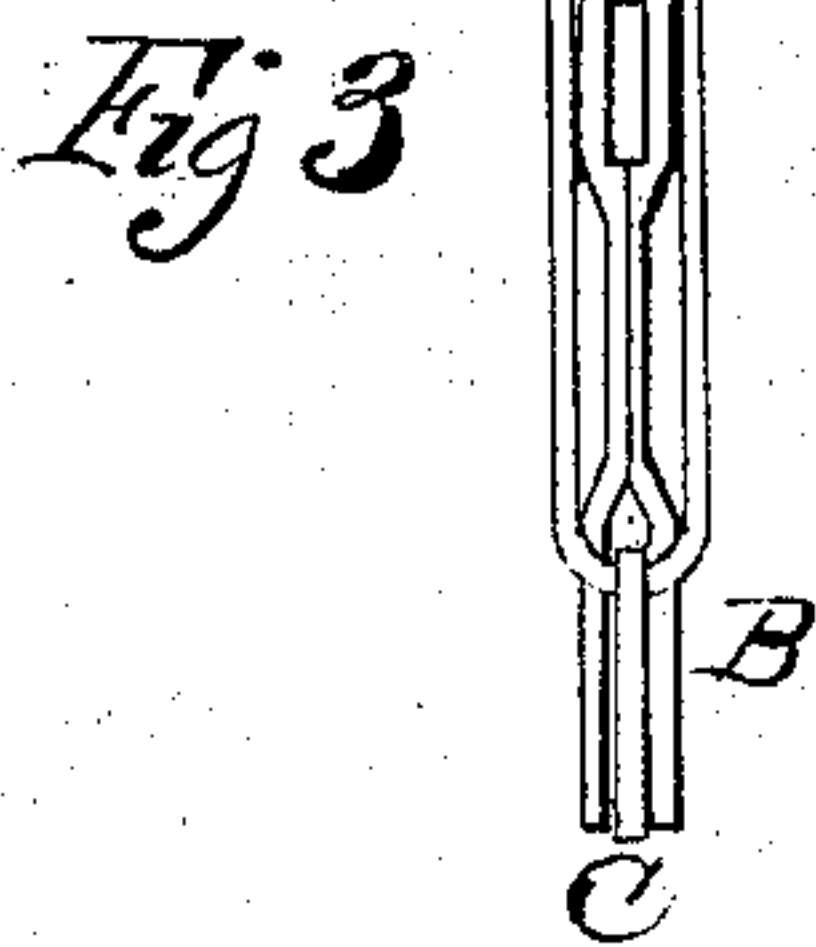
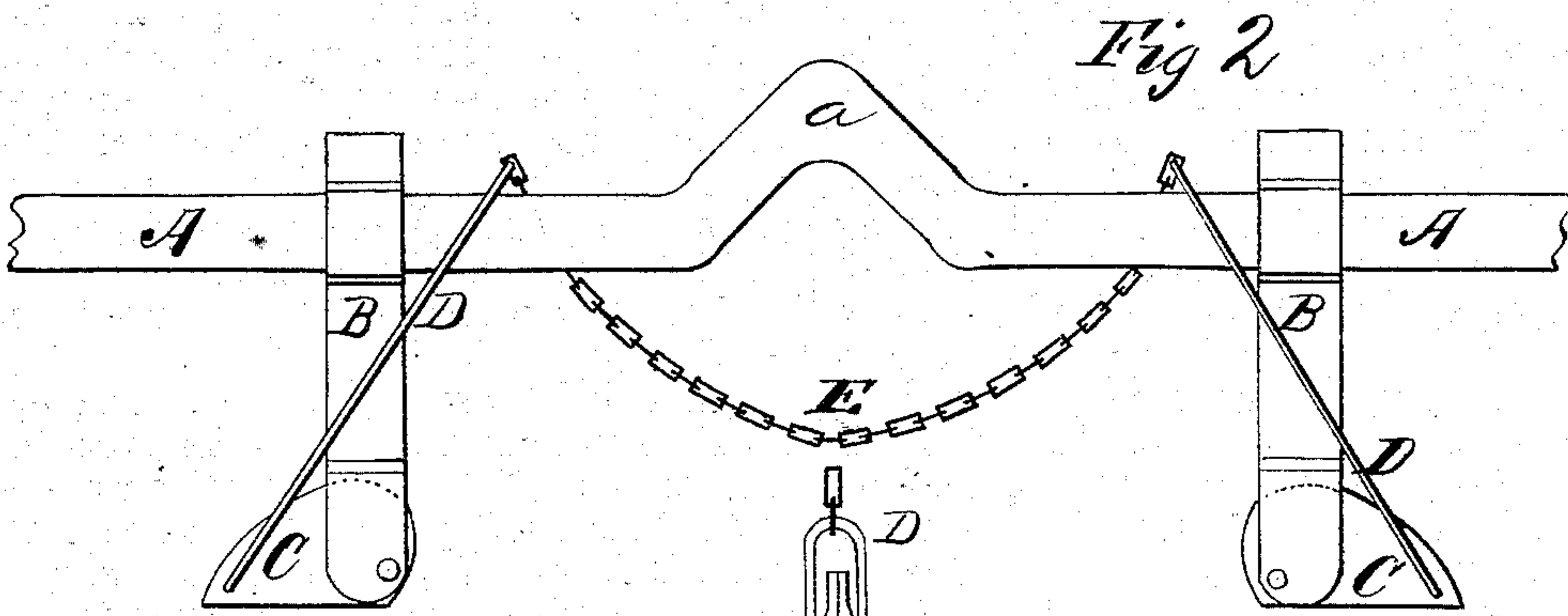
