

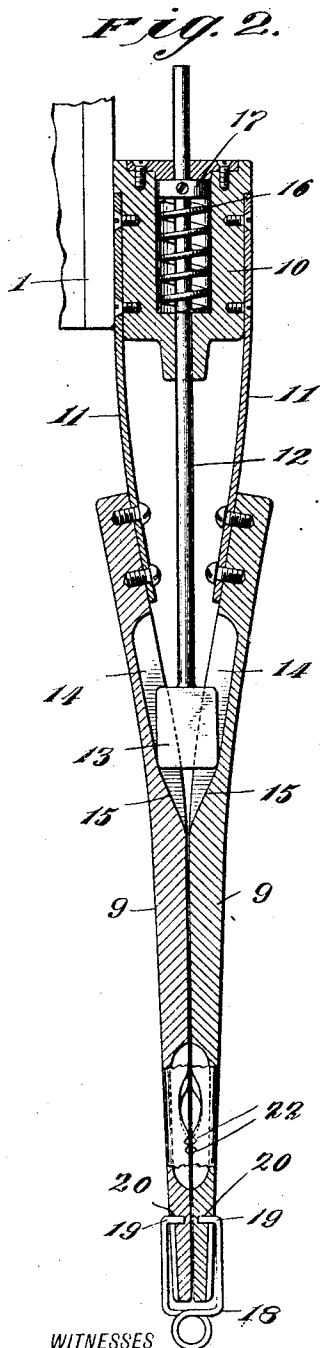
2 SHEETS—SHEET 1.



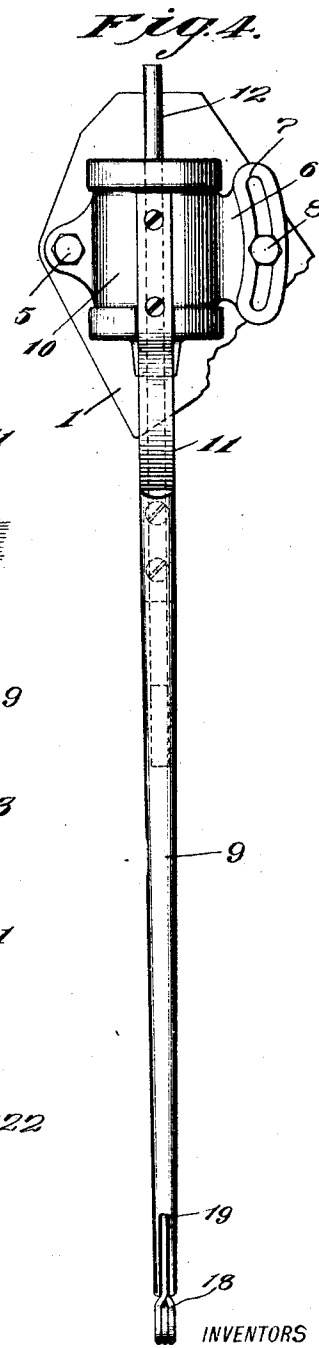
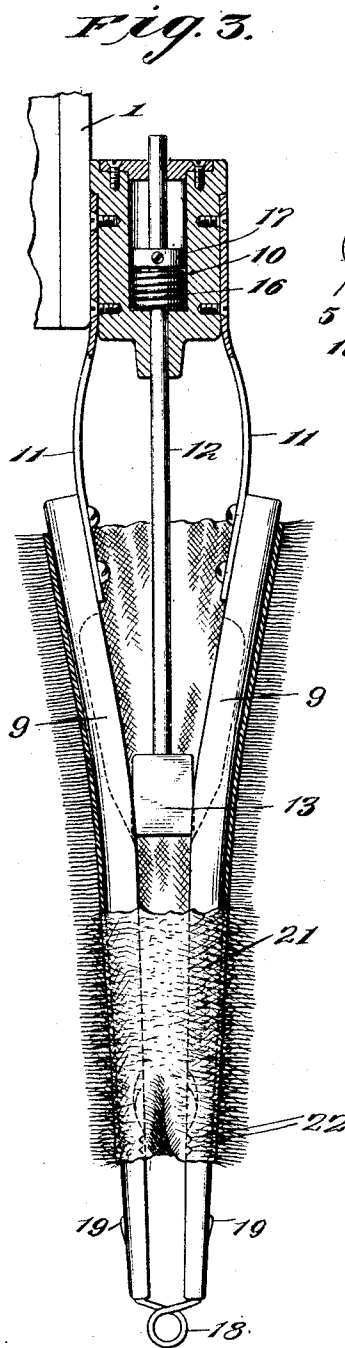
S. AND B. FRIEDMAN.
SKIN STRETCHER.
APPLICATION FILED OCT. 2, 1919:

