(No Model.)

W. H. FARMER.

DEVICE FOR SECURING THE NEEDLES IN EMBROIDERING MACHINES.

No. 322,704. Patented July 21, 1885.

Fig. 1.

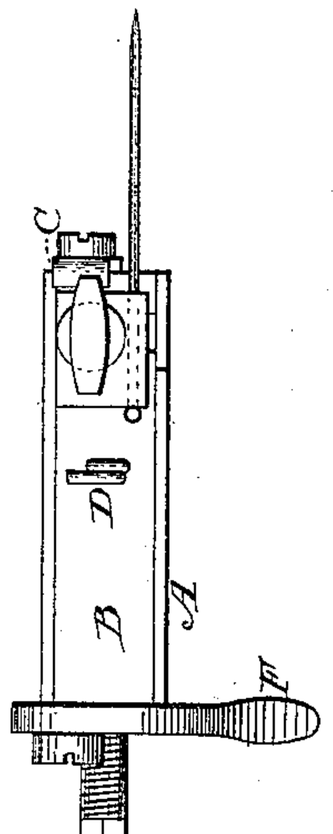


Fig. 2.

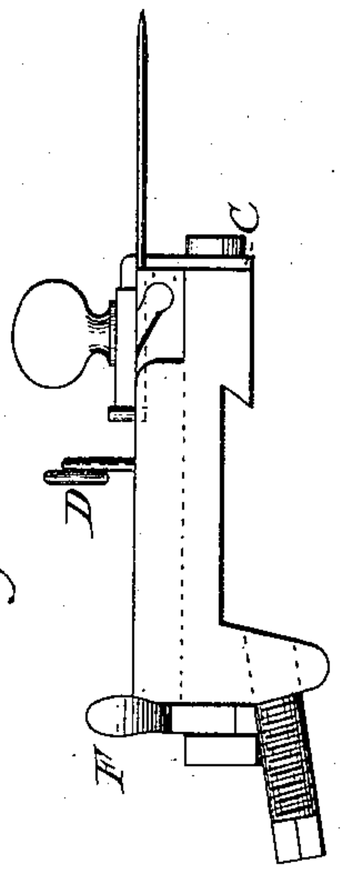


Fig. 3.

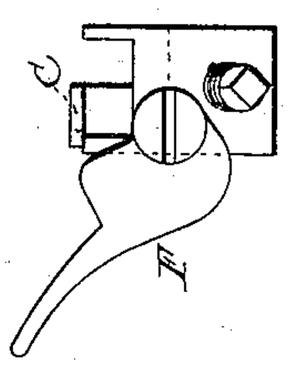


Fig. 4.

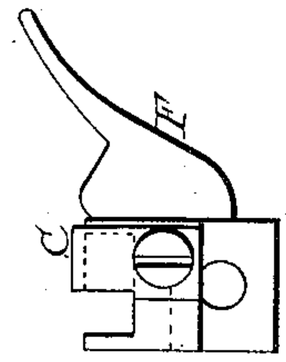
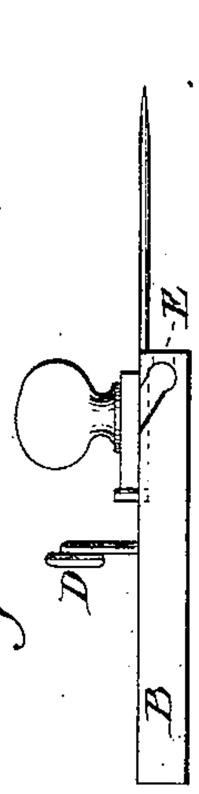


Fig. 5.



Witnesses.
J. A. Rutherford
Robert Everett.

Inventor.
William H. Farmer.
By James L. Norris.
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM HUTCHINSON FARMER, OF NOTTINGHAM, ENGLAND.

DEVICE FOR SECURING THE NEEDLES IN EMBROIDERING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 322,704, dated July 21, 1885.

Application filed January 8, 1885. (No model.) Patented in England November 11, 1884, No. 14,824.

To all whom it may concern:

Be it known that I, WILLIAM HUTCHINSON FARMER, lace manufacturer, a subject of the Queen of Great Britain, and a resident of Nottingham, England, have invented a new and useful Improvement in Devices for Securing the Needles in Embroidering-Machines, (for which I have applied for provisional protection in Great Britain, No. 14,824, bearing date November 11, 1884,) of which the following is a specification.

In the drawings, Figure 1 shows a plan of an improved needle-bracket with the needle in position. Fig. 2 shows a side view of the same. Fig. 3 shows an outer end view without a sliding bit. Fig. 4 shows an inner end view of the same, and Fig. 5 shows a side view of the sliding bit with the needle clamped thereon.

Heretofore embroidering-machines provided with a number of needles have had to be stopped when the thread supplied to either of the needles broke, to obviate which, instead of securing each needle in its bracket in the usual way, I cut a groove in the upper face of each bracket A to receive a sliding bit, B, in the front end of which the needle is clamped or otherwise secured in the usual way. The bit is prevented from passing beyond the front of the bracket by a plate, C, secured to it by a screw. The top of this plate is returned at a right angle backward, so as to overlap the sliding bit and prevent its rising. Behind the needle-clamping plate is a guide, D, for the thread. In front of the guide, in one side of the sliding bit, a hole, E, is drilled to guide the thread close to the needle. When the sliding bit carrying the needle has been placed in the groove of the bracket and pushed up to the front, so as to be held by the plate before named, it is secured in position by the attendant lowering a stop-plate, F, which rocks on a stud secured in the back of the bracket.

By such means when the thread of either needle breaks, instead of stopping the machine and thereby throwing the whole of the needles out of work, the attendant by simply raising the stop-plate is enabled to withdraw the sliding bit, rethread the needle, and replace the bit, while the remainder of the needles continue at work, thereby effecting a considerable saving of time. Needle brackets and bits so constructed are equally applicable to embroidery-machines carrying shuttles or loop-retaining hooks.

It is evident that the bit itself instead of the bracket may be grooved, so that its sides embrace and slide upon the bracket instead of sliding therein; but such would be a mere formal change in the embodiment of the invention, within the scope of ordinary mechanical ability or skill.

What I claim is—

1. In an embroidering machine or attachment, the combination of a needle-bracket grooved longitudinally to receive a sliding bit, a bit adapted to slide therein and hold the needle, a pivoted stop-plate for preventing the sliding of the bit when desired, and a stop-plate bent over at its upper edge to retain the sliding bit in the groove, substantially as described.

2. In an embroidering machine or attachment, the combination of a grooved needle-bracket, a needle-holding bit sliding therein, a stop attached to the bracket, and a stop-plate for clamping the bit in the bracket, substantially as described.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

WILLIAM HUTCHINSON FARMER.

Witnesses:
H. W. GOUGH,
JOHN HENRY GOUGH.