

No. 636,626.

Patented Nov. 7, 1899.

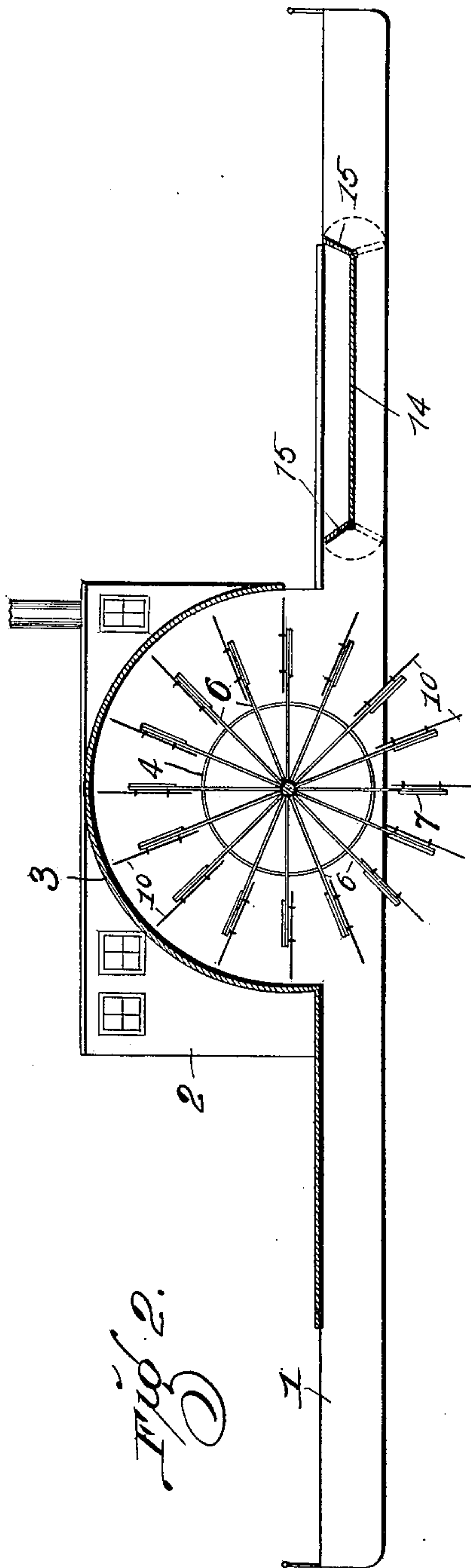
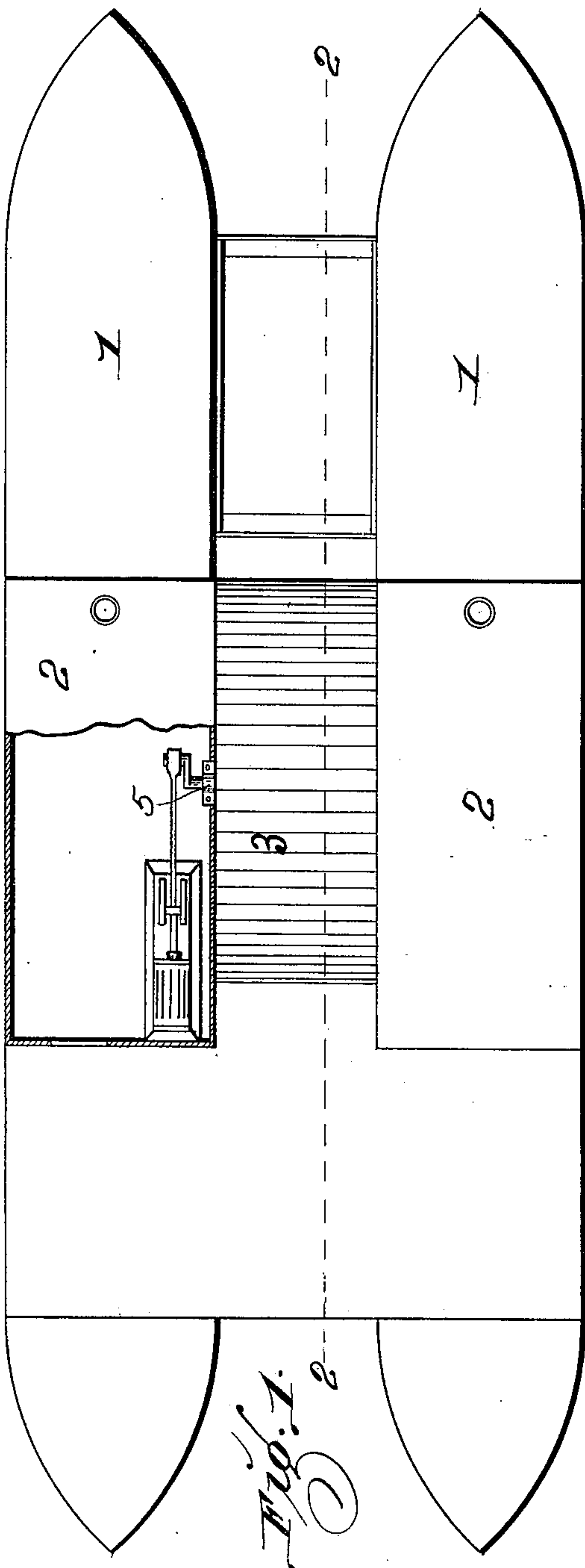
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SELF PROPELLING DREDGE BOAT AND JETTY.

