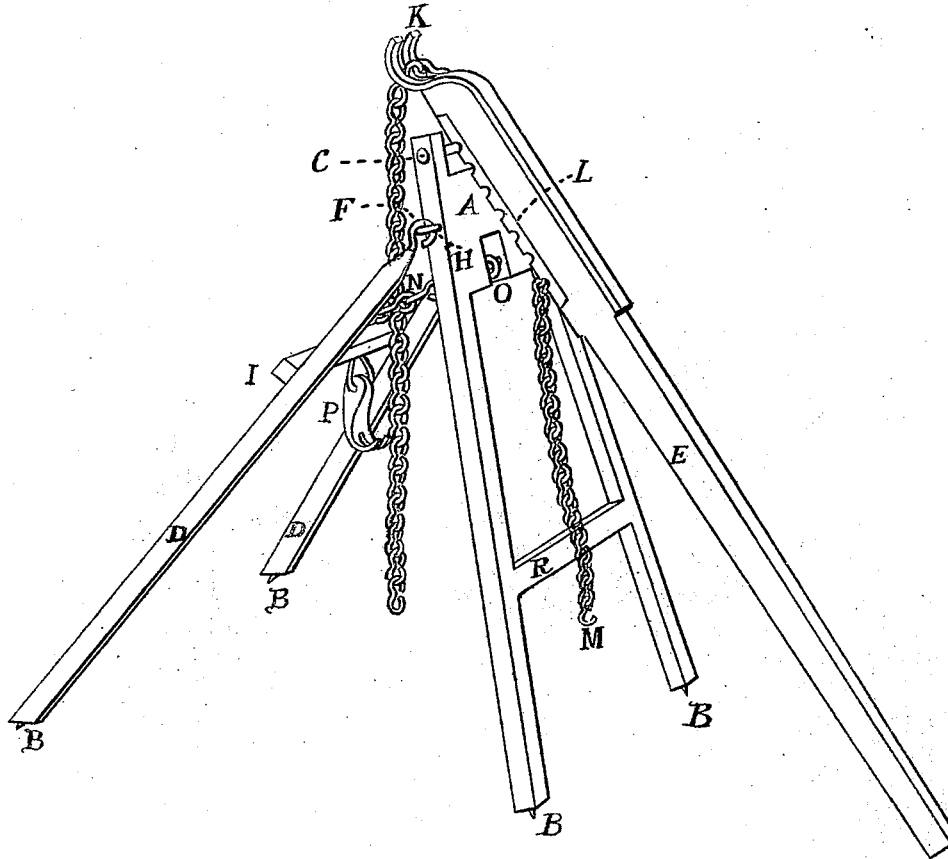


E. DUE.

DEVICE FOR HOISTING AND SETTING STONE.

No. 184,766.

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Witnesses.
F. L. King
J. D. Van Slyke

Inventor.
Elliot Due

UNITED STATES PATENT OFFICE.

ELLIOT DUE, OF WALTHAM, MASSACHUSETTS.

IMPROVEMENT IN DEVICES FOR HOISTING AND SETTING STONE.

Specification forming part of Letters Patent No. **184,766**, dated November 28, 1876; application filed March 10, 1876.

To all whom it may concern:

Be it known that I, ELLIOT DUE, of Waltham, Middlesex county, in the State of Massachusetts, have invented an Improved Device for Hoisting and Setting Stone, of which the following is a specification:

The object of my invention is to provide a long-needed device for lifting stone, setting ashler curbing, posts, and similar work, which shall at once be inexpensive, portable, quickly and easily adjusted and readjusted at pleasure and convenience.

The device may be used to great advantage for a multitude of purposes, which it is not necessary to mention here. Its most common use, however, will be in setting stone curbing in cities, towns, and cemeteries. For this purpose derricks have been used heretofore, but the frequent removals necessary to keep along with the work render the derrick of very doubtful utility for this class of work, so much so that it is generally dispensed with altogether, and the work performed by men with crow-bars. This requires a gang of at least five men to each length of curbing while setting the same.

The invention herein described is so light that it is easily handled and carried about by one man, and, when folded up, is very compact, requiring but little space for transportation.

