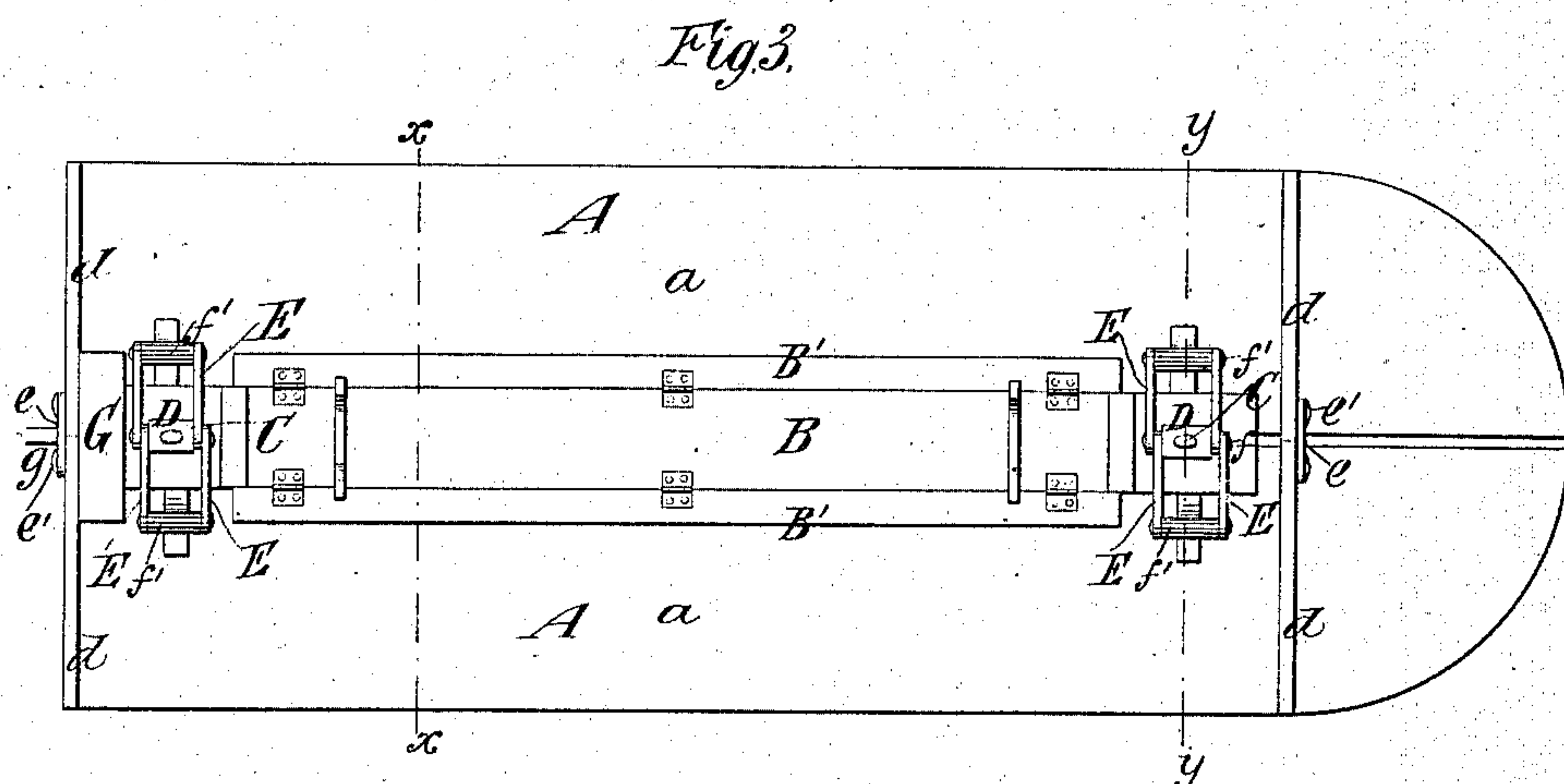
