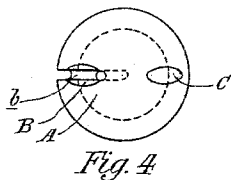
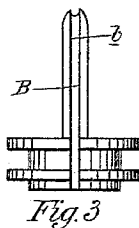
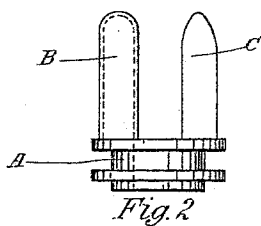
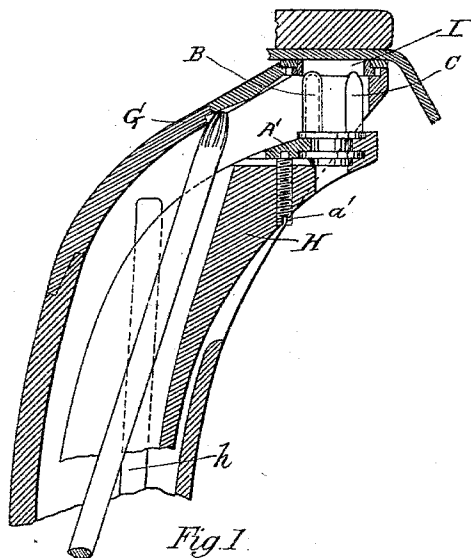


(No Model.)

M. C. MULLARKY.
SEWING MACHINE.

No. 569,652.

Patented Oct. 20, 1896.



Witnesses.
 Alph. Walter.
 H. Durier

Michael Colwell ill allanky
Inventor

per: J. Emile Vanier
Attorney.

UNITED STATES PATENT OFFICE.

MICHAEL COLWELL MULLARKY, OF MONTREAL, CANADA.

SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 569,652, dated October 20, 1896.

Application filed April 4, 1895. Serial No. 544,504. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL COLWELL MULLARKY, a citizen of the Dominion of Canada, residing at the city and district of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has reference to the adaptation of an awl on the same head as the ordinary needle and thereby piercing the hole for the needle, for as is well known in the wire-sewing machines now in use the wire passes over the needle in a groove that runs up one side of the needle, over its top, and down on the other side, and the needle is forced into the material that is being sewed and thus acts as its own awl, this requiring a considerable effort, and thus subjects the needle to a heavy strain; also the wire generally breaks when the needle happens to strike a lasting-nail, or, again, if it is attempted to sew two pieces of leather together separated by a thin metallic sheet to reinforce the whole with my arrangement the awl pierces the hole first and then the needle is inserted into the hole already made for it.

The object of my invention is to provide an arrangement that will lessen the strain on the machine and also prevent the breaking of the needle in wire-sewing machines.

Referring to the drawings, similar letters refer to similar parts throughout the several views.

Figure 1 is a section showing my invention in place. Fig. 2 is an enlarged side view. Fig. 3 is an enlarged view showing the needle and awl when in the same line, and Fig. 4 is an enlarged plan view.

G is the horn of a wire-sewing machine of approved construction.

H is a cross-head vertically slidable in the

horn in the guide-grooves *h*. The mechanism for reciprocating the cross-head is not shown in the drawings, as it is of ordinary approved construction.

I is a cap at the top of the horn for the shoe-sole or leather belt to rest on while being sewed. This cap is provided with a hole for the needle and awl to project through.

A is a circular head which is free to oscillate in a recess at the top of the cross-head.

A' is a plate secured by a screw *a'* to the cross-head and operating to hold the head in position.

B is the needle, provided with a groove *b* for the wire, and C is the awl. The needle and the awl project upwardly from the head A and are arranged equidistant from and on opposite sides of its center. The head is free to turn back and forth or oscillate in its socket so as to follow the line of the seam.

The awl and the needle are spaced the length of one stitch apart, so that the needle is invariably inserted in the hole made by the awl.

The needle places the wire in the hole made by the awl in the form of a loop, and a lasting-nail is thrust laterally through the loop by devices of approved construction, which do not form a part of this invention.

What I claim is—

In a wire-sewing machine, the combination, with a reciprocatory cross-head provided with a recess in its upper end, of a circular head journaled in the said recess and free to oscillate back and forth, and an awl and a grooved needle projecting upwardly from the said head and arranged substantially equidistant from its center and on opposite sides thereof, substantially as set forth.

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

MICHAEL COLWELL MULLARKY.

Witnesses:

OLP. WALTER,
ERWIN FLIEFFELAUS.