(Application filed Mar. 2, 1899.)

(No Model.)

2 Sheets—Sheet 1.



Attest
M. Smith
a. j. McCauley, By Higdon & Logan Attys.

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Fig. 3.

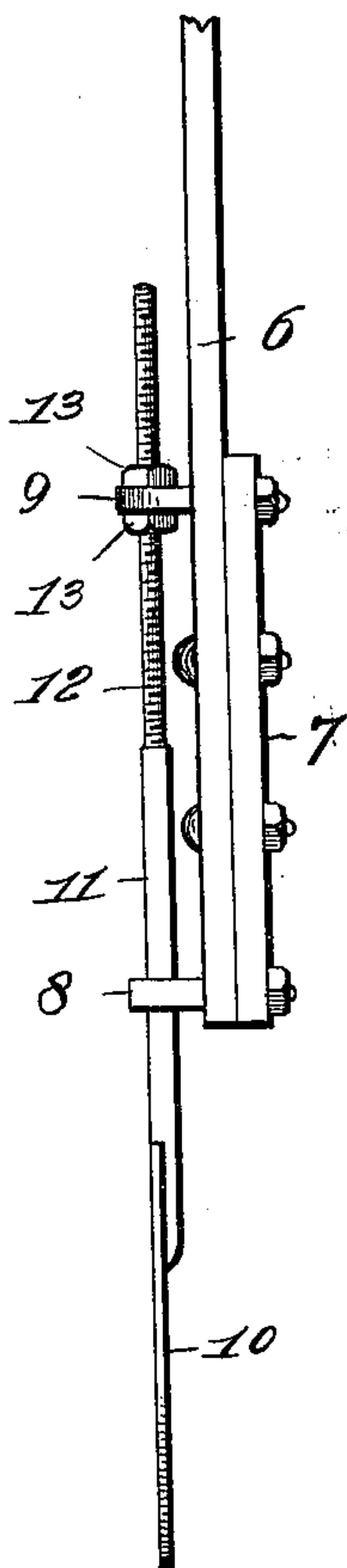


Fig. 4.

