

H. SMOKE.  
KEEL BLOCK.

APPLICATION FILED SEPT. 18, 1907.

936,676.

Patented Oct. 12, 1909.

Fig. 1.

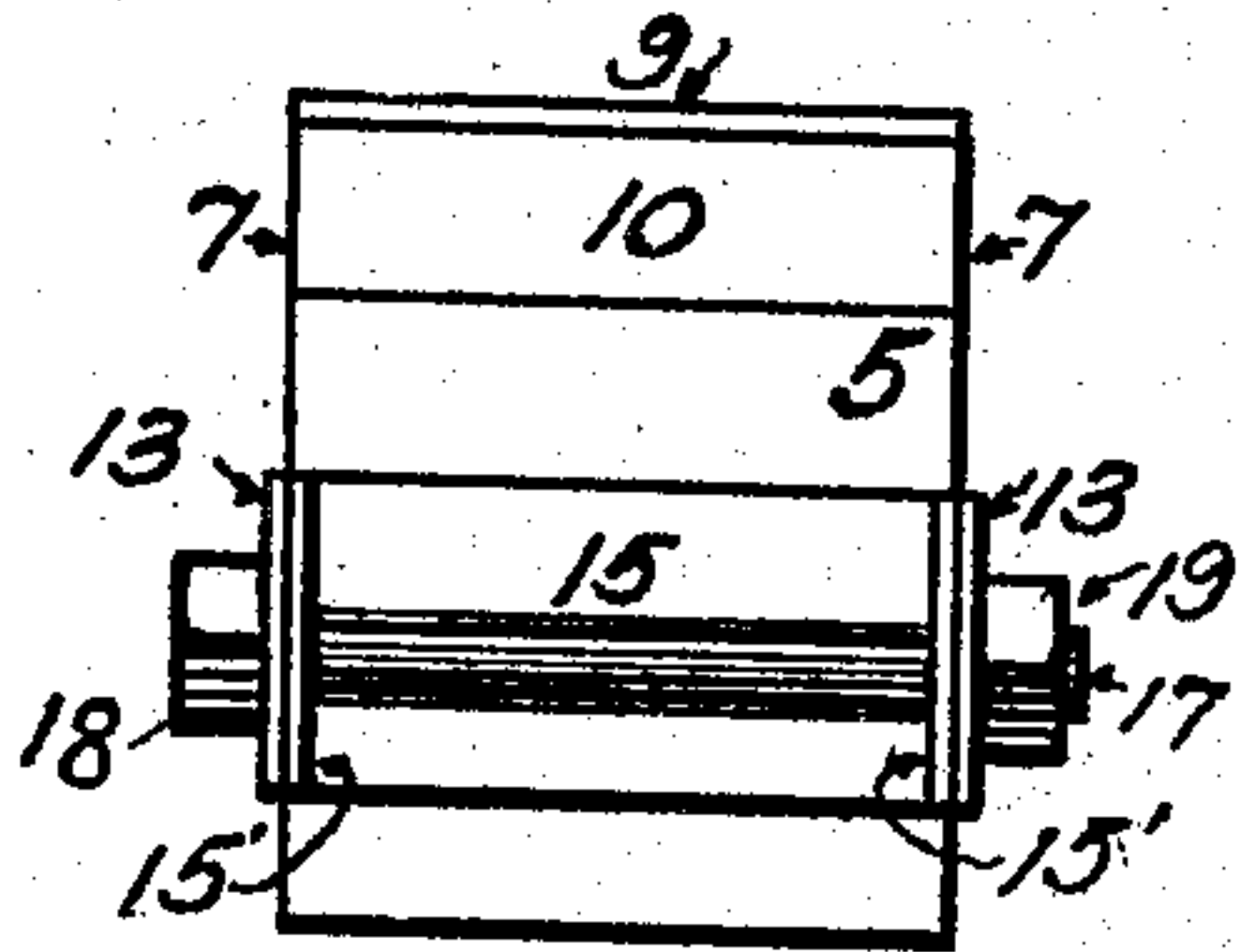


Fig. 2.

