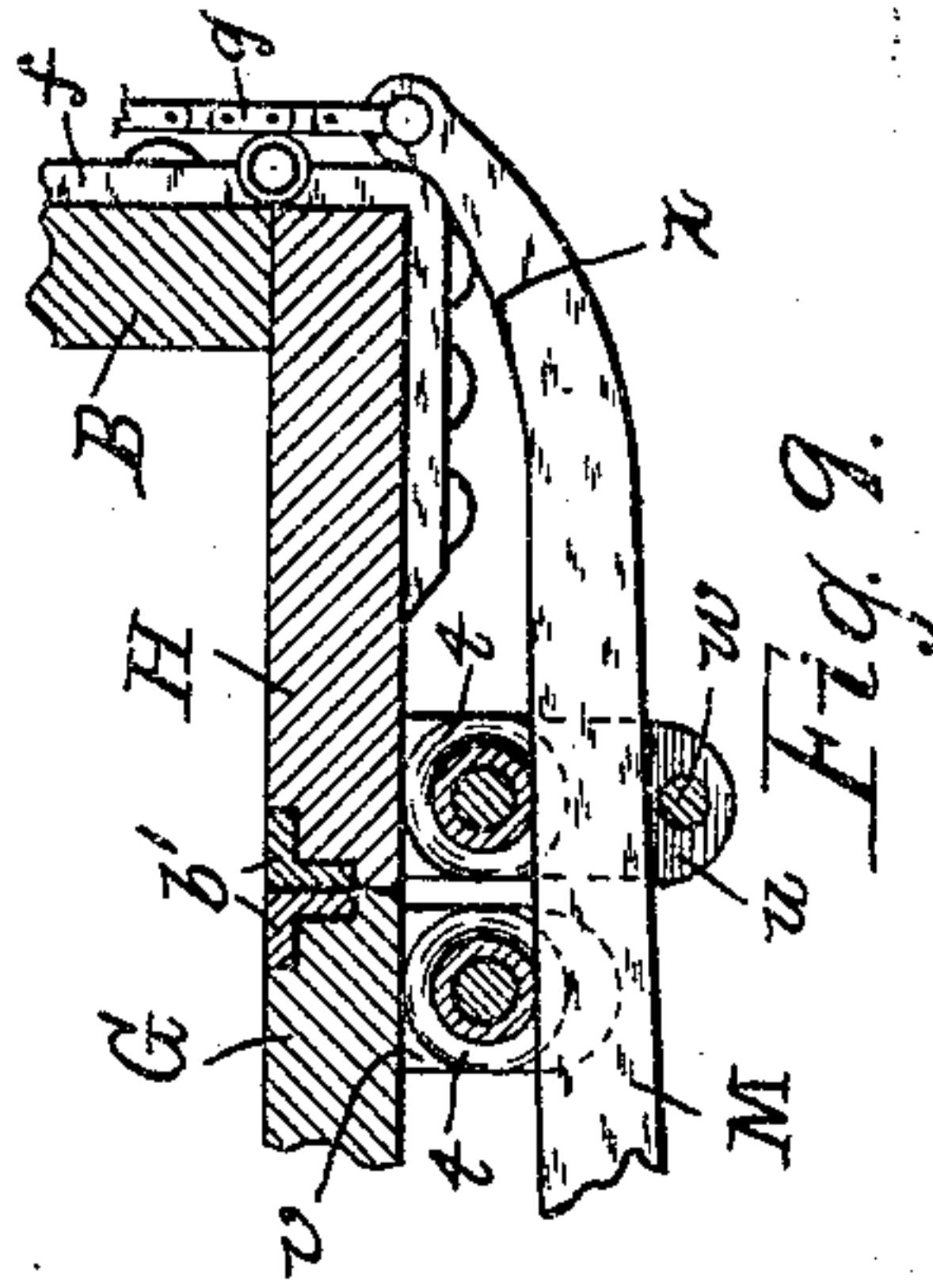
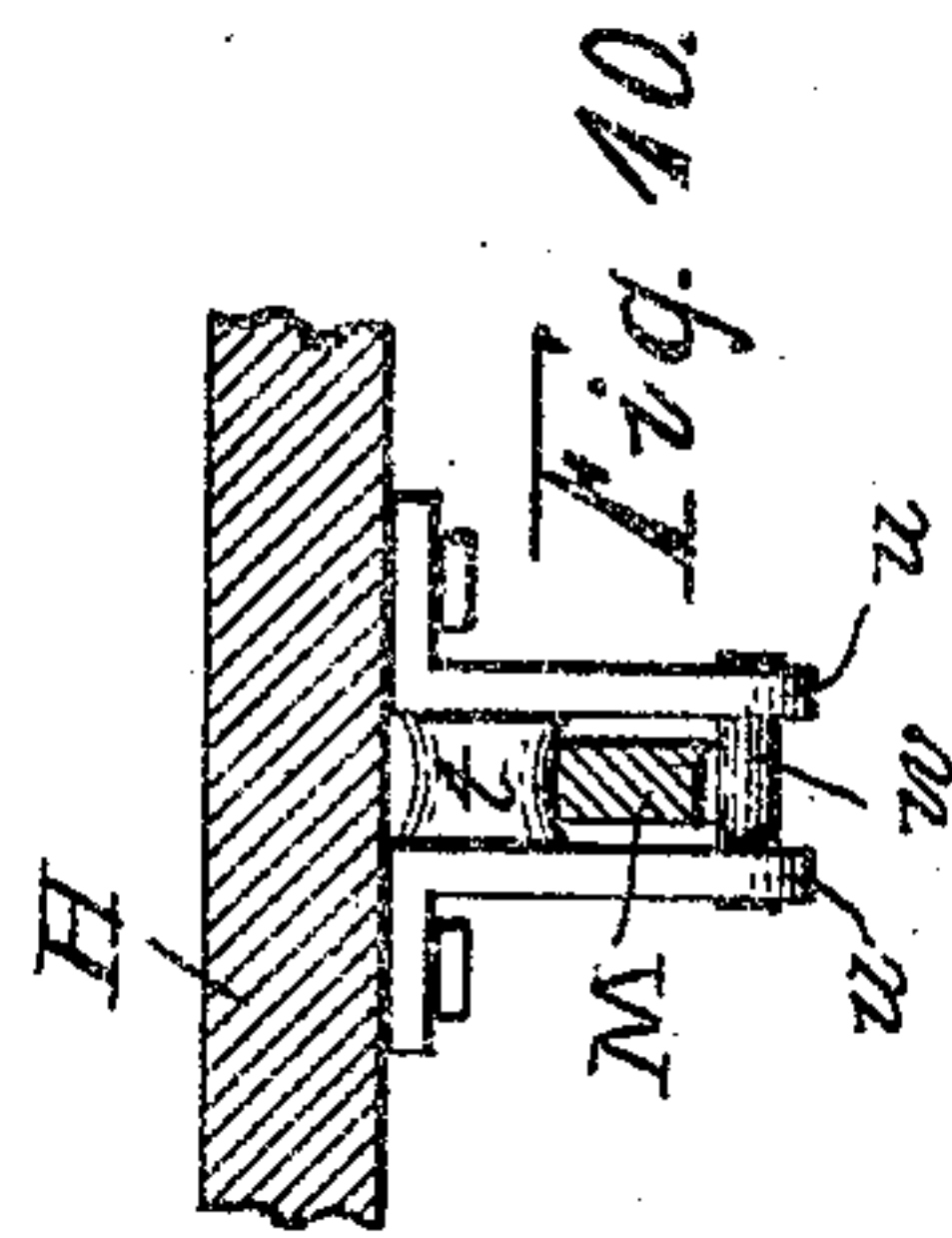
