T. TROTT.

SEWING MACHINE.

APPLICATION FILED MAR. 19, 1909.

1,154,946. Patented Sept. 28, 1915.

Fig. 1.

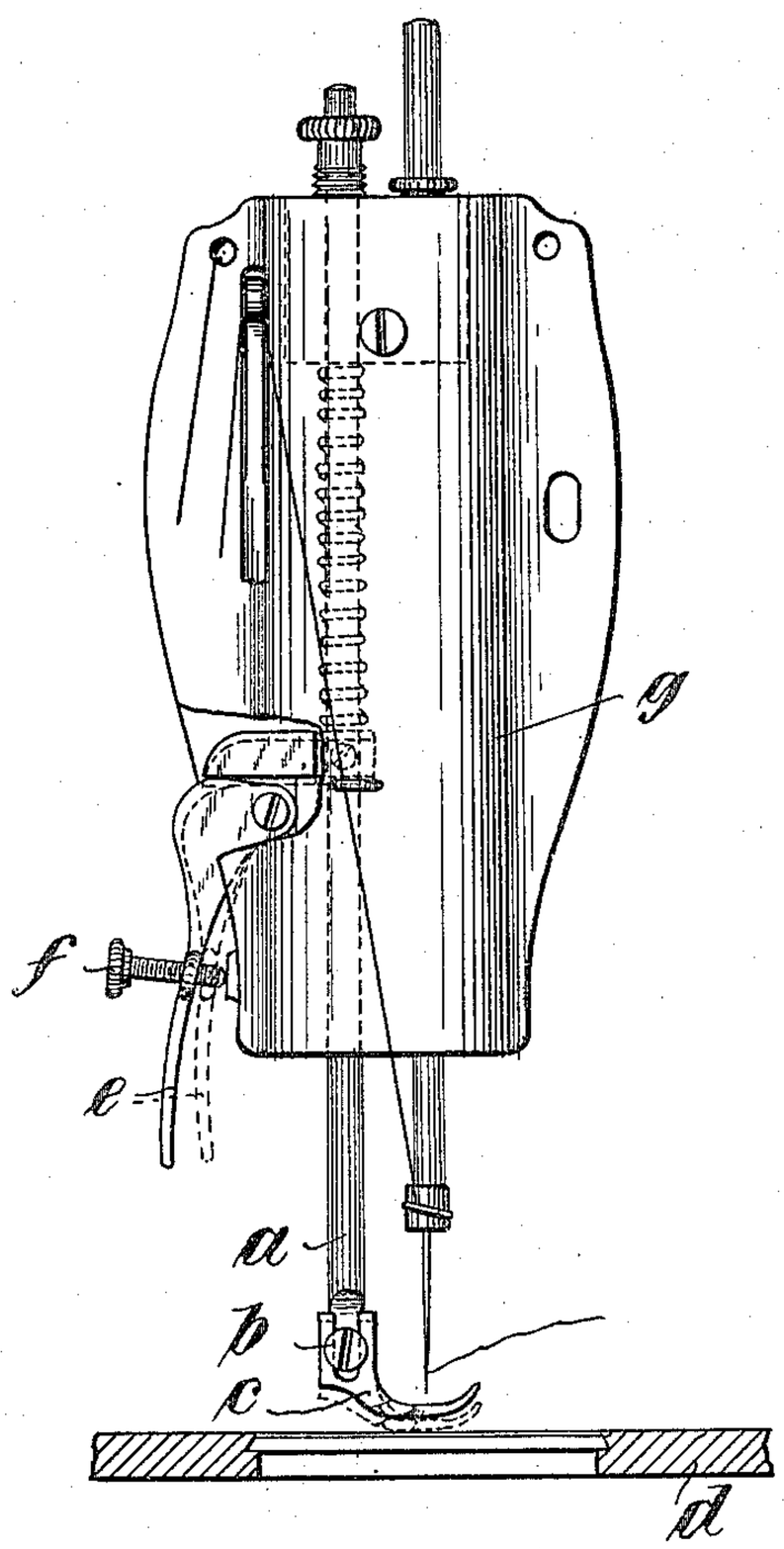


Fig. 2.

