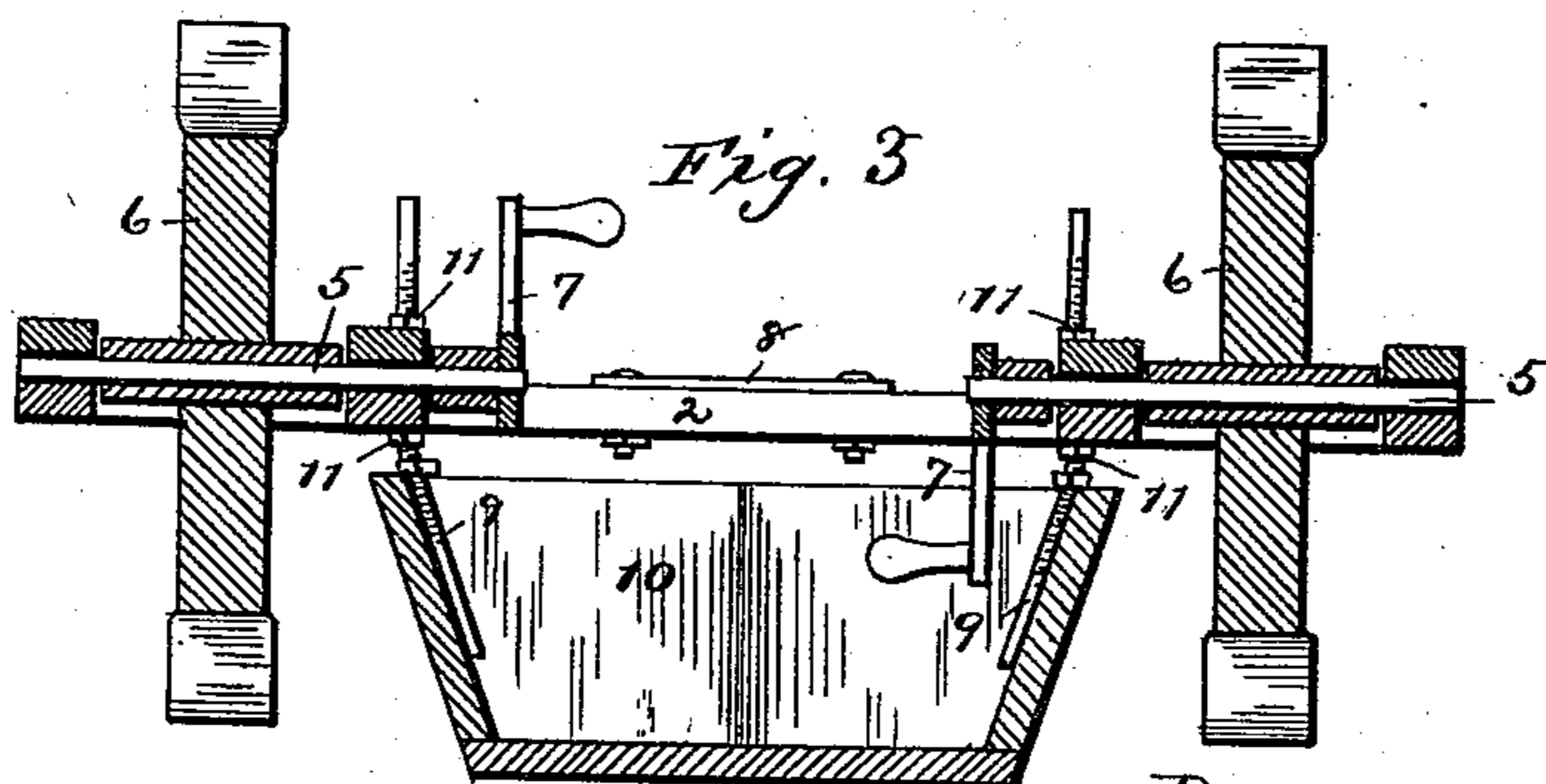