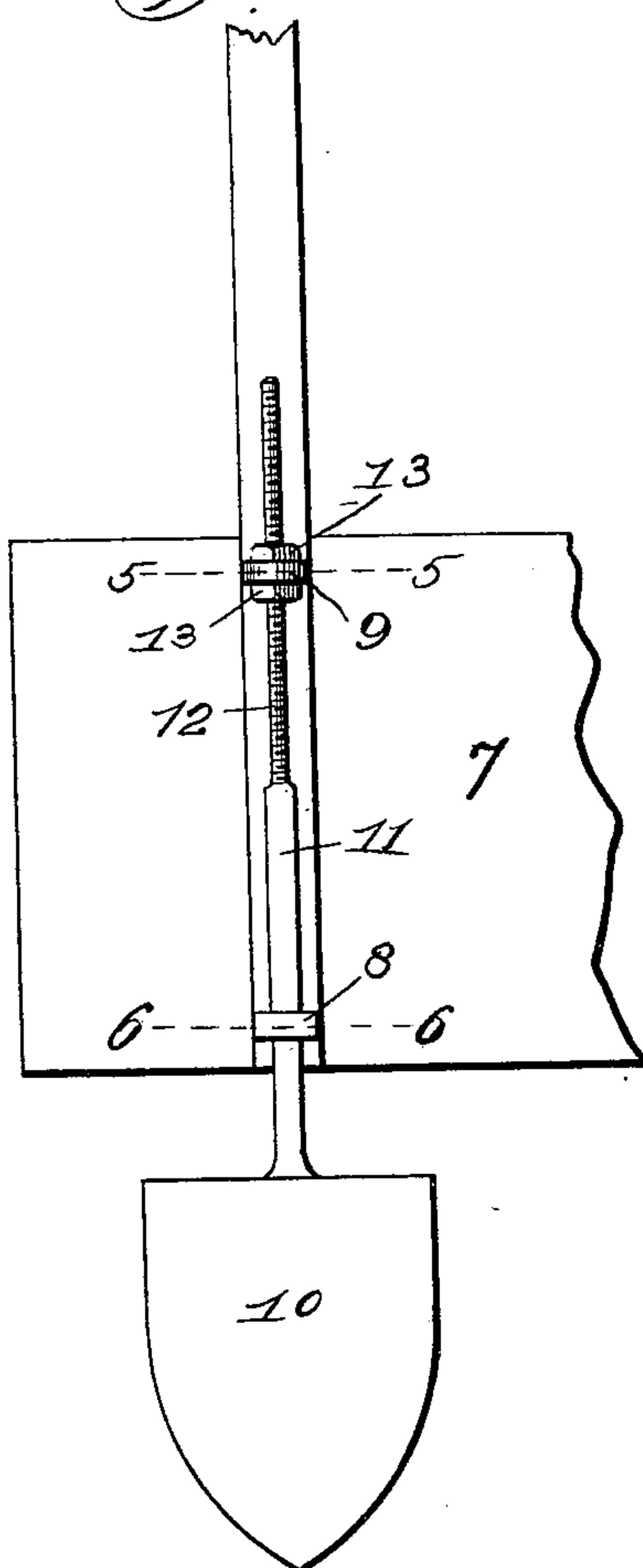


Fig. 5.

