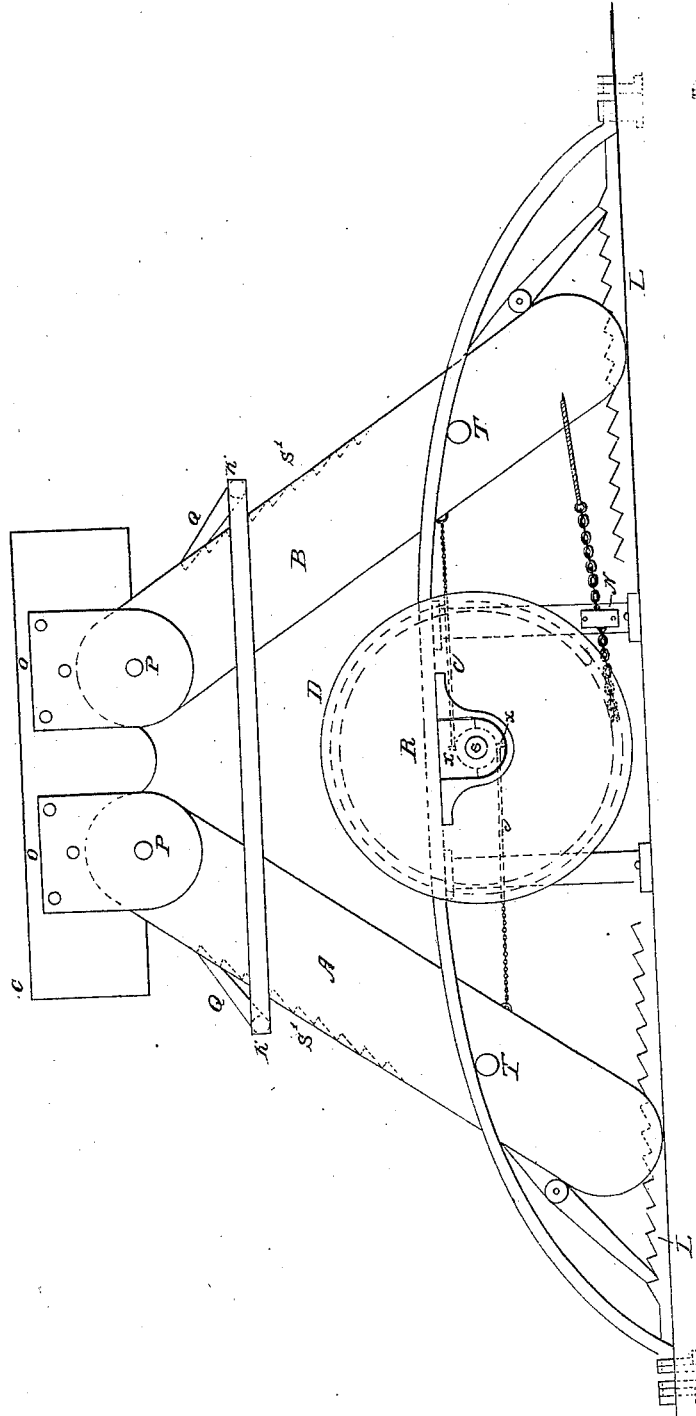


Patented Feb. 20, 1849.



# UNITED STATES PATENT OFFICE.

FRANCIS GRICE, OF WASHINGTON, DISTRICT OF COLUMBIA.

## BLOCK FOR SUPPORTING BILGES AND KEELS OF VESSELS.

Specification of Letters Patent No. 6,120, dated February 20, 1849.

*To all whom it may concern:*

Be it known that I, FRANCIS GRICE, of the city of Washington, District of Columbia, have invented a new and Improved Mode  
5 of Supporting the Keel and Bilge of Ships or Vessels when Docked; and I do hereby declare that the following is a full and exact description.

A and B are two legs 4 feet 4 inches in  
10 length, 9 inches in breadth and 16 inches in thickness, hinged at their head to the block C, D by a pin P and a plate O leaving when perpendicular a space of 5 inches between them. The dimensions of the block are 3  
15 feet in length, 16 inches in thickness and 9 inches in breadth. At a distance of one foot 2 inches from the dock's bottom there will be a shaft S placed athwart the block's direction, supported by two rails R, R and pro-  
20 jecting on one side so as to receive a drum D two feet in diameter, 4 inches in breadth and grooved, around which will be a chain fastened by one end in the groove, and passing at the other end through a ring N, hence  
25 reaching the top of the dock. At a point on the shaft, being the middle distance between the two legs, there will be two eye bolts X, X opposite each other at the end of two diameters of the shaft. A rope or chain  
30 is fastened to each of these eye bolts, one going to the leg A, and the other to the leg B. By this arrangement the chain around the drum being pulled, will cause the shaft to revolve and the chains C and C, coiling on  
35 said shaft in opposite directions, will draw the legs toward each other, and raise the block C, D. The rails R R will prevent all

deviation of the apparatus, and the pin T projecting from each leg and fitting under the rails will counteract all tendency to rise which may be the case when immersed in water. A quadrangular clamp K, formed of metal  $1\frac{1}{2}$  inches square will clasp the two legs, and falling by its own gravity as the legs draw near each other will prevent their separating again. The action of this clamp is moreover secured by ratchets and pawl g g and s s placed as per diagram B and E and another ratchet L fitted to the bottom of the dock and passing through the legs, as shown in the same diagram, will by means of pawls attached to the legs prevent their from separating, acting as they do, in connection with the clamp ratchets above described.

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

The combination of the two legs and the horizontal table supported by them, with the pawls at their feet, and the rectangular frame and its pawls and ratchet, the whole to be acted upon by devices for giving a coincident motion of the legs toward each other and constituting a support for the bilge and keels of vessels when taken in dock, not intending to limit myself to the precise form and number of the parts or to the exact size as described as it is obvious that four legs may be used instead of two or that the number of pawls and ratchets may be multiplied.

FRANCIS GRICE.

Witnesses:

ED. CHAPMAN,  
FRANCIS E. GRICE.