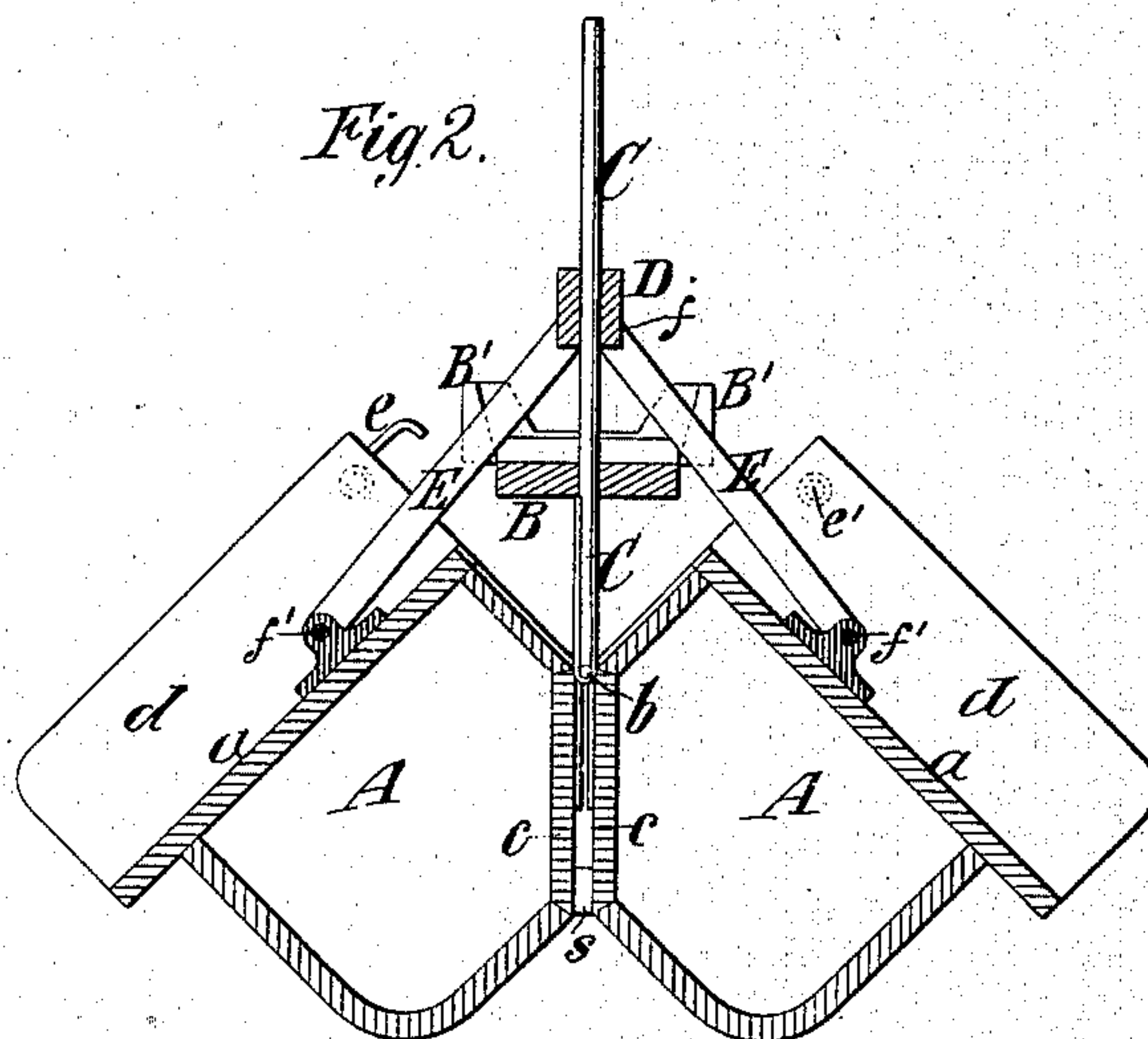
