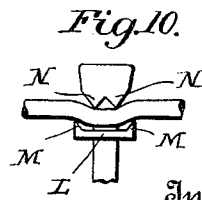
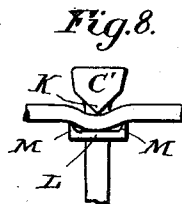
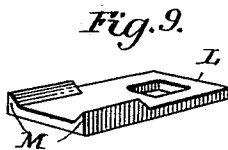
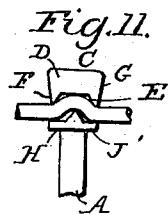
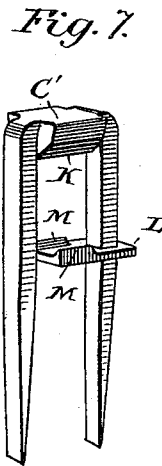
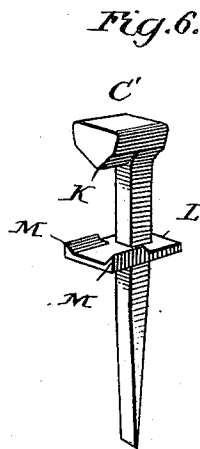
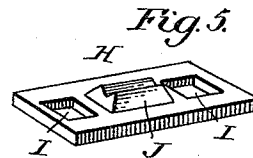
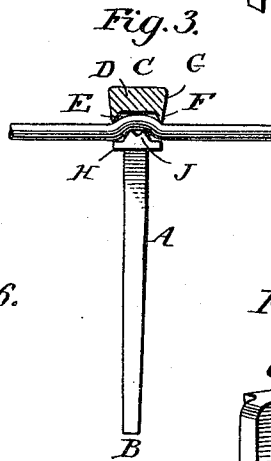
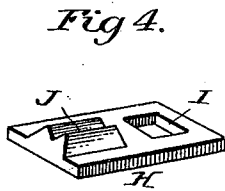
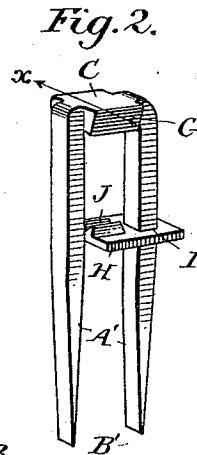
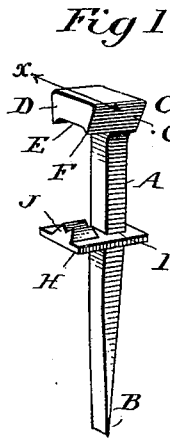


(No Model.)

W. G. HAY.
WIRE FASTENER.

No. 578,100.

Patented Mar. 2, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM G. HAY, OF JACKSONVILLE, MISSOURI.

WIRE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 578,100, dated March 2, 1897.

Application filed April 7, 1896. Serial No. 586,579. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. HAY, a citizen of the United States, residing at Jacksonville, in the county of Randolph and State of Missouri, have invented certain new and useful Improvements in Wire-Fasteners, of which the following is a specification.

My invention relates to fasteners for wire fences; and it consists in a nail or staple the head of which is recessed on its under side and has sharp or angular holding edges at opposite sides of the recess, and a clamping-plate having one or more angular ridges on its surface which are adapted to force the wire into the recess in the head of the nail or staple when the latter is driven into a post.

My invention embodies further details, which will be hereinafter described.

In the accompanying drawings, which form a part of my specification, Figure 1 is a perspective view of a nail and clamping-plate made in accordance with my invention. Fig. 2 is a similar view of a staple constructed in like manner. Fig. 3 is a section on the line *xx* of Figs. 1 and 2, showing the clamping-plate and wire in operative position. Fig. 4 is an enlarged perspective view of the clamping-plate. Fig. 5 is a similar view showing another form of clamping-plate. Figs. 6, 7, 8, and 9 are views similar to Figs. 1, 2, 3, and 4, respectively, showing modified forms. Fig. 10 is a modification of Fig. 8, and Fig. 11 is a modification of the form shown in Fig. 3.