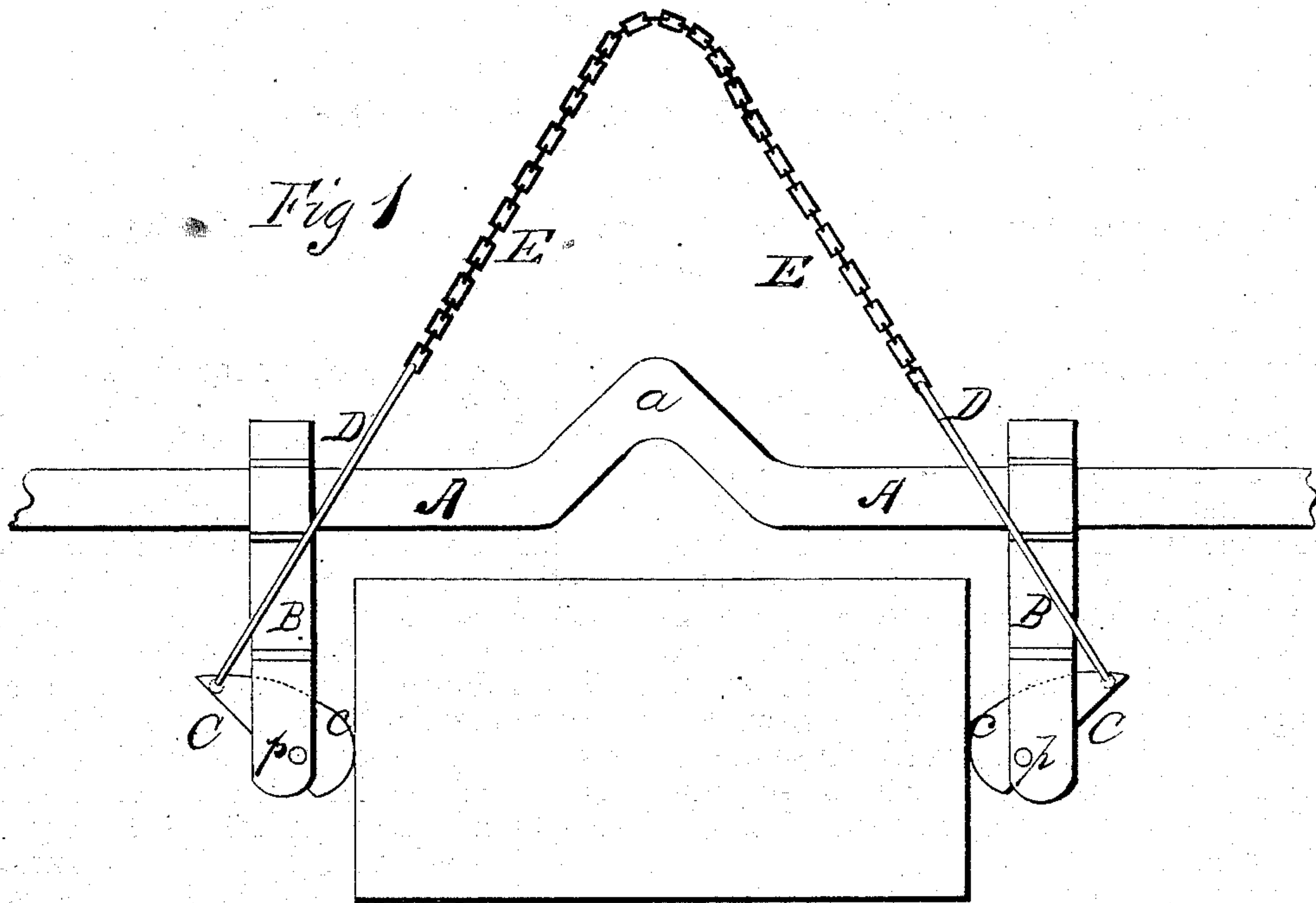