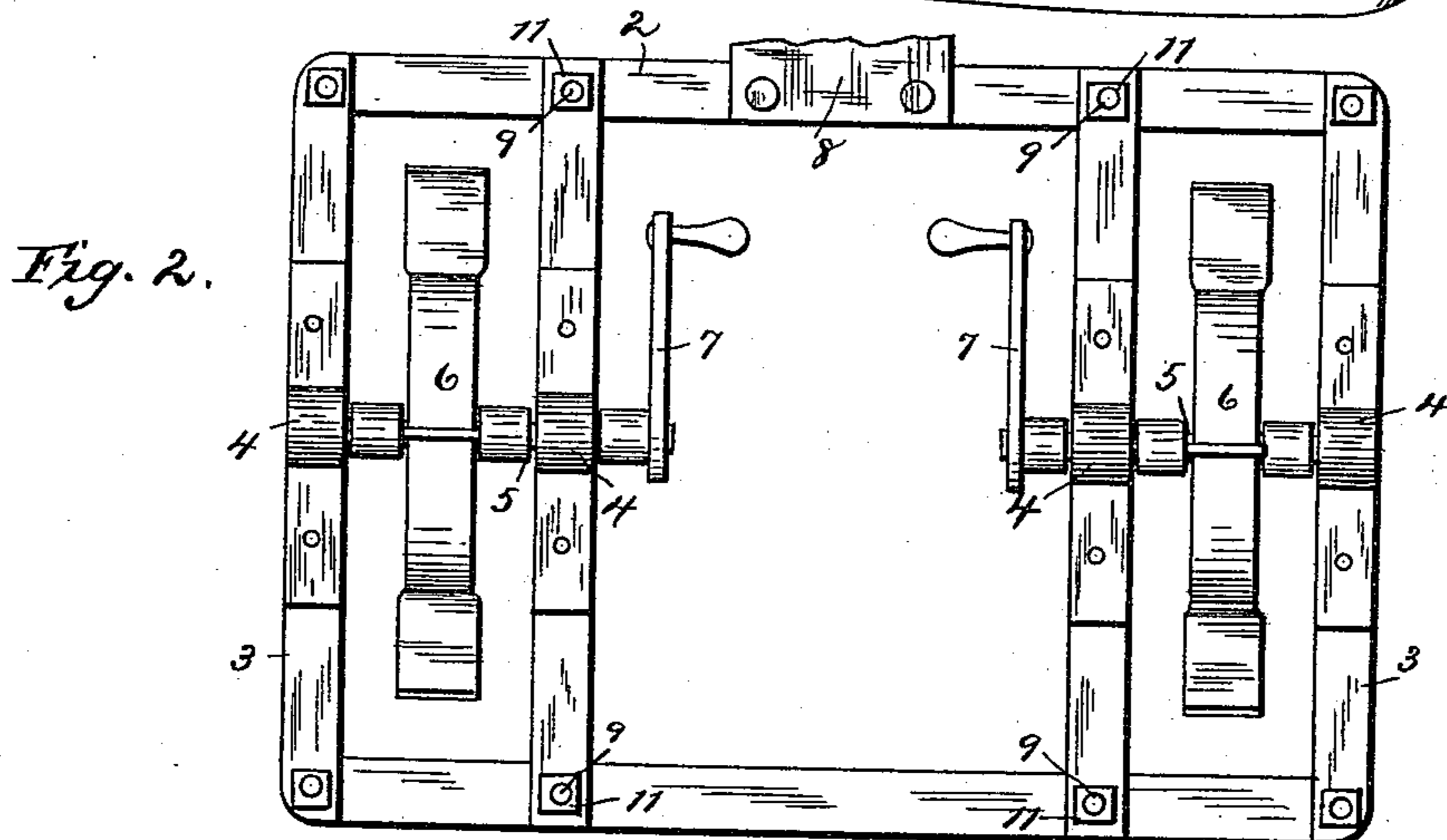