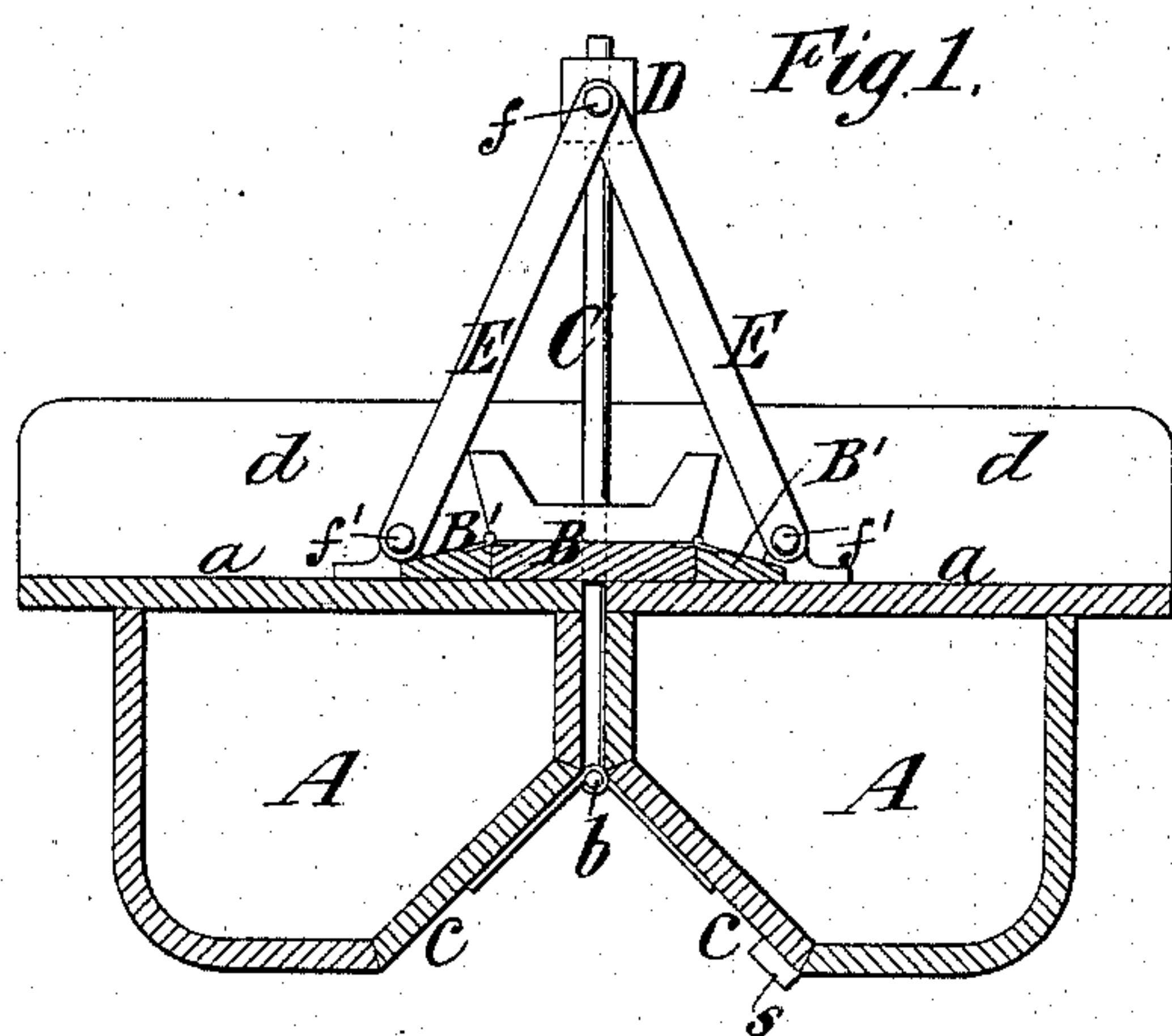


