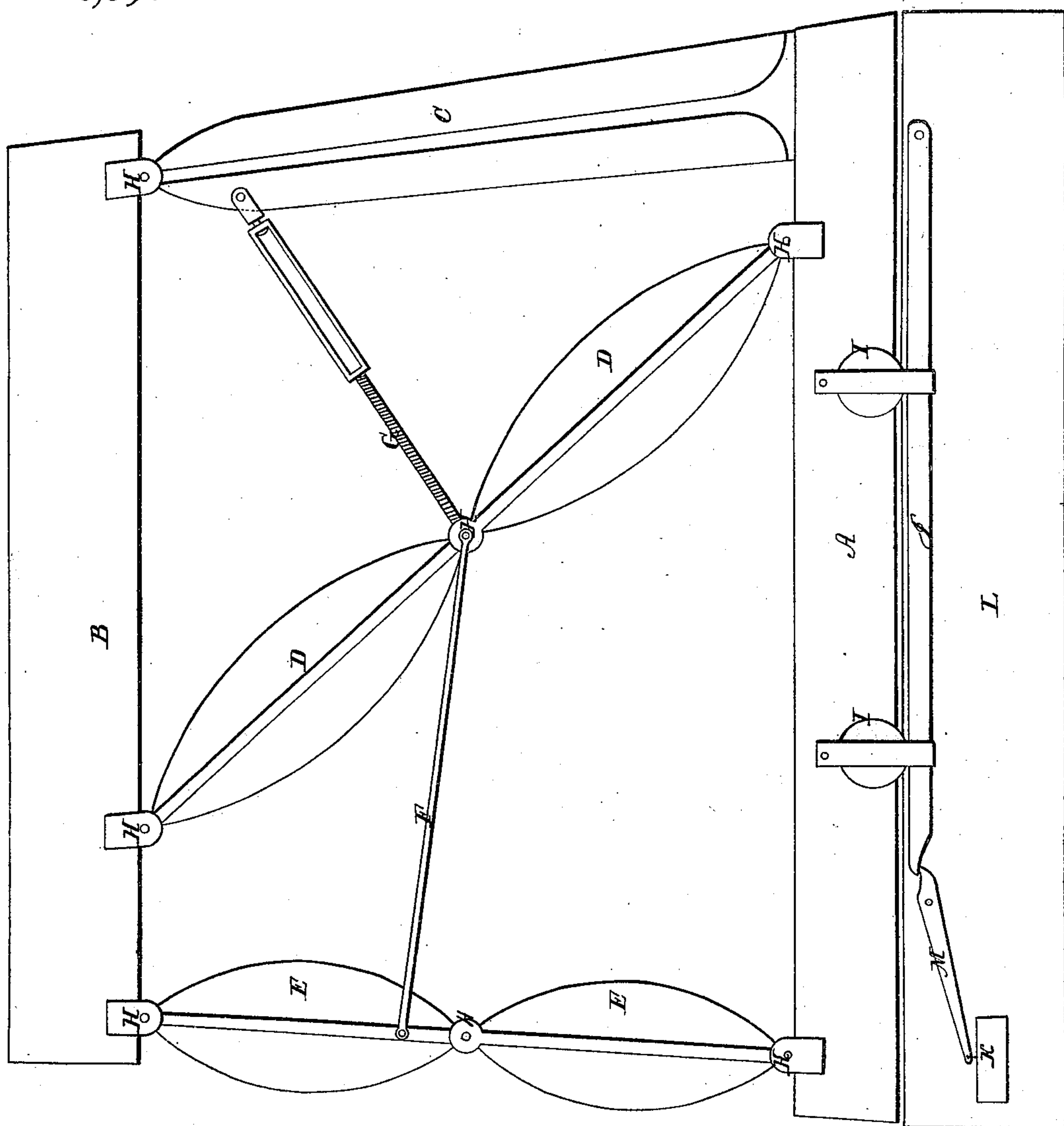


H. J. Crandall.
Floating Dock.

N^o 12,093.

Patented Dec. 19, 1854.



UNITED STATES PATENT OFFICE.

HORACE I. CRANDALL, OF BOSTON, MASSACHUSETTS.

BILGE-SUPPORTER FOR HOLDING VESSELS IN DOCKS.

Specification of Letters Patent No. 12,093, dated December 19, 1854.

To all whom it may concern:

Be it known that I, HORACE I. CRANDALL, born in Westerly, Rhode Island, and now resident in Boston, county of Suffolk, and State of Massachusetts, have invented a new and useful improvement for holding vessels in an upright position, by being hauled under the bilges of the vessel and used in dry, sectional, or railway docks, to which invention I have given the name of "Bilge-Supporters;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

B, is a top bearer, on the top of which is placed the varied heights, and shape of wood necessary, to have them fit the vessels' bilges properly, and the under side rests upon the standards, C, and, E, and is braced by the brace, D. The standards and braces are made with rocker joints, H, and connected together by connecting rods, F, and held in the desired position by the screw, G. The bottom bearer, A, rests upon the bed piece, or log, when loaded, and rests upon the sheave, I, and rail, J, when not loaded, and is lifted by the weights K, and the lever, M.

It will be perceived that when there is

no load upon the bilge supporter, that it will be held up clear from the bed log, L, by the weights, K, and lever, M, and will rest upon the sheaves, I, and rail, J, and can be moved with but little power and as soon as the vessel bears upon it, it will lift the weights K, and the bottom bearer, A, will rest firmly upon the bed log, L, and when the vessel bears hard upon the bilge supporter, and it is desired that the bilge supporter should be taken out then turn the screw, G, the brace, D, and the standard, E, will revolve upon the rocker joints, H, which will lower the end of the top bearer, B, and relieve the bilge supporter from its load, and the bilge supporter can be made to resume its load by placing it in the same position, and turning the screw, G, reversed.

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

The making of bilge supporters, with standards and braces, with rocker, movable joints, with the sheaves, or rollers, and rails, for the bilge supporters to rest, or move upon when not loaded, and for the use of dry, sectional, or railway docks, substantially as herein set forth.

HORACE I. CRANDALL.

Signed in presence of—

JOHN A. LORING,
JONATHAN SMITH.