(No Model.)

O. E. CARTWRIGHT.

LEWIS IRON.

No. 361,927. Patented Apr. 26, 1887.

Fig. 1.

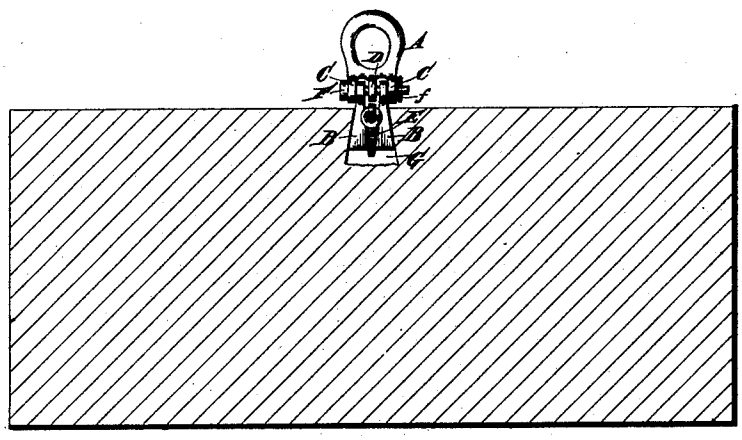
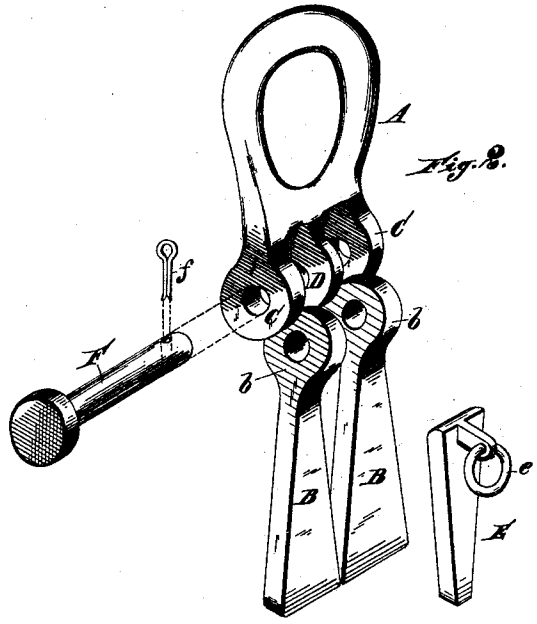


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

OSCAR E. CARTWRIGHT, OF DETROIT, MICHIGAN.

LEWIS-IRON.

SPECIFICATION forming part of Letters Patent No. 361,927, dated April 26, 1887.

Application filed October 2, 1886. Serial No. 215,168. (No model.)

To all whom it may concern:

Be it known that I, OSCAR E. CARTWRIGHT, of Detroit, county of Wayne, State of Michigan, have invented a new and useful Improvement in Lewis-Irons; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists of the combinations of devices and appliances hereinafter specified, and more particularly pointed out in the claims.

My invention relates to improvements in lewis-irons.

The objects of my invention are to provide means for quickly and securely adjusting and locking the dovetail tenons in position, and to provide a device of such construction that the said tenons may be readily adjusted to fit recesses of different shapes in the blocks of stone or other bodies to be raised.

In the drawings, Figure 1 is a sectional view of a block of stone with my improved lewis-iron in position for raising. Fig. 2 is a view showing the various parts of my device in perspective.

A represents my improved clevis; B B, my improved dovetail tenons; C C and D, the supporting-ears, which form a part of my improved clevis; E, a wedge-shaped key for spreading the tenons B B; F, the bolt or pin by means of which the clevis A and dovetail tenons B B are united; *f*, a pin or colter for securing the same in place.

The operation of my device is as follows: The dovetail tenons B B are first placed in the recess G. The wedge-shaped key E is then inserted between them and driven down so as to spread the tenons B B and bind them firmly against the sides of the recess G. The clevis A is then placed in position and bolt F inserted and secured.

I construct my dovetail tenons with both faces inclined, instead of one inclined and one vertical face, as ordinarily constructed. I also construct my improved key of substantially a wedge shape, instead of the usual form, which has its faces parallel.

It will also be seen by reference to the drawings that in operation the key E is not shackled together with the dovetail tenons B B, as in the ordinary construction. This construction permits of the key E being forced farther down between the tenons B B, and thereby spreading them farther apart and locking them more firmly against the faces of the recess G.

It is obvious that this construction of the key admits of a greater amount of adjustment to fit the recess. In the ordinary device recess G must be cut so as to have its faces of exactly the same inclination as the surfaces of the tenons. A little variation renders it necessary to insert additional wedges between the tenons and the surfaces of the recess, thus necessitating considerable extra labor, and at the same time rendering the device less secure. In my device, however, if the recess should be made larger than necessary, a small hole may be drilled in the bottom of the recess G and the key E forced down until the dovetail tenons B are spread far enough apart to engage firmly against the sides of the recess G, thus rendering my device perfectly secure.

I construct my improved clevis with an intermediate supporting-ear, D, which engages the bolt F between the tenons B B, thus preventing the bolt from springing or breaking at this point, which it is liable to do if not supported.

I provide the key E with a ring, *e*, and when the device is not in use the bolt F is passed through the ears C C and D of the clevis A, *b b* of the tenons B, and ring *e* of the key E, thus securing all the parts together.

What I claim is—

1. The combination, in a lewis-iron, of the tenons B, each having both faces inclined, the wedge-shaped key E, a clevis, A, and a shackling-bolt, F, for pivotally connecting the clevis and tenons together, substantially as described.

2. The combination, in a lewis-iron, of the tenons B, each having both faces inclined, the wedge-shaped key E, having the attached ring *e*, the clevis A, and a shackling-bolt, F, for connecting the clevis and tenons and for holding the key, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

OSCAR E. CARTWRIGHT.

Witnesses:
N. S. WRIGHT,
M. B. O'DOGHERTY.