

(No Model.)

2 Sheets—Sheet 1.

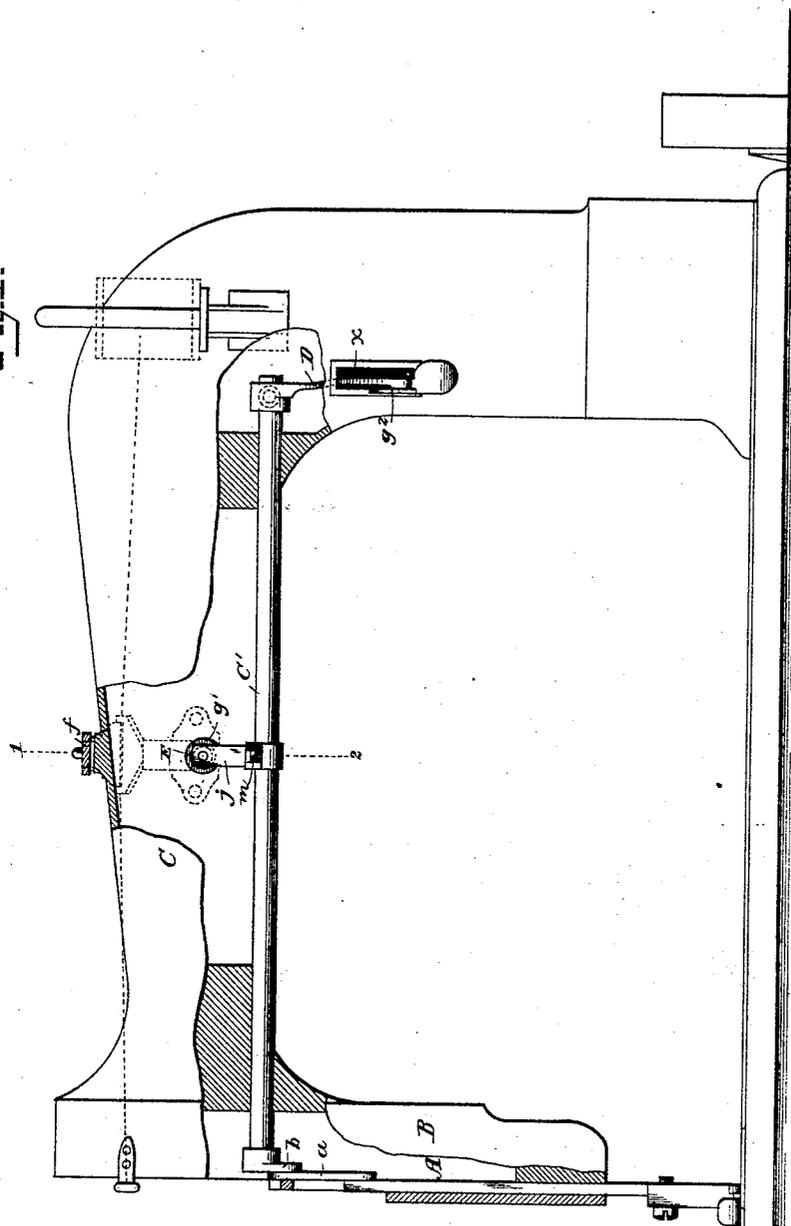
J. J. WHEAT.

PRESSER FOOT DEVICE FOR SEWING MACHINES.

No. 328,163.

Patented Oct. 13, 1885.

Fig. 1.



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H. C. Hammann.

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2 Sheets—Sheet 2.

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Fig. 3.

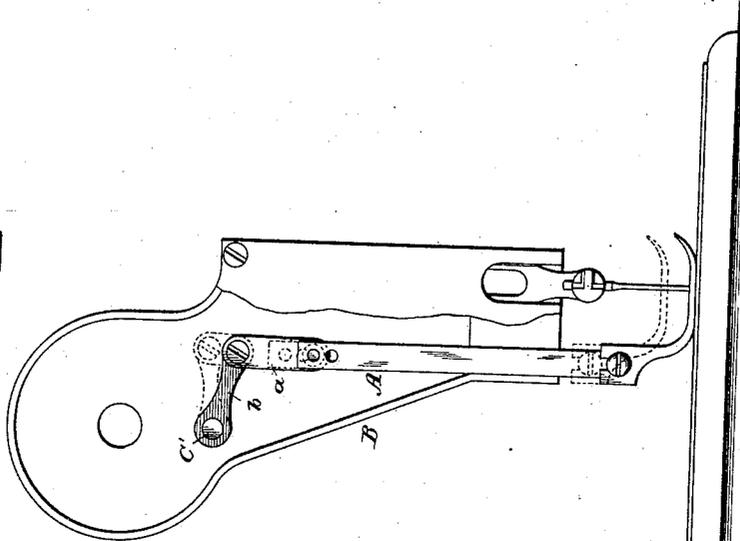
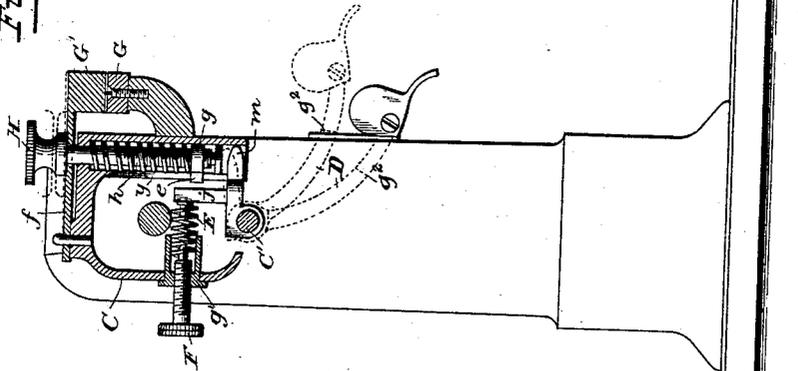


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN J. WHEAT, OF INDIANAPOLIS, INDIANA.