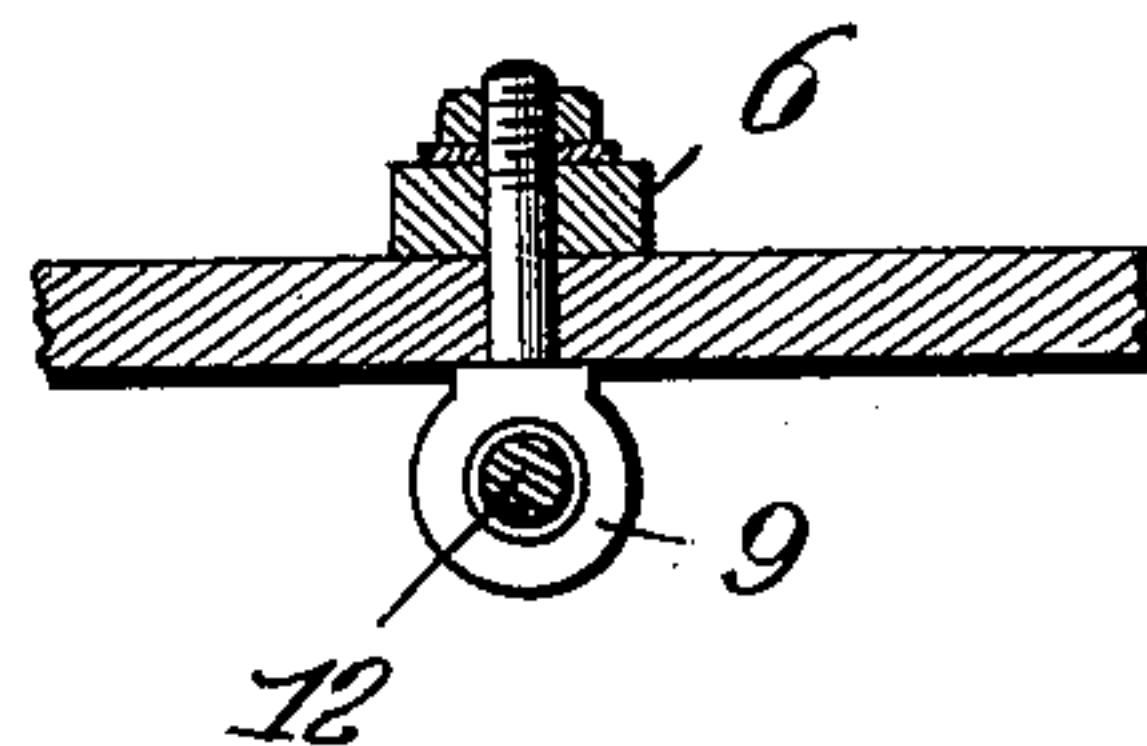
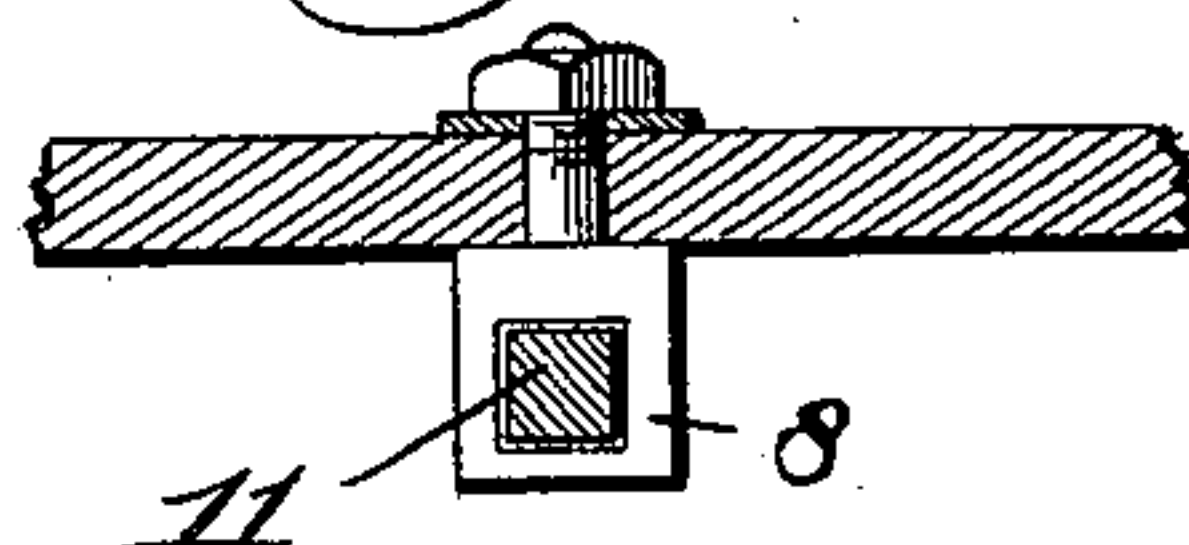


Fig. 6.



Inventor:—
Joseph Brown.
Attest M. Smith
A. J. McCauley. *By Higdon & Longan Attys.*

UNITED STATES PATENT OFFICE.

JOSEPH BROWN, OF ST. LOUIS, MISSOURI.

SELF-PROPELLING DREDGE-BOAT AND JETTY.

SPECIFICATION forming part of Letters Patent No. 636,626, dated November 7, 1899.

Application filed March 2, 1899. Serial No. 707,437. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH BROWN, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Self-Propelling Dredge-Boats and Jetties, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings; forming a part hereof.

My invention relates to self-propelling dredge-boats and jetties; and it consists of the novel construction, combination, and arrangement of parts hereinafter described and claimed.