The accompanying drawing gives a perspective view of my invention, showing the device as it is set ready for use.

In the manufacture of the same I prefer to use wood for the stand, legs, and lever, thus securing a stiff, light, and inexpensive machine.

The fulcrum-stand or frame A being made of wood, the legs or posts are spread at the base an appropriate distance apart, but brought nearly together at the top. They are appropriately braced, and secured at the top and bottom, so that this part of the frame shall be stiff, firm, and reliable. Each post is made to project at the top sufficiently above the fulcrum-bolt, C, to prevent undue lateral motion or sliding of the lever E. The feet B B B B are provided with spurs, to prevent slipping, as the whole device must stand at an angle.

Care should be taken in building to see that

all the parts of the fulcrum-stand A are firmly united, thus preventing any swaying or lateral motion under pressure and weight.

The fulcrum-bolt C serves the double purpose of firmly securing the legs of the stand A and a fulcrum for the lever E, thus receiving the extra wear and strain, which are greater at this point than any other. When built for practical use, no space is left between the bolt on the under side and the wood, thus giving the fulcrum the full strength and solidity of the fulcrum-stand. The legs D D are provided at the top with ring-bolts or hooks F, by which they are connected with corresponding ring-bolts H at the top of, and on each side of, the fulcrum-stand A. Thus adjusted, the legs may be swung to such position as may be desired to give a suitable footing to support the fulcrum-stand in the desired position.

The bar I is not necessarily a part of this machine, as, when in practical use, any ordinary crow-bar will answer the purpose, and perform the function assigned to the bar I. It is attached to the model simply for convenience in illustrating the use of the hook P, hereinafter more fully explained. In the practical working machine the lever E is made of wood, the split or claw hook K being appropriately attached to the same. Beneath the lever E, where it comes in contact with the fulcrum, a corrugated fulcrum friction-iron, L, is placed, and appropriately secured to the lever, which strengthens the lever at the point where strength is the most needed, prevents slipping on the fulcrum, and protects the lever from excessive wear. The hoisting-chain M should be such as is ordinarily used for stone-work. The stay-chain N is appropriately attached to the fulcrum-stand at O. To the opposite end of this chain is attached the claw-hook P.

To illustrate the operation of the machine I will describe its use and operation in setting stone curbing. One man easily carries the stand to the point desired, and sets it up so as to span the ditch prepared for the curbing, with the stone therein to be set. The legs D D are so placed as to furnish the necessary brace and support to the fulcrum-stand A. The chain M being properly adjusted to the stone to be raised, the lever E is thrown over

the fulcrum-bolt C, and the split or claw hook K is depressed, so as to catch the chain M at a low point. The man at the lever, pressing down upon the same, raises the stone. The lever being usually some fifteen feet in length, an immense power is obtained by one man. If the stone is not raised to a sufficient height by the first operation of the lever, the bar I (or any ordinary bar that may be at hand) is thrown across the legs D D, as near to the chain M as may be desirable. The claw-hook P is thrown over the bar I, and hooked onto the chain M, and thus holds the load while a new hitch is obtained with the lever K. Should the leverman be required at some other point, the hook P is again adjusted to sustain the stone at the point to which it has been raised.

It is obvious that by changing the position of the bar I, the position of the stone may be also changed to the point desired. The bar I, once adjusted, is held securely in its position by friction without further attachment. When not in use the chain N and hook P may be thrown back over the brace-bar R, out of the way of the operators.

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

1. The combination of the claw-hooked lever E with a fulcrum-stand, composed and formed as follows, to wit: The triangular stand A and the swinging or adjustable legs D D, formed, arranged, and secured as described.

2. In a stone-hoisting machine, the combination of the stay-chain N and claw-hook P, with the stand A, and the ordinary hoisting-chain M, substantially as shown, and for the purpose specified.

3. In a fulcrum-stand for a hoisting-machine, the projections above and on each side of the fulcrum-bolt C, formed and used substantially as shown and described.

4. The combination of the lever E, hook K, chain M, stand A, chain N, and claw-hook P, substantially as shown and described.

ELLIOT DUE.

Witnesses:

FRANCIS G. KING,
J. D. VAN SLYCK.