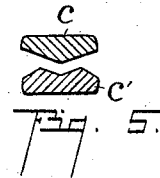
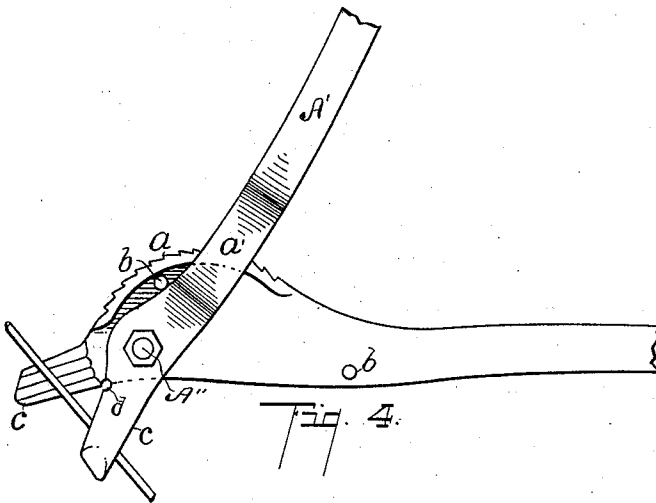
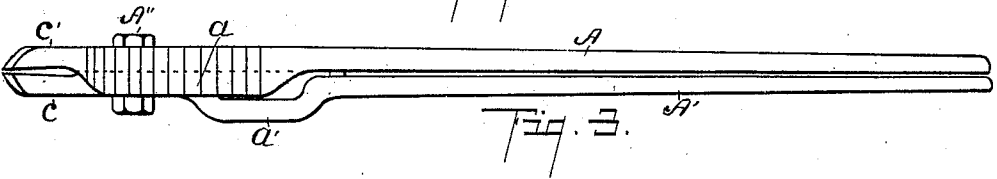
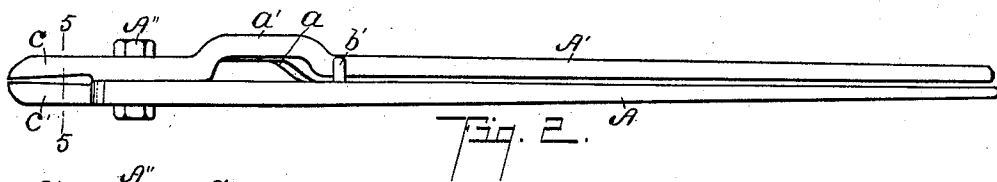
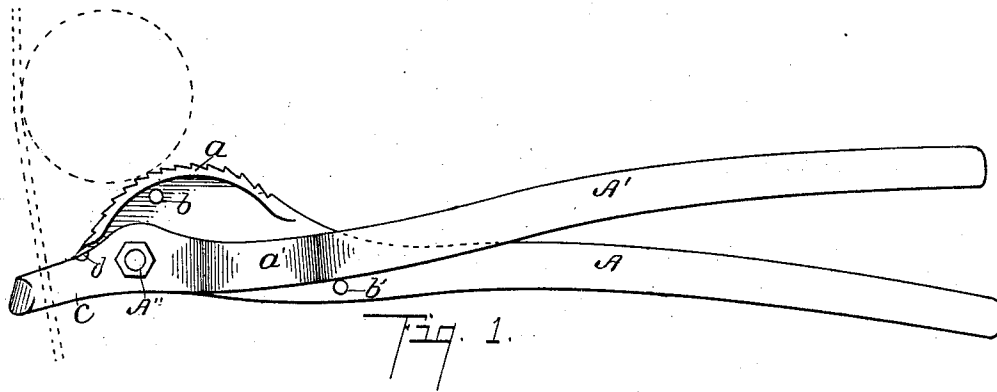


No. 763,507.

PATENTED JUNE 28, 1904.

R. E. QUICK.
WIRE TIGHTENING PLIERS.
APPLICATION FILED JULY 12, 1902.

NO MODEL.



Witnesses:
D. C. Wood
O. W. Earl

Inventor,
Rolla E. Quick
By *Fred L. Crippen*
Att'y.

UNITED STATES PATENT OFFICE.

ROLLA E. QUICK, OF PAW PAW, MICHIGAN.

WIRE-TIGHTENING PLIERS.

SPECIFICATION forming part of Letters Patent No. 763,507, dated June 28, 1904.

Application filed July 12, 1902. Serial No. 115,290. (No model.)

