G. Webber,

Grapple.

No. 6,702. Patented Sep. 11, 1849.

Fig. 1.

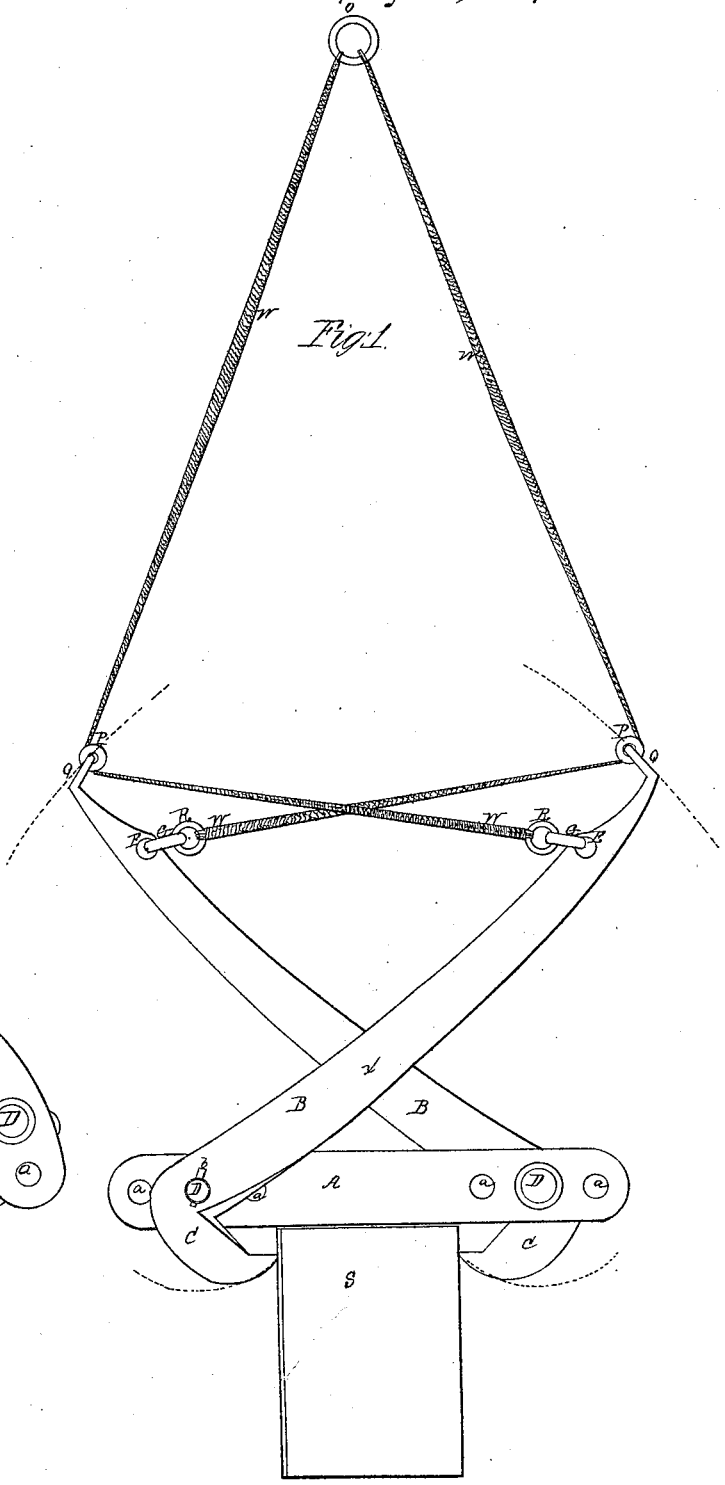
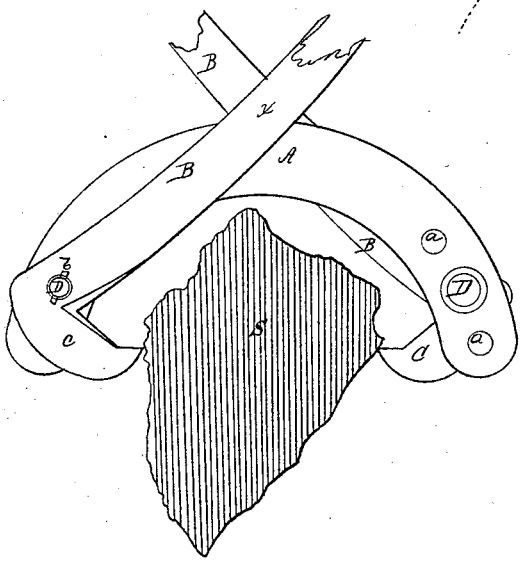


Fig. 2.