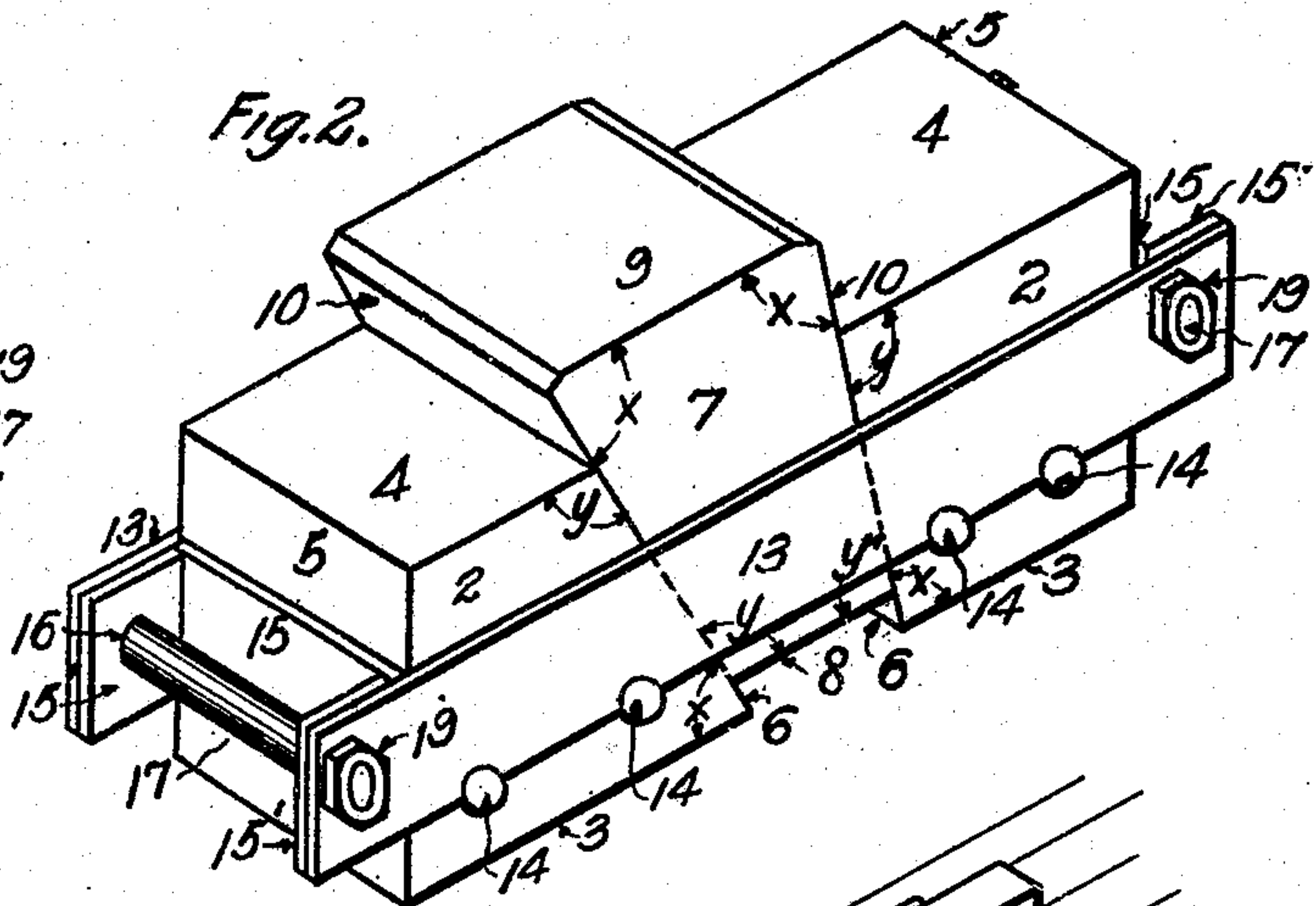


Fig. 3.