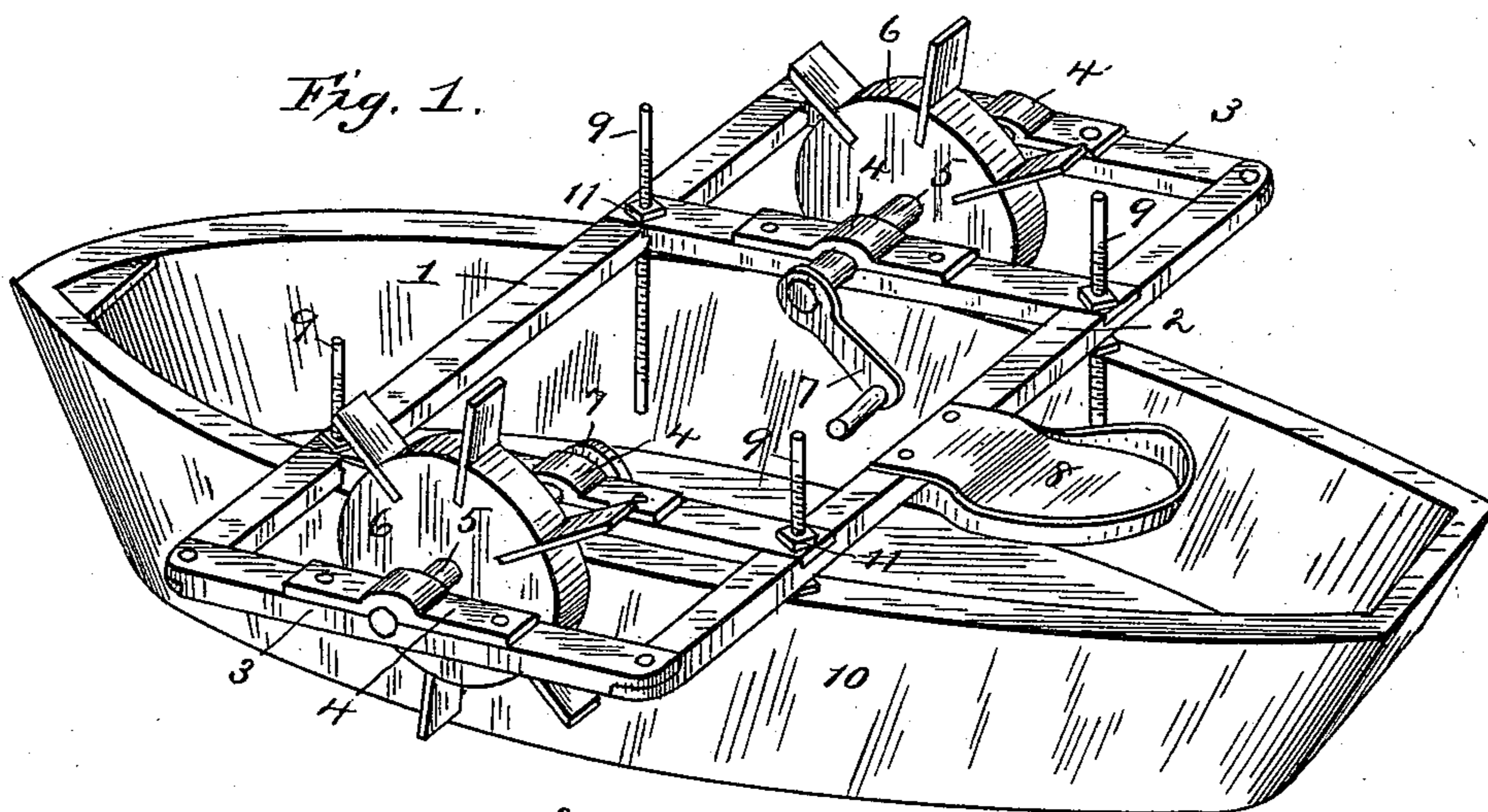


