(No Model.)

L. J. STEWART.

Float for Fattening Oysters.

No. 227,855. Patented May 18, 1880.

Fig. 1.

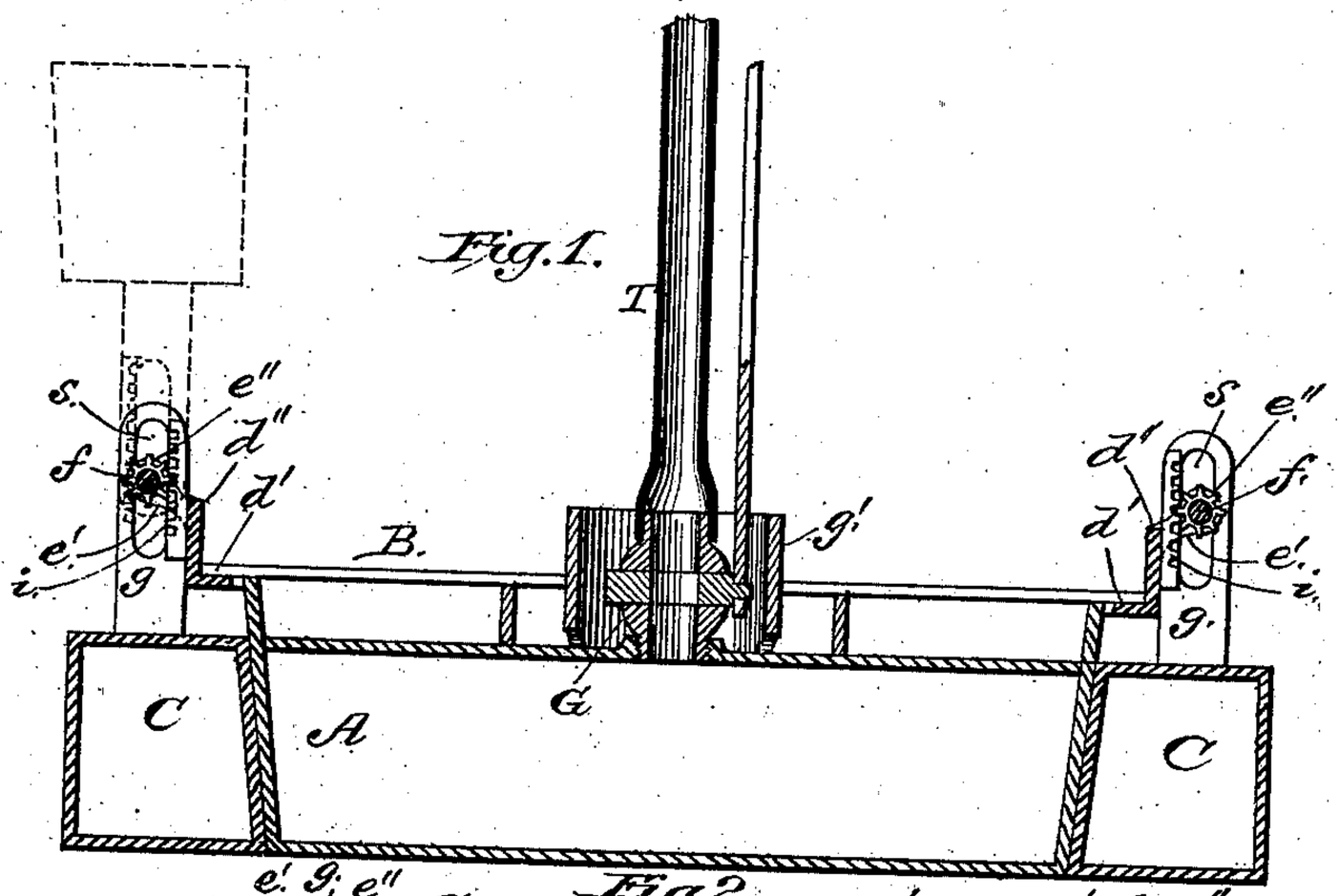

Fig. 2.