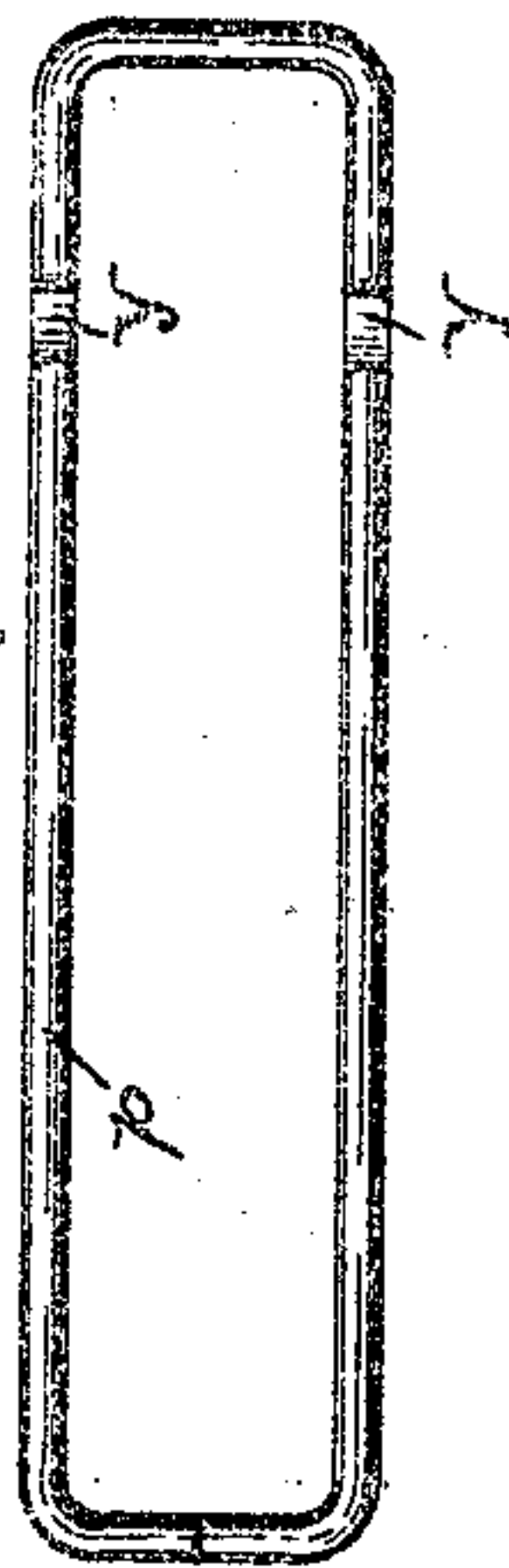


