(No Model.)

F. C. NEUHAUS.

PLIERS.

No. 511,091. Patented Dec. 19, 1893.

Fig. 1.

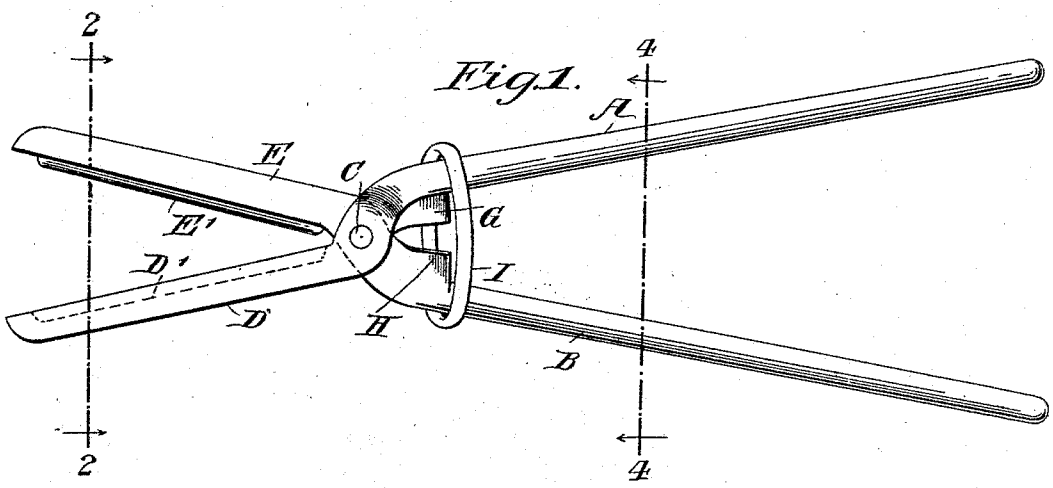


Fig. 2.

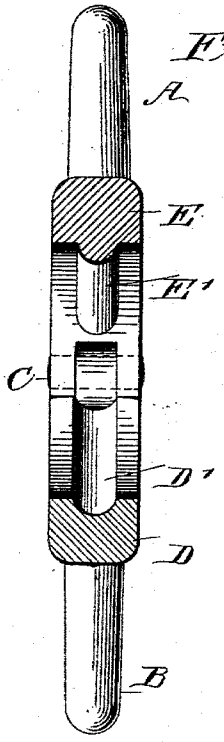


Fig. 3.

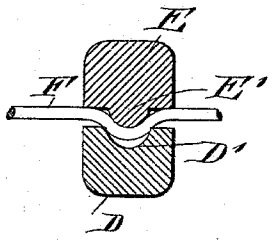


Fig. 4.

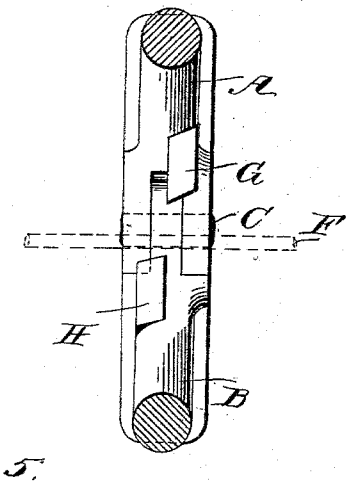
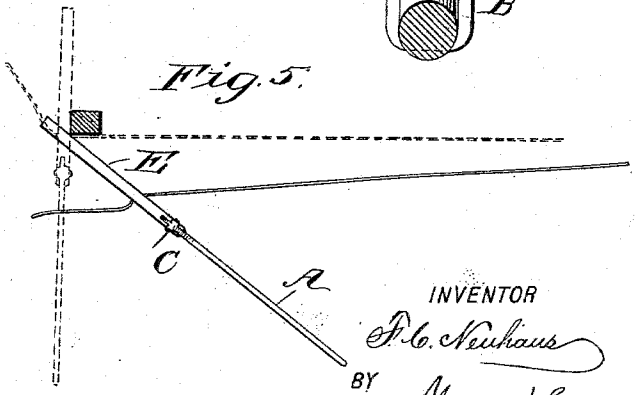


Fig. 5.



