G. P. ROBERTSON.

STRETCHING PLIERS.

APPLICATION FILED NOV. 14, 1916.

1,268,626. Patented June 4, 1918.

Fig. 1.

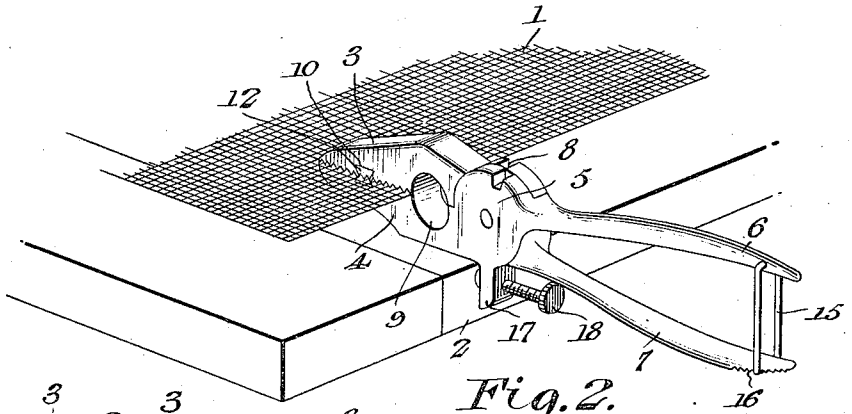


Fig. 2.

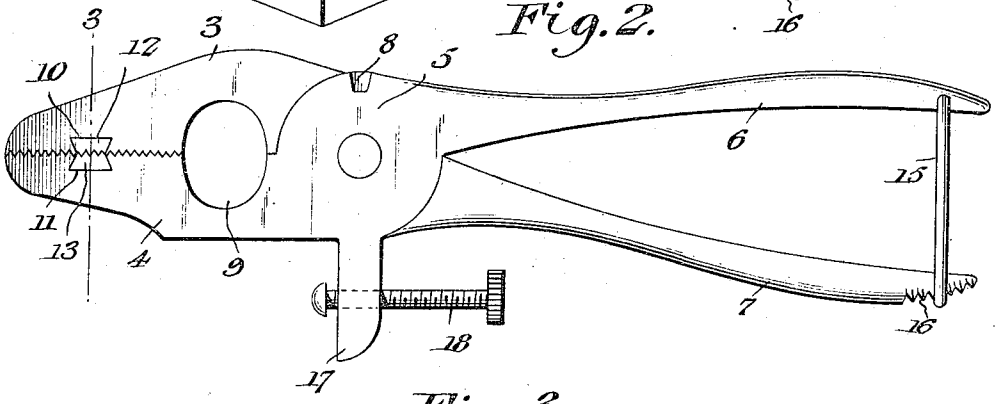
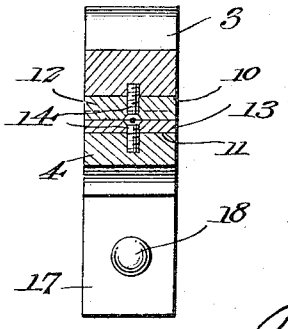


Fig. 3.



WITNESS

Frederick W. Ely

INVENTOR

George P. Robertson,

BY Victor J. Evans

ATTORNEY

UNITED STATES PATENT OFFICE.

GEORGE P. ROBERTSON, OF BETHESDA, MARYLAND.

STRETCHING-PLIERS.

1,268,626. Specification of Letters Patent. **Patented June 4, 1918.**

Application filed November 14, 1916. Serial No. 131,296.

To all whom it may concern:

Be it known that I, GEORGE P. ROBERTSON, a citizen of the United States, residing at Bethesda, in the county of Montgomery and State of Maryland, have invented new and useful Improvements in Stretching-Pliers, of which the following is a specification.

The present invention relates to improvements in tools, and is particularly directed to the pincer type of tools.