To all whom it may concern:

Be it known that I, ROLLA E. QUICK, a citizen of the United States, residing at the village of Paw Paw, in the county of Van Buren and State of Michigan, have invented certain new and useful Improvements in Wire-Tightening Pliers, of which the following is a specification.

This invention relates to improvements in wire-tightening pliers.

The objects of the invention are to provide an improved construction of pliers adapted to be used as a means for stretching and holding wire.

Another object is to provide an improved construction of wire-tightener by which a wire may be quickly and conveniently grasped and tightened without kinking the same in an objectionable manner.

Further objects will definitely appear in the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined, and pointed out in the claims.

A structure embodying the features of my invention is fully illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of my improved pliers, the same being illustrated in operative position, a wire and post being indicated by dotted lines. Fig. 2 is an elevation view of the structure appearing in Fig. 1, taken from the bottom of the sheet. Fig. 3 is an elevation view of the same from the opposite side to Fig. 2. Fig. 4 is a detail view illustrating my improved pliers in the position assumed in grasping a wire. Fig. 5 is a detail cross-sectional view taken on line 5 5 of Fig. 2.

In the drawings similar letters of reference refer to similar parts throughout the several views.

Referring to the lettered parts of the drawings, A A' represent the levers or handles of the pliers, which are pivotally secured together at A'' and provided with jaws c c',

adapted to close across each other somewhat like a pair of shears, the jaws lying side by side like the blades of a pair of shears, as clearly appears in Figs. 2 and 3. These jaws do not close tight upon each other and are preferably formed one with a concave surface and the other with a convex surface, as appears in Fig. 5, to facilitate their grasping and holding the wire.

The arm or lever A is provided with a projecting curved head *a*. This is preferably widened by a flange to add to the gripping-surface, which surface is preferably serrated or corrugated. The lever A' is offset at *a'* to accommodate the flange of the head *a*. Pins or stops *b b'* are provided to limit the movement of the handles.

I provide a suitable wire-cutter, as at *d*, on the jaws. This wire-cutter might, however, be otherwise located or arranged.

From the foregoing description of the parts it will appear that in use—for instance, in making or repairing fence—when it is desired to use the pliers for stretching or holding the wire the wire may be grasped and the head *a* placed against a post or the like, where it acts as a fulcrum and the handles are used as a lever. The serrations of the head prevent the same slipping. It is also apparent that owing to the arrangement of the jaws but little, if any, kink is given to the wire by this operation. It is apparent that if it is desired to hold a wire which is already in a taut condition it may be easily done with my improved pliers and that the danger of slipping is reduced to a minimum.

I have illustrated and described my device improved by me on account of simplicity in construction and convenience in use. I am aware, however, that they are capable of considerable variation in structural details without departing from my invention. The head need not be specially serrated. The stops could be omitted. The form of the engaging surfaces of the jaws could be changed. However, I have shown these various parts in a superior arrangement, and I wish to claim the structure specifically as well as broadly.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In wire-tightening pliers, the combination of the handles A A' pivotally secured together at A''; jaws c c', the inner face of one of which is concave and of the other convex, said jaws lying in different planes whereby they will move across each other in closing; and a rounded serrated head a on one of said levers, all coating for the purpose specified.

2. In wire-tightening pliers, the combination of the handles A A' pivotally secured together at A''; jaws c c', the inner face of one of which is concave and of the other convex, said jaws lying in different planes whereby they will move across each other in closing; and a rounded head a on one of said levers, all coating for the purpose specified.

3. In wire-tightening pliers, the combination of the handles A A'; a pivot A'' therefor; jaws c c' arranged transversely to said pivot so that they move laterally across each other and conformed to clamp the wire between

their adjacent sides; and a rounded serrated head a on one of said handles, all coating for the purpose specified.

4. In wire-tightening pliers, the combination of the handles A A'; a pivot A'' therefor; jaws c c' arranged transversely to said pivot so that they move laterally across each other and conformed to clamp the wire between their adjacent sides; and a rounded head a on one of said handles, all coating for the purpose specified.

5. In wire-tightening pliers, the combination of suitable handles; a pivot therefor; jaws arranged transversely to said pivot so that they move laterally across each other conformed to clamp the wire between their adjacent sides in closing, for the purpose specified.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

ROLLA E. QUICK. [L. s.]

Witnesses:

ORAN W. ROWLAND,
M. O. ROWLAND.