

L. W. POND.
Boom and Raft Rudders.

No. 138,760.

Patented May 13, 1873.

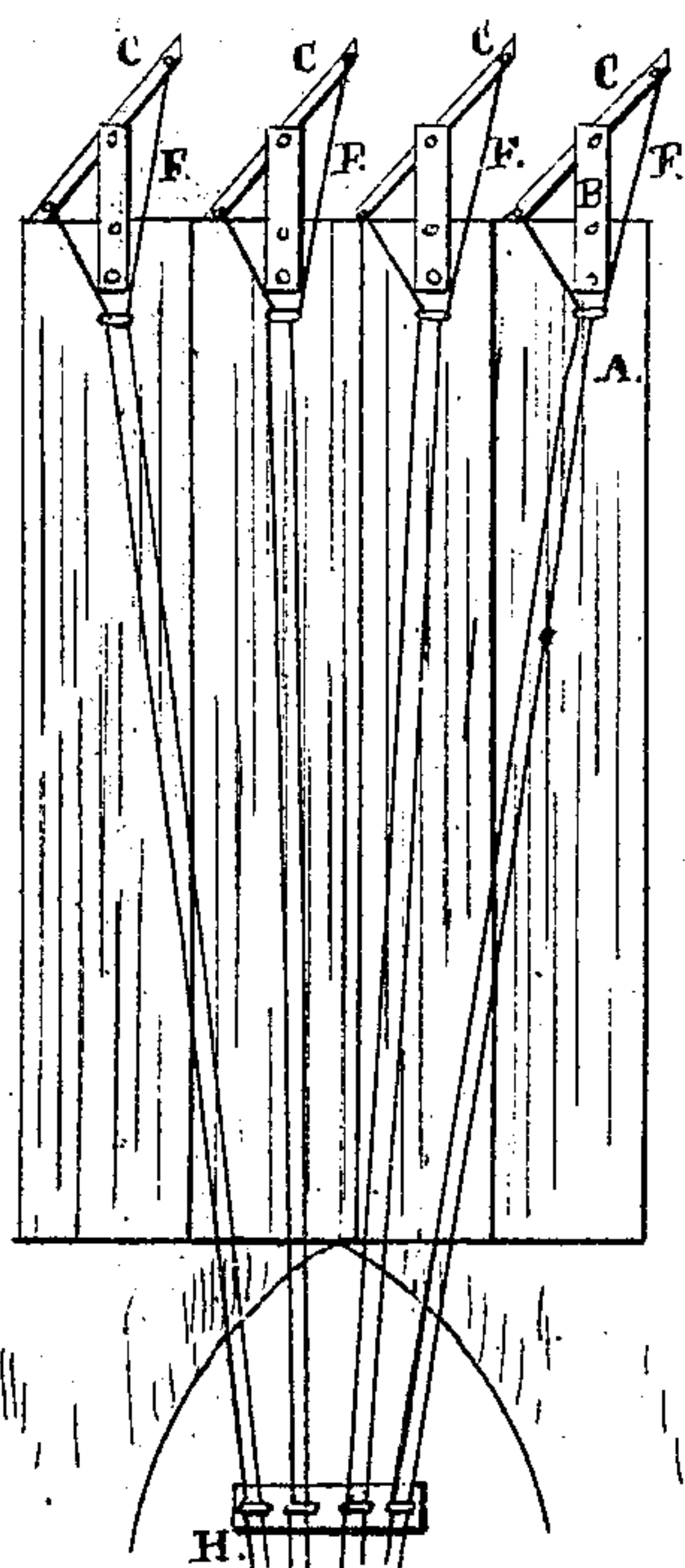


Fig. 2.