Fig. 12.



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# UNITED STATES PATENT OFFICE.

DANIEL S. EVERETT, OF MACEDON, NEW YORK.

## DUMPING-BED FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 785,160, dated March 21, 1905.

Application filed November 10, 1904. Serial No. 232,218.

*To all whom it may concern:*

Be it known that I, DANIEL S. EVERETT, of Macedon, in the county of Wayne and State of New York, have invented a new and useful Improvement in Dumping-Beds for Wagons, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

My invention is an improved portable dumping-bed or holding-body for wagons, to be mounted upon the bolsters of the running-gear for hauling and instantly dumping or depositing the load through swinging bottom-boards or floor-sections. This dumping bed or body is designed more particularly to be used for excavating, road-making, and similar work, and it is adapted particularly for carrying gravel, sand, macadam, and other dry earths and like substances. It is made complete in itself and independent of the parts of the running-gear and so constructed as to be readily shifted from one running-gear to another, it being adapted to be used with any ordinary farm-wagon or road-wagon for heavy hauling.

One object of this invention is to produce an improved portable dumping-bed provided with swinging or hinged bottom-boards or floor-sections and to so construct the parts that the attendant driving the team may with his foot and without leaving the seat instantly dump or discharge the load and then while driving away readjust the bottom-boards or floor-sections in readiness for another load.

Another object of the invention is to so construct the dumping-bed that the space within it for receiving the load shall be clear and wholly unoccupied by working parts of the bed or other parts or bodies.

A further object of the invention is to provide means for more easily and readily actuating and controlling the swinging floor-sections than has heretofore been employed and for supporting them to better sustain the weight of the load.

Other objects and advantages of the invention will be brought out and made to appear in the following specification and the invention fully described, and more particu-

larly pointed out in the appended claims, reference being had to the accompanying drawings, which, with the reference characters marked thereon, form a part of this specification.

