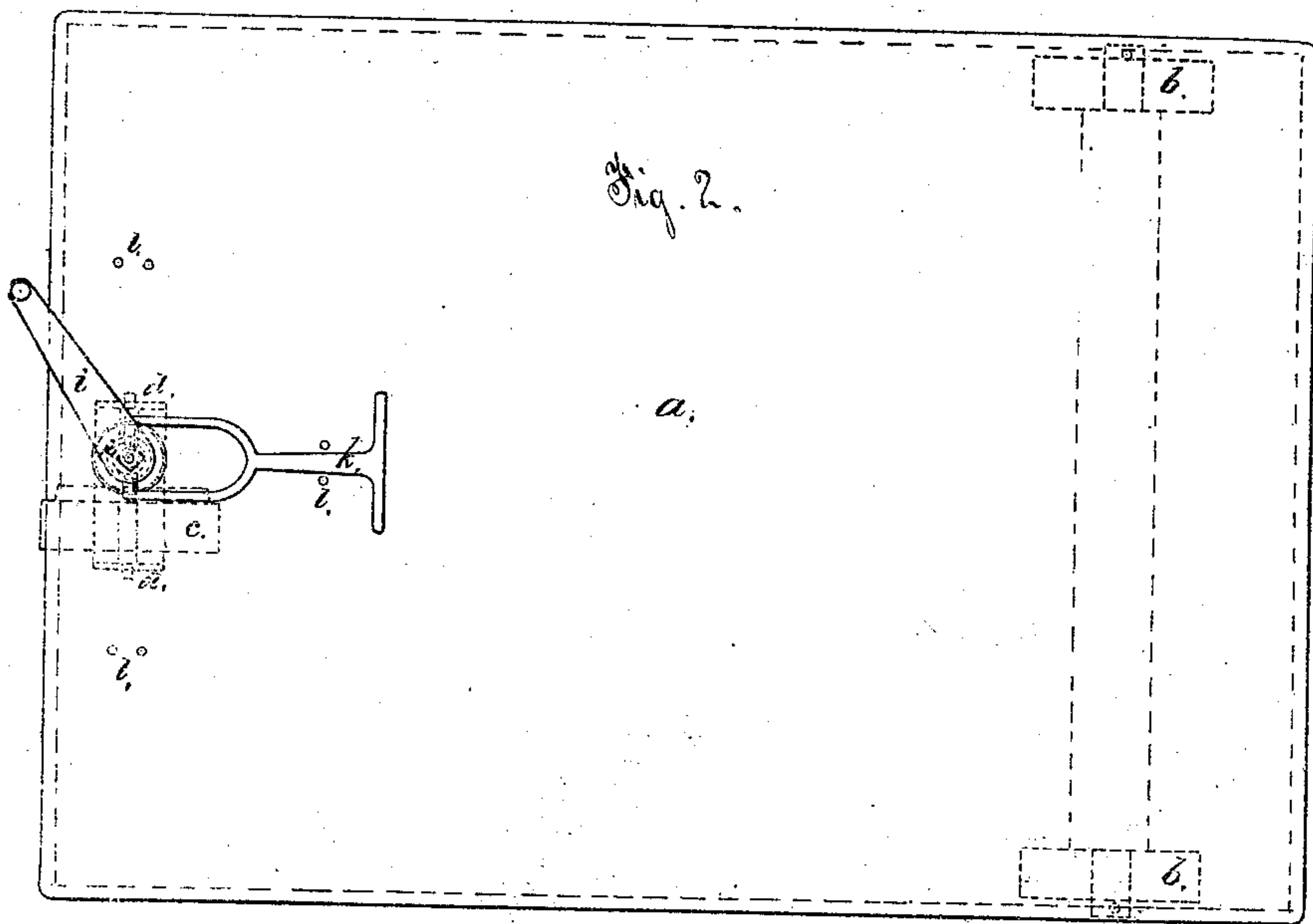
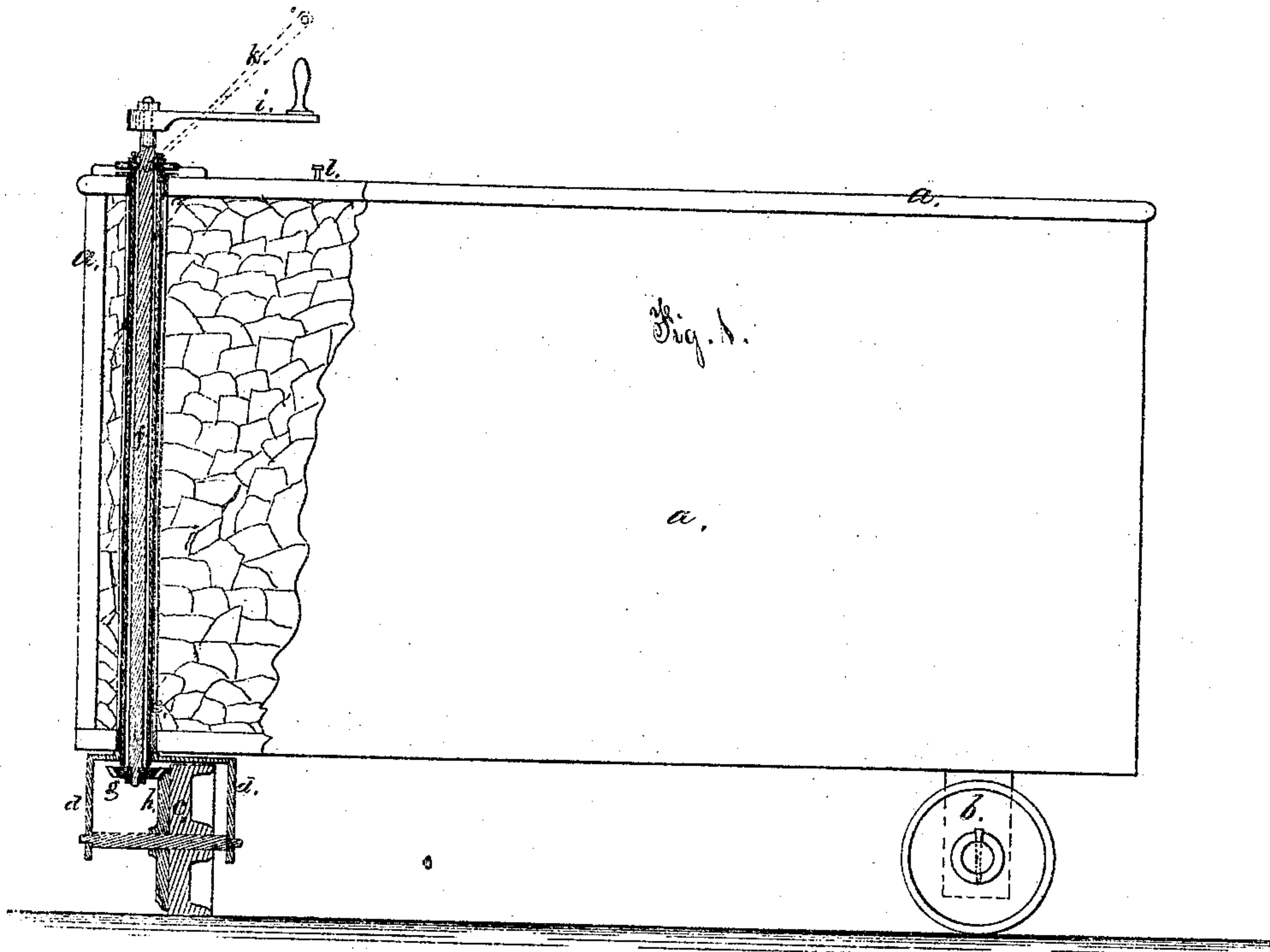