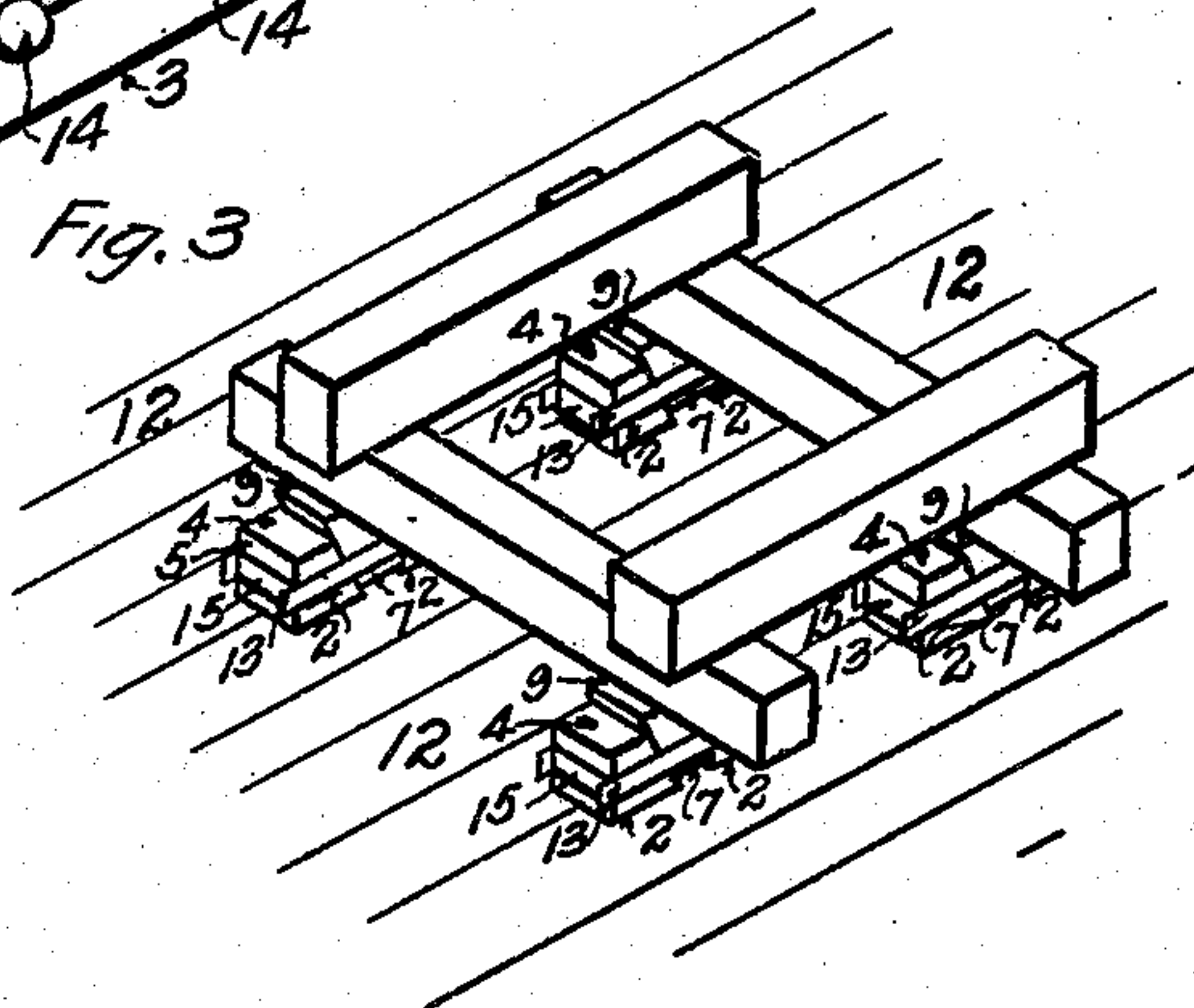


Fig. 4.