WITNESSES:
John A. Rennie
C. Sedgwick

INVENTOR
F. C. Neuhaus
BY Munn & Co
ATTORNEYS.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANK C. NEUHAUS, OF KINKLER, TEXAS.

PLIERS.

SPECIFICATION forming part of Letters Patent No. 511,091, dated December 19, 1893.

Application filed August 22, 1893. Serial No. 483,732. (No model.)

To all whom it may concern:

Be it known that I, FRANK C. NEUHAUS, of Kinkler, in the county of Lavaca and State of Texas, have invented certain new and useful Improvements in Pliers, of which the following is a full, clear, and exact description.

My invention is an improvement in that class of pliers whose jaws are respectively provided with a lengthwise rib and groove.

The feature of novelty is the form of the meeting surfaces of the jaws which adapts them to bite and kink a wire in a novel and superior manner.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement. Fig. 2 is an enlarged transverse section of the same on the line 2—2 of Fig 1. Fig. 3 is a similar view of the same with the jaws closed and the wire clamped. Fig. 4 is a like view of the improvement on the line 4—4 of Fig. 1; and Fig. 5 is a reduced plan view of the improvement as applied.

The improved pliers are provided with the usual handles A and B connected with each other by a pivot C and provided with jaws D and E respectively, of a length about one-half of that of the handles A and B. When the handles A and B are closed, the gripping faces of the jaws D and E come in close contact with each other throughout their entire length so that the wire can be gripped near to or farther from the pivot C of the pliers.

On the gripping face of the jaw E is formed an elongated longitudinally-extending gripping ridge E′ preferably semi-circular in cross section and adapted to register with a correspondingly-shaped and arranged groove D′ formed in the opposite face of the other gripping jaw D. By this arrangement, a wire passed between the gripping jaws at right angles thereto, when the pliers are open, is pressed into the groove D′ on closing the handles A and B, so that the wire is kinked by the action of the ridge E′ pressing the wire into the groove. It will be noticed that the parallel and opposite faces of the jaws hold or grip the portions of the wire which are next the bend thus produced, straight and in alignment, which is necessary to production of the desired form of kink.

In using the pliers for stretching wire in building fences, the operator first inserts the wire between the open jaws near the pivot C and then closes the handles A and B, so as to firmly grip the wire by kinking it, as above described. The operator then places the forward ends of the closed gripping jaws D and E in contact with one side of the post, as illustrated in Fig. 5, and then exerts a pull on the pliers, so as to swing the same horizontally with the post as the fulcrum point. In doing so, the wire and at the same time the pliers, stand at about right angles to the post, and the pliers can be moved transversely along the post, so as to move the wire in contact with the front face of the fence post. The wire can then be fastened, or if not sufficiently stretched a new grip is taken on the wire in the manner above described, and this operation is repeated as many times as deemed necessary to firmly stretch the wire.

As illustrated in Figs. 1 and 4, a pair of nippers is formed on the pliers, the said nippers comprising the cutting blades G and H arranged on the handles A and B respectively near the pivot C.

In order to hold the pliers in closed position after the wire is clamped, as above described, I provide a ring I fitted to slide on the handles A and B, so as to hold the latter in a closed position during the time the operator imparts a swinging motion to the pliers for stretching the wire on the fence post, as previously described.

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

As an improved article of manufacture, the pliers having jaws whose gripping faces are respectively provided with a longitudinal ridge and corresponding groove, also with opposite meeting surfaces on each side of said ridge and groove, for gripping the portions of a wire adjacent the intervening bend produced therein, as shown and described.

FRANK C. NEUHAUS.

Witnesses:
C. L. NEUHAUS,
T. J. MCKAY.