(No Model.)

J. W. I. STEVENSON.

BELT STRETCHER.

No. 298,910. Patented May 20, 1884.

Fig. 1.

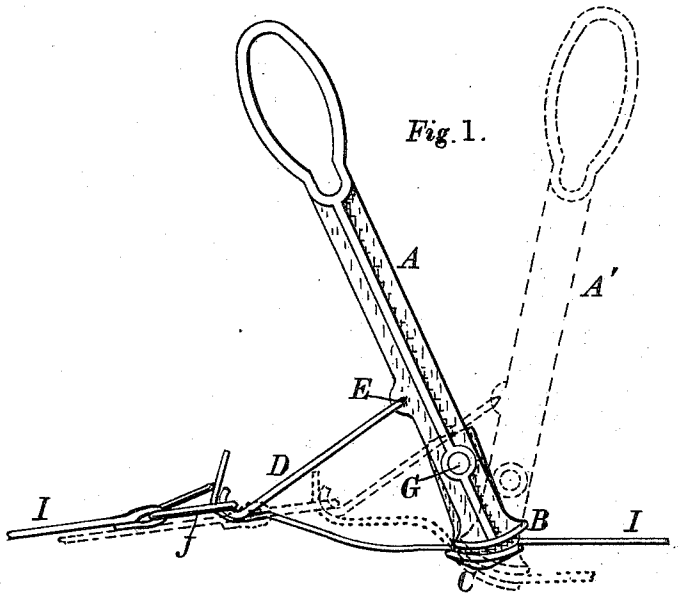


Fig. 2.

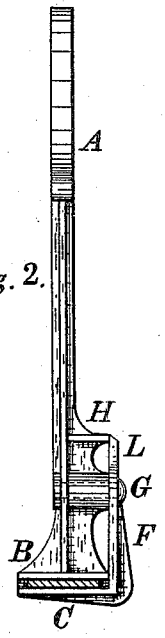


Fig. 3.

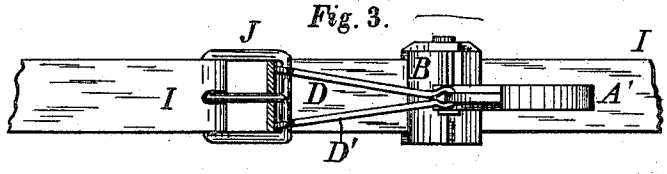
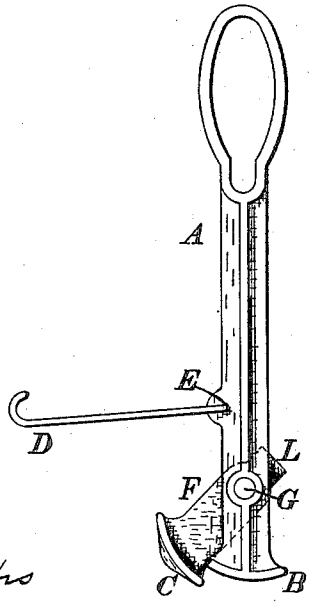


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN W. I. STEVENSON, OF ROCHESTER, NEW YORK, ASSIGNOR TO HIMSELF AND JAMES F. GORDON, OF SAME PLACE.

BELT-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 298,910, dated May 20, 1884.

Application filed July 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. I. STEVENSON, of Rochester, New York, have invented an Improvement in Belt-Stretchers, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to certain improvements in belt-stretchers, designed more particularly for use in tightening the carrying and elevating canvas now generally employed on grain harvesting and binding machines, but capable of being employed for other purposes.

My improvements are fully described in the accompanying specification and drawings, and the novel features thereof specified in the claims annexed to the said specification.

My improvements in belt-stretchers are represented in the accompanying drawings, in which Figure 1 is an elevation representing the manner of using my invention. Fig. 2 is a side view. Fig. 3 is a plan view. Fig. 4 represents my improved belt-stretcher as seen from the side, with the clamping-jaws open.

My improved belt-stretcher consists of a lever or handle, A, provided at its lower end with the eccentric clamping-jaw B, between which and the eccentric pivoted clamping-jaw C the belt is held during the tightening operation. At a suitable distance above the jaws the hooks D D′ are attached to the lever A. These hooks are preferably, for cheapness of construction, made of a single piece of wire inserted through a hole at E in the lever, and doubled on itself, so as to bring the hooks at its ends at a suitable distance apart to engage with the buckle J near its outer sides, as represented in Fig. 3. By bending the wire inward just outside the lever the hooks are secured from being accidentally detached. The clamping-jaw C is attached to an arm or plate, F, which extends upward on one side of the lever A, and is pivoted thereto, so as to swing freely on the pin, screw, or rivet G. The arm and jaw are stiffened on the outside by a suitable rib, and the end L of the arm which extends beyond the pivot is arranged to bear against the lug or projection H, Fig. 2, on the lever, so as to relieve the strain on the pivot caused by the clamping of the belt I between the jaws B and C. The lever A may be ribbed on one or both sides, so as to secure the requisite strength with the least weight. The jaws B and C are formed on a circle or curve, the center of which is eccentric with the pivot G, being located to the right hand of the pivot, as shown in Fig. 4, so that when the belt I is placed between the jaws and the upper end of the lever is swung toward the right hand from A to A′ in Fig. 1 the belt is firmly clamped between the jaws.

The method of using my improved belt-stretcher will be readily understood from the preceding description and an inspection of the accompanying drawings. The perforated end of the belt or strap I being placed between the clamping-jaws, and the hooks D D′ being engaged with the cross-bar at the free end of the buckle on the other end of the strap, the lever A is now swung over from A toward A′ in Fig. 1, drawing the buckle along the free end of the strap and straining the belt until the desired amount of tension is produced, after which the tongue of the buckle is caused to enter one of the holes in the strap, and the instrument is detached by a backward or return movement of the lever.

My improved belt-stretcher is easily and cheaply made, the lever and clamping-jaw C consisting, preferably, of malleable iron, and it will be found exceedingly convenient and efficient in practical use.

I claim—

1. The combination, with the lever A, provided with clamping-jaw B and pivoted clamping-jaw C, of the hooks D D′, arranged to engage with the cross-bar of a buckle near its ends, substantially as and for the purposes set forth.

2. The combination, with the lever A, provided with clamping-jaw B and pivoted clamping-jaw C, of the hooks D D′, formed from one piece of metal, inserted through an opening in the lever and bent into suitable shape, and arranged to engage with the cross-bar of a buckle near its ends, substantially as and for the purposes set forth.

JOHN W. I. STEVENSON.

Witnesses:
A. R. SELDEN,
JAS. F. GORDON.