

(No Model.)

H. MUNDLOS.
PRESSER FOOT FOR SEWING MACHINES.

No. 511,539.

Patented Dec. 26, 1893.

Fig. 1.

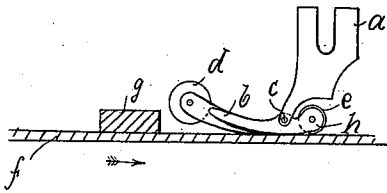


Fig. 2.

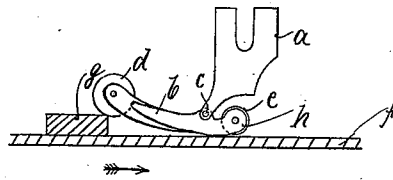


Fig. 3.

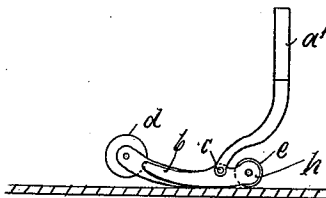


Fig. 4.

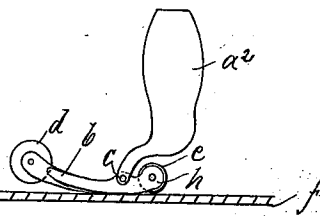


Fig. 5.

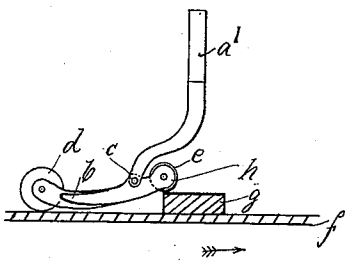


Fig. 6.

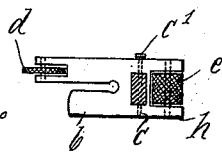
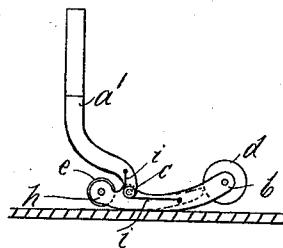


Fig. 7.



Witnesses:
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UNITED STATES PATENT OFFICE.

HEINRICH MUNDLOS, OF MAGDEBURG, GERMANY, ASSIGNOR TO H. MUNDLOS & CO., OF SAME PLACE.

PRESSER-FOOT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 511,539, dated December 26, 1893.

Application filed May 9, 1893. Serial No. 473,625. (No model.)

To all whom it may concern:

Be it known that I, HEINRICH MUNDLOS, a subject of the King of Prussia, German Emperor, and a resident of Magdeburg-Neustadt, in the Province of Saxony, Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in and Connected with Presser-Foot for Sewing-Machines, of which the following is an exact specification.

This invention relates to sewing machines and has for its object to provide a self-acting presser foot for irregular layers of material, which presser foot is applicable to all kinds of sewing machines. I attain that object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side-view of the presser-foot in its normal position. Fig. 2 is a similar view, the presser foot being automatically lifted by a thick layer or obstruction. Figs. 3 and 4 show different forms of the shank. Fig. 5 shows the position of the parts when the obstruction has nearly left the presser-foot. Fig. 6 is an upper view of the device. Fig. 7 is a modification.

Similar letters refer to similar parts throughout the several views.

The shank *a*, Figs. 1 and 2, (*a'*, Figs. 3, 5 and 7; *a''*, Fig. 4, in the annexed drawings,) for the said presser-foot, in its form and method of attachment, is made to suit the particular kind of sewing machine to which it is desired to apply the presser foot and as its build may require. The presser-foot *b* (Figs. 1 to 6) is connected at *c* with the shank *a* by means of a hinge pin furnished with a head *c'*, and carries at *d* a raised wheel and at *h* a second lower wheel *e* which in its normal position always touches the material. Now if the layer of material *ff* is moved in the direction of the arrow over the needle plate of the machine by the feeder (not shown) the presser foot takes up its normal position, as shown in Figs. 1, 3 and 4, which brings the front wheel out of action. If the presser foot approaches afterward an obstruction *g* (Figs. 1 and 2), for

instance a thicker layer of material, a cross seam or a strap placed on the material (as in saddlery), the wheel *d* comes into operation; the obstruction *g* then pushes against the wheel *d* and positions the presser foot self-actingly at an angle, which is necessary in order to pass more easily over the obstruction, the back wheel *e* preventing any friction by the fork *h*. After the presser foot *b* has partly or wholly overcome the obstruction (Fig. 5) being under the influence of a spring, it will take up again its normal position, the front wheel *d* arriving first on the material.

Fig. 7 represents a modification of the appliance described, in which the foot *b* is not only shown connected with the shank *a'* by means of the hinge pin *c, c'* but in addition thereto by a spring *i*, which latter has constantly a tendency to press the front part of the foot onto the material. The pressure of the spring is so light that it will not materially influence the ascent of the front wheel *d* (Fig. 2) while on the other hand the lowering of the wheel *d* (Fig. 5) is assisted, the pressure between the feeder and presser foot during this period being always retained at such a degree that the feeding of the material *f* proceeds unimpeded.

Having thus fully described the nature of my said invention, what I desire to secure by Letters Patent of the United States is—

In a presser foot for sewing machines, the combination with the shank for attachment to the presser bar of the sewing machine, of the foot *b*, having at its toe the normally elevated roller *d*, and at its heel the roller *e* normally bearing upon the work, the foot being fulcrumed to the shank between said rollers, for the purpose as described.

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

HEINRICH MUNDLOS.

Witnesses:

ONO. TRANSMER,
W. EGGELING.