The primary object of the invention is to produce a tool comprising two pivoted members each including a handle and a jaw, means being arranged upon one of the handles whereby to engage with the other handle to lock both of the handles, each of the jaws having their active faces grooved to receive removable co-acting toothed members and one of the jaws being provided with offset fingers forming a fulcrum member whereby when a material is gripped between the jaws the said finger may be arranged upon the edge of the structure to which the material is to be attached, the finger being further provided with an adjustable element in the nature of a set screw so that a further adjustment or stretching of the material may be thus provided for, and whereby the material after being stretched may be tacked or otherwise secured to the frame upon which it is arranged.

A further object of the invention is to produce a tool of this class which shall embody the desirable features of simplicity, cheapness, strength and efficiency.

With the above and other objects in view the improvement resides in the construction, combination and arrangement of parts set forth in the following specification and falling within the scope of the appended claim.

In the drawing:

Figure 1 is a view illustrating the application of the tool,

Fig. 2 is a side elevation of the tool, and

Fig. 3 is a sectional view approximately on the line 3—3 of Fig. 2.

The improved tool in the showing of Fig. 1 of the drawing is illustrated as employed in stretching wire 1 over a frame 2, but it is here to be stated that the device may be employed as a stretching implement for other material as will, it is thought, be obvious. The tool includes two jaw members 3 and 4 respectively which are pivotally connected, as at 5, and each of said jaws is provided with a rearwardly extending portion from the said pivot forming the same with handles 6 and 7 respectively. The tool, at its pivoted portion, is rounded and is provided with a transverse notch 8, and the walls provided by the notch in the respective elements of the tool may be sharpened, and the tool may be thus employed for cutting wire, nails or the like. The tool between the pivot and the jaws proper thereof has its inner face concaved, as at 9, whereby the tool may be employed for engaging with a headed element, the head of the said element being received in the depression provided by the concaved portions 9 of the jaws 3 and 4. The jaws 3 and 4 have their active faces provided with transverse grooves 10 and 11 respectively, and the side walls of these grooves may be inclined, the said grooves being provided to receive auxiliary block members 12 and 13 respectively, the said blocks having their co-acting faces toothed or roughened, as illustrated in the drawings. These blocks may be sustained in the grooves in any desired or preferred manner. Preferably bolt members 14 pass through openings in the said blocks and enter threaded orifices in the respective jaws 3 and 4. The handle 6 of the jaw 4 has pivotally secured to the outer end thereof a bail member 15, and the handle 7 of the jaw 3, at the outer edge thereof is roughened or provided with teeth 16 whereby the connecting element of the substantially U-shaped bail 15 may engage with the said serrations or teeth 16 to effectively hold the handles 6 and 7 locked and the jaws 3 and 4 in positive engagement.

Integrally formed upon one of the jaws, say, the jaw 4, adjacent to the pivot 5 of the tool is an angularly extending member providing a finger 17 and this finger serves as a fulcrum element whereby when the wire mesh is arranged between the jaws and the handles locked, and the said mesh stretched by the operator of the tool, the finger 17 is adapted to be brought against one of the edges of the frame 2 and to serve as a fulcrum member to assist in the further stretching of the mesh. In addition to serving as a fulcrum member the finger 17 also serves to hold the tool against the frame and as illustrated by the drawings I have provided the finger 17 with a threaded opening through which is passed the shank of a set screw 18, and it will be noted by manipu-

lating the set screw the tool may be adjusted with relation to the frame and the wire mesh may be thus further stretched.

When the blocks 12 and 13 are removed the tool may, of course, be employed for other purposes than that set forth.

From the above description, taken in connection with the accompanying drawing, the simplicity of the device as well as the advantages thereof will, it is thought, be perfectly apparent to those skilled in the art to which such invention appertains without further detailed description.

Having thus described the invention, what I claim is:

In a tool designed for stretching unsecured sides or ends of a screen from a frame in an opposite direction from that end or side which has been secured to the frame, a pair of pivoted jaws having handle extensions and means for locking the handles to retain the jaws closed, an angular finger formed on one of said members adjacent the pivot thereof, and a thumb screw threaded through said finger and adapted to contact with one edge of the frame to lock the tool on the frame and to serve as a fulcrum member for said tool.

In testimony whereof I affix my signature.

GEORGE P. ROBERTSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."