

UNITED STATES PATENT OFFICE.

HENRY VORDER WULBECKE, OF SAN FRANCISCO, CALIFORNIA.

WIRE SPLICER AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 395,642, dated January 1, 1889.

Application filed June 29, 1888. Serial No. 278,587. (No model.)

To all whom it may concern:

Be it known that I, HENRY VORDER WULBECKE, of the city and county of San Francisco, State of California, have invented an Improvement in Wire Splicers and Cutters; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a new and useful implement or tool, the object of which is to twist the overlapping ends of wire to form the splice, and to cut off wire when needed; and my invention consists in a stock having a novel head forming a bearing by which the implement is journaled or pivoted upon the body of the wire, and having on the side of said head a curved guide for receiving the free end of the opposing wire and twisting it around the first wire on which the head is journaled; and it consists, further, in the stock or handle having a cutting-blade pivoted to it for the purpose of clipping off the ends or other portions of the wire, all of which I shall hereinafter fully describe and claim.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of my splicer and cutter. Fig. 2 is a longitudinal section of same. Fig. 3 is a view showing its use.

A is the stock of the implement, having a handle, *a*, and a head, B. This head consists of two portions or jaws, one, *b*, fixed and the other, *b'*, movable. The fixed jaw has a semi-circular groove or socket in its face, and the movable jaw has a corresponding semi-circular groove or socket in its opposing face, the two sockets forming practically a complete circular bearing. The movable jaw of the head is jointed to the fixed jaw by a hinge at C, and there is a spring, *c*, which holds said movable jaw normally away from the fixed jaw. The movable jaw is fitted over and is guided upon a lug or ear, D, extending from the face of the fixed jaw, and upon the projecting end of this lug or ear is pivoted a cam or eccentric lever, E, which operates against the back of the movable jaw for the purpose of forcing it toward and holding it against the fixed jaw. Upon each side of the head, both on the fixed and movable jaws, are the

curved guide-flanges F, having grooved faces, as shown.

The body or stock of the implement is slotted at *a'* and transversely grooved at *a²*, and in the slot is fitted a cutting-blade, G, pivoted at *g*, and adapted to traverse the transverse groove *a²* on the stock. This blade has a handle, *g'*, the end of which is adapted to be secured, so as to prevent it from swinging open when not wanted, by means of the spring H on the end of the handle *a*, the head of which spring fits into a groove, *h*, in the end of the handle *g'*.

The operation of the implement will be best understood by reference to Fig. 3. In that figure there are opposing wires K and K', the ends *k* and *k'* of which overlap, so that they can be twisted upon the adjacent wires. The center of the splice is held tightly in a suitable vise so as to prevent it from turning. The cam-lever E on the head of the implement is thrown back so as to release the movable jaw *b'* of the head and allow both jaws to be fitted over the body of the wire—say of K. The cam-lever is then thrown forward so as to close the jaws, to prevent the wire from coming out of the circular seat formed in the faces of the jaws, and to properly hold the implement upon the wire in any position, either hanging or otherwise; but the jaws do not grip the wire, merely confining it, there being no pressure upon it whatever, as it is intended to act simply as a journal about which the implement may revolve. When in this position on the wire K, it will be seen that the end *k'* of the opposing wire (which said end has been bent outwardly) lies within the grooved face of the adjacent guide-flange F on the side of the head of the implement. The wire being held by the vise, as described, and the end *k'* lying in the flange, the implement is now revolved about the wire K as a center, whereby the guide-flange forces the end *k'* around with it and causes it to twist neatly and tightly upon the wire K. As many turns may be taken as is necessary, and the end may then be clipped off, if desired, by setting it in the transverse groove *a²* on the stock and clipping it off with the cutter G. The other end of the wire is treated in a similar manner.

The whole operation may be neatly and quickly done, and by having a flange on each side of the head the implement may be conveniently used on both sides of the splice and in every position.

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

1. A wire-splicing implement consisting of a stock having a head with a fixed jaw and a movable jaw hinged to the fixed jaw, said jaws having grooved faces whereby the head of the implement may turn upon the wire, and laterally-extending flanges adapted to bear against the free end of the opposing wire, and to twist said wire around the wire upon which the implement turns, substantially as herein described.

2. A wire-splicing implement consisting of a stock having a fixed jaw and a movable jaw hinged to the fixed jaw, the said jaws being each provided with a grooved face for one of the wires and with outwardly-projecting curved flanges for engaging the free end of the opposing wire, substantially as herein described.

3. A wire-splicing implement consisting of a stock having a head with a fixed jaw and a movable jaw hinged to the fixed jaw, said jaws having a semicircular opposing groove in their faces, whereby the head of the implement may be fitted upon the wire which serves as a journal about which the implement may turn, and a fixed flange projecting outwardly from one side of each head for bearing against the free end of the opposing wire and forcing it to twist around the wire upon which the implement is pivoted, substantially as herein described.

4. A wire-splicing implement consisting of a stock having a head with a fixed jaw and a movable jaw hinged thereto, whereby the head of the implement may be pivoted upon the

wire, and curved flanges on the sides of the head for bearing against the free end of the opposing wire and forcing it to twist about the wire upon which the implement is pivoted, substantially as herein described.

5. A wire-splicing implement consisting of a stock having a head with a fixed jaw and a movable jaw hinged to the fixed jaw, whereby the head of the implement may be pivoted upon the wire, a cam or eccentric lever acting against the movable jaw to hold it against the fixed jaw, and curved flanges on the sides of the head for bearing against the free end of the opposing wire and causing it to twist around the wire on which the head is pivoted, substantially as herein described.

6. A wire-splicing implement consisting of a stock having a head with a fixed grooved jaw and a lug or ear extending from its face, a movable grooved jaw hinged to the fixed jaw and guided upon the lug or ear, a spring for holding the movable jaw back, a cam or eccentric lever pivoted upon the lug or ear of the fixed jaw and operating against the back of the movable jaw to force it up to the fixed jaw, and the curved grooved side flanges on the jaws, substantially as herein described.

7. A combined wire splicer and cutter consisting of a stock having a handle and a head with a fixed and a movable jaw, whereby the head may be pivoted on the wire, and curved flanges upon the sides of the head for twisting the end of the opposing wire, and the cutting-blade pivoted in the stock and having a handle opposing the handle of the stock, substantially as herein described.

In witness whereof I have hereunto set my hand.

HENRY VORDER WULBECKE.

Witnesses:

S. H. NOURSE,

H. C. LEE.