April 18, 1933. J. HITZLER ET AL 1,904,787

DEVICE FOR SHRINKING LEATHER

Filed Nov. 4, 1930

Fig. 1.

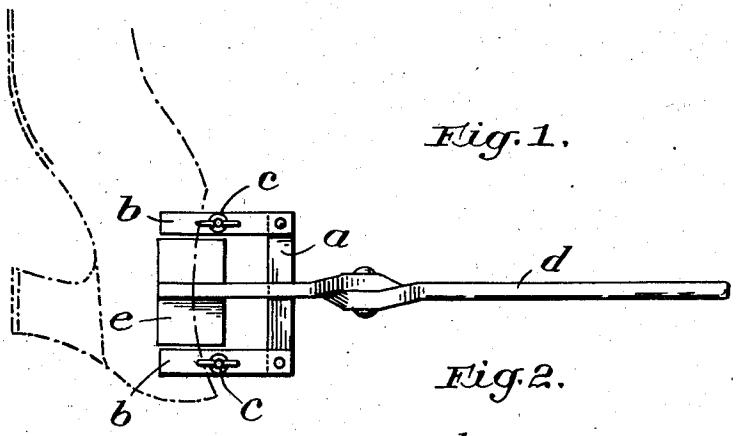


Fig. 2.

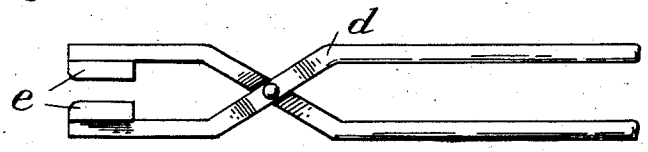


Fig. 3.

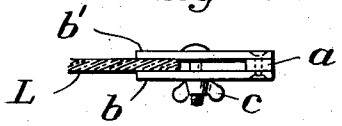


Fig. 4.

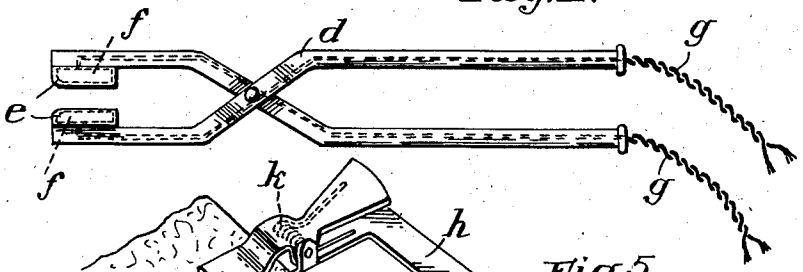
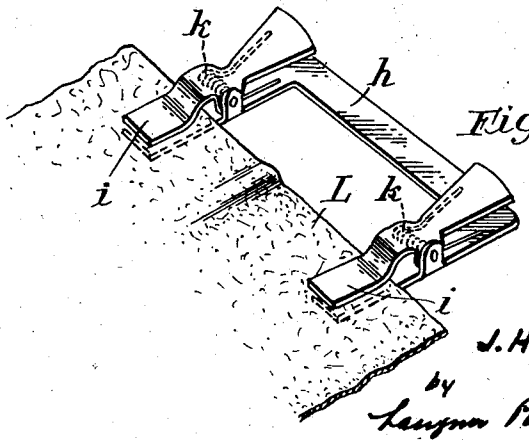


Fig. 5.



INVENTORS
J. Hitzler, & F.C.J. Merz,
by
Langner Parry Card & Langner
Attys.

Patented Apr. 18, 1933 1,904,787

UNITED STATES PATENT OFFICE

JOSEF HITZLER, OF FRANKFORT-ON-THE-MAIN, AND FRIEDRICH CARL JULIUS MERZ, OF FRANKFORT-ON-THE-MAIN-RODELHEIM, GERMANY

DEVICE FOR SHRINKING LEATHER

Application filed November 4, 1930, Serial No. 493,376, and in Germany November 6, 1929.

The present invention relates to a device for shrinking or contracting leather and especially for contracting and thereby reshaping leather articles which have been widened and deformed by use, such as for instance ladies' shoes.

Shoes, especially ladies' shoes and similar articles are frequently deformed in use. Hereby the shoe loses in appearance, especially when the upper edge of the same is widened. The object of the present invention is to reshape such articles by contracting the widened parts artificially. The reshaping is according to the invention performed by means of an easily operable clamping device and a plier- or tong-like arrangement.

Some preferred forms of the invention are illustrated by way of examples in the accompanying drawing, in which

Fig. 1 shows a simple plier-like mechanism with clamping device in operative position.

Fig. 2 is a lateral view of the same invention.

Fig. 3 is a lateral view of a clamping device according to the invention.

Fig. 4 shows a modified constructional form of pliers, which are equipped with an electric heating device.

Fig. 5 shows another modification of the clamping device in operative position.

In accordance with the invention the widened or stretched leather piece of a shoe is contracted by clamping the piece to be reshaped in two clamping mechanisms a, b, b^1, c in such a manner that a small fold is formed between the clamping members or that the deformed piece in folded or crimped state is pinched between the clamping members. According to Fig. 1 the pliers d terminate in two reinforced jaws e. These jaws are heated to a temperature of 140–150° C. by means of electricity, gas, or any other fuel and are thereupon pressed together between the clamping members. Through this treatment the heated part of the shoe will shrink and when the clamping members are separate the shoe may be removed from the device in reshaped state.

Instead of the plier-like pressing device and the described clamping arrangement any other mechanisms may be used, the operation of which is so simple, that the reshaping may be performed also by unskilled persons.

According to Figs. 1–3 the clamping device comprises a U-shaped strap b, a, b^1. The leather is placed on the plates b^1 and the plates b are pressed against the leather by means of the wing-nuts c. The distance between the clamping members should preferably correspond substantially with the width of the pliers' jaws. The width and other dimensions of the pliers may vary within wide limits.

According to the Figs. 4 and 5 the clamping device consists of a U-shaped strap. On each of the free ends of this strap a pivotal clamping lever i, k is resiliently arranged in such a manner, that the same may be opened and the leather may be inserted by pressing its free end. According to Fig. 4 the pressing jaws are equipped with an electric heating body f and with supply wires g. The latter may conveniently be passed through the handle of the device. The device may for heating be coupled to any desired lighting leads. The clamping device and the pliers are preferably constructed in the form of separate devices, in order that clamping devices of different width may be used in connection with the same pliers. At the electrically heated form of the invention the clamping devices and the pliers are preferably combined and the strap h is located directly on the lower part of the pliers' jaws.

We claim:

A method of shrinking or contracting leather and especially of reshaping the widened upper leather of shoes and the like, comprising the steps of clamping the piece of leather to be contracted in wrinkled state and applying heat and pressure to said clamped piece in order to bring forth the shrinkage of the same.

In testimony whereof we affix our signatures.

JOSEF HITZLER.
FRIEDRICH CARL JULIUS MERZ.