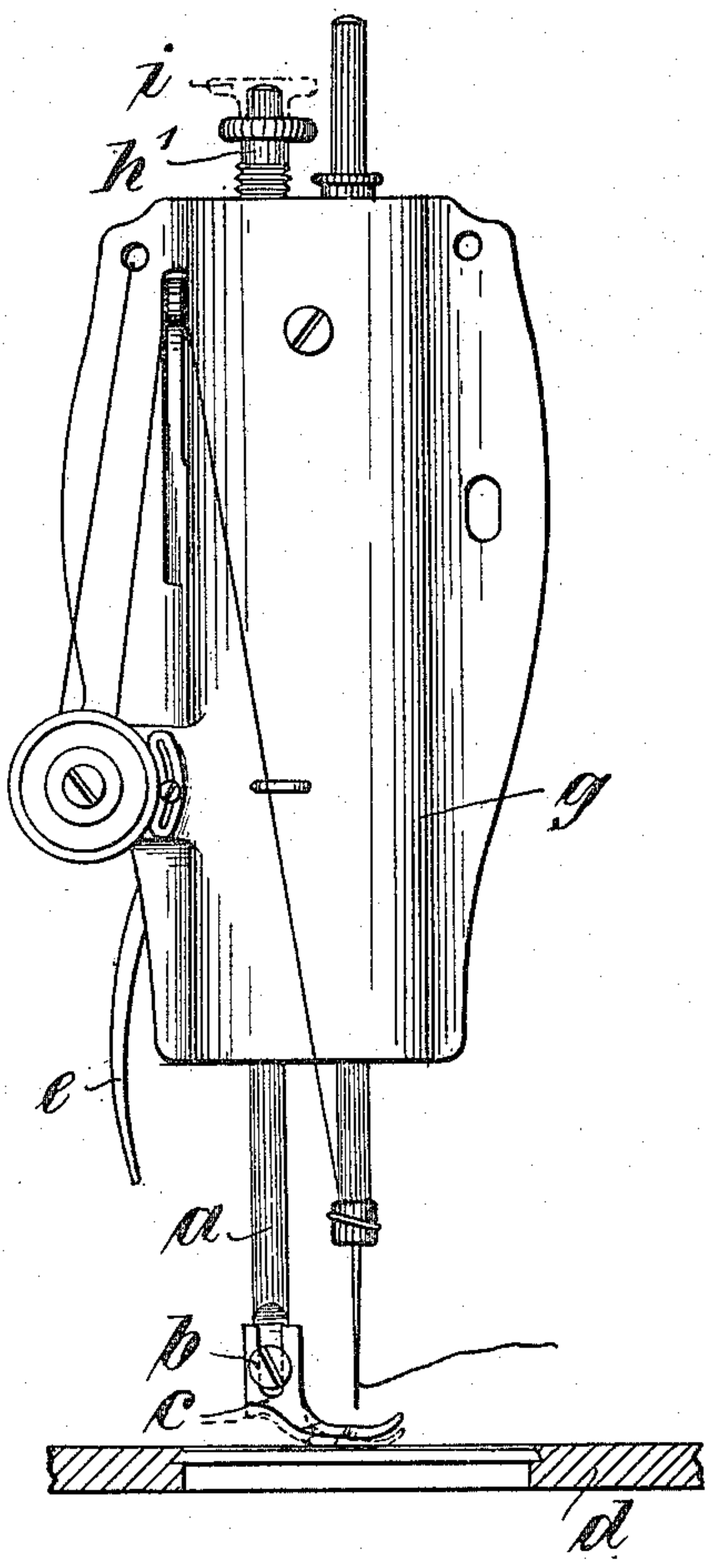


Fig. 3.