Figure 1 is a plan of my improved dumping-bed, parts being broken away. Fig. 2 is a side view seen as indicated by arrow in Fig. 1, parts being shown in two positions by full and dotted lines. Fig. 3 is a vertical longitudinal section of parts at the front end of the bed, taken as on the dotted line 3 3 in Fig. 1, parts being shown in various positions by full and by dotted lines, parts being broken away. Fig. 4 is a similar section on said dotted line 3 3, showing the parts unlocked, parts being broken away. Fig. 5 is a plan of parts at the front of the bed, parts being horizontally sectioned on the dotted line 5 in Fig. 3 and other parts broken away. Fig. 6 is a vertical longitudinal section of parts at the rear end of the bed, taken on the dotted line 6 in Fig. 1, parts being broken away. Fig. 7 is a vertical transverse section of lower parts of the dumping-bed, taken on the dotted line 7 7 in Fig. 1, parts being broken away and other parts shown in various positions by full and by dotted lines. Fig. 8 shows the dumping-bed inverted, with the parts beneath appearing in plan. Fig. 9 is a front side elevation of lower parts of the bed seen as Fig. 7 is seen, parts being in vertical transverse section over the truss-bar, further showing the relation of the parts, parts broken away. Fig. 10 is a side elevation of parts controlling the truss-bar, the latter and the adjacent part of a bottom board or section being vertically and longitudinally sectioned on the dotted line 10 10 in Fig. 7. Fig. 11 is a similar view of parts, the section being on the dotted line 11 11 in Fig. 7. Fig. 12 is a plan of the lower side of the pull-link for the ratchet. Figs. 3 to 7 and 9 to 12 are drawn to various scales larger than that of Figs. 1, 2, and 8.

Referring to the drawings, A is the holding box or body of the dumping-bed, comprising two similar vertical side-boards B B, front and rear inclined end-boards C D, and a series of four equal bottom-boards or floor-sections



tions E F G H. Beneath the body A and disposed transversely thereof is a pair of false bolsters I I, Figs. 2, 6, and 8, made rigid with the sides B B, which false bolsters, together  
 5 with the side-boards and the end-boards C D, constitute a rigid frame or single body of relatively immovable parts. The front end-board C divides the body A into a main apartment or chamber A' for receiving the load and  
 10 a smaller front apartment A<sup>2</sup>, having a floor O and footboard a', both rigid with the side-boards B B.

K, Figs. 1 and 2, is a seat for the attendant driving the team attached to the wagon, crossing the body A in the usual manner, said  
 15 seat comprising a pair of longitudinal sticks or bars a a, resting directly upon the upper edges of the side-boards B B, respectively, and joined thereto by hinges b b, as shown.  
 20 By means of this manner of employing the seat it may be turned forward from over the main apartment A' out of the way, as shown by dotted lines in Fig. 2, while the wagon is being loaded.

25 The false bolsters I I are disposed near to but clear of the ends of the floor-sections E F G H of the main apartment A' of the body, as shown in Fig. 2, said false bolsters being adapted to rest directly upon the true  
 30 bolsters of the wagon, (represented by dotted lines c c,) said false bolsters being formed with shallow vertical recesses d at their ends, Figs. 1, 2, and 12, to receive the wagon-stakes when the dumping-bed is placed upon a wagon,  
 35 as stated.

L, Figs. 1, 2, 6, 7, and 8, is a horizontal longitudinal non-rotatory shaft, preferably a piece of gas-pipe, with its ends resting in bearings in the false bolsters I I, the manner  
 40 of holding the shaft being clearly shown in Fig. 6. This shaft is at the middle of the body A and level with the floor-sections, as appears in Fig. 7, and between the middle sections F G, said sections being joined to the  
 45 shaft by hinges e, Figs. 1, 7, and 8, in a manner to allow the sections to swing downward to inclined positions. (Shown by dotted lines in Fig. 7.) The side floor-sections E H are similarly held to the respective side-boards  
 50 B B by hinges f, Figs. 1, 2, 7, and 8, so as to swing or turn downward, as indicated by dotted lines in Fig. 7, so that when all the floor-sections are down or in their pendent positions two wide longitudinal openings will be  
 55 formed at the bottom of the apartment A' of the body, out through which the load of gravel or other material held in the body will be quickly discharged directly beneath the wagon and between the wheels thereof.

