

(No Model.)

G. D. COINER.

TENSION DEVICE FOR USE IN MAKING FENCES.

No. 399,383.

Patented Mar. 12, 1889.

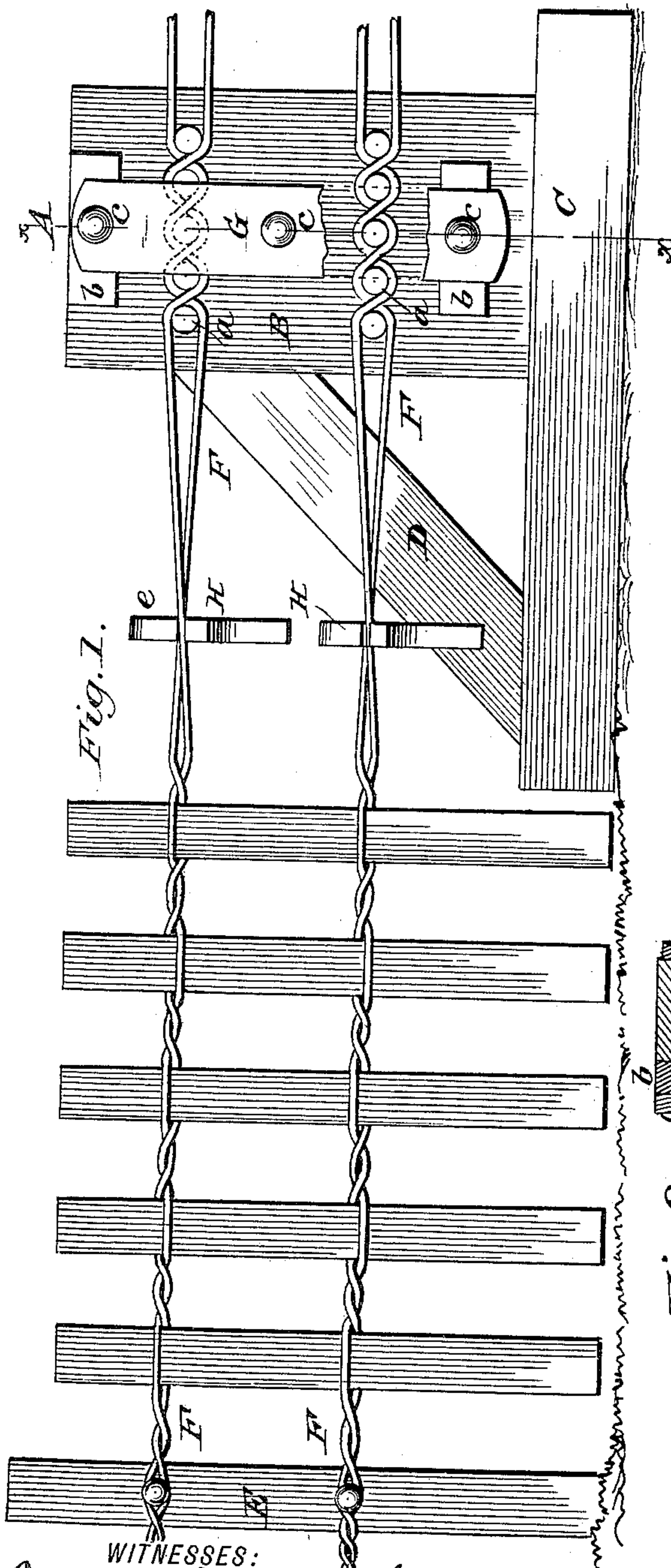


Fig. 1.

