March 5, 1929. A. J. CARMICHAEL ET AL 1,704,169

SEWING MACHINE PRESSER FOOT

Filed Feb. 15, 1927

Fig. 1.

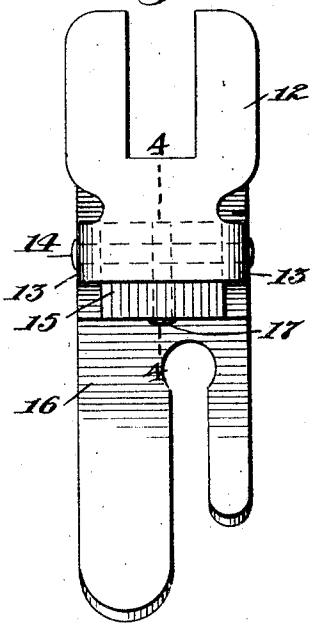



Fig. 3.

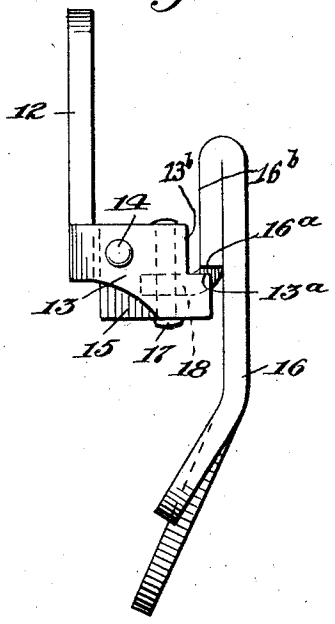



Fig. 2.

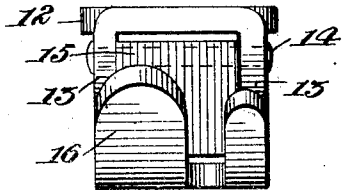
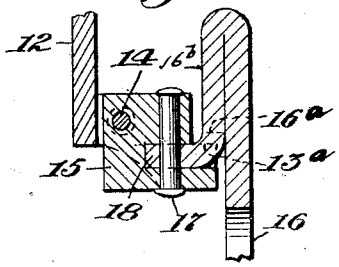



Fig. 4.




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# UNITED STATES PATENT OFFICE.

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## SEWING-MACHINE PRESSER FOOT.

Application filed February 15, 1927. Serial No. 168,419.

This invention has for its object to provide a sheet metal sewing machine presser foot which is self-adjusting or self-leveling, in that it comprises a shank fitted for attachment to a presser-bar and having a depending portion, a small block attached to said shank by a transverse pivot-pin, and a presser-foot attached to said block by a longitudinally disposed pivot-pin which is at a right angle to said first-named pivot-pin. These two pivot-pins therefore provide what is practically a universal joint enabling the presser-foot to adjust itself in any direction according to the requirements of the work passing beneath it.

In the accompanying drawing Fig. 1 is an enlarged plan view of the improved presser-foot. Figs. 2 and 3 are front and side views, respectively, of the same; and Fig. 4 is a partial section on line 4—4, Fig. 1.

Referring to the drawing, 12 denotes a presser-foot shank which is forked for attachment to a sewing machine presser-bar, said shank having depending portions or lugs 13. Pivotally attached to the said depending portions or lugs 13, by a transverse pivot-pin 14, is a small block 15 to which the presser-foot 16 is pivotally attached by a pin 17 arranged at a right angle to the pivot-pin 14. The pivot pins 14 and 17 are in different horizontal planes, as clearly shown in Figs. 3 and 4.

It will thus be seen that the two pivot-pins referred to will enable the presser-foot to tilt longitudinally and to rock laterally, so that it will readily adjust itself in any direction to any inequalities of the work passing beneath it.

The depending lugs 13 are provided with shoulders $13^a$ and $13^b$ arranged to come in contact with the shoulders $16^a$ on a raised presser-foot part or surface $16^b$, respectively, to limit the upwardly tilting movements of the presser-foot 16 which is loosely hung beneath said lugs 13, so as to have a limited tilting movement longitudinally. The sidewise rocking movements of said presser-foot are limited by contact of the shoulders $13^b$ with the integral, forwardly-turned raised part $16^b$ doubled onto the top of said presser-foot.

It will be noted that the block 15, with which the presser-foot 16 is connected, is loosely hung beneath the shank 12, so that said block is free to tilt on the pin 14. The longitudinal pivot-pin 17 passes through a lug or tenon 18 extending upward from the raised part $16^b$ of the presser-foot into a transverse recess in the bottom of the pivoted block 15 through which said pin extends.

Thus the two pivot pins 14 and 17, at right angles to each other, afford a universal joint connection between the shank 12 and the presser-foot 16, and the loosely hung connections just referred to will permit the presser-foot to adjust itself in any direction to accommodate any inequalities in the work passing beneath it, as will be apparent.

As the parts of this device are mostly of sheet metal the improved presser-foot may be manufactured at little expense by stamping, as will be understood.

Having thus described our invention we claim and desire to secure by Letters Patent:

The combination with a sewing machine presser-foot shank constructed for attachment to a presser-bar and having depending lugs, of a block pivoted between said lugs by a transverse pivot-pin and having a transverse recess in its bottom, a presser-foot loosely hung beneath said block and having an integral, forwardly turned raised part doubled onto the top of said presser-foot, said raised part having an upwardly projecting lug entering said recess, and a longitudinally arranged pivot-pin passing through said block and upwardly projecting lug, said depending lugs having shoulders to contact with parts of said presser-foot to limit its tilting and rocking movements, said pivot pins being in different horizontal planes, and all of the parts of said device, excepting said block and pivot pins, being of sheet metal, so that the said device may be mostly made by stamping, thus avoiding expense in making.

In testimony whereof we affix our signatures.

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