Patented Jan. 11, 1921.
2 SHEETS—SHEET 2.

1,365,031.



WITNESSES
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UNITED STATES PATENT OFFICE.

SAMUEL FRIEDMAN, OF BROOKLYN, AND BERNARD FRIEDMAN, OF NEW YORK, N. Y.

SKIN-STRETCHER.

1,365,031.

Specification of Letters Patent.

Patented Jan. 11, 1921.

Application filed October 2, 1919. Serial No. 327,837.

To all whom it may concern:

Be it known that we, SAMUEL FRIEDMAN and BERNARD FRIEDMAN, both citizens of the United States, and residents, respectively, of the city of New York, borough of Brooklyn, in the county of Kings, and borough of the Bronx, in the county of Bronx and State of New York, have invented a new and Improved Skin-Stretcher, of which the following is a full, clear, and exact description.

This invention relates to improvements in skin stretchers, an object of the invention being to provide improved stretching means located at an angle or incline so that when the stretching operation is ended, the skin will fall by gravity from the stretcher.

A further object is to provide improved means for operating the device to stretch the skins.

A further object of the invention is to provide improved means for forcing the stretcher bars apart, and during such operation allow the bars to adjust themselves to the parallel or angular shape of the skin.

A further object is to provide a device of the character stated with improved means for facilitating the reversing of the skin when it is drawn from the stretcher.

With these and other objects in view the invention consists in certain novel features of construction, and combinations and arrangements of parts, as will be more fully hereinafter described and pointed out in the claims.

Figure 1 is a view in side elevation illustrating our improvements;

Fig. 2 is a view in longitudinal section through the stretcher;

Fig. 3 is a view partly in section and partly in elevation showing the stretcher with a skin thereon;

Fig. 4 is an edge view;

Fig. 5 is a fragmentary view illustrating a modification; and

Fig. 6 is a view in section on the line 6—6 of Fig. 5.

1 represents a standard secured on a base 2 and having a laterally projecting arm 3 engaging its upper end. 10 represents a cylindrical casing which has a perforated lug 4 thereon pivotally connected to the standard 1 by means of a bolt 5. A web 6 is made integral with the casing 10 and has a slot 7 therein concentric with the pivot 5, and a screw 8 is positioned in the slot 7 and

secured in the standard 1 so as to clamp the casing 10 at the desired angle.

A pair of stretcher bars 9, 9, are connected to the casing 10 by spring arms 11 and a plunger rod 12 extends through the casing 10 and is provided at one end with a cam bar 13 movable in longitudinal grooves 14 in inner faces of the stretcher bars 9, 9, and adapted, when moved in one direction, to force the bars 9, 9, apart.

It will be noted that the bars 9, 9, at their upper ends flare apart and that the walls of the grooves 14 taper, as shown at 15, so as to permit this stretching action to take place when the block 13 is moved in one direction.

A coiled spring 16 is located in the casing 10 and bears against a collar 17 fixed to the plunger 12 so as to hold the plunger in its normal position and return it to such position. A light wire spring 18 coiled between its ends, as shown, is made with hooked ends 19 positioned in sockets 20 in bars 9, 9, adjacent their free ends. This spring 18 co-operates with the spring arms 11, holds the stretcher bars normally in the position shown in Fig. 2, and allows the bars to adjust themselves to the angular or parallel form of the skin indicated by the reference numeral 21. This compels the bars to stretch the skin uniformly throughout its length. The spring 18 also causes the free ends of the bars to move quickly together when the block 13 is withdrawn to allow the skin to fall off the stretcher, as will fully hereinafter appear.

The bars 9, 9, adjacent their free ends are provided in their inner faces with teeth 22 so that the skin 21 can be forced in position between the bars 9, 9, and when the latter come together, the teeth 22 will grip the skin and hold the lower end thereof so that when the upper end of the skin is drawn downwardly, the skin will be reversed or turned wrong-side-out.

A lever 23 is pivotally supported near its upper end on the arm 3, as shown at 24, and the upper end of said lever bears against the upper end of the plunger 12. A treadle 25 is connected to the lower end of the lever 23 and a weighted arm 26 is connected to the lever 23 at its pivotal point so as to hold the lever in normal position. A stop 27 fixed to the standard 1 limits the movement of the lever in one direction.

When it is desired to stretch the skin,

the latter is placed on the bars 9, 9, and the treadle 25 is forced downwardly and to the right of Fig. 1, which causes the plunger 12 to move longitudinally when the cam block 13 will separate the bars 9, 9, and stretch the skin, as shown in Fig. 3. When the pressure on the treadle 25 is released, the springs 11 and 18 will move the bars 9, 9, together after the plunger 12 is withdrawn by a spring 16 and as the stretcher is at an angle, as shown in Fig. 1, the skin will fall off the stretcher.

If it is desired to reverse the skin, the lower portion thereof is forced between the bars to be engaged by the teeth 22 and the upper end of the skin is pulled downwardly to cause the reversing action, as will be understood. The angular position of the stretcher can be adjusted by means of the screw 8, as above explained, so that it may be conveniently located for the operator and yet will have sufficient incline to allow the skin to fall off and the stretcher bars move together.

In the modification shown in Figs. 5 and 6 a wire hook 28 is supported in recesses 29 in the bars 9 and normally projects from the face of the bars. This hook allows a skin to be readily inserted on the bars but catches the lower edge thereof when the skin is removed and causes the skin to be reversed.

Various slight changes may be made in the general form and arrangement of parts described without departing from the invention, and hence we do not limit ourselves to the precise details set forth but consider ourselves at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

We claim:

1. A skin stretcher, comprising a support, a pair of stretcher bars elastically connected to the support and having portions thereof angularly disposed relative to each other,

and a longitudinally movable cam block between said members adapted to move said members laterally relative to each other when said cam block is moved longitudinally.

2. A skin stretcher, comprising a support, a pair of stretcher bars elastically connected to the support and having portions thereof angularly disposed relative to each other, a longitudinally movable cam block between said members adapted to move said members laterally relative to each other when said cam block is moved longitudinally, and a spring connecting the free ends of said members.

3. A skin stretcher comprising a support, spring arms on the support, stretcher bars secured to the spring arms, an elastic member connecting the ends of the bars, a plunger movable between the bars and adapted to force them apart, and teeth on the inner faces of said bars adjacent the smaller end.

4. A skin stretcher comprising a support, spring arms on the support, stretcher bars secured to the spring arms, an elastic member connecting the ends of the bars, a plunger movable between the bars and adapted to force them apart, and skin gripping means on the said bars adjacent the smaller end of the stretcher.

5. The combination with a standard, a casing pivotally connected to the standard, a web on the casing having a slot curved concentric with the pivot of the casing, a screw located in the slot and securing the casing at an angle, stretcher bars carried by the casing, a spring pressed plunger movable through the casing and adapted, when moved in one direction, to force the bars apart, a foot lever pivotally connected to the standard and engaging the plunger, and a weighted arm holding the lever in normal position.

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