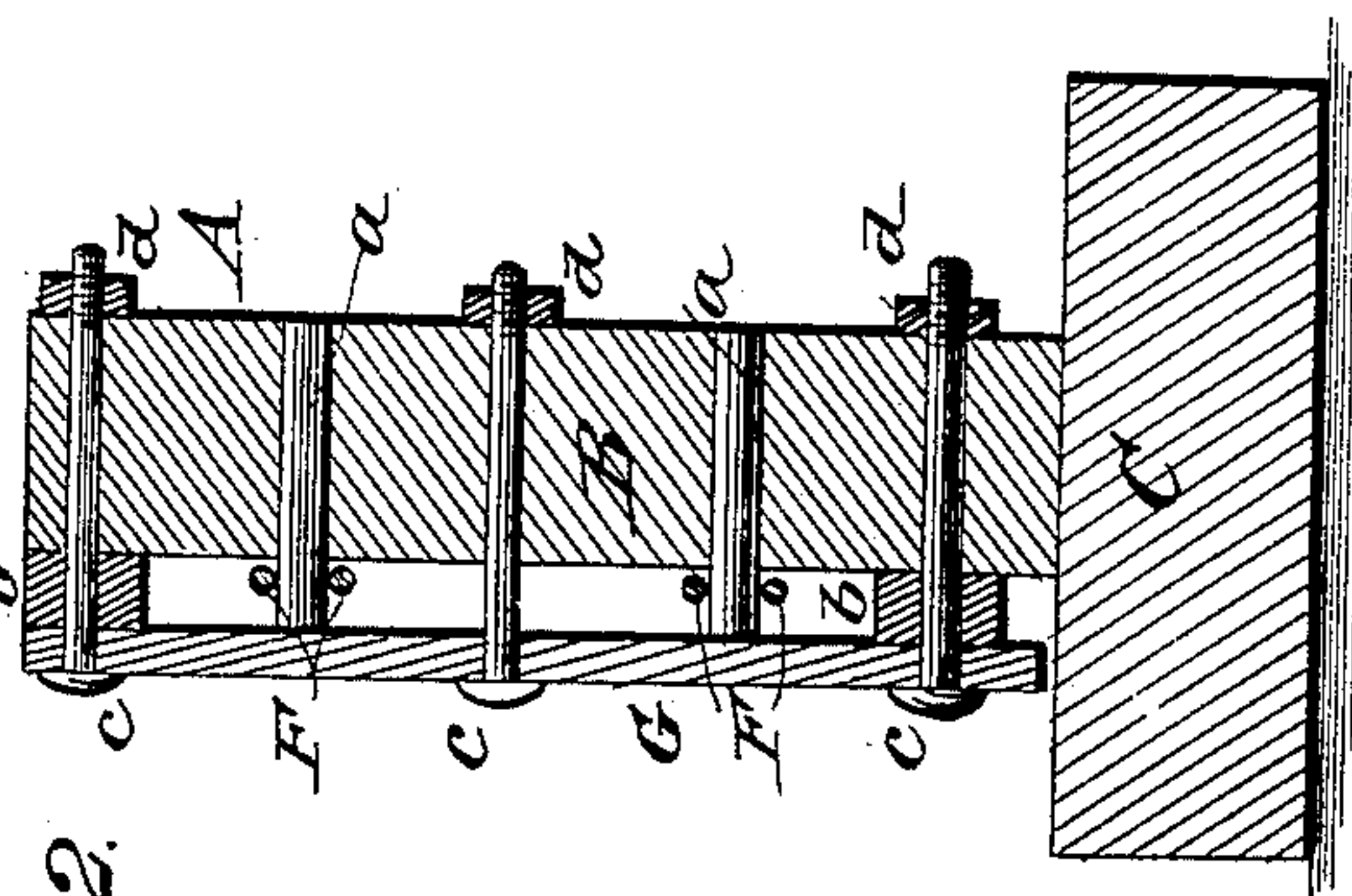
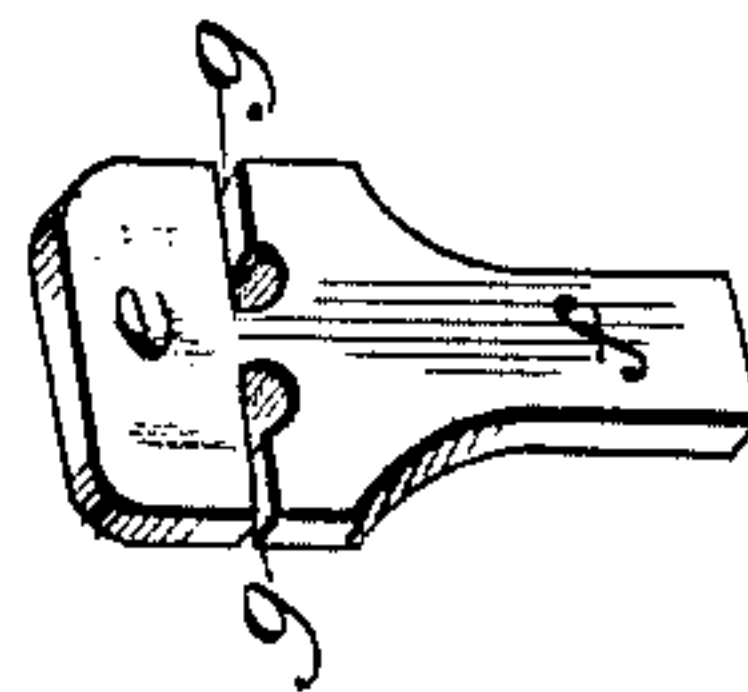


Fig. 2.

Fig. 3.



WITNESSES:

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TENSION DEVICE FOR USE IN MAKING FENCES.

SPECIFICATION forming part of Letters Patent No. 399,383, dated March 12, 1889.

Application filed May 11, 1888. Serial No. 273,586. (No model.)

