

R. F. MACCLEMMY.
BODY BRACE.
APPLICATION FILED APR. 9, 1909.

948,234.

Patented Feb. 1, 1910.

2 SHEETS—SHEET 1.

Fig. 1

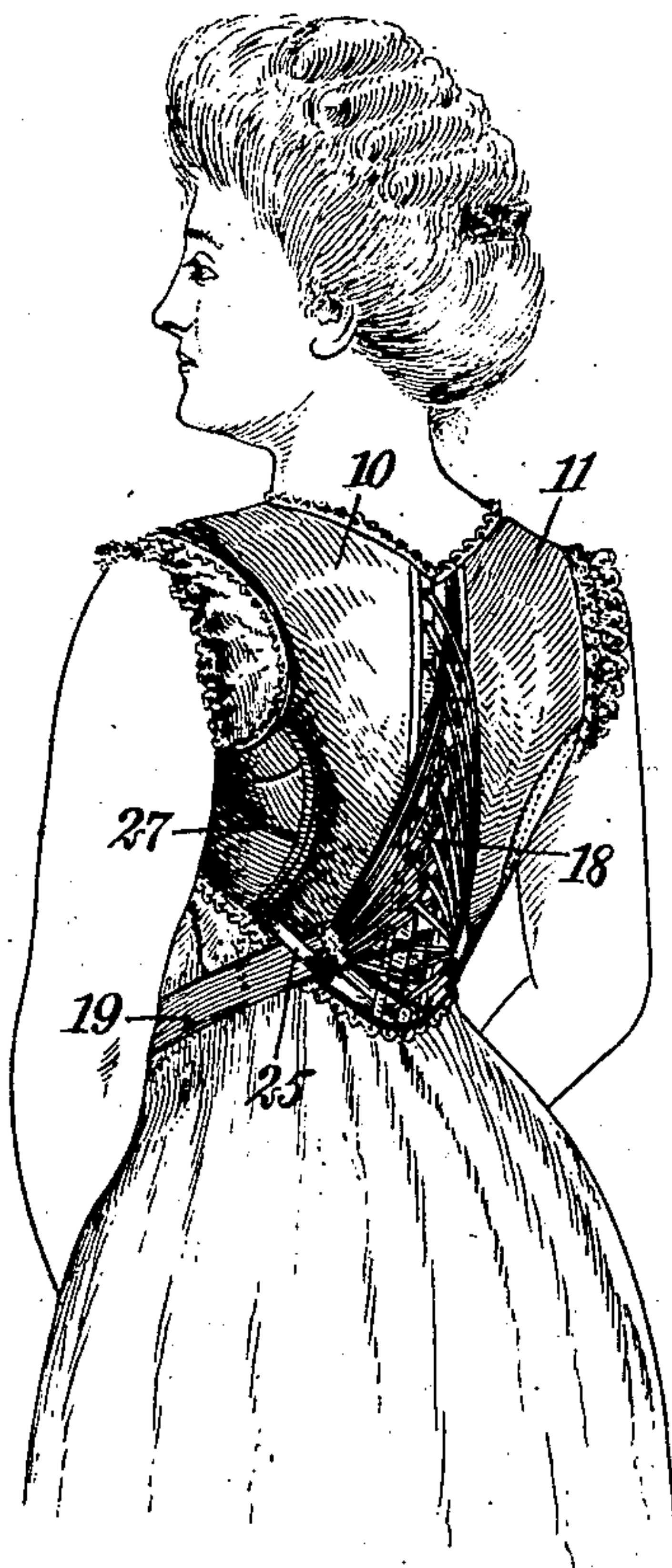
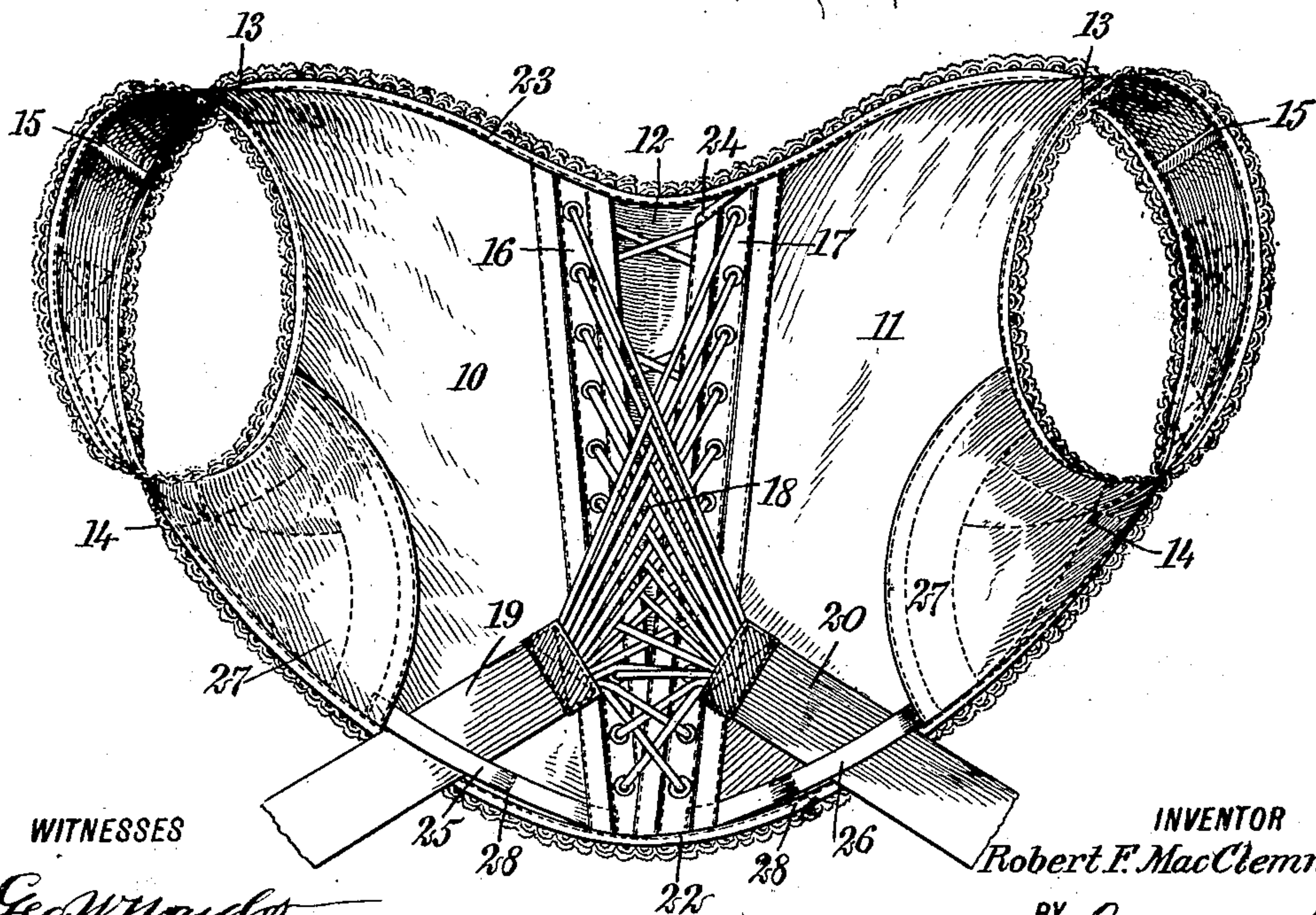


