A. F. FIFIELD.

CLAMP FOR SEWING MACHINES.

APPLICATION FILED JUNE 26, 1918.

1,404,750. Patented Jan. 31, 1922.

Fig. 1.

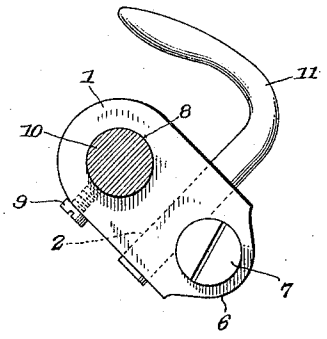
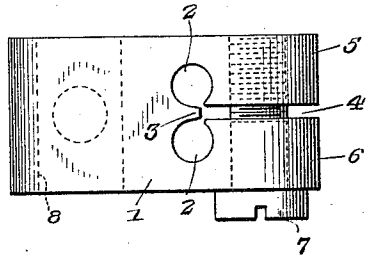


Fig. 2.



WITNESSES

J. H. Crawford.

A. E. Fifield

INVENTOR

Albert F. Fifield

BY Henry J. Miller

ATTORNEY

UNITED STATES PATENT OFFICE.

ALBERT F. FIFIELD, OF NEWARK, NEW JERSEY, ASSIGNOR TO THE SINGER MANUFACTURING COMPANY, A CORPORATION OF NEW JERSEY.

CLAMP FOR SEWING MACHINES.

1,404,750. Specification of Letters Patent. Patented Jan. 31, 1922.

Original application filed December 8, 1917, Serial No. 206,197. Divided and this application filed June 26, 1918. Serial No. 242,013.

To all whom it may concern:

Be it known that I, ALBERT F. FIFIELD, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Clamps for Sewing Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to clamps for holding stitch-forming instrumentalities of sewing machines.

It aims to provide a new and improved form of clamp for holding the shanks of loopers, needles or the like which is simple in construction, efficient in operation and not costly to manufacture.

The present application is a division of my copending application Serial No. 206,197, filed December 8, 1917.

The invention is embodied in a clamp having a pair of parallel cylindrical sockets separated by a narrow tongue of metal and adapted to receive the shanks of loopers. The sockets may be constructed about the shanks of the loopers by tightening a screw passing loosely through one of two slightly elastic arms which are separated by a slot communicating with each of the parallel sockets, the screw being threaded into the other of the two elastic arms so that when it is tightened the arms will be sprung slightly toward each other.

The invention is illustrated in the accompanying drawings in which Fig. 1 is a side elevation of the clamp with loopers positioned therein and Fig. 2 is a plan view thereof in the direction of extent of the shank receiving sockets.

The clamp is in the form of a block 1 of metal which is provided with a pair of sockets 2 separated by a narrow tongue or wall of metal 3 and each communicating with a narrow slot or incision 4 between two elastic clamping arms or elements 5 and 6 into the former of which is threaded a screw 7 loosely passing through the latter. The block may be secured in any suitable manner to a shaft or bar of the sewing machine, as illustrated, being provided with a bore 8 and screw 9 adapted to grip a looper-shaft 10 of the machine.

While the axes of the sockets 2 and the walls defining the slot 4 are preferably parallel they need not be made so. And while the sockets or apertures 2 have been shown circular it will be obvious that their form may be varied within the spirit and scope of the invention.

With the clamp of the described construction loopers of the form shown at 11 or needles and the like may have their shanks secured tightly in position by a simple operation, each shank being firmly held by constriction of the socket walls thereabouts. The clamp is simple to manufacture requiring but two drilling and one milling operation to fashion the sockets 2 and slot 4. Owing to the constriction grip about the shanks of the implements there is no likelihood of roughing the shanks thereof and owing to the arrangement of the clamp-screw 7 no likelihood of its end threads being marred and jamming. Further the disposition of the clamp-screw 7 permits of its being made of a size convenient to manipulate and proof against thread strippage.

Having thus set forth the nature of the invention, what I claim herein is—

1. A clamp for stitch-forming instrumentalities comprising a clamp member having a plurality of apertures arranged side-by-side and also provided with a single incision extending transverse to the common plane of the axes of said apertures and communicating with each of said apertures to form opposed clamping members, and means for adjusting said elements to contract said apertures to grip the shanks of instrumentalities positioned therein.

2. A clamp for sewing machines having a pair of spaced sockets extending in the same direction, a wall between said sockets, a pair of spaced elastic clamping arms on opposite sides of said wall and on the same side of said sockets, and means for drawing said arms together and simultaneously constricting said sockets to grip the shanks of members that may be positioned in said sockets against opposite sides of said wall.

3. A clamp having a plurality of spaced sockets arranged side by side and extending in the same general direction, said clamp also provided with a slot opening at one end through the side of the clamp and communicating at the other end with each of the said sockets, and means for drawing together the side walls of the slot to contract

the sockets about the shanks of instrumentalities adapted to be arranged therein.

4. A multiple shank-clamp for similar stitch-forming instrumentalities having a pair of spaced parallel sockets extending in the same direction and also provided with a slot defined by walls intersecting said sockets throughout their length, and means for drawing together the walls defining the slot in order to contract the sockets about the shanks of instrumentalities adapted to be arranged therein, said walls defining the slot being transverse to a plane containing the axes of said sockets.

5. A clamp for holding a plurality of loopers by their shanks comprising a block having apertures therein separated partially at least by a portion of the block, said block being provided with an incision open externally at one end and communicating with said apertures, and a single tension member for reducing said incision and contracting said apertures about the shanks of loopers positioned therein.

In testimony whereof, I have signed my name to this specification.

ALBERT F. FIFIELD.