(No Model.)

J. J. CORAM.

FENCE WIRE TENSION DEVICE.

No. 545,682. Patented Sept. 3, 1895.

Fig. 1.

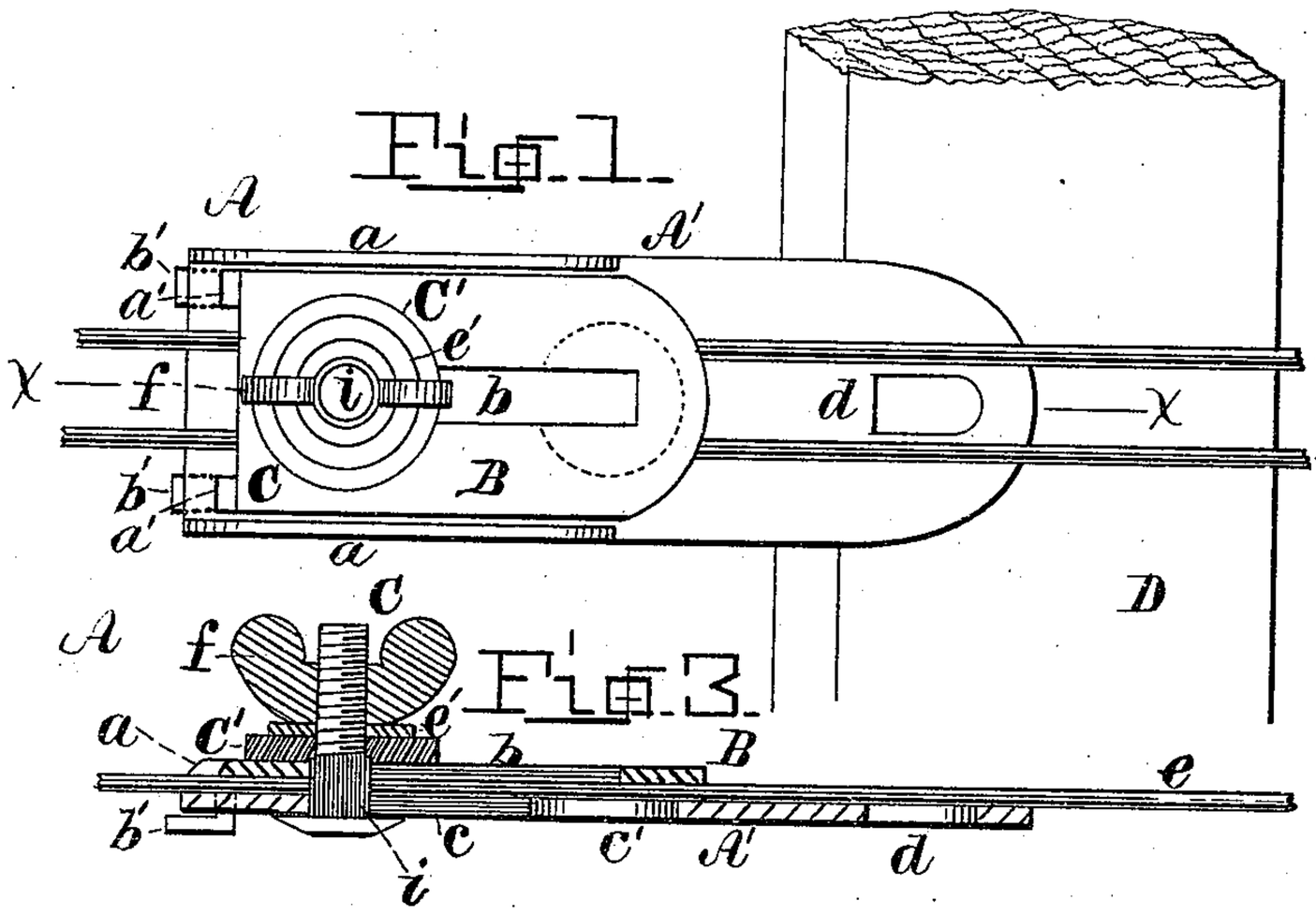


Fig. 2.

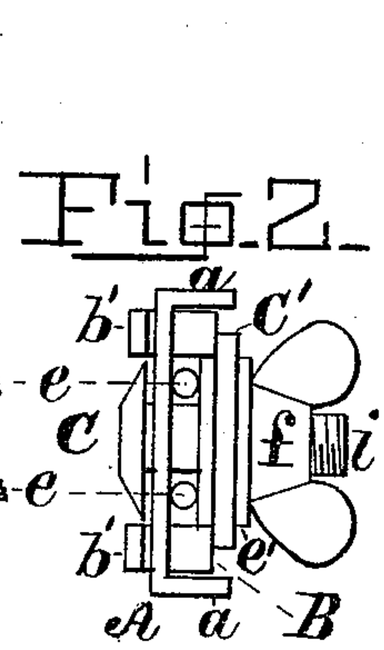


Fig. 3.