(No Model.)

B. JARRELL.
BOAT.

No. 428,213.

Patented May 20, 1890.



Witnesses:

H. L. Mer.

M. S. Duval

By his Attorneys,

Benjamin Jarrell.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

BENJAMIN JARRELL, OF LEE'S CREEK, OHIO.

BOAT.

SPECIFICATION forming part of Letters Patent No. 428,213, dated May 20, 1890.

Application filed March 20, 1890. Serial No. 344,611. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN JARRELL, a citizen of the United States, residing at Lee's Creek, in the county of Clinton and State of Ohio, have invented a new and useful Boat, of which the following is a specification.

This invention has relation to hand-propellers for boats; and among the objects in view are to provide a propeller adapted to be operated by hand and to be mounted in a suitable frame-work, which frame is adjustably mounted on the boat elements.

With the above objects in view the invention consists in a rectangular frame adjustably applied to the gunwales of a boat, means for securing the same in position, and opposite paddle-wheels mounted upon independent crank-shafts provided with cranks adapted to be operated by hand.

Referring to the drawings, Figure 1 is a perspective of a boat provided with attachment constructed in accordance with my invention. Fig. 2 is a plan of the attachment. Fig. 3 is a transverse central section of the attachment in position.

Like numerals of reference indicate like parts in all the figures of the drawings.

The attachment comprises a rectangular frame-work consisting of front and rear side bars 1 and 2 of a length greater than the width of an ordinary skiff or row boat, so that the ends of said bars will project considerably beyond the gunwales of the boat, and opposite pairs of side bars 3, a pair being arranged at each side of the gunwales.

The side bars 3 form an intermediate space at each side of the boat, and each pair of side bars is provided with opposite bearings 4, and in each pair of bearings there is mounted a transverse shaft 5, said shaft being perfectly independent of each other. Paddle-wheels 6, of any ordinary construction, are mounted upon each of the shafts and rotate with the shafts, which latter are provided with operating-cranks 7, located at the inner ends of the shafts.

A seat 8 is secured to the rear end bar 2, so that the operator is in a position to readily grasp and operate the cranks, either singly

or in unison and in the same or opposite directions, as desired. By operating the cranks from front to rear the vessel will be propelled forward, and by reversing the cranks a backward motion will be given. By operating one crank in one direction and the other crank in the opposite direction the vessel will be sharply turned, as will be readily understood.

In Fig. 1 I have shown my invention applied to a skiff 10 of ordinary construction, the attachment being adjustably connected therewith. From two opposite points of the gunwales there project upward threaded bolts 9, which project through openings formed in the inner side bars 3. These bolts are provided above and below the bars with nuts 11, by which the frame may be raised and lowered, so that the paddle-wheels will not enter too deep in the water when the boat settles by reason of its cargo.

The manner of raising and lowering the frame so that more or less of the paddle-blades will enter the water will be readily understood, in that it is simply necessary, for instance, to elevate the frame, as when the boat is loaded, to loosen the upper nut upon each rod, then screw up the lower set of nuts until the frame is sufficiently elevated, and then tighten the upper nuts upon the frame, so that the same is tightly clamped in position between the two sets of nuts.

Having thus described my invention, I claim—

1. The herein-described attachment for boats, the same consisting of a frame having opposite end bars, opposite connecting pairs of side bars, bearings formed in each pair of side bars, shafts mounted in the bearings and independent of each other, paddle-wheels mounted on the shafts, and cranks arranged upon the ends of the shafts, substantially as specified.

2. The herein-described attachment for boats, the same consisting of a frame having opposite end bars, opposite connecting pairs of side bars, bearings formed in each pair of side bars, shafts mounted in the bearings and independent of each other, paddle-wheels mounted on the shafts, and cranks arranged

upon the ends of the shafts, in combination
with a boat, the adjusting-bolts projecting
from the same and passing through the frame,
and the opposite set-nuts mounted on the
5 bolts and arranged at each side of the frame,
substantially as specified.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in
presence of two witnesses.

BENJAMIN JARRELL.

Witnesses:

JOHN WEST,
JOHN KIRBY.