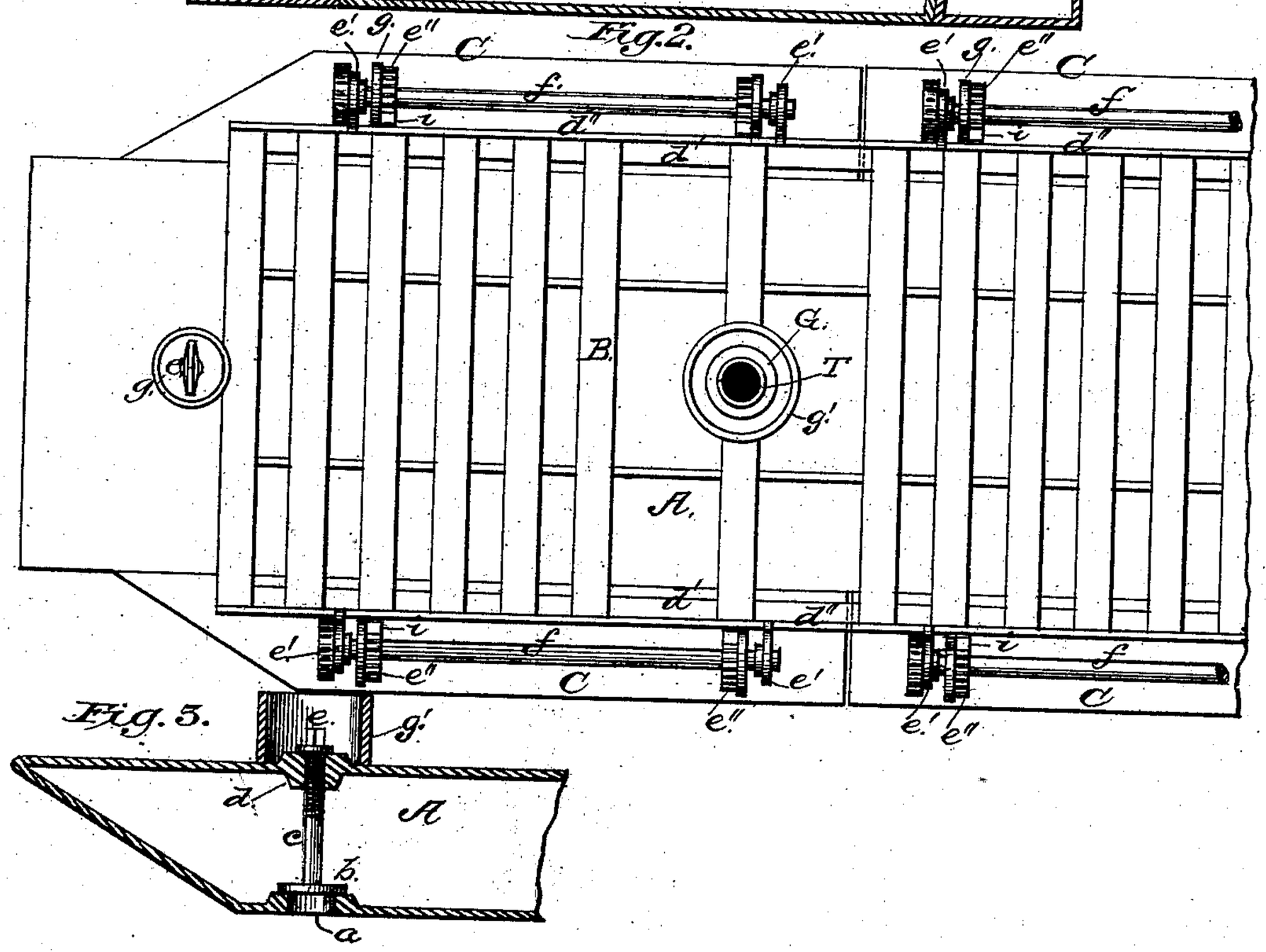

Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

LEVIN J. STEWART, OF CAPPAHOSIC, VIRGINIA.

FLOAT FOR FATTENING OYSTERS.

SPECIFICATION forming part of Letters Patent No. 227,855, dated May 18, 1880.

Application filed March 25, 1880. (No model.)