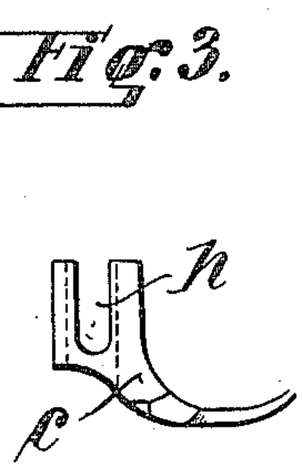
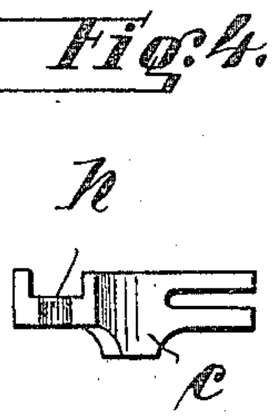


Fig. 4.



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SEWING-MACHINE.

1,154,946. Specification of Letters Patent. Patented Sept. 28, 1915.

Application filed March 19, 1909. Serial No. 484,389.

To all whom it may concern:

Be it known that I, THEKLA TROTT, a subject of the King of Prussia, residing at Berlin, in the Kingdom of Prussia and German Empire, have invented new and useful Improvements in Sewing-Machines, of which the following is a specification.

In using a sewing machine to darn, it is usual to remove the presser foot, and, either to stretch the fabric in a special frame, or to secure a spring on the needle, which will prevent the fabric from being moved when the needle rises. The existing systems, however, have the drawback, that, in order to use the sewing machine for darning, accessories are required, which are mostly not at hand, and, in any case, take some time to attach. Further, in such devices, the vertical restriction of the fabric is not sufficient, so that the thread is easily broken, and good darning requires, at the least, extreme skill on the part of the operator.

According to my present invention these drawbacks are removed by using the presser foot, which, as heretofore, rests on the fabric when sewing, to vertically restrict said fabric when darning, the foot then being raised to such an extent that the fabric can be moved freely in all directions in one and the same horizontal plane. In order to adjust the foot in accordance with the thickness of the fabric, any suitable means may be employed, which can act directly or indirectly on the presser-rod, presser-lever or presser-foot.

In the accompanying drawing illustrating my invention by way of example: Figure 1 is a front elevation of a sewing machine, in which the presser-rod is raised by a set-screw provided on the presser-lever. Fig. 2 shows another construction, in which the foot is adjustably connected with the presser-rod. Fig. 3 is a side elevation and Fig. 4 is a plan of the foot used in Fig. 2.

In the construction shown in Fig. 1 the adjustment, as mentioned above, is effected by a set-screw provided on the presser-lever. The rod *a*, to which the foot *c* is attached by means of the screw *b*, is raised and lowered in the usual manner by a lever *e*. To this lever is attached the set-screw *f*, the point of which presses against the casing *g*, so that, by turning this screw, the height of the presser-foot can be adjusted, according to desire, that is, according to the thickness of the fabric to be inserted between the foot *c* and the plate *d*. The thread is guided exactly in the same way as in sewing so that there is no need to specially describe the same.

The construction shown in Figs. 2–4 renders an adjustment of the rod *a* unnecessary, because, in this case, the foot *c* is vertically adjustable in regard to the rod *a*, so that in the lowest position of said rod *a* the foot either rests on the plate *d* or is secured some short distance over the same. As better shown in Fig. 3 the vertical adjustability of the foot *c* is obtained by lengthening the slot *h*, which serves to receive the set-screw *b*.

As mentioned above, the adjustment can also be effected by a device provided on the presser-rod *a*. In this case a screw threaded sleeve *i* is preferably provided over the sleeve *h'*, as shown in dotted lines in Fig. 2. By turning this screw threaded sleeve *i*, the rod *a* can be raised or lowered without influencing the tension of the presser as afterward required for sewing.

In all cases the bottom surface of the foot *c* should be so rounded off that the fabric can be freely moved in all directions.

What I claim and desire to secure by Letters Patent of the United States is:—

In an ordinary household sewing machine, a presser foot comprising a foot portion and an integral shank portion, said shank portion being provided with an elongated open ended slot, the closed end of which is located at a predetermined distance below the normal attaching point for the presser foot whereby the presser foot is adapted for attachment at the normal point for ordinary sewing or at or near the bottom of said slot for special work such as darning.

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

THEKLA TROTT.

Witnesses:

HENRY HASPER,

WOLDEMAR HAUPT.