(No Model.)

G. D. BARNEY.  
DUMPING SCOW.

No. 322,409.

Patented July 21, 1885.



Witnesses:

*C. C. Perkins.*  
*Matthew Pollock.*

Inventor:

*Geo. D. Barney*  
*by his attys*  
*Brown & Hall*



# UNITED STATES PATENT OFFICE.

GEORGE D. BARNEY, OF BROOKLYN, NEW YORK, ASSIGNOR TO NATHAN BARNEY, OF SAME PLACE.

## DUMPING-SCOW.

SPECIFICATION forming part of Letters Patent No. 322,409, dated July 21, 1885.

Application filed December 6, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE D. BARNEY, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Dumping-Boats, of which the following is a specification.

My invention is applicable to boats for transporting and automatically dumping garbage or other materials, but is more particularly intended for stone, and especially for stone of large size, such as it may be desired to use for the construction of breakwaters and other submarine works.

My improved boat consists, essentially, of two floats or portions, which are arranged side by side, and are hinged at their inner or adjacent sides so as to provide for their swinging downward and inward toward each other, whereby their deck portions, which are horizontal or approximately horizontal when the floats or pontons are righted or in their normal position, will be brought into such inclined positions that the deck-load will slide off on opposite sides of the boat. The floats or pontons are preferably hinged together at a point about half their depth from the top, and below the hinges their inner and adjacent sides are slanted or inclined away from each other, as is necessary in order to permit them to dump.

One great advantage in a boat composed of floats or pontons so constructed and hinged together is that the water which is between them as they swing outward from each other at their tops and inward toward each other at the bottoms is in a measure confined, and must be expelled when dumping, and will therefore prevent the floats or pontons from ever being subjected to any great shock by coming forcibly together when dumping. The two pontons or floats are held together by suitable hooks or catches, which are released or thrown off when it is desired to dump the load. I also combine with the two floats or pontons a fixed deck, which is supported in a novel manner so as to retain its horizontal position when the boat is dumped. This deck is supported by two uprights or standards, which are attached at their lower ends to the hinges which connect the floats or pontons. At the proper height the fixed deck is secured to the standards or uprights, and upon the

standards or uprights, above the deck, slide blocks or collars, which are connected by rods or hinged braces or stays with the two floats or pontons. When the two floats or pontons swing outward in dumping, the collars or blocks slide down on the standards or uprights, and thereby serve to prevent them and the deck supported by them from canting to one side or the other when the boat is dumping.

The invention consists in novel combinations of parts, hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a transverse section of a boat embodying my invention, the floats or pontons being together in position to receive a load. Fig. 2 is a similar section, showing the floats or pontons in the position which they occupy when the boat is dumped, and Fig. 3 is a plan of the boat. Figs. 1 and 2 are taken on the planes indicated, respectively, by the dotted lines *x x* and *y y*, Fig. 3, and are on a larger scale than Fig. 3.

Similar letters of reference designate corresponding parts in all the figures.

A A designate the two floats or pontons, which constitute the principal part of the boat. They are alike in shape, except that they are made right and left, and they may be constructed in a manner similar to the dumping boats or scows heretofore used. They each have a deck portion, *a*, and are perpendicular or square on their inner and adjacent sides for about half their depth, at which point they are hinged together by suitable hinges, *b*, which may be of brass or gun-metal, to resist corrosion. Below their hinges *b* the inner and adjacent sides of the floats or pontons slant or are inclined downward and away from each other, as shown at *c*. The remainder of the bottoms of the floats or pontons and their outer sides may be of any suitable shape.

The floats or pontons have end boards, *d*, which may serve to confine the load, if of garbage or other loose material, and the floats or pontons may be held together by hooks *e*, pivoted to one and engaging with an eye or stud, *e'*, on the other, or by means of any other suitable catches or fastening devices.