T. Fowler,
Ship's Ballast.

No. 34,358.

Patented Feb. 11. 1862.



Witnesses

Lemuel W. Searell

John W. Howard

City of New York January 2nd 1862

Thaddeus Fowler

UNITED STATES PATENT OFFICE.

THADDEUS FOWLER, OF RICHMOND VALLEY, NEW YORK.

IMPROVED DECK-BALLAST BOXES FOR VESSELS.

Specification forming part of Letters Patent No. **34,358**, dated February 11, 1862.

To all whom it may concern:

Be it known that I, THADDEUS FOWLER, of Richmond Valley, in the county of Richmond and State of New York, have invented, made, and applied to use a certain new and improved means for moving the weight-boxes used on steamers and other vessels for keeping them upright in the water; and I do hereby declare that the following is a full, clear, and exact description of my said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a vertical section of my apparatus as applied to said weight-box, and Fig. 2 is a plan of the same.

Similar marks of reference denote the same parts.

In most vessels, and particularly in river steamboats, a weight-box is employed that can be rolled about from place to place in order to keep the vessel perfectly upright or "trim," or else to counteract the action of the wind as far as possible, and in some vessels several of these boxes are employed, and as the chain cable is often contained in one or more of the boxes they are often called "chain-boxes." The weight contained in such boxes is often very considerable and to move them often requires considerable effort by six, eight, or more men. To call these deckhands together often consumes considerable time and takes them away from other necessary duties, as well as often being very hard labor.

The nature of my said invention consists in the employment of a crank and pinion with the caster-wheel of such weight-boxes, whereby one man can apply sufficient power to move said weight-box from place to place in order to balance the boat. The speed of moving said box is of course decreased, but the operation of trimming the boat can be performed in much less time and with greater facility than by the old method of getting the hands together and one attendant by constantly adapting the position of the box to the varying circumstances of steering the vessel or the preponderance of passengers or freight on either side can greatly facilitate the run-

ning of the boat and prevent the loss of speed and power consequent upon any inequality in the level of the vessel.

In the drawings, *a* is a box containing the chain or other weight. *b b* are the wheels or rollers thereunder, as usual.

c is the caster-wheel set in the yoke *d*, that is attached to a pipe *e* and can be turned in any direction by the handle *k*, that connects by a fork and projecting pins with the upper end of said pipe.

f is a rod passing through the pipe *e* and provided with a pinion *g* at the lower end taking the wheel *h* or teeth on the side of the caster-wheel *c*.

i is a crank-handle on the upper end of the rod *f*.

It will now be seen that the attendant can move the chain or weight box backward or forward across the boat by simply turning the crank-handle *i*, the handle *k* being in the position shown in Fig. 2 and held between the guide-pins *l l*; but when the box is to be moved to a different part of the boat the direction can be determined by the handle *k*, moving the caster-wheel to a different angle with the box. Several of these pins *l l* may be applied on top of the box *a* to hold the handle *k* in any desired position.

It is usual to turn the ordinary caster-wheel of chain-boxes around (to the position of Fig. 1) to prevent the box moving by its own weight if the deck becomes inclined, but by turning the forked handle *k* up over the crank-handle *i*, as seen by dotted lines in Fig. 1, the rolling of the caster-wheel is effectually prevented.

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

The shaft *f*, pinion *g*, and handle *i*, in combination with the caster-wheel *c*, as and for the purposes specified.

In witness whereof I have hereunto set my signature this 4th day of January, 1862.

THADDEUS FOWLER.

Witnesses:

LEMUEL W. SERRELL,
THOS. GEO. HAROLD.