H. H. STUART.  
Lifting-Grippers.

No. 158,332.

Patented Dec. 29, 1874.



WITNESSES  
*Eugene W. Johnson.*  
*Frank J. Chas.*

INVENTOR  
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# UNITED STATES PATENT OFFICE.

HENRY H. STUART, OF CAMBRIDGE, ILLINOIS.

## IMPROVEMENT IN LIFTING-GRIPERS.

Specification forming part of Letters Patent No. **158,332**, dated December 29, 1874; application filed October 31, 1874.

*To all whom it may concern:*

Be it known that I, HENRY H. STUART, of Cambridge, in the county of Henry and State of Illinois, have invented a new and valuable Improvement in Lifting-Gripers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of my device closed upon some object, and Fig. 2 is a view of the same open. Fig. 3 is a side or edge view.

This invention has relation to devices which are especially adapted for seizing and lifting stone and other like ponderous articles; and the nature of the invention consists in the construction of the parts, as will be hereinafter more fully described and claimed.

In the annexed drawings, A designates a strong metallic bar of suitable length, having an angular bend,  $\alpha$ , at or near the middle of its length, upon which are applied, so as to work loosely thereon, two hangers, B. C designates two arms, having cam-shaped ends  $c$ , which are pivoted at  $p$  to the lower end of the hangers B. D designates strong metallic links, which are pivotally attached to the outer ends of the arms C, and which are of sufficient length to permit the hangers B to pass freely through their slots, as shown in Figs. 2 and 3. The outer ends of the links are connected by a chain, E, to which is attached the block and tackle commonly used for lifting purposes.

I use my improved gripe in the following manner for the purpose of lifting a stone: The hangers B, having been made to embrace the stone, are held firmly against it, the chain

E and links D hanging loosely upon the supporting-bar A, as shown in Fig. 2. In this position the cam-shaped ends  $c$  of the arms C will be flush, or nearly so, with the inner edges of the hangers B; but when the lifting power is applied the arms C will be drawn up into position shown in Fig. 1, thereby forcing the cam-shaped ends  $c$  outward, and firmly grasping and holding the stone, which may now be lifted and swung into any desired place.

The object of the bend  $\alpha$  of the bar A is to allow my improved gripe to be conveniently used in connection with a pyramidal or oblong stone; hence it will be readily understood that where used with flat stones this bend is unnecessary, and will not be used.

I am aware that stretchers in which are journaled adjustable cam-rollers, and provided with loops, to which are attached the ends of a rope, have heretofore been employed for hoisting monuments, and, therefore, I lay no claim to such invention, the adjustments for different-sized monuments requiring more time and labor than in my invention.

What I claim as new, and desire to secure by Letters Patent, is—

The metallic bar A, having a bend,  $\alpha$ , at or near its middle, in combination with the adjustable hangers B B, provided with loops at both their ends, pivoted cam-arms C C, and links D D, pivoted to the outer ends of the arms C C, all constructed and arranged to operate substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HENRY H. STUART.

Witnesses:

O. E. PAGE,  
J. P. STACKHOUSE.