

No. 892,510.

PATENTED JULY 7, 1908.

F. X. FALLER.
GARMENT STRETCHER.
APPLICATION FILED NOV. 4, 1907.

Fig. 1.

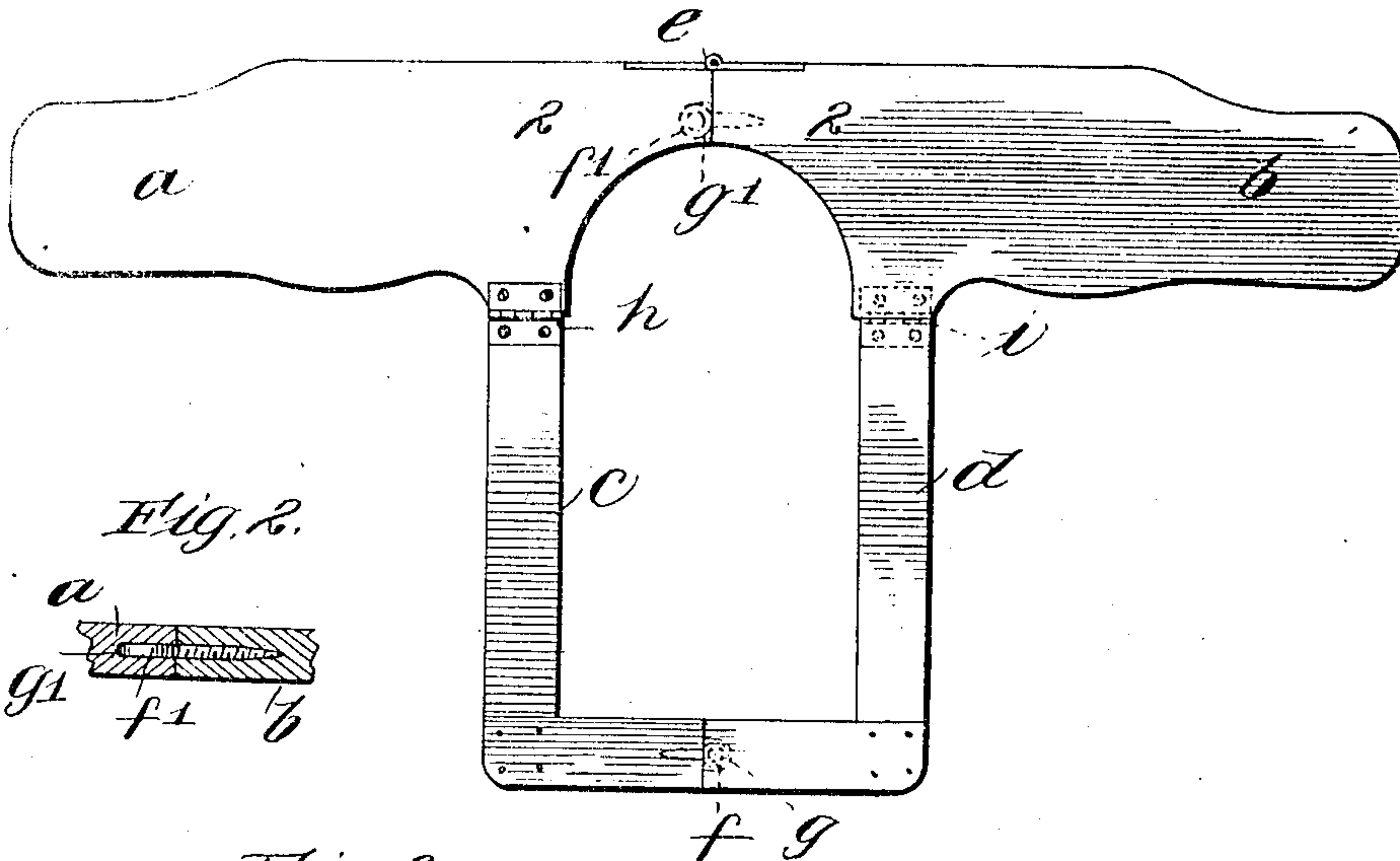


Fig. 2.