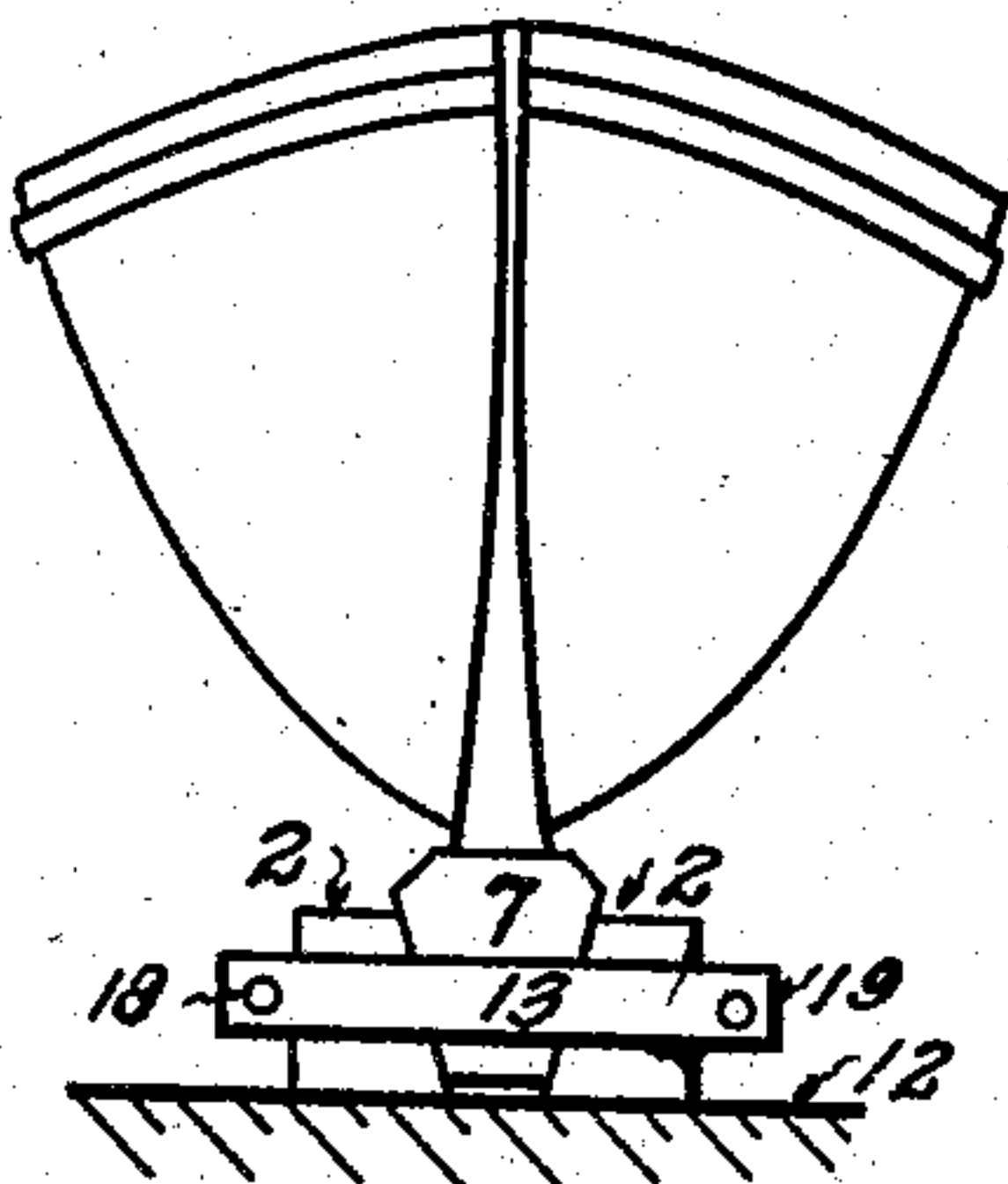