PRESSER-FOOT DEVICE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 328,163, dated October 13, 1885.

Application filed September 20, 1884. Serial No. 143,579. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. WHEAT, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Presser-Foot Devices for Sewing-Machines, of which the following is a specification.

My invention relates to improvements in the presser-foot appliances of sewing-machines; and it consists in the means, fully described hereinafter, for readily raising and lowering the presser-foot, and for releasing the tension upon the upper thread when the presser-foot is raised.

In the drawings, Figure 1 is a side view of sufficient of a sewing-machine, in part section, to illustrate my invention. Fig. 2 is a transverse section on the line 1 2, Fig. 1. Fig. 3 is an end view, the cap-plate of the head of the overhanging arm being removed.

A presser-foot bar, A, slides in suitable guides in the head B of the overhanging arm C of the machine, and is connected by a link, a, to the arm b of a shaft, C', extending through the upper horizontal portion of the said arm, and provided at its inner end with an arm or handle, D, which extends through a slot, x, in the overhanging arm.

By operating the arm D the shaft may be rocked so as to raise or lower the presser-foot, and a shoulder, g', of the arm D may be brought to engage with the edge of the slot in such manner as to retain the parts in the position shown in dotted lines, Figs. 2 and 3.

The requisite pressure of the foot upon the work-plate is derived from a spring, E, which may be arranged in any suitable position, so as to exert the proper effect, but preferably bears upon an arm, j, extending from the shaft C', with a force proportioned to the extent to which it is compressed by means of a screw-pin, F, extending through a detachable bushing, g', supported by the arm C, the end of the screw-pin bearing upon the spring, as shown in Fig. 2.

The arrangement of the arm or handle D at the inner end of the overhanging arm of the machine permits the operator to raise and lower the presser-foot with great facility, and without necessity of changing her position or manipulating any parts of the machine at the

head of the overhanging arm. The left hand of the operator may thus be kept upon the work while the foot is raised and lowered.

The tension device consists of a stationary block, jaw, or plate, G, and a movable block or plate, G', and a screw-pin, H, carrying a nut, g, and a spring, h, interposed between a bearing upon the arm C and the nut g, and acting to depress the screw-pin, and with it the block G', which is preferably secured to a spring-plate, f, through which the screw-pin extends, and which is fastened at one end to the arm C, as shown in Fig. 2. The nut g is provided with a feather, e, which extends into a slot, y, in the overhanging arm, whereby the nut is prevented from turning, while it is permitted to rise and descend when the screw-pin is revolved, so as to compress the spring to a greater or less extent and thereby vary the tension.

Inasmuch as it is desirable to release the tension when the work is to be removed after the elevation of the presser-foot, I provide means whereby the tension jaws or plates G G' are relieved from the action of the spring when the presser-foot is raised. Different means of releasing the tension-jaws from the action of the spring h by the turning of the shaft C' may be employed; but I prefer those shown in the drawings, the same consisting in prolonging the arm j to form a finger, m, extending beneath the end of the screw-pin H, so that when the shaft C' is turned to elevate the presser-foot the finger m will be brought against the end of the pin H and will lift the latter till there is no longer any pressure upon the jaw G' of the clamp.

It will be apparent that clamps of different construction may be employed. For instance, the screw-pin H may extend directly through the usual loose clamping-disks, as shown in dotted lines, Fig. 2.

I claim—

1. The combination, with the sewing-machine, of an overhanging arm having a slot at the side, a rock-shaft having its bearings in the overhanging arm, provided at the inner end with an operating arm or handle extending through the said slot and the presser-foot bar, and a connection between the latter and the shaft, substantially as set forth.

2. The combination, with the sewing-ma-

chine, of an overhanging arm having a slot at the side, a rock-shaft inclosed by and having its bearings in the overhanging arm, provided at the inner end with an operating arm or handle extending through the said slot, and means, substantially as described, for securing the said arm after adjustment, and the presser-foot bar, and a connection between the latter and the shaft, as set forth.

3. The combination of the presser-foot bar, operating rock-shaft provided with a handle and connected to the said bar, and spring arranged to bear upon a projection of the shaft to turn the same to depress the presser-foot, and means for varying the tension of the spring, substantially as described.

4. The combination of the shaft connected to operate the presser-foot, tension-jaws, screw-pin, and spring for depressing the latter,

and finger projecting from the shaft beneath the screw-pin, substantially as set forth.

5. The combination of the fixed jaw G, jaw G', secured to a spring-plate, f, screw-pin extending through the spring-plate, nut upon the screw-pin provided with a feather extending into a slot, a spring, h, bearing upon the nut, and shaft C', connected to the presser-foot bar, and provided with an arm extending beneath the end of the screw-pin, substantially as specified.

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

JOHN J. WHEAT.

Witnesses:

CHARLES E. FOSTER,
D. P. COWL.