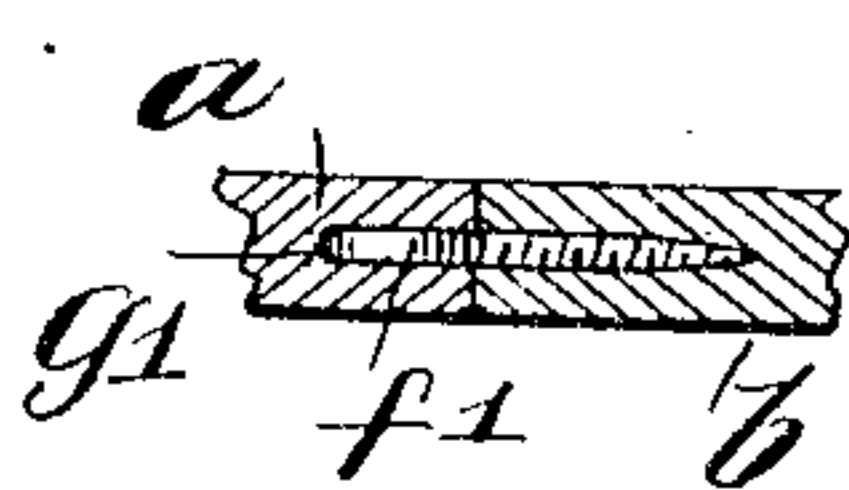


Fig. 3.