Fig. 2.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 3.

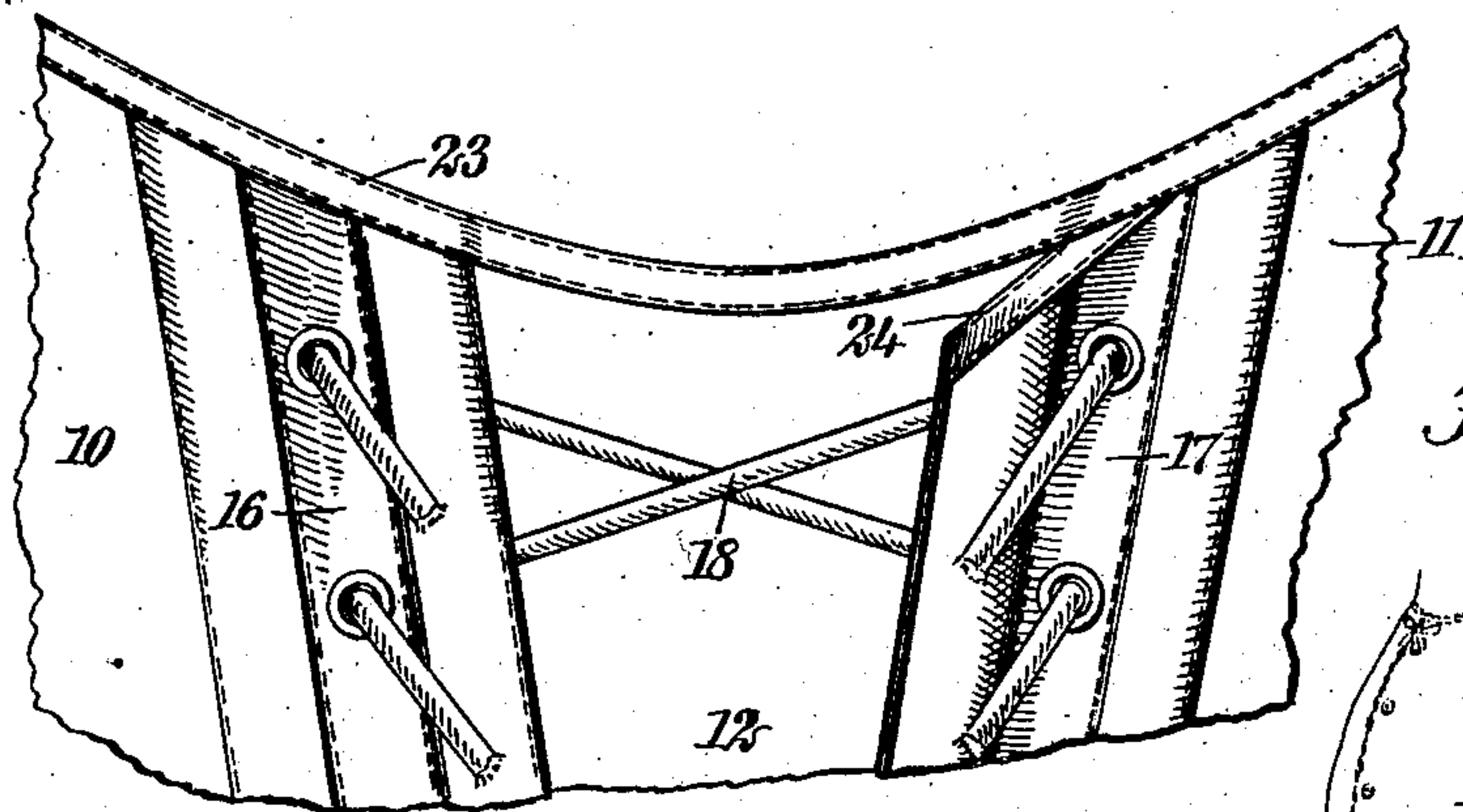


Fig. 4.

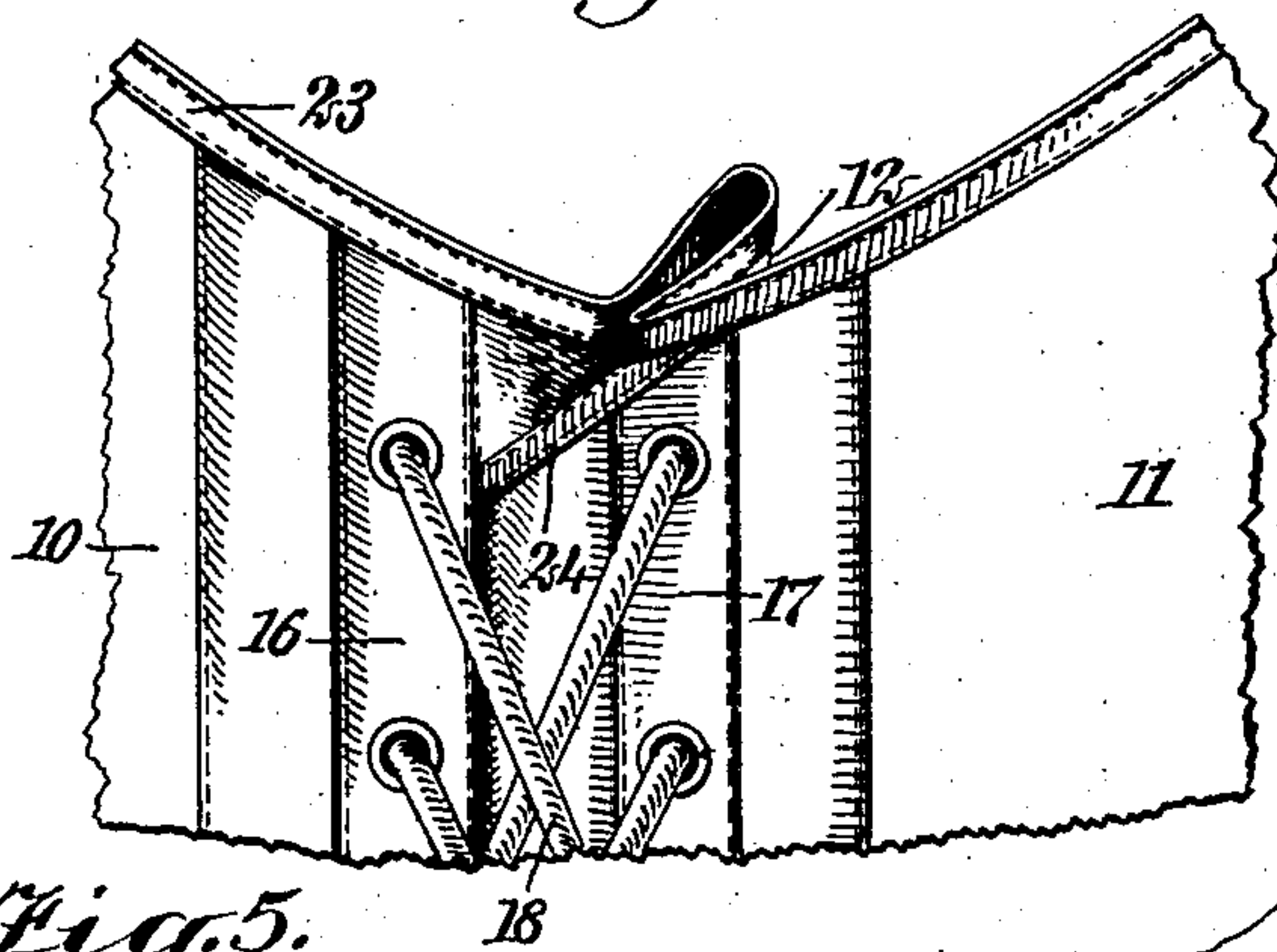


Fig. 5.

