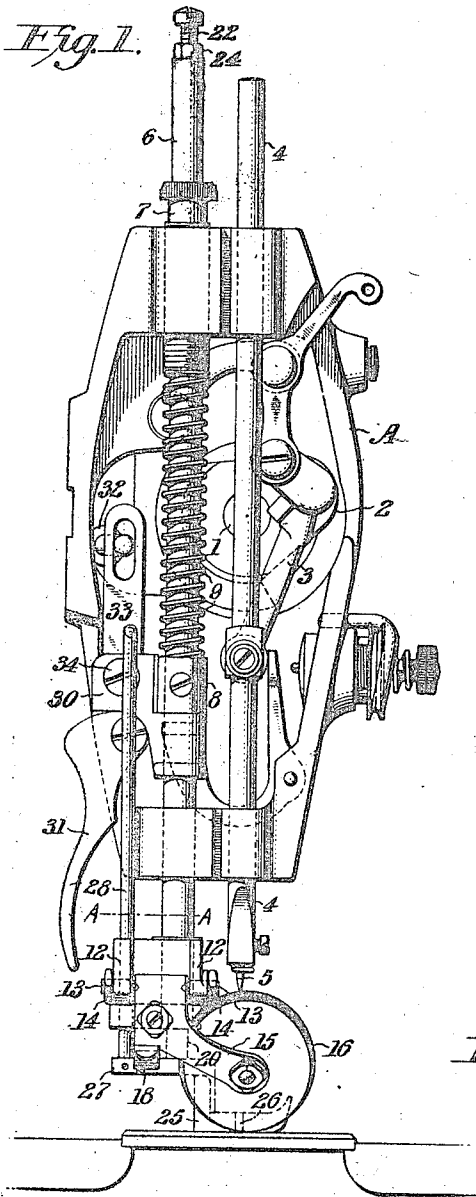
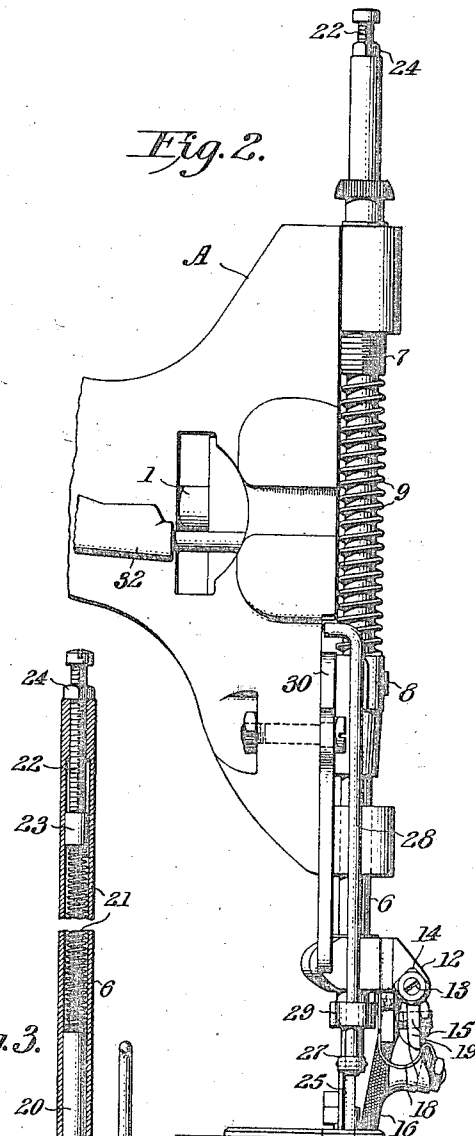
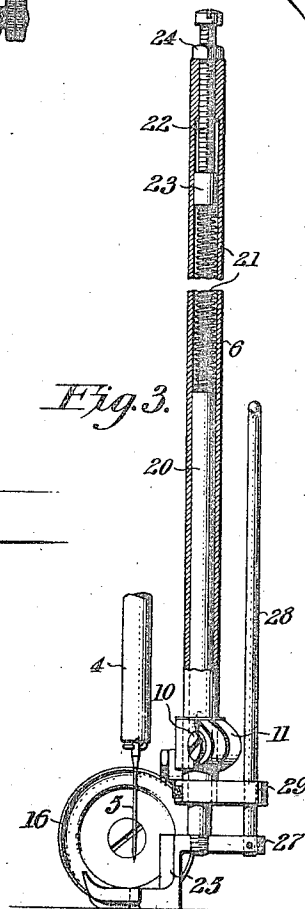
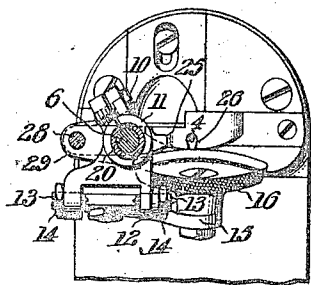


A. H. DE VOE.
PRESSER FOOT MECHANISM FOR SEWING MACHINES.
APPLICATION FILED AUG. 29, 1917.

1,306,752.

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PRESSER-FOOT MECHANISM FOR SEWING-MACHINES.

1,306,752.

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To all whom it may concern:

Be it known that I, ALBERT H. DE VOE, a citizen of the United States, residing at Westfield, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Presser-Foot Mechanisms for Sewing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in cloth-presser mechanisms for sewing machines and has for its primary object to provide a simple and compact arrangement of main and auxiliary cloth-pressers each of which exerts upon the work a yielding pressure capable of being regulated independently of the other.

The invention has for a further object to provide an improved mechanism of this class in which the cloth-pressers are permitted to yield independently of each other to different thicknesses in material and in which both of the cloth-pressers are adapted to be lifted under the action of the usual lifter lever.