To all whom it may concern:

Be it known that I, GABRIEL DEWITT COINER, a citizen of the United States, residing at Koiner's Store, in the county of Augusta and State of Virginia, have invented a new and useful Improvement in Tension Devices for Use in Making Wire-and-Picket Fences, of which the following is a specification.

In constructing wire-and-picket fences (of the class in which the pickets are held between two pairs of wires twisted together) the wires have been drawn through tension devices formed, broadly speaking, of a block or plate and a series of pegs or pins. In some cases such blocks or plates have been loosely attached to a windlass anchored to the ground, and in others they have been attached to a post set in the ground at a considerable distance from the one to which the wires are permanently secured. Thus a separate tension device is required for each wire or pair of wires, and supplementary devices or attachments are employed to secure the tension devices proper to the aforesaid windlass or post, as the case may be.

My improved tension device consists of a vertical standard supported rigidly on a relatively broad base, and a removable guard-plate rigidly attached to the face of said standard, but separated from it by a narrow space, and two horizontal rows of pins which project from the standard at points included between the ends of said plate. Thus the said parts are rigidly connected, and one guard serves for both pairs of wires applied to the two rows of pins. The device is moved from point to point as the fence-making progresses, and may be pinned or otherwise secured to the ground.

In the accompanying drawings, Figure 1 is a side elevation of my improved tension device, showing same in operation. Fig. 2 is a cross-section on line *x x*, Fig. 1. Fig. 3 is a detail view of a twister which I employ in making the fence.

A represents the tension device, which consists, in part, of the standard or upright B, rigidly secured to a base, C, which is made sufficiently broad to support the standard. A diagonal brace, D, extends from the standard to the base and assists in holding the

standard in position. The standard B is provided with two or more rows of pins, *a*, which project a short distance from its surface. Two or more rows of holes may be made in the standard and the pins driven in; or the pins may be secured to the upright in any suitable manner.

E represents a part to which the ends of two or more pairs of wires, F, are firmly secured. These wires, which can be drawn from reels, are placed around the pins *a*, and the ends are then fastened to the post E.

In arranging the pairs of wires F on the pins *a*, one of the wires is passed over and the other wire is passed under the first pin. The wires are then crossed and passed over and under the rest of the pins in the same manner. To the upper and lower parts of the standard B are fastened the blocks *b b*. After the wires are placed on the pins a keeper or guard-plate is applied to the face of the standard B for holding the wires on the pins. Said plate is arranged vertically parallel to the standard, but separated from it by the thin spacing-blocks *b*. Screw-bolts *c* and nuts *d* serve as means for securing the plate detachably to the standard, and also for holding the blocks *b* in place. Those pins *a* which are opposite the plate G abut or bear against it, as shown in Fig. 2.

H represents a wrench or twister for fastening the pickets in position. The twister consists of a head, *e*, and a handle, *f*. The head *e* is provided on opposite edges with slots or notches *g g*. These notches are enlarged at their inner ends, as shown in the drawings.

In constructing a fence with my device the starting-post E is first firmly fixed in the ground in the desired position. The tension device A is then placed at any convenient distance from the post E in the line of the fence, and firmly anchored to the ground or fastened by rods or chains to a post or other fixed point. As many pairs of wires as is desired for the fence are then drawn from the reels, carried around the pins on the tension device, and the ends secured to the post E. The guard-plate G is then placed in position and secured by bolts *c*, as shown. The twisters H are then placed between the two wires and turned so as to bring the wires into

the notches. The twist-ers are moved along the wires a short distance from the post E, a picket is placed in the space thus made, and the twist-ers are each given one or more turns to form a twist in the wires. The twist-ers are again slid along the wire a short distance, a second picket is inserted, and the twist-ers are then turned in a direction opposite to the first movement. The operation is continued the same way, the direction of the movement of the twist-ers being reversed with each picket, in order to keep the wires from being twisted between the twist-ers and the tension device.

After the fence is formed as near to the tension device as is desirable, the tension device is carried to another position and again secured.

As many pairs of wires can be used for the fence as desired, the rows of pins used in the tension device corresponding in number to the pairs of wires. A separate twister is used for each pair of wires.

The wires can be passed around a greater or less number of pins in the several rows, according to the degree of tension desired.

The tension should be so regulated that the wires will be readily fed out from the reels as they are taken up while being twisted.

Owing to the enlarged openings at the ends of the notches, the twist-ers can slide easily along the wires, while, the other part of the notches being but slightly larger than the wires, the twist-ers cannot easily become displaced.

Having thus described my invention, what I claim as new is—

The improved wire-tension device, consisting of the vertical standard B, having a broad base, C, to which it is rigidly secured, the removable guard-plate G, rigidly secured to said standard in vertical and parallel position, spacing-blocks *b*, interposed between the plate and standard, and the pins *a*, inserted through the standard and projecting from its face in two horizontal rows arranged between the upper and lower ends of the guard-plate, as shown and described.

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Witnesses:

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