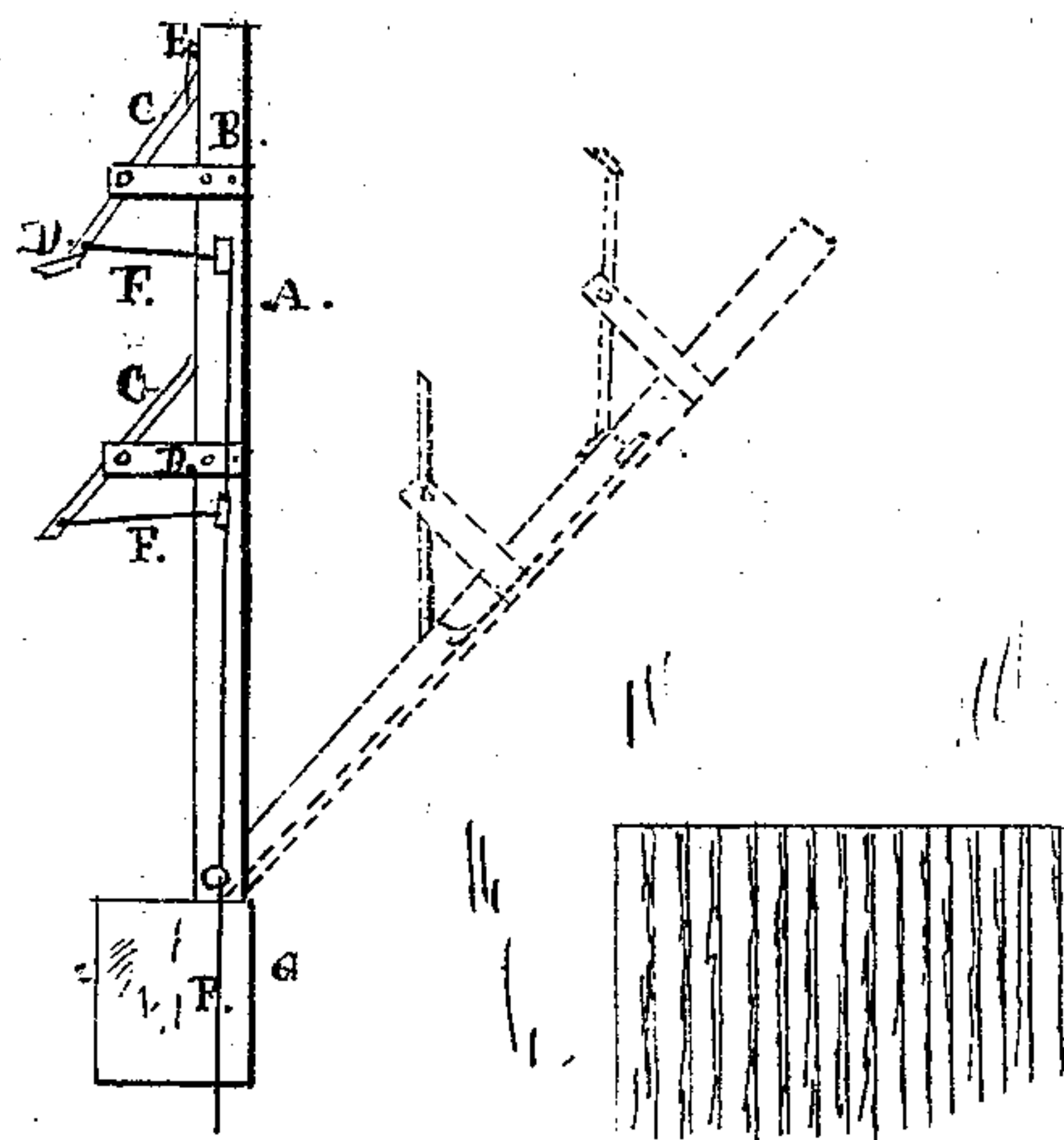


Fig. 1.

Witnesses:
E. J. Smith,
Mary A. Giles

Inventor:
Leri W. Pond
By J. B. Smith
his attorney

UNITED STATES PATENT OFFICE.

LEVI W. POND, OF EAU CLAIRE, WISCONSIN, ASSIGNOR TO HIMSELF AND
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IMPROVEMENT IN BOOM AND RAFT RUDDERS.

Specification forming part of Letters Patent No. **138,760**, dated May 13, 1873; application filed
September 9, 1872.

To all whom it may concern:

Be it known that I, LEVI W. POND, of Eau Claire, in the county of Eau Claire and in the State of Wisconsin, have invented certain Improvements in Boom and Raft Rudder, of which the following is a specification:

Nature and Object of the Invention.

My invention is a rudder to be placed on the side of a boom, and so arranged that when set in one direction will throw the boom across the river, and when set in the other direction will swing the boom open rapidly, or when set in front of a raft will turn it in either direction, as it may be set. The lines for setting the paddle in either direction are on board the boat, and when the raft is wanted to be set in one direction pull on the line reaching to one end of the rudder, and when to the other side pull on the rope running to the other end of the rudder, and thus save the expense of men on the front end of the raft to steer it with oars or sweeps. These rafts are pushed through the water by a steamboat in their rear. The bow of a boat is seen in the drawing pushing the raft along, with the ropes running from the rudder back on board of the boat.

Description of the Drawing forming part of this Specification.

Figure 1 is a view of a boom with the rudder on the lower side of it. Fig. 2 is a view of a raft with the rudders attached to the bow, with the bow of a steamboat, with the lines running back from the rudders to the steamboat.

General Description.

A, the boom stick or raft; B, the standard to which the rudder is hung by the middle; C, the rudder; D, a piece fastened to the end

of the rudder for the water to catch on, throw the rudder open or in a contrary direction; E, another piece on the other end of the rudder for the same purpose as the one on the other end of the rudder; F, ropes to open and close the rudders; G, a piece to which the boom is hung; H, the runner through which the lines from the rudders run on board the boat. The boom is represented swung back, and the river is left open for anything to pass. The rudders are swung back, and the current has pulled the boom out of the way of anything. The dotted lines show the boom swung out against the current to sheer the logs across the river into the side boom. The rope F is pulled in and the front ends of the rudders are pulled against the boom, and the water, striking against the rudders, runs the boom across the current. The water presses the hardest against the outer end of the rudders, so that when the rope is slacked up the rudders will fall off from the boom-end. The water, catching against the piece D or E, swings the rudder back. On the raft two lines to each rudder is wanted, so as to tilt either end of the rudder inward, as may be desired. These rudders will throw the bow of the raft in either direction, as the rudders may be turned, and the raft may be steered on board the boat as well as on the raft.

Claim.

I claim as my invention—

Rudder C, with end pieces D and E, in combination with stationary support B and rope F, substantially as described.

LEVI W. POND.

Witnesses:

J. P. SMITH,
A. T. GILBERT.