STONE-LIFTER.

SPECIFICATION forming part of Letters Patent No. 474,885, dated May 17, 1892.

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To all whom it may concern:

Be it known that I, EMILE THEODORE VIETT, of Charleston, in the county of Charleston and State of South Carolina, have invented certain new and useful Improvements in Stone-Lifters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in stone-lifters or lewis-tools. In the stone-lifters ordinarily employed the shackle is secured in a majority of instances to the three or four sections forming the lifter. In other instances the shackle is secured to the two outer sections, leaving the inner section loose. These arrangements of parts are objectionable, owing to the difficulty experienced in coupling the parts; and the main object of my invention is to overcome this difficulty and at the same time provide means for locking the tool to the stone or object to be lifted as securely as they are locked by the old constructions.

With this end in view my invention consists in certain novel features of construction and combinations of parts, as will be hereinafter more fully described, and pointed out in the claim.

In the accompanying drawing my improvement is shown in elevation. A represents a shackle enlarged at its ends and provided at such enlarged ends with openings a, a', through which passes the bolt c, the small end of said bolt c being provided with an opening d for the reception of a pin e, bent at one end, as shown. C represents the body or main portion of the lifting device, and consists, essentially, of a block preferably of uniform thickness throughout the greater portion of its length and with inclined side edges forming a wedge, the upper end of said block being thickened and provided with a bolt-hole for the passage of the bolt c, carried by shackle A. This upper end of the wedge or block fits easily between the inner faces of the free ends of the shackle and can be secured thereto by simply passing the bolt through the ends of the shackle and wedge. D are the keys, each having smooth flat faces adapted to rest in contact with the inclined edges of the wedge, and preferably with slightly-curved outer faces for contact with the end walls of the dovetailed cavity formed in the stone. The upper ends of these keys are bent or turned outwardly, so as to rest on the top of the stone when the parts are applied.

To assemble the parts in a dovetail cavity formed in the stone, the shackle is first removed from the wedge and the latter dropped in the dovetailed cavity. The keys are then dropped in the cavity on opposite sides of and against the inclined faces of the wedge and lock the wedge against removal. The shackle is now secured to the wedge, as above described, and the stone is ready to be lifted.

It will be apparent that in cutting the dovetail or grooves in different stones the size will vary, and in order to meet this contingency I make the keys D of different sizes, thereby making it unnecessary to increase or decrease the size of the wedge.

In the devices now in use it is necessary to exercise great care in cutting the dovetailed cavity, as any irregularities in the same will prevent the proper registering of the openings in the wedge and keys, and the failure of said openings to register will prevent the insertion of the fastening-bolt; but with my device this difficulty is obviated. The wedge C being the only part attached to the shackle A, any irregularities in the dovetailed cavity will in no wise hinder the operation of my device, for the keys D are separate and distinct parts and are in no way attached to the wedge or shackle; but when the wedge is lowered in the dovetailed cavity the keys are placed on either side of said wedge, their sides being parallel and resting against the sides of the wedge, and when the parts are in position, as above stated, the stone or other object is ready to be lifted.

In the devices now in use it frequently happens that the beveled or dovetailed edges of the hole are not cut straight and when the strain on the lewis or lifter due to lifting is applied, the latter will draw or pull out of the dovetail, or the strain will cause the stone to crumble or break around the mouth of the dovetail, which will also assist the lewis to
leave the dovetail, thus making the operation of lifting stone dangerous.

The foregoing is due to the fact that the three parts forming the lewis are coupled together and any strain imparted to the lewis tends to draw equally on the three parts comprising the lewis; but in my device the wedge is an independent element, and any strain imparted to the latter will in nowise interfere with or move the keys.

It is evident that numerous slight changes in the constructive details of my improvement might be resorted to without departing from the spirit and scope of my invention. Hence I would have it understood that I do not wish to confine myself to the exact form and construction shown, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

The combination, with a single tapering tenon and coupling devices connected with its smaller end, of keys independent of and disconnected from the tenon and provided with approximately parallel faces, as shown, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EMILE THEODORE VIETT.

Witnesses:

W. A. KENYON,
L. W. BISCHOFF.