B designates the fixed or horizontal deck, which is supported midway between the two floats or pontoons A A, and which is supported by strong uprights on standards C C, arranged one near each end of the boat. If desired, one or more similar uprights or standards C may be arranged between the two shown. They may be of wood or metal, and are hinged to one or both of the floats or pontoons so that their hinges will be in line with the hinges *b* which connect the floats or pontoons together.

The deck B is securely fixed upon and connected with the uprights or standards C C, so as to be rigid thereon, at a height which will just enable the deck portions *a* of the floats or pontoons to swing or move outward and inward beneath it.

On each standard or upright C, above the fixed deck B, is a collar or block, D, which is free to slide upward and downward thereon, and is connected by bars or rods E with the two floats or pontoons. These rods or bars E are pivoted or hinged at their upper ends, *f*, to the collar or block D, and at their lower ends, *f'*, to the floats or pontoons, and consequently as the floats or pontoons are swung inward or outward the collars or blocks D slide up and down on the uprights or standards C, and the said uprights or standards and the deck B attached to them are held against canting to one side or the other.

At opposite edges of the fixed deck B are wings or side pieces, B', which are hinged thereto. These side pieces may be turned down to lie upon the floats or pontoons, as shown in Fig. 1, and enable a wheelbarrow to be run over the whole boat when it is desired to unload without dumping; or they may be swung up, as shown in Fig. 2, when it is desired to dump. In the latter position they form guards or sides to prevent any one from falling off the fixed deck B when the load is dumped. Upon this deck B may be erected the house G for the boat captain, and a rudder, *g*, may be hung from the rear portion of the deck.

When the load is to be got rid of by dumping, it is to be placed entirely on the deck portions *a* of the floats or pontoons A, and when the hooks *e* or fastening devices are released the two floats or pontoons will swing outward and away from each other, as shown in Fig. 2, and the load, whether of stone, garbage, or other material, will slide off on opposite sides. In their dumping movement the water which is between the inclined inner sides, *c*, of the floats or pontoons, and which

must be expelled to allow them to come together, forms a cushion, which prevents them coming together with any injurious shock. When the load is not to be got rid of by dumping, the side portions or wings, B', may be turned down, as shown in Fig. 1, and the boat is then loaded over its entire surface.

In order to form a positive stop to prevent the two floats or pontoons from jamming together and straining the hinges, I may attach to one or to each float or ponton a block or stop, *s*, which may be of wood or rubber.

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

1. In a dumping-boat, the combination of two floats or pontoons having approximately flat deck portions hinged at their inner sides between their top and bottom, and adapted to swing downward and inward toward each other at their lower portions, substantially as and for the purpose herein described.

2. In a dumping-boat, the combination of two floats or pontoons hinged together at their inner sides at a point about half their depth, and having their inner sides inclined outward in opposite directions below their hinges, substantially as and for the purpose herein described.

3. In a dumping-boat, the combination, with two floats or pontoons hinged together at their inner sides so as to swing downward and inward toward each other at their lower portions in dumping, of uprights or standards having their lower ends hinged in line with the hinges which connect the floats or pontoons, and a fixed deck erected upon and supported by said uprights or standards, substantially as and for the purpose herein described.

4. In a dumping-boat, the combination, with two floats or pontoons hinged together at their inner sides as described, of uprights or standards C, hinged at their lower ends, the deck B, erected upon and supported by said uprights or standards, and the sliding blocks or collars D, and rods or bars E, whereby the uprights or standards are maintained in vertical position, substantially as herein described.

5. In a dumping-boat, the combination, with two floats or pontoons hinged together on their inner sides, as described, of the uprights or standards C, and the deck B, fixed to said uprights or standards and provided with the hinged sides or wings B', substantially as herein described.

GEORGE D. BARNEY.

Witnesses:

N. BARNEY,  
C. HALL.