W. SAMSON.

Endless Tread Horse Power Link.

No. 202,054. Patented April 2, 1878.

Fig. 1.

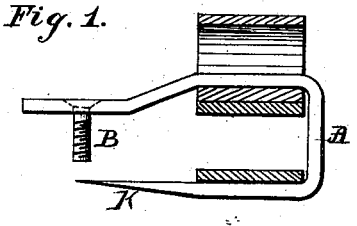


Fig. 2.

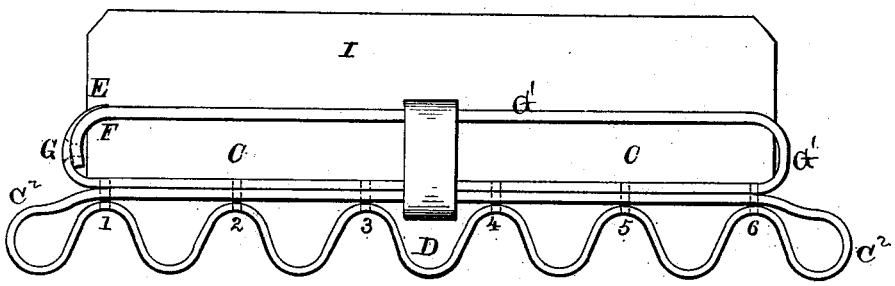
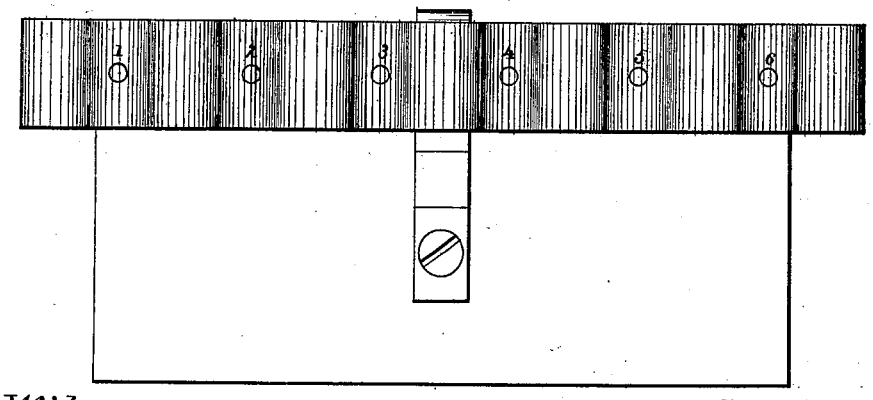


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM SAMSON, OF BERKSHIRE, VERMONT.

IMPROVEMENT IN ENDLESS-TREAD HORSE-POWER LINKS.

Specification forming part of Letters Patent No. **202,054**, dated April 2, 1878; application filed December 30, 1876.

To all whom it may concern:

Be it known that I, WILLIAM SAMSON, of Berkshire, in the county of Franklin and State of Vermont, have invented a new and valuable Improvement in the Mode of Securing Horse-Power Links; and do hereby declare that the following is a full and clear 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 marked thereon.

Figure 1 of the drawing is a representation of the staple herein described. Fig. 2 is a representation of the lap, mortise, staple, and bed of link described herein. Fig. 3 is a reversed view of cogs and manner of fastening staple.

The nature of my invention consists in an improved method of forming the mortise used in securing corrugated sheet-metal links to the lags or tread of horse-powers.

It also consists in the use of a staple, one prong of which is driven into the end of the lag. The other passes through one of the crimps in the bed of the link, and out on the lag far enough to be there firmly secured by means of a screw.

A represents the staple which is used for securing the corrugated or crimped link C^2 to the tread. This staple is made of steel or iron, and the ends are both bent inward in the same direction, and one made longer than the other. The shorter end is made sharp, so as to be driven into the tread, either above or below the mortise, as shown in Fig. 2, while the longer end is so shaped as to allow the two bands to pass under it, as shown in Fig. 1, and has the screw or bolt B passed through it. This staple passes through the depression D in the corrugated tread-iron, and thus rigidly secures the iron to the tread at its center in such a manner that the iron cannot work loose.

In order to prevent the link C^2 from elongating, a bolt, rivet, or screw is passed through it at each crimp or corrugation, as shown at 1 2 3 4 5 6.

In order to form a sufficiently strong backing for this iron, to prevent all elongation, the tenon C has a strap, of band or wrought iron or other suitable material, G′, passed entirely around it from the corner at F, and the end E is made to form a lap, as shown. The two ends are securely fastened together by a rivet, G, or other fastening, and thus a mortise is formed that is independent of the link, and which is secured in position by the same rivets or bolts, 1 2 3 4 5 6, that hold the cogs. This lap E comes up over the corner, and prevents the mortise being worn away at this point by the calks of the horse's shoes, when the tread or lag becomes worn, and thus enables the full strength of the rivet G to be utilized, which rivet enters the tenon in a direction vertical to the strain.

Having thus described my invention, I claim—

1. The mortise G′, formed of iron, and serving as a backing in securing the corrugated link C^2 to the tread or lag, substantially as shown.

2. The mortise G′, having the lap E as means for protecting the corner, substantially as described.

3. The corrugated or crimped link C^2, having a rivet passed through it at each bend or depression, substantially as set forth, so as to prevent elongation.

4. The mortise G′, having the ends united by the rivet G, which rivet enters the tenon in a direction vertical to the strain.

5. The staple A, having one of its ends made sharp and the other one provided with a hole, through which is passed a screw or bolt, B, in combination with the link C^2, whereby the link is held in position, substantially as shown.

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

WILLIAM SAMSON.

Witnesses:

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DANIEL G. FURMAN.