In its preferred embodiment, the invention comprises a cloth-presser mechanism consisting of main and auxiliary cloth-pressers sustained by telescopically arranged and independently spring-pressed presser-bars, of which the outer or main presser-bar is vertically movable in bearings provided in the head of the overhanging bracket-arm of the machine. Lifting means of the usual type are provided for the main presser-bar, in the present instance serving, through suitable connections, to lift the auxiliary presser therewith.

In the accompanying drawings illustrating the preferred embodiment of the invention and in the several figures of which like parts are similarly designated, Figure 1 is a front end elevation of a portion of a sewing machine head with its face-plate removed. Fig. 2 is a rear side elevation of the same. Fig. 3 is a view, partly in section, illustrating the telescopically arranged presser-bars, and Fig. 4 is a sectional top plan view of the cloth-pressers taken on the line A-A of Fig. 1.

Referring more particularly to the drawings, the sewing machine is constructed with an overhanging bracket-arm terminating in the head A and in which is journaled the ac-

tuating shaft 1, provided with the crank 2 connected by means of the link 3 with the needle-bar 4 carrying the needle 5.

A hollow or tubular main presser-bar 6 is mounted for vertical movement in aligned bearings formed in the head A, the upper bearing being afforded by an adjustable sleeve or bushing 7 between which and the collar 8, secured upon the presser-bar, is interposed a coiled spring 9. Secured to the lower end of the presser-bar 6 by means of the clamp-screw 10 is the split collar 11 formed with spaced ears 12 receiving the oppositely directed pivot-screws 13 held in position by the lock-nuts 14. Supported for pivotal movement upon the screws 13 is an arm 15 rotatively supporting the main cloth-presser wheel 16. Secured to a lug 17 of the collar 11 is a bent spring 18 adapted to engage a shoulder 19 formed on the arm 15 to retain the presser-wheel 16 in operative position.

Telescopically arranged within the hollow presser-bar 6 is the auxiliary presser-bar 20 acted upon by the spring 21 with a pressure that may be regulated by a screw 22 threaded into the upper part of the main presser-bar and contacting with a cylindrical block 23 interposed between the screw and the spring. A lock-nut 24 serves to hold the screw 22 in adjusted position. The lower end of the presser-bar 20 sustains the auxiliary cloth-presser 25 provided closely adjacent the bearing point of the presser-wheel 16 with a needle-slot 26 upon opposite sides of which the edge of the presser 25 is curved to intersect a vertical plane passing through the line of feed as clearly shown in Fig. 4 of the drawings. The shank of the auxiliary presser 25 is constructed with a tail 27 in an aperture of which is secured a rod 28 passing through an aligned aperture formed in a lug 29 projecting from the main presser-bar, the rod and the lug forming coöperative members that prevent relative rotation between the two presser-bars. The rod 28 is bent laterally at its upper end so as to overlie the laterally projecting lug 30 of the collar 8, sufficient clearance being provided to permit either of the cloth-pressers to yield independently of the other for different thicknesses in material. In order to lift the presser-members above the work, the lug 30 is adapted to be engaged in the usual manner by the hand lifter-lever 31 or by

the treadle-actuated lever 32 through the intermediary of the slotted plate 33 secured to the lug by the screw 34.

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

1. A presser mechanism for sewing machines comprising telescopically arranged main and auxiliary presser-bars, cloth-pressers sustained by said presser-bars, springs exerting a pressure upon each of said presser-bars, and mutually independent means for regulating the pressures exerted by said springs.

2. A presser mechanism for sewing machines comprising telescopically arranged main and auxiliary presser-bars, cloth-pressers sustained by said presser-bars, a spring adapted to exert a pressure upon said auxiliary presser-bar, and means carried by said main presser-bar for regulating the pressure exerted by said spring.

3. A presser mechanism for sewing machines comprising main and auxiliary presser-bars, cloth-pressers sustained by said presser-bars, springs adapted to exert a pressure upon each of said presser-bars, means affording a bearing for the main presser-bar and adapted to regulate the pressure exerted thereupon and means carried by said main presser-bar for regulating the spring-pressure exerted upon said auxiliary presser-bar.

4. A presser mechanism for sewing machines comprising a hollow main presser-bar, an auxiliary presser-bar telescopically arranged within said main presser-bar, a spring within said hollow presser-bar and adapted to exert a pressure upon said auxiliary pres-

ser-bar, and means for regulating the pressure exerted by said spring.

5. In a presser mechanism for sewing machines, main and auxiliary cloth-pressers, telescopically arranged presser-bars sustaining said cloth-pressers, springs adapted to exert a pressure upon each of said presser-bars, mutually independent means for regulating the pressures exerted by said springs, and means for lifting said cloth-pressers against the action of said springs.

6. A presser mechanism for sewing machines, comprising telescopically arranged main and auxiliary cloth-pressers adapted to yield independently of each other to different thicknesses of material, main and auxiliary presser-bars sustaining said cloth-pressers, a collar secured upon said main presser-bar, a lifter lever adapted to act upon said collar to lift said main cloth-presser, and means for lifting said auxiliary cloth-presser when the main cloth-presser is lifted by the action of said lifter lever.

7. A presser mechanism for sewing machines, comprising telescopically arranged main and auxiliary presser-bars, cloth-pressers sustained by said presser-bars, and independently regulated springs exerting a pressure upon each of said presser-bars, said presser-bars being arranged to permit said cloth-pressers to yield independently of each other to different thicknesses of material.

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

ALBERT H. DE VOE.