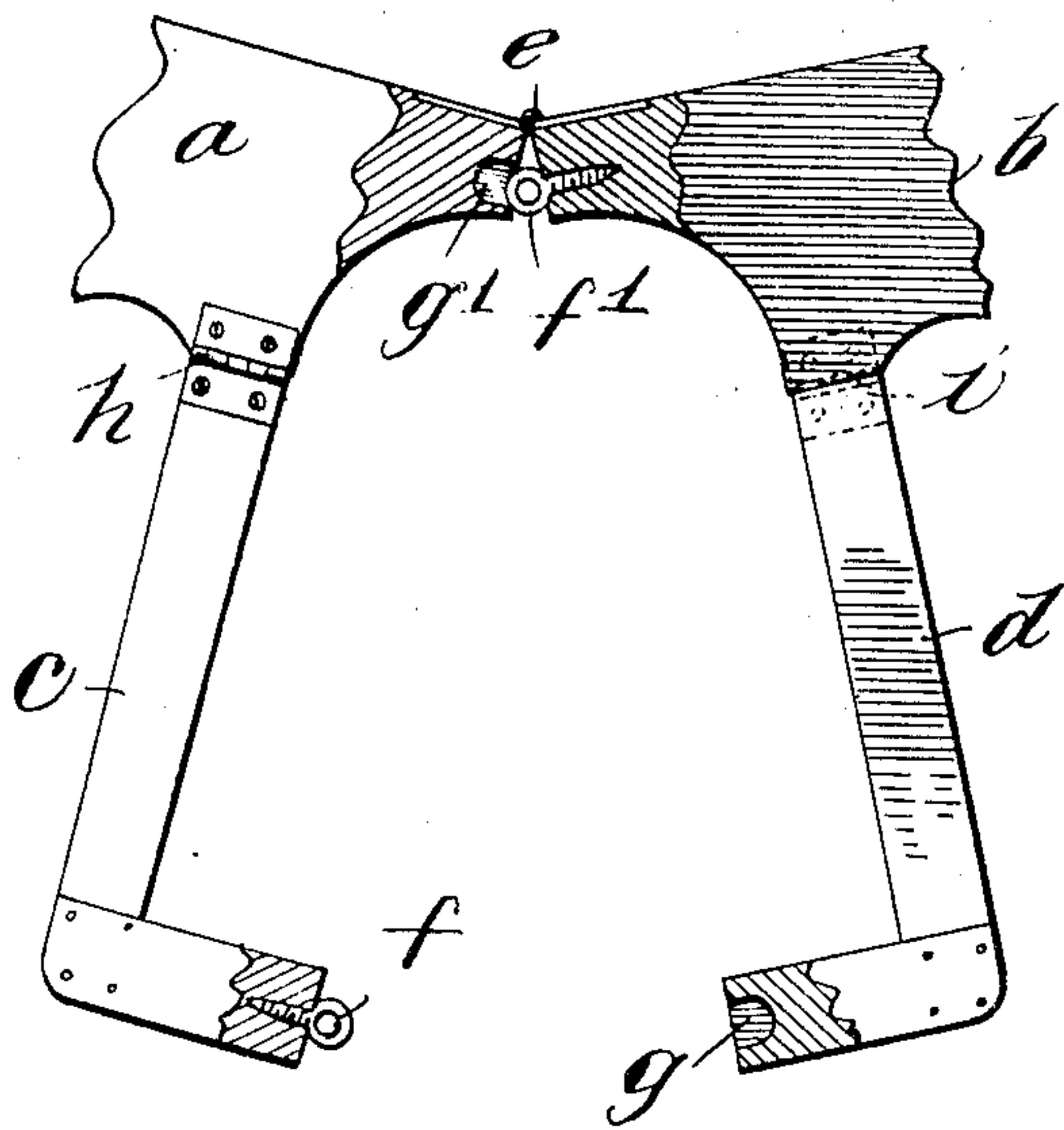
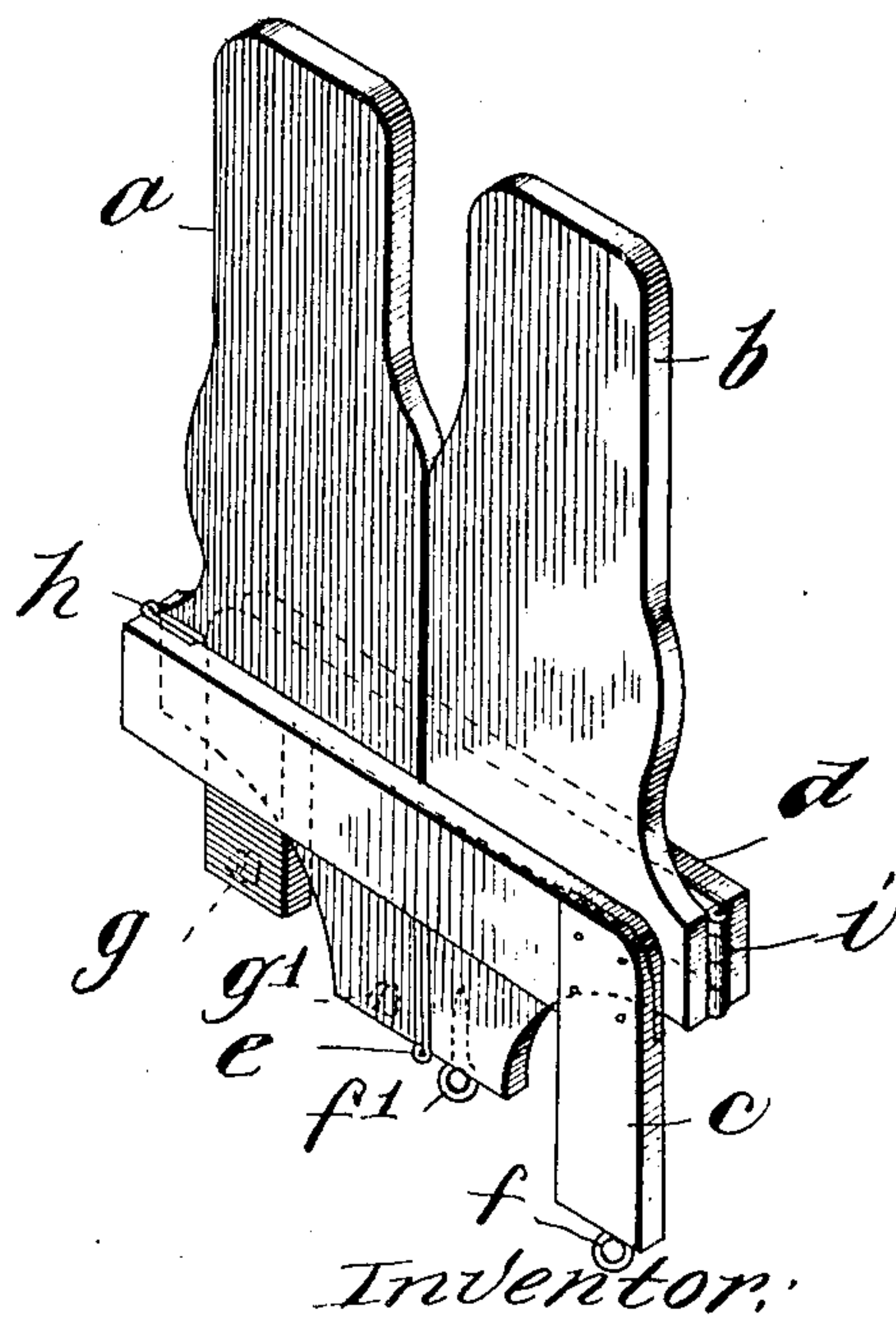


