

G. CURKENDALL & J. EMEIS.

ELASTIC LINKS FOR HAMMER CONNECTIONS.

No. 174,493.

Patented March 7, 1876.

Fig. 1

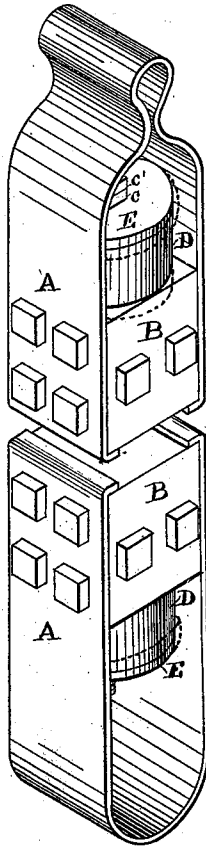


Fig. 3

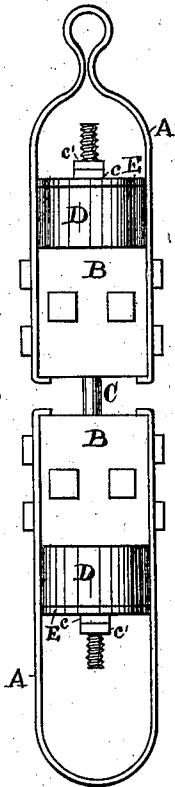
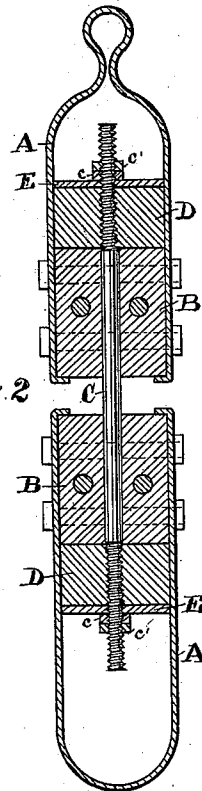


Fig. 2



Witnesses:  
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# UNITED STATES PATENT OFFICE.

GEORGE CURKENDALL AND JULIUS EMEIS, OF DAVENPORT, IOWA.

## IMPROVEMENT IN ELASTIC LINKS FOR HAMMER-CONNECTIONS.

Specification forming part of Letters Patent No. 174,493, dated March 7, 1876; application filed February 1, 1876.

*To all whom it may concern:*

Be it known that we, GEORGE CURKENDALL and JULIUS EMEIS, of Davenport, county of Scott and State of Iowa, have invented certain Improvements in Drop-Hammers, of which the following is a full, clear, and exact description, reference being had to the annexed drawing, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 in the accompanying drawing is a perspective view, Fig. 2 a vertical central sectional view, and Fig. 3 a side elevation, of a device embodying our invention.

This invention relates to improvements in the construction of the hammer-straps of drop-hammers; and consists, first, in making the hammer-strap in two pieces, united by a threaded rod and nuts, and by means of which the length of the strap may be adjusted as desired; and, second, in the arrangement of the springs with said adjusting-rod and hammer-strap, for relieving the concussion attendant upon the use of the ordinary strap at the moment the power acts upon the hammer to raise it.

Referring to the parts by letters, letters A represent the adjacent ends of the upper and lower ends of a hammer-strap, divided at any suitable point, and their other ends attached, respectively, to the lifter and to the hammer, in any suitable and desirable manner, and not shown in the drawings. B B are blocks, one of which is secured in each of the adjacent ends, A, of the hammer-strap, which ends are bifurcated to receive and retain them securely in place. C is a rod, which passes through the blocks B, and is threaded at its ends,

which extend some distance through said blocks, for the reception of the nuts *c* and jam-nuts *c'*. D D are rubber springs, pierced for the passage of the bolt or rod C, and on which they are placed between a washer, E, next the jam-nut and the block B.

For the purpose of holding the parts more securely in place, a recess may be made in the block B, to receive the spring D some distance, and the washers E may have annular flanges to extend down the sides of the rubber springs D, as shown by dotted lines at Fig. 1.

It will be seen that, by adjusting the nuts *c* *c'* on the rod C, the length of the hammer-strap may be adjusted for different thicknesses of dies when used, and that the great strain on the hammer-strap, arising from the sudden jerk (more especially common to drop-hammers in which the hammer is raised by a crank) at the moment the force is applied to raise the hammer, will be relieved by the springs D.

We claim—

1. The screw-rod C, arranged to operate with the blocks B and ends A of a drop-hammer strap, for adjusting its length, substantially as and for the purpose specified.

2. The rods C and springs D, arranged to operate with the blocks B and ends A of the hammer-strap, for relieving the jerking strain on the same, substantially as and for the purpose specified.

GEORGE CURKENDALL.  
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