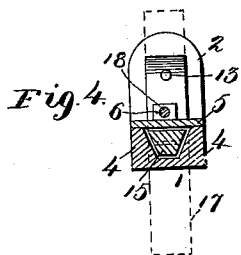
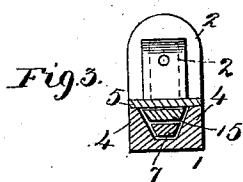
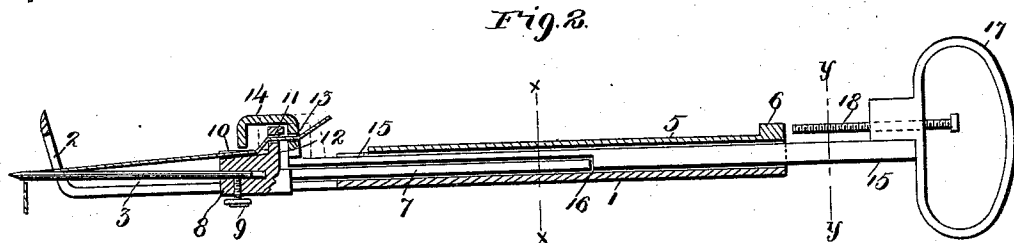
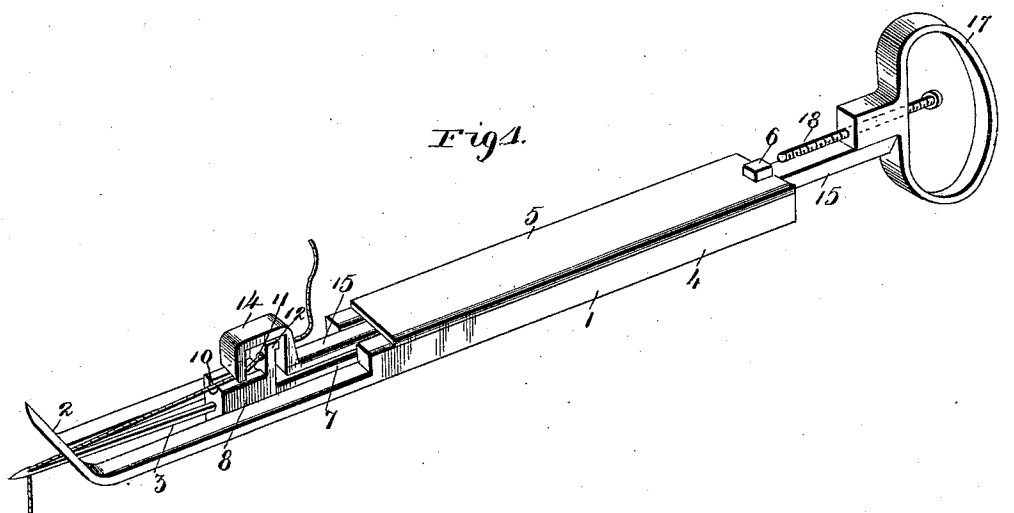


(No Model.)

F. OHL.
HAND EMBROIDERING MACHINE.

No. 534,077.

Patented Feb. 12, 1895.



Witnesses
Adalbert Engelhard
Ida Reudorf

Inventor
Fredrick Ohl.
By *his Attorney* *Henry D. O'Brien*

UNITED STATES PATENT OFFICE.

FREDRICK OHL, OF ST. LOUIS, MISSOURI.

HAND EMBROIDERING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 534,077, dated February 12, 1895.

Application filed April 24, 1894. Serial No. 508,763. (No model.)

To all whom it may concern:

Be it known that I, FREDRICK OHL, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Hand Embroidering-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in hand embroidering machines and consists in the novel arrangement and combination of parts more fully set forth in the specification and pointed out in the claim.

In the drawings, Figure 1 is a perspective view of my complete invention. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a section on the line $x-x$ of Fig. 2; and Fig. 4 is a section on the line $y-y$ of Fig. 2 looking to the left.

The object of my invention is to construct a hand embroidering machine which will be simple, effective, easily adjustable as to the length of stroke and stitch. In detail it may be described as follows:

Referring to the drawings, 1 represents the body portion or casing for the operating parts and carrying the loop 2 through which passes the needle 3, said loop 2 and casing 1 corresponding to the presser bar and foot in the ordinary sewing machine. The casing 1 consists of a bottom plate from which extends for a portion of its length on either side thereof the lateral wall 4 over the upper edges of which is secured a retaining plate 5, carrying an abutting ridge or piece 6 at its forward portion. Within the casing and between the walls 4 and extending about midway through the length of the casing operates the needle bar 7 whose operating end carries a head into which the upper end of the needle 3 is passed and there secured by the screw 9 passing through the extension of the loop 2. The head 8 has a longitudinal depression 10 for the passage of the yarn said yarn passing through the opening 11 of the shoulder 12 of said bar and finally through the opening 13 of the hook 14 carried by the operating bar 15. The bar 15 has a shoulder or offset 16 co-

operating with the inner end of the needle bar, said bar extending outwardly from said shoulder to the operating handle 17 which latter carries the adjusting screw-threaded bar 18 for varying the length of the stroke and consequently the stitch, the operating end of said screw-threaded bar striking against the abutting ridge 6 carried by the top plate 5.

It will be seen that the cross sections of the operating bar and needle bar are bevel or wedge shaped and the inner surfaces of the walls 4 are inclined to conform to said shape, it being found that this form of these parts is most practical especially facilitating the manufacture in the process of casting the same.

The yarn is threaded through the opening 13 of the hook 14 then passed through the opening of the shoulder 12 of the needle bar. The hook 14 is then slightly raised (being resilient) so as to allow the yarn to pass into the depression 10, and finally passed through the eye of the needle 3. The handle 17 and the bar 15 are thrust forward, the shoulder 16 striking the end of the needle bar allowing the yarn to feed, the needle being thrust forward a distance depending on the distance the screw-threaded bar 18 has been advanced in the handle, the end of the screw-threaded bar limiting the movement of the parts when it comes in contact with the abutting ridge 6. Upon retracting the parts the forward end of the hook 14 seizes the yarn by holding it firmly between itself and the inner surface of the shoulder 12 (see dotted lines Fig. 2) in this way forming the stitch on the fabric through which the needle has passed and from which it is being withdrawn.

Having described my invention, what I claim is—

A hand embroidering machine comprising a suitable casing, a needle bar operating therein, a head on said bar having a depression or groove on its upper surface, a needle carried by said head, an operating bar, a hook carried by said bar spanning said head, a looped extension on said casing through which the needle passes, a shoulder on said operat-

ing bar adapted to strike the inner end of the
needle bar, a handle on said operating bar, a
screw-threaded adjusting bar carried by said
handle, a top plate for the casing and a ridge
5 on said casing adapted to come in contact
with the end of the screw-threaded adjusting
bar, substantially as set forth.

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

FREDRICK OHL.

Witnesses:

IDA C. ENGELHARD,

WALTER G. THIELECKE.