

(No Model.)

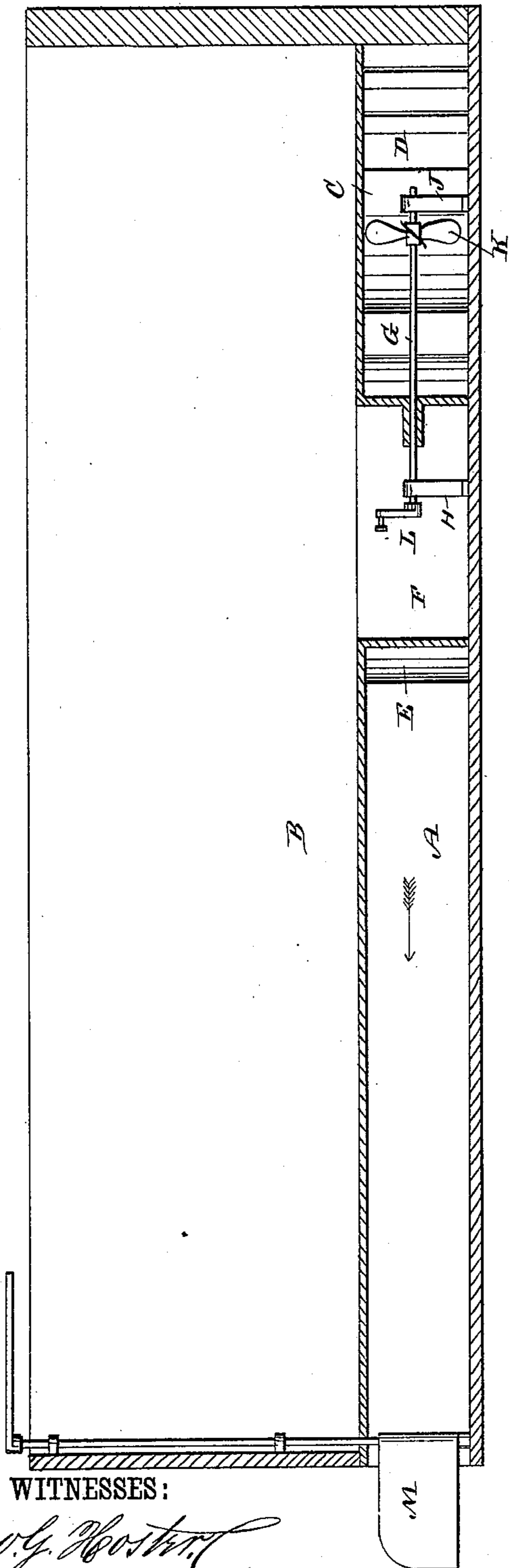
A. McDONALD.

CANAL BOAT.

No. 297,279.

Patented Apr. 22, 1884.

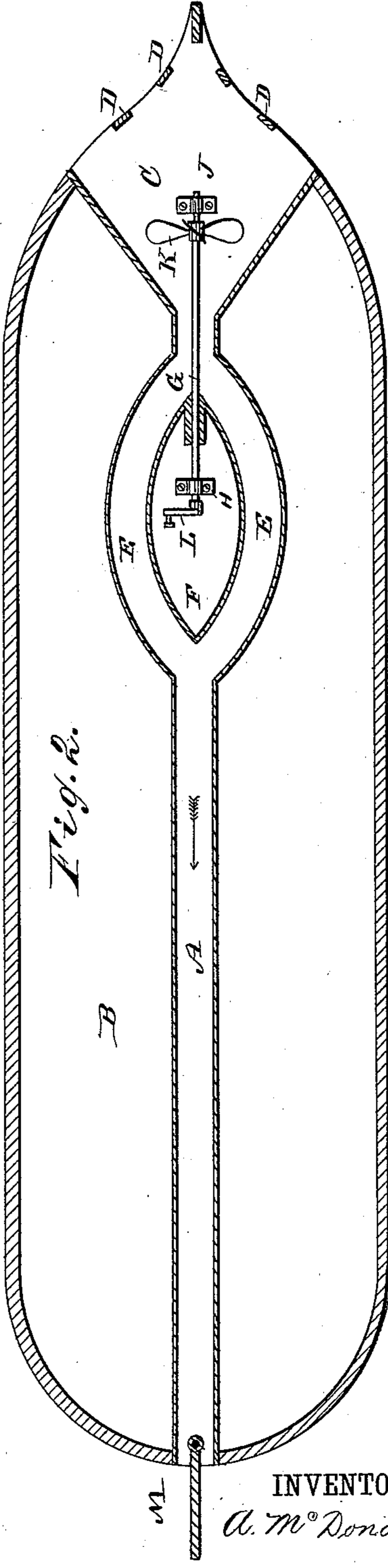
Fig. 1.



WITNESSES:

Thos. G. Hostetler
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Fig. 2.



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ANGUS McDONALD, OF AU SABLE, MICHIGAN.

CANAL-BOAT.

SPECIFICATION forming part of Letters Patent No. 297,279, dated April 22, 1884.

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

To all whom it may concern:

Be it known that I, ANGUS McDONALD, of Au Sable, in the county of Iosco and State of Michigan, have invented a new and Improved Canal-Boat, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved canal-boat which can travel very rapidly, and which does not wash out the banks of the canal.

The invention consists in a canal-boat having a longitudinal tunnel formed on its bottom, which tunnel is widened at its front end, and has two curved branches a short distance back of the front end, and in the front part of which tunnel a shaft is journaled, on which a propeller-screw is mounted.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal sectional elevation of my improved canal-boat. Fig. 2 is a sectional plan view of the same.

A tunnel, A, is formed in the bottom of the canal-boat B from the front to the rear, the ends of the tunnel being open. The tunnel terminates in a lateral enlargement, C, at the bow end of the boat, and at its front end a grating, D, or screen is formed, to prevent drift-wood and other floating objects from passing into the tunnel. Near the front end the tunnel has two curved branches, E—one on each side—between which a compartment, F, is formed. A shaft, G, is journaled in a standard, H, in the compartment F, and a standard, J, in the enlargement C, the inner end of the said shaft being within the compartment F. On the front end of the shaft G a propeller-screw, K, is mounted, which is located within the enlargement C. A crank, L, is formed on the inner end of the shaft G, and on the said crank

means for revolving the shaft are coupled. The rudder M is pivoted at the rear end of the vessel in the usual manner.

The operation is as follows: The screw K draws in the water at the bow of the boat; the water passes through the tunnel A and is discharged at the rear end of the boat. The water discharged assists in propelling the boat. As the water is drawn in at the front of the boat, the bow need not force the water to one side, and thus no billows are formed to wash out the banks of the canal. The water discharged at the rear end of the boat fills the void created by the boat in the canal.

The boat can be propelled rapidly, as it offers less resistance than the boats of the usual construction.

The tunnel can be formed in all boats, and is to be made of iron.

Other boats besides canal-boats can be constructed in the manner described.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The boat having the narrow longitudinal channel or tunnel in its lower surface, with a widened front end protected by a screen or bars, the said channel or tunnel curved laterally on each side of a central chamber and extending throughout the length of the boat, in combination with the propeller and its shaft, with its forward end supported in the widened portion of said tunnel, and its other end provided with means for its operation and supported in the aforesaid central chamber, as shown and described, and for the purpose set forth.

ANGUS McDONALD.

Witnesses:

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