Fig. 4.

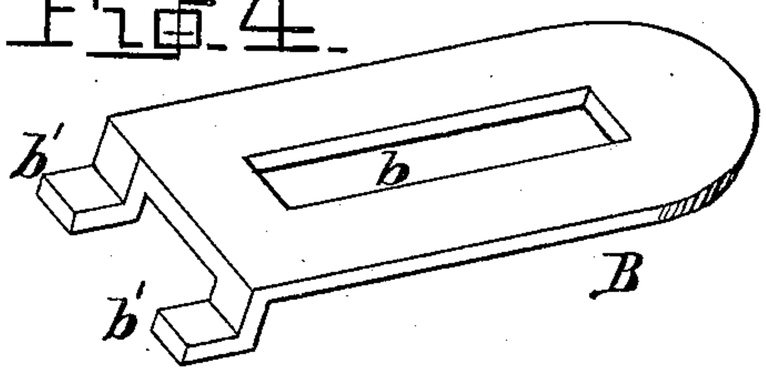
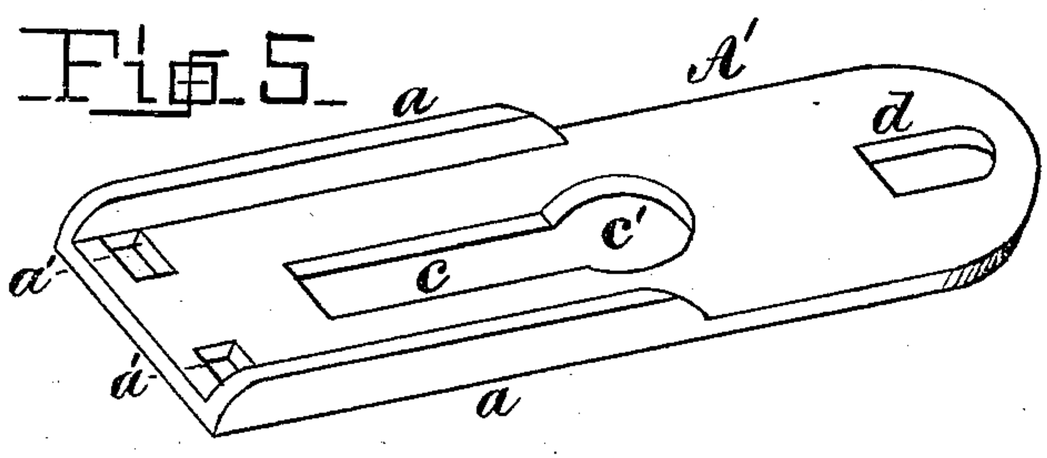


Fig. 5.



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FENCE-WIRE TENSION DEVICE.

SPECIFICATION forming part of Letters Patent No. 545,682, dated September 3, 1895.

Application filed June 13, 1895. Serial No. 552,707. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. CORAM, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Fence-Wire Feeders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in feeders for fence-wires, and is applicable more especially to the feeding of wires in composite wire fences having inserted pickets.

My improved fence-wire feeder is fully described in the specification, and is more particularly pointed out and set forth in the claims.

My improved fence-wire feeder consists of separable interlocked plates, between which the wires are supported in paralliel order, and are held by a semi-elastic clamp, which allows them to be drawn from between the plates with the least possible friction, and, unlike that of ordinary rigid clamping devices, it permits the wires to be moved over the surface of the plates smoothly, without stops or jerks in the movement. Means is provided for shifting the clamp to different points on the plates to vary the pressure to suit the degree of tension required.

Figure 1 is a top view of my improved fence-wire feeder. Fig. 2 is an end view of the same, looking from left to right in Fig. 1. Fig. 3 is a vertical longitudinal section through line X X, Fig. 1. Fig. 4 is an isometric view of the top plate. Fig. 5 is a like view of the bottom plate.

In the drawings, Fig. 1, the fence-wire feeder is shown in the operative position and ready for attachment to the post D.