To all whom it may concern:

Be it known that I, LEVIN J. STEWART, of Cappahosic, in the county of Gloucester and State of Virginia, have invented a new and valuable Improvement in Floats for Fattening Oysters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a transverse section of my improved float. Fig. 2 is a plan view of the same, and Fig. 3 is a sectional detail thereof.

This invention has relation to improvements in floats for fattening, stowing, feeding, and transporting oysters.

In floats heretofore used the shell-fish have been placed upon the deck of the float and the latter sunk, by admitting water into the same, in shoal-water; hence such floats were useless, except when a bank a few feet under water can be obtained.

The object of my invention is, mainly, to construct a float for the purposes above mentioned which will be operative in deep water, and which may be raised or sunk with great facility and speed.

The nature of the invention will be fully set forth hereinafter.

In the accompanying drawings, the letter A designates a scow or lighter, constructed of wood or metal, or of a combination thereof, so as to be both air and water tight, and decked over from end to end, so as to be tight. The bottom of the scow is provided with openings *a*, closed at pleasure by the valves *b*, that are operated from the deck by means of screw-stems *c* extending through bearings *d* in the said deck, and provided on its end with a wrench-seat, *e*.

I do not confine myself to this peculiar device for opening and closing the valves. These being open, water enters the hull of the scow and sinks it with its load. The deck of the scow is covered with a supplementary raised deck, B, upon which the oysters or other shell-fish are placed. This deck extends laterally out beyond the deck proper, and forms an "overhang," *d'*, which is provided at its outer edge with a guard, *d''*, to retain the oysters. From this guard project bearing-arms *e'*, in which are journaled shafts *f*, having gear-wheels *e''* keyed thereon, and extending through slots *s* in the metallic arms *g* of the subsidiary floats C. The gear-wheels *e''* engage toothed racks *i* upon the arms *g*, and when the said shafts are operated the said floats are raised or lowered, as the case may be. When raised the said floats allow the scow to sink down in the water to a proportionate extent, and when lowered they raise the scow proportionately. When lowered to their fullest extent, the valves *b* being open and water flowing into the scow, the floats C swing out from under the overhang, and as the scow sinks assume the position shown in dotted lines, Fig. 1, when they arrest the scow and sustain it at a distance under the water of several feet, thus preventing it from sinking to the bottom, whatever be the depth of the water. These subsidiary floats may be of wood or iron, and formed in the shape of a boat or barrel.

It will be seen that this float may be used in water of any depth, and that by this means oysters may be fattened without the scow resting on the bottom.

The employment of the subsidiary floats in connection with the scow causes the latter to sink or rise on an even keel and perpendicularly. It being desired to raise the scow and its load, the valves *b* will be closed and a quantity of water pumped out of the same, when it will immediately rise to the surface. Barely enough water being admitted into the hull of the scow to sink it, and the latter being supported by the floats, it is evident that but a small quantity need be pumped out to float the scow; or, the valves being opened, the water may be expelled from the scow by an air-forcing pump with a similar result. This I accomplish by means of a flexible tube, T, coupled to the condenser of the air-pump and to the nozzle of a stop-cock, G, inserted in the deck. This cock is under water when the scow is sunk, and should be turned off, so that should the tube T be accidentally or maliciously cut under water the scow will not fill and sink beyond the support of the subsidiary

floats to the bottom. The ends of the valve-stems and the cock G are inclosed within annular guards *g*, which prevent them from being covered up or choked up by the load.

In admitting water into the hull of the scow the valves and cock are opened; but the moment it sinks to a depth to be supported from the floats they are closed, and a quantity of air remains in the scow, which assists in buoying up the same and imposes but little weight upon the floats, which consequently need be but of small size compared to the scow.

If desired, the floats may be made detachable from the hull of the scow and anchored at the fattening-grounds, while the scow is towed to the oyster-packing establishment or to market.

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

1. The oyster-scow having a hollow body, and the drain-rack B above the same, the lateral floats, having arms *g* pivoted to said scow, and mechanism for raising or lowering the same, substantially as specified.

2. The combination of the scow A, having overhang *d'*, the shafts *f*, journaled in the said overhang, and provided with gears *e''*, and the floats C, having slotted arms *g*, with rack-bars *i*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LEVIN J. STEWART.

Witnesses:
FRANK J. MASI,
PHILIP C. MASI.