UNITED STATES PATENT OFFICE.

GEO. WEBBER, OF PORTLAND, MAINE.

CAN-HOOK.

Specification of Letters Patent No. 6,702, dated September 11, 1849.

To all whom it may concern:

Be it known that I, GEORGE WEBBER, of Portland, in the county of Cumberland and State of Maine, have invented a new and useful Improvement on a machine, to be called the "Webber," for Grasping and Raising Blocks of Stone, Ice, or Other Substances; and I hereby do declare that the following is a full, clear, and exact description, reference being had to the accompanying drawing, making a part of this specification, in which—

Figures 1 and 2 are front elevations.

The same letters in both figures refer to like parts.

The nature of my invention consists in providing a fulcrum bar A, in combination with diagonal jaw levers B, B, so that each jaw lever has a fulcrum in the bar thereby giving this machine more lever to grasp and retain blocks of wood, ice, or stone than if the two jaw levers were united and combined by a bolt passing through them where or at a part where they intersect each other. I also provide one or more rings near the upper end of each jaw lever to which I attach a chain or rope which is made to pass around a pulley secured on the extreme end of the opposite jaw lever, and thus the ropes or chains are made to cross each other below the pulleys and are afterwards united above in a ring, thus making the end of one jaw lever by the pulley, the fulcrum for the chain or flexible lever attached to the other jaw lever, so as to combine a remarkable grasping lever power in a small space for the purpose specified in the foregoing.

A, is the fulcrum bar. It consists of a piece or bar of iron, or steel with one or more holes in it at both ends to receive the bolts D, D, which pass through the jaw-levers, B, B, then through the fulcrum bar, thus uniting the jaw-levers and fulcrum bar. Each bolt D, is what may be called a fixed axis, as the holes in the fulcrum bar and jaw levers are made of such a size as will allow the jaw levers to be moved on the bolts. Each bolt has a broad head on one end and an eye or slot near the other to receive the pin or skiver (*b*) to retain the jaw-levers, and fulcrum bar between the bolt head and skiver.

The bolts can be shifted to unite the fulcrum bar and jaw-levers in any of the holes (*a*) (*a*) so as to increase or diminish the distance between the jaws C, C. S, S, is a block of stone, or other substance. In Fig. 2 the fulcrum bar is made of a different form than that of Fig. 1, to show how it may be best adapted in form for different purposes. There are ice grapples at present in use that have jaws exactly like B, B, but they are united by a bolt passing through them where they cross each other at X. They have no fulcrum bar and therefore cannot exert as much lever power to retain any block of any substance in or between the jaws, C, C, as my apparatus with the fulcrum bar.

E E, are eyes, one in each jaw lever in which is inserted rings G, G.

R is a ring inserted into G.

W, is a chain, or rope attached to R.

On one jaw lever, passing over a pulley P, which is fixed on the extreme end Q, of the opposite jaw lever, and then it is secured and united to a ring O above. The two chains or ropes W, W, thus intersect each other below the pulleys, and the end of each jaw lever by the pulley P is made a fulcrum for the flexible lever W W, thus combining great power in a small space to enable the jaws C C to maintain a great retaining power for elevating masses of rock, ice or any other substances. The gain of lever power to operate the jaws C, C, by this arrangement over grapples in common use, is from P to R on both sides and likewise from X to D on both sides.

Having thus explained my invention I do not claim the jaw levers B, B, united together to form a grapple for holding blocks &c. to be elevated. But

What I claim as new and useful is—

The combination of the fulcrum bar A with the jaw levers B, B, for the purpose and in the manner substantially described.

GEORGE WEBBER.

Witnesses:

WILLIAM WEBBER,

DANL. WINSTON.