Figure 1 is a plan view of my improved dredge-boat and jetty. Fig. 2 is a longitudinal sectional view taken approximately on the line 2 2 of Fig. 1. Fig. 3 is a side elevation of the lower end of one of the wheeled arms of my improved boat. Fig. 4 is a front elevation of the lower end of one of said arms and showing the bucket and shovel carried by said arm. Fig. 5 is a detail sectional view taken approximately on the line 5 5 of Fig. 4. Fig. 6 is a detail sectional view taken approximately on the line 6 6 of Fig. 4.

In the construction of my improved dredge-boat and jetty I make use of a pair of hulls 1, the same being arranged parallel with each other and held a suitable distance apart in any desired manner, and said hulls and the space between them are decked over, with the exception of a space between the centers of said hulls, through which the wheel of the boat operates. Located upon the center of each hull is a suitable housing 2, in which is located a battery of boilers and an engine. Extending upwardly over the deck between the houses and over the open space in the deck is the semicircular wheel-housing 3. The wheel 4 is rotatably arranged in suitable bearings 5, and said wheel is driven by the engines located within the houses 2, said wheel comprising a plurality of arms 6, the same being suitably framed together, and the ends of said arms being provided with the usual transverse paddles or buckets 7. Rigidly secured to the outer ends of each of the wheel-arms 6 is a pair of sockets 8 and 9, the outer socket 8 being provided with a rectangular aperture and the inner socket 9 being provided with a circular aperture.

10 indicates a shovel, the same having the in-

tegral square handle 11, which passes through the rectangular aperture in the socket 8, and the upper end of said handle is rounded and screw-threaded, as indicated by 12, said rounded screw-threaded portion passing through the circular aperture in the socket 9, and nuts 13 are arranged upon said screw-threaded portion immediately above and below the socket 9. By manipulating these nuts the shovel may be adjusted and locked in position upon the wheel-arm. As there is one of these shovels arranged on each wheel-arm, there will consequently be a row of said shovels extending outwardly from each bucket or paddle 7.

Arranged between the hulls immediately to the rear of the wheel-house is a suitable tank 14, the ends 15 thereof being hinged so as to swing downwardly, as indicated by dotted lines in Fig. 2.

When my improved boat is in operation, the engines operate the propeller-wheel, which rotates in the usual manner and propels the boat forwardly, and as said boat passes over the bar which it is desired to move or through which it is desired to cut the channel the shovels 10 will dip up the sand as fast as the boat travels and the action of the wheel, together with the jetty formed by the double hull, will carry off the sand to deep water. If desired, the ends 15 of the tank 14 may be swung upwardly, and thus a portion of the sand dug up by the shovels will be thrown into the tank, and said sand may be carried any distance to be disposed of as desired.

A bar can be gradually removed or a channel gradually deepened by passing the boat over the bar or channel several times and each time lowering the shovels a slight distance.

Should it be desired to cut a channel or dredge to a depth greater than the depth to which the shovels can be adjusted when the boat is traveling under ordinary conditions, the hulls may be loaded with a large quantity of sand, thus causing said hulls to have a deeper draft in the water, and consequently causing the shovels to operate to a greater depth.

The pilot-house may be positioned at any suitable point on the boat, and said boat may be, if desired, provided with all the imple-

ments and apparatus required for removing snags and other obstructions from the water or on the bank.

5 A boat of my improved construction has a very light draft, may be propelled into any position, as required, to form a jetty, and will dig a channel through a bar as fast as the boat travels over said bar.

I claim—

10 1. In a combined dredge-boat and jetty, a pair of hulls arranged parallel with each other and held a suitable distance apart, a propeller-wheel operating through the space between said hulls, means carried upon said
15 hulls for operating the propeller-wheel, and shovels carried by the arms of the propeller-wheel, substantially as specified.

2. In a combined dredge-boat and jetty, a pair of hulls arranged parallel with each other and held a suitable distance apart, a propeller-wheel operating through the space between said hulls, means carried upon said hulls for operating the propeller-wheel, and adjustable shovels carried by the propeller-wheel arms, said shovels being arranged in
25 alinement upon each set of wheel-arms and projecting below the buckets of said wheel, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH BROWN.

Witnesses:

M. P. SMITH,

A. J. MCCAULEY.