In the drawings, Figs. 1, 2, 3, and 4 represent the preferred embodiments of my invention.

Referring particularly to Fig. 1, A indicates the body of a nail the upper part of which may be of any suitable form in cross-section, while the point B is preferably wedge-shaped and sharp, as shown, so as to easily cut the grain of the wood without splitting the post. The head C of the nail is turned over at a right angle to the body A and is slightly wider than the body. The overhanging part D of the head is longitudinally recessed on the under side at E, and the edges F form angular flanges. The sides G of the head incline outwardly toward the top to facilitate extracting the nail by means of a suitable nail-puller.

A rectangular metal plate H (see Fig. 4) is formed with a perforation I at one end,

through which the body A of the nail may be inserted, the outline of the perforation being preferably the same as that of the nail-section. In front of the perforation I there are two angular longitudinal ridges or projections J, which, when the plate is placed upon the nail, extend up into the recess in the head between the flanges F.

In operation the wire is placed between the head and the clamping-plate, and when the nail is driven into the post the projections J force the wire into the recess and give it a slight bend. At the same time the angular flanges F and the angular ridges J will cut into the wire sufficiently to hold it firmly.

The prongs A' and points B' of the staple shown in Fig. 2 are like the corresponding parts in Fig. 1. The head of the staple is slightly wider than the prongs, as shown in the drawings, and is similar in cross-section to the head of the nail in Fig. 1. The plate H is placed upon one of the prongs A', and the wire is clamped in the manner above described. In connection with the staple I may use a plate having perforations at each end through which both prongs of the staple pass, as shown in Fig. 5.

I contemplate using the staple where great strain is put upon the wire and the nail where the strains are not excessive.

In the modifications shown in Figs. 6, 7, 8, and 9 I have shown the head C' of the nail or staple as having a longitudinal angular or V-shaped projection K upon its under side and a clamping-plate L, which is longitudinally recessed, so that its edges form angular holding-flanges M. It will be evident that when the wire is placed between the plate and the head and the nail is driven the projection K will force the wire into the recess of the plate and it will be bent and firmly held by the flanges of the plate and the projection on the head. I prefer to form the under side of the head with two angular projections N, as is shown in Fig. 10.

In Fig. 11 I have shown a form similar in all respects to that shown in Fig. 3, excepting that instead of the two ridges J there is a single ridge J'.

While I have shown in the preferred form of my invention two projections J upon the plate, it will be evident that a single projec-

tion would answer in a manner; but I prefer to form the plate with two projections, for the reason that they grip the wire at two points and do not bend it so sharply as the single projection would.

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

1. In a wire-fastener, a nail or staple having an overhanging head, in combination with a clamping-plate having its upper face opposing the under face of said head, one of said faces having a pair of angular holding edges separated by an intermediate recess and the other face having one or more angular ridges arranged to register with said recess, substantially as described.

2. In a wire-fastener the combination with a nail or staple having longitudinal angular flanges and an intermediate recess upon the under side of its head, of a clamping-plate having one or more angular ridges upon its surface arranged to register with the recess between the flanges on the head, substantially as described.

3. In a wire-fastener the combination with a nail or staple having longitudinal angular flanges and an intermediate recess upon the under side of its head, of a clamping-plate having one or more angular ridges upon its surface arranged to register with the recess and a perforation at one end through which the body of the nail is adapted to pass, substantially as described.

4. A nail or staple having a head wider than the body and formed substantially at right angles thereto, the under side of the head being recessed longitudinally and provided with angular longitudinal side flanges, substantially as described.

5. A nail or staple having a wedge-shaped point or points, and a head C having the recess E, the angular flanges F, and inclined sides G, substantially as described.

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

WILLIAM G. HAY.

Witnesses:

H. J. POWELL,
J. W. MCCOWEN.