60 The hinged floor-sections E F G H are operated and controlled by the following means.

M, Figs. 2, 7, 8, and 9, is a stiff metallic bar or truss suspended beneath and transverse of the body A and at the middle of its length by  
 65 side chains g g. (See also Fig. 1.) Normally

the truss is held close under the body A, as shown by full lines in Fig. 7, the floor-sections E F G H being each provided with a roller t, Figs. 9, 10, and 11, disposed beneath the  
 70 free edges of the several sections and resting upon and adapted to roll along the upper edge of the truss. The various rollers t are held between pendent hangers u u and v v, secured to the under sides of the several floor-sections at the sides of the truss, as appears  
 75 in Fig. 7, the hangers u u on the outer sections E H being extended below the truss and provided with cross-pins w w beneath to aid in supporting the truss should a chain break at  
 80 any time or keep it from by any means getting too far away from the floor-sections. By these means the truss when at its highest position, as shown in Fig. 7, serves to hold the floor-sections in horizontal positions and aid them  
 85 to support the weight of the load without sagging. If, however, the truss be allowed to descend at any time, the weight of the load in the body A will carry the floor-sections down to the positions shown by dotted lines,  
 90 and so escape to the ground. The truss moves bodily upward and downward, all of its positions being horizontal, and it is prevented from having sidewise motion by the  
 95 confining-hangers u u, v v.

When the truss is again raised, the floor-sections will be lifted by it to their normal positions of horizontality, ready to again be  
 100 loaded. The truss, it will be observed, is not a straight bar, but formed with four curves or bends x, upon which the rollers t respectively rest, as shown, when the floor-sections are down. These curves or bends in the truss  
 105 cause the rollers to more readily and easily move or start rolling when the truss is lifted than if they rested upon horizontal parts of the truss. This is of great importance in  
 110 practice, as the weight of the floor-sections is considerable, and the lines conceived, as drawn, through the centers of the motions of the respective hinges and the rollers t when  
 115 the floor-sections are down are necessarily nearly vertical in order that wide outlet-openings for the escape of the load be formed between the floor-sections.

The side chains g g, supporting the truss, 115 pass over idle pulleys h h, Figs. 1, 2, and 8, held at the sides of the body A, extending thence forward and around the respective projecting ends of a horizontal winding-shaft N, having bearings in the side-boards B B, as  
 120 shown. The shaft N is provided at the middle with a toothed wheel or ratchet k, rigidly fixed, Figs. 1, 3, 4, 5, and 7, there being a U-shaped pawl i projecting from bearings l l on the end-board C in position to engage the  
 125 teeth of the ratchet and normally prevent it and the shaft from turning backward.

m is a lever held to turn in bearings n, secured to the floor O of the forward apartment A<sup>2</sup> of the body A, the lever being op- 130



posite the edge of the ratchet *k* and in position to swing in directions toward and from the ratchet. The lever is provided with a pull-link or pawl *p*, (see Fig. 12,) held in a bearing *o* on the under side of the lever in position to engage with the teeth of the ratchet, by means of which lever and the link the ratchet and the shaft *N* may be turned forward or in a manner to wind the side chains *g g* upon the shaft, and so draw the truss *M* upward at any time when down to the position shown by dotted lines in Fig. 7. The link is open at the middle, as shown, the side portions inclosing or spanning the ratchet.

The lever *m* is provided at its upper end with a laterally-projecting footrest *r*, Figs. 1, 5, and 7, in reach of the attendant occupying the seat *K*, by means of which he may work the lever to turn the ratchet forward and close the floor-sections. A pair of slender springs *s s*, secured to the sides of the link *p* and to the end-board *C*, acts to hold the link and the lever normally upward to the positions shown by full lines in Fig. 3 in readiness to be pressed downward by the foot of the attendant to the positions shown by the lower dotted lines when it is wished to turn the shaft *N* forward.