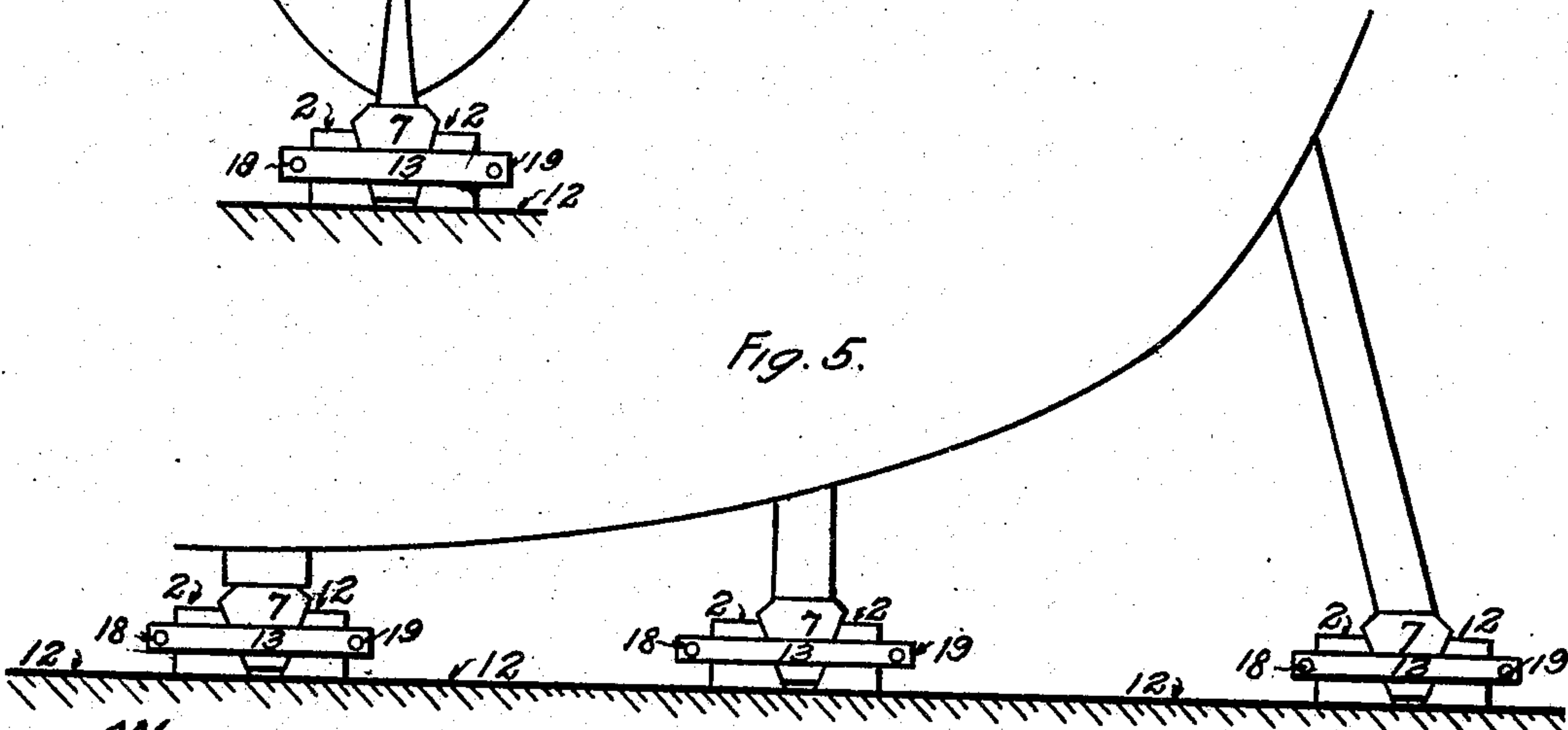