A is the fence-wire feeder, which is composed of the two oblong plates A′ and B. These plates are preferably struck up from heavy sheet metal, or they may be of thin malleable iron. Plate A′, as seen in the detail Fig. 5, is square or rectangular at the front end, and its rear end is circular, as being best adapted for attachment to a post, as D in Fig. 1, for which it is provided with an oblong hole *d*. Flanges *a* are turned upward at right angles on the edges of the plate A′ and extend from the front end rearwardly a little more than half the length of the plate. Near the front end of plate A′, in transverse line, are two oblong square holes *a′*. These holes have their longest diametric lines in the same transverse line, and each extends nearly to the wall-line of the flange *a*, upon either side, so as to leave a space between them for the wires *e* (seen extending longitudinally through the feeder) between the plates A′ and B, in Fig. 1. In the middle longitudinal line of plate A′ is an oblong slot *c*, which terminates at its rear end (equidistant between the rear ends of the flanges *a*) in a circular hole *c′*, the object of which will be hereinafter described. A top plate B, slightly less in width than plate A′ and of like plane surface, but shorter than the latter, lies upon the wires *e*, between the flanges *a* of the plate A′. Plate B has a rectangular front end, and extending therefrom in line with the holes *a′* are lugs *b′*, which are formed with two right-angled bends and pass downward through holes *a′* and forward under the end of plate A′ in line therewith, thus preventing plate B from being separated from plate A′ during the operation of drawing the wires through the feeder. Plate B has an oblong slot *b*, which registers with slot *c* in plate A′, and a square-shanked screw-bolt *i*, with a round flat head, extends upward from beneath plate A′ through slots *c* and *b*, connecting the two plates A′ and B together. A thick heavy rubber washer C′ on bolt *i* rests upon plate B, and over this is a metal washer *e′* to protect washer C′ from abrasion. A large winged thumb-nut *f* on bolt *i* completes the clamping device. A metal spring-washer may be used instead of the rubber washer C′; but I prefer the latter as giving better results.

The manner of interlocking the plates A′ and B is obvious from reference to the several figures and to the description given. After the lugs *b′* of plate B are inserted through holes *a′* in plate A′ the head of bolt *i* of the clamp is dropped through hole *c′* of plate A′ upon lowering the rear end of plate B and clamp C is slid forward to the point desired and secured. The reverse of this op-

eration is all that is required to separate the plates A′ and B. The clamp C remains at all times (in assembling or separating the plates) attached to the upper plate B. The hole *c′* in plate A′, besides being shown in Fig. 5, is also seen in dotted lines in Fig. 1. It will be noticed that the rear end of slot *b* in plate B extends a little beyond the center of hole *c′* in the plate A′ below it, so that when clamp C is moved to that end of slot *b* the head of bolt *i* will be within the line of hole *c′* in plate A′, and, being a little less in diameter, will be drawn up through it upon lifting the rear end of plate B to separate the two plates, and the clamp C will remain attached to the latter plate. This manner of constructing the feeder so as to separate the plates without the necessity of removing the clamp or separating its several parts will be found to be of very great advantage, as it prevents loss of the latter, besides making the operation of connecting the plates much quicker and easier.

In the position of clamp C shown in Figs. 1 and 3 the pressure upon wires *e* is most direct at the front ends of the plates A′ and B. By loosening nut *f* and shifting the clamp to the middle of plate B and securing it at that point the pressure is evenly distributed upon the whole extent of the wires *e* beneath the plate B. Wires are often uneven from galvanizing them. By shifting the clamp the wires are relieved where they may have been checked in drawing through the feeder from this or from any other cause and stops or jerks are obviated. The flanges *a* on the plate A′ not only prevent any displacement of the plate B when the nut *f* of clamp C may be loosened, but they also prevent either wire, when slackened, from being thrown off from between the plates of the feeder.

I claim as my invention—

1. The improved fence wire-feeder composed of the two separable interlocking plates described, the lower plate being provided with flanges; holes in transverse line in its forward end; a longitudinal slot terminating in a hole at one end of the latter; the top plate provided with lugs extending downward and forward therefrom, adapted to engage the holes in the forward end of said lower plate, to interlock said plates; said upper plate being provided with a longitudinal slot registering with the slot in said lower plate, and the semi-elastic clamp described, having its connecting bolt engaging the slots in said plates, whereby said clamp may be shifted from point to point in the line of said slots, as and for the purpose hereinbefore set forth.

2. In a fence wire-feeder, the two longitudinally slotted interlocking-plates; the lower of said plates being provided with an enlarged hole at one end of its slot; a semi-elastic clamp having its connecting bolt engaging the slots in said plates, the latter being made separable by shifting said clamp to a point where its bolt-head registers with the enlarged hole in said lower plate, when it is drawn upward through the latter, without detaching said clamp from the upper plate, substantially as set forth.

3. In a fence wire-feeder, the combination with the two coincidently slotted plates, provided with interlocking devices, of a semi-elastic clamp connecting said plates, and means for separating the latter without removing said clamp from the upper plate, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN J. CORAM.

Witnesses:
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FOREST SPEAKS.