Means are also provided for the attendant to, with his foot, lift the pawl *i* to release the ratchet when it is wished to dump the load. The upper end of the link *p* is turned slightly upward, as shown in Figs. 3 and 4, and a pair of spurs *y y* (see also Fig. 12) are provided projecting downward from the side portions of the link in position to engage the pawl, which is wider than the link when the lever is turned far upward, and so raise the pawl from the ratchet, as shown in Fig. 4. This is effected by a backward movement of the foot against the part *r* of the lever. When the lever is thus pressed backward, the upper horizontal portion of the link resting upon the sprocket glides obliquely upward along the adjacent tooth to the upper position, (shown by dotted lines in Fig. 3,) the spurs *y* touching the pawl, as shown. A continued upward pressing of the lever lifts the pawl, as stated, releasing the ratchet and the side chains, and so allowing the truss to descend and the contents of the body *A* to be discharged. When the foot is removed from the lever, the weight of the parts will cause them to descend to the positions shown in full lines in Fig. 3, ready to be again operated by the foot to wind up the chains and close the bottom boards or sections in readiness to receive another load.

It will be observed that the main apartment *A'* for receiving the load is wholly empty or unoccupied and without contained parts of the operating mechanism, the means for operating the truss-bar and the floor-sections being mainly within the forward apart-

ment *A'* and wholly without the main apartment *A'*. This is of great advantage in the practical working of the dumping-bed, for when thus constructed all is out of the way for throwing in the load with shovels or otherwise.

In constructing this dumping-bed I employ slender angle-irons *b'*, Figs. 1, 7, and 9, to cover and protect the upper corners of the free meeting edges of the wooden floor-sections *E F G H*.

Having the floor-sections arranged to open along longitudinal lines at some distance away from the center line of the body and the two intermediate sections when down forming a cover for the reach of the wagon serve to protect the reach and keep the gravel or other substance of the outflowing load away and off therefrom.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A dumping-bed, the same being a rigid body having side-boards, a horizontal, longitudinal shaft at the bottom of the body and midway between the side-boards, floor-sections for the body connected by hinges to the side-boards and to the shaft and adapted to swing thereon, a truss-bar disposed transversely beneath the floor-sections, rollers held by the floor-sections to traverse the truss-bar, bends in the truss-bar to control the rollers, and means for actuating the truss-bar.

2. A dumping-bed for wagons, comprising a holding-body having longitudinal-swinging floor-sections, a transversely-disposed truss-bar beneath the floor-sections, a series of hangers pending from the floor-sections at the sides of the truss-bar carrying rollers to traverse the truss-bar, and elements carried by said hangers beneath the truss-bar.

3. A dumping-bed for wagons, comprising a holding-body with floor consisting of swinging sections, a truss-bar for controlling said swinging sections, a transverse shaft on said holding-body, chains connected with the truss-bar and adapted to be wound upon said shaft, a ratchet rigid on the shaft and a pawl to engage the ratchet, a lever and a link carried by the lever to turn the ratchet and to lift the pawl.

4. A dumping-bed for wagons, comprising a holding-body having a floor consisting of swinging sections, an element beneath the floor-sections for controlling them, a shaft carried by the holding-body, chains joined to said controlling element for the floor-sections, a ratchet rigid on the shaft and a pawl to engage the ratchet, a lever and a link spanning the ratchet, carried by the lever to actuate the ratchet, the link having spurs at the sides of the ratchet to engage the pawl.

5. A dumping-bed for wagons, comprising a holding-body having a floor consisting of



swinging sections, an element beneath the  
floor-sections for controlling them, a shaft  
carried by the holding-body, holding-chains  
joined to said controlling element for the  
5 floor-sections, a ratchet rigid on the shaft  
and a U-shape pawl to engage the ratchet, a  
lever and a link on the lever to actuate the  
ratchet with sides inclosing the latter, the  
side portions of the link having spurs to lift

the pawl, the latter being wider than the ad- 10  
jacent end of the link.

In witness whereof I have hereunto set my  
hand, this 4th day of November, 1901, in the  
presence of two subscribing witnesses.

DANIEL S. EVERETT.

Witnesses:

MARY L. WINSTON,  
ENOS B. WHITMORE.