Fig. 5.



WITNESSES  
O. M. Morrow  
W. W. Talbot

INVENTOR  
Harry Smoke  
BY J. S. Prentner  
ATTORNEY



# UNITED STATES PATENT OFFICE.

HARRY SMOKE, OF GLOUCESTER, NEW JERSEY.

## KEEL-BLOCK.

936,676.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed September 18, 1907. Serial No. 393,447.

*To all whom it may concern:*

Be it known that I, HARRY SMOKE, a citizen of the United States, residing at Gloucester, in the county of Gloucester and State of New Jersey, have invented certain new and useful Improvements in Keel-Blocks, of which the following is a specification.

My invention relates to improvements in keel-blocks such as are employed in the building or the repairing of vessels, and the object of my invention is to provide such a device which can be more easily removed from beneath a vessel and which would facilitate the launching of a vessel than can the devices commonly in use. A keel-block constructed in accordance with my invention could also be used as a bilge-block and as a shore block, as is shown in the accompanying drawing, in which—

Figure 1, is an end elevation; Fig. 2, is a perspective view; Fig. 3, is a view of my block when in use as a bilge-block; Fig. 4 is a front view of the keel-block in position under the vessel; and Fig. 5 is a view of the block when in use as a shore-block.

Similar characters refer to similar parts throughout the several views.

My block consists of two ground sections, and one rider section designated respectively by the figures 2, 2 and 7. The ground sections 2, 2, have their bases 3, 3, parallel with the tops 4, 4, their outer faces 5, 5, at right angles with the tops and bases, and their inner faces 6, 6, make acute angles  $x, x$ , with the bases 3, 3, and obtuse angles  $y, y$ , with the tops 4, 4. The rider section has its base 8, parallel with its top 9, and faces 10, 10, which form obtuse angles  $y, y$ , with the base 8, and acute angles  $x, x$ , with the top 9, similar and equal to the angles  $x, y$ , of the ground section but reversed in position.

When the block is assembled and in position to support a vessel, the rider 7, is wedged between the ground sections 2, 2, and is held so as to be above the floor space 12, and to extend above the tops of the ground sections. To prevent the weight of the vessel from forcing the rider downward and the ground sections outward, I provide tie-bars 13, 13, and pins 14, carried by sections 2, 2, to support said bars. To the outer

faces 5, 5, are fastened plates 15, 15, and to the bars 13, 13, are fastened similar plates 15', 15'. Bars 13, 13, and plates 15' are provided with holes 16, for passing tie-rods 17, which are provided with heads 18, and removable nuts 19.

When the vessel is to be launched nuts 19 are removed, rods 17 forced out and bars 13 are lifted off the pins 14. The weight of the vessel then forces the rider down, which forces the ground sections outward. By making the rider and ground sections of the form shown and described it will be seen that in order to launch a vessel it is only necessary to remove the tie-rods and bars.

Blocks constructed in accordance with my invention can be used repeatedly as keel-blocks, bilge-blocks and shore-blocks, the assembling or separation thereof not causing any serious damage to any of the parts.

Having thus described my invention, what I claim as new and desire to protect by Letters Patent, is—

1. The herein described block, consisting of a rider and two ground sections in connection with means for detachably joining said sections and consisting of tie bars, pins carried by the ground blocks to support said bars, plates attached to the bars, and plates attached to the ground sections to hold the said ground sections in a fixed position to support the rider above the floor space when the block is joined, and removable tie rods to tie the bars together.

2. The herein described block, consisting of a wedge-shaped rider section, two ground sections, pins carried by the ground sections, tie-bars supported by the pins, plates attached to outer faces of the ground sections, plates attached to the tie-bars to hold the ground blocks in a fixed position, tie-rods to join the bars, removable nuts to permit the removal of the rods, for the purposes described.

In witness whereof I have hereunto signed my name in the presence of two witnesses.

HARRY SMOKE.

Witnesses:

MARY E. HAMER,  
ANTONI SMOKE.