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

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GARMENT-STRETCHER.

No. 892,510.

Specification of Letters Patent.

Patented July 7, 1908.

Application filed November 4, 1907. Serial No. 400,520.

To all whom it may concern:

Be it known that I, FRANCIS X. FALLER, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Garment-Stretchers, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to garment stretchers and has several objects in view.

The main object of my invention is to produce a garment stretcher which shall be collapsible to adapt it for shipment and storage, yet which is so constructed as to enable the garment stretcher, when unfolded, to be of sufficient rigidity to withstand all ordinary usage.

The garments that the device of my invention is adapted to stretch are those possessing sleeves and body portions, such as undershirts.

It has hitherto been proposed to construct such garment stretchers as these so that they will fold along a line extending vertically of the garment stretcher, whereby the arm portions of the stretcher are brought face to face so as to lie in parallel planes, as do the contiguous portions of the body element of the stretcher. This result has been secured by forming the stretcher in two divisions which are hinged together, one hinge being located at the top and the other hinge being located at the bottom. It is apparent that when the garment stretcher thus constructed is folded for shipment, that unprotected parts are exposed which are subject to breakage. Furthermore, this construction is such that it will not readily withstand the use to which it is adapted.

It has been proposed to improve upon the garment stretcher above described, by pivoting the arm portions of the garment stretcher upon corner portions of the body portion of the stretcher, so that, when folded, the various parts of the garment stretcher would occupy four planes, the divided parts of the body occupying two adjacent parallel planes, while the arm portions would occupy planes parallel to these and adjacent thereto. The protection to the body portions of the garment stretcher in shipment is but slightly increased by the modified structure and no

other advantages are gained thereby, whereas, on the contrary, disadvantages have resulted.

In practicing my invention, I so divide the garment stretcher that the arm portions may be folded not so as to occupy parallel planes, but so as to occupy the same plane. To this end, the garment stretcher is divided vertically thereof and a hinge is provided at the top of the structure having a pintle extending transversely to the plane of the stretcher, permitting the rotation of the divided portions of the stretcher with respect to each other in the same plane. There is thus provided, in accordance with my invention, but one hinge at the central dividing line, there being a suitable engaging device at the bottom portion of the stretcher whereby the main divisions of the stretcher are maintained in the same plane with the arm portions of the stretcher when the device is set up for use.

I effect a subdivision of each main division of the stretcher along a line transverse to the main vertical division line and where the arm portions are mainly disposed, so that not only may the arm portions be folded together, but the lower portions of the stretcher may be folded over the arm portions, whereby the arm portions and these latter portions of the stretcher mutually protect each other in shipment and whereby the space occupied by the device is materially reduced, thereby furnishing another advantage for shipment purposes.

I will explain my invention more fully by reference to the accompanying drawing, showing the preferred embodiment thereof, in which—

Figure 1 is a view of the device of my invention unfolded, so that it may be used for its purpose. Fig. 2 is a sectional plan view showing a portion of the stretcher. Fig. 3 shows a portion of the structure indicating the first movement that is made in order to fold it. Fig. 4 indicates the structure completely folded for purpose of shipment or storage.

Like parts are indicated by similar characters of reference throughout the different figures.

The garment stretcher includes two arm portions *a*, *b* and a body portion formed in two divisions *c*, *d*. The garment stretcher is

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divided along a central vertical line into two main divisions, which main divisions are hinged together at the upper portion of the stretcher by means of a hinge *e* having a pintle extending perpendicularly to the plane occupied by the arms, the hinge being thus adapted to confine the arms to movement in a plane which includes both of the arms. Hitherto these main body portions of the stretcher have been hinged together by means of a hinge whose pintle was parallel with the plane occupied by the arm portions, so as to permit the arm portions to be folded over to occupy parallel planes, rather than causing them to occupy, when folded, the same plane, which latter case is in accord with my invention. Hitherto it has also been the practice to locate a hinge along the main vertical line and at the bottom portion of the garment stretcher so as to cooperate with the upper hinge in the folding and unfolding operations.

In accordance with my invention, I eliminate the hinge at the bottom of the stretcher, for the stretcher must separate at the bottom portion when the arm portions are folded together. In order, however, to maintain the main divisions of the garment stretcher in the same plane when the stretcher is unfolded for use, I provide some suitable sort of registering device, preferably in the form of a tongue and groove construction, such as that indicated most clearly in Figs. 1, 2, and 3.

One main division of the garment stretcher is provided with a tongue *f* at the bottom of the stretcher, adapted to engage a groove *g*, the structural formations at *f* and *g* serving to hold the bottom portions of the garment stretcher in proper relation. The tongue *f*, in the embodiment of the invention shown, is in the form of an eye which has a screw stem for securing the eye in place. The upper portion of the garment stretcher may be similarly provided with a tongue and groove formation *f*¹, *g*¹, if desired, in order further to insure the disposition of the main divisions of the stretcher in the same plane when the stretcher is unfolded and adjusted for purpose of use. In order to prevent the portions *c* and *d* from improperly projecting from the arm portions when the device is folded for shipment or storage, these portions *c* and *d* are hinged to the arm portions, desirably by means of hinges *h* and *i* whose pintles extend parallel to the plane of the arms, so that these portions of the stretcher may be rotated in planes perpendicular to the planes of the respective arms, whereby these portions *c*, *d* of the stretcher, when folded, may occupy planes parallel with the plane occupied by the arm portions. In order that these hinges *h* and *i* may not only permit of this movement of the portions *c* and *d* with respect to the arms, but may also be adapted to cooperate in maintaining the

various portions of the stretcher in a given plane when the device is unfolded for use, I locate one hinge *h* upon one side of the garment stretcher and the other hinge *i* upon the other side, these hinges cooperating to prevent relative swinging movement of parts of the structure along the axes of said hinges *h* and *i*. Furthermore, by this disposition of the hinges *h* and *i* the arm portions *a* and *b* are sandwiched between the portions *c*, *d* of the body when the device is folded for shipment or storage, as indicated in Fig. 4.

It will be seen that the garment stretcher of my invention is provided not only with the vertical division line but also with a horizontal division line, the terms "vertical" and "horizontal" being used when the garment stretcher is placed in a vertical position. The horizontal division line occurs substantially at the junction of the arm and body portions.

In the claims, for the sake of convenience, I use the terms "vertical" and "horizontal" having regard to the garment stretcher when in its natural upright position.

I do not wish to be limited to the precise construction herein shown and particularly described, but,

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. A garment stretcher having arm and body portions, the garment stretcher being divided along a central vertical line and along a horizontal line, near where the body and arm portions meet, a hinge provided upon the top of the stretcher where the arm portions are separated by the vertical dividing line, serving to permit the arm portions to be relatively rotated to occupy the same plane, when folded, the bottom portion of the stretcher being provided with fastening means for holding this part of the garment stretcher in place, hinges located at the junction points of the body portion with the arm portions and serving to permit swinging movement of the body portions in planes angular to the planes of the contiguous arm portions, one of these latter hinges being disposed upon one side of the garment stretcher, while the other of these latter hinges is disposed upon the other side of the garment stretcher, whereby, when the garment stretcher is adjusted for use, the body of the garment stretcher is maintained in its proper plane with respect to the arm portions.

2. A garment stretcher having arm and body portions, the garment stretcher being divided completely throughout the length of the garment stretcher along a central vertical line, a hinge provided upon the top of the stretcher where the arm portions are separated by the vertical dividing line, serving to permit the arm portions to be relatively rotated to occupy the same plane, when folded,

the bottom portion of the stretcher being provided with fastening means for holding this part of the garment stretcher in place.

3. A garment stretcher having arm and body portions, the garment stretcher being divided completely throughout the length of the garment stretcher along a central vertical line, a hinge provided upon the top of the stretcher where the arm portions are separated by the vertical dividing line, serving to permit the arm portions to be relatively rotated to occupy the same plane, when folded, the bottom portion of the stretcher being provided with fastening means for holding this part of the garment stretcher in place, the body of the garment stretcher being foldable with respect to the arm portions.

4. A garment stretcher having arm and body portions, the garment stretcher being divided completely throughout the length of the garment stretcher along a vertical line, a hinge provided upon the top of the stretcher where the arm portions are separated by the vertical dividing line, serving to permit the arm portions to be relatively rotated to occupy the same plane, when folded, the bottom portion of the stretcher being provided with fastening means for holding this part of the garment stretcher in place, portions of the body upon each side of the vertical dividing line being foldable in opposite directions with respect to each other and in planes transverse to the planes of the arm portions.

5. A garment stretcher having a main vertically disposed dividing line extending completely throughout the length of the garment stretcher and a horizontally disposed dividing line along which the garment stretcher may be folded and unfolded and hinging means at the top of the garment stretcher uniting the portions thereof upon each side of the vertically disposed dividing line and permitting the arm portions of the garment stretcher to be folded to occupy the same plane.

6. A garment stretcher having a main vertically disposed dividing line extending completely throughout the length of the garment stretcher, a horizontally disposed dividing line along which the garment stretcher may

be folded and unfolded, and hinging means at the top of the garment stretcher uniting the portions thereof upon each side of the vertically disposed dividing line whereby the arm portions may be folded together to occupy the same plane and portions of the body may be folded in directions transverse to the plane of the arm portions over onto the arm portions to occupy parallel planes thereto.

7. A garment stretcher having a main vertically disposed dividing line, a horizontally disposed dividing line along which the garment stretcher may be folded and unfolded, and hinging means whereby the arm portions may be folded together to occupy the same plane and portions of the body may be folded over onto the arm portions to occupy parallel planes thereto, the means that permit the folding of the body upon the arm portions serving to effect the location of the parts of the body upon opposite sides of the folded arms.

8. A garment stretcher having arm and body portions, the garment stretcher being divided along a central vertical line and along a horizontal line, near where the body and arm portions meet, a hinge provided upon the top of the stretcher where the arm portions are separated by the vertical dividing line, serving to permit the arm portions to be relatively rotated to occupy the same plane, when folded, hinges located at the junction points of the body portion with the arm portions and serving to permit swinging movement of the body portions in planes angular to the planes of the contiguous arm portions, one of these latter hinges being disposed upon one side of the garment stretcher, while the other of these latter hinges is disposed upon the other side of the garment stretcher, whereby, when the garment stretcher is adjusted for use, the body of the garment stretcher is maintained in its proper plane with respect to the arm portions.

In witness whereof, I hereunto subscribe my name this 30th day of October A. D., 1907.

FRANCIS X. FALLER.

Witnesses:

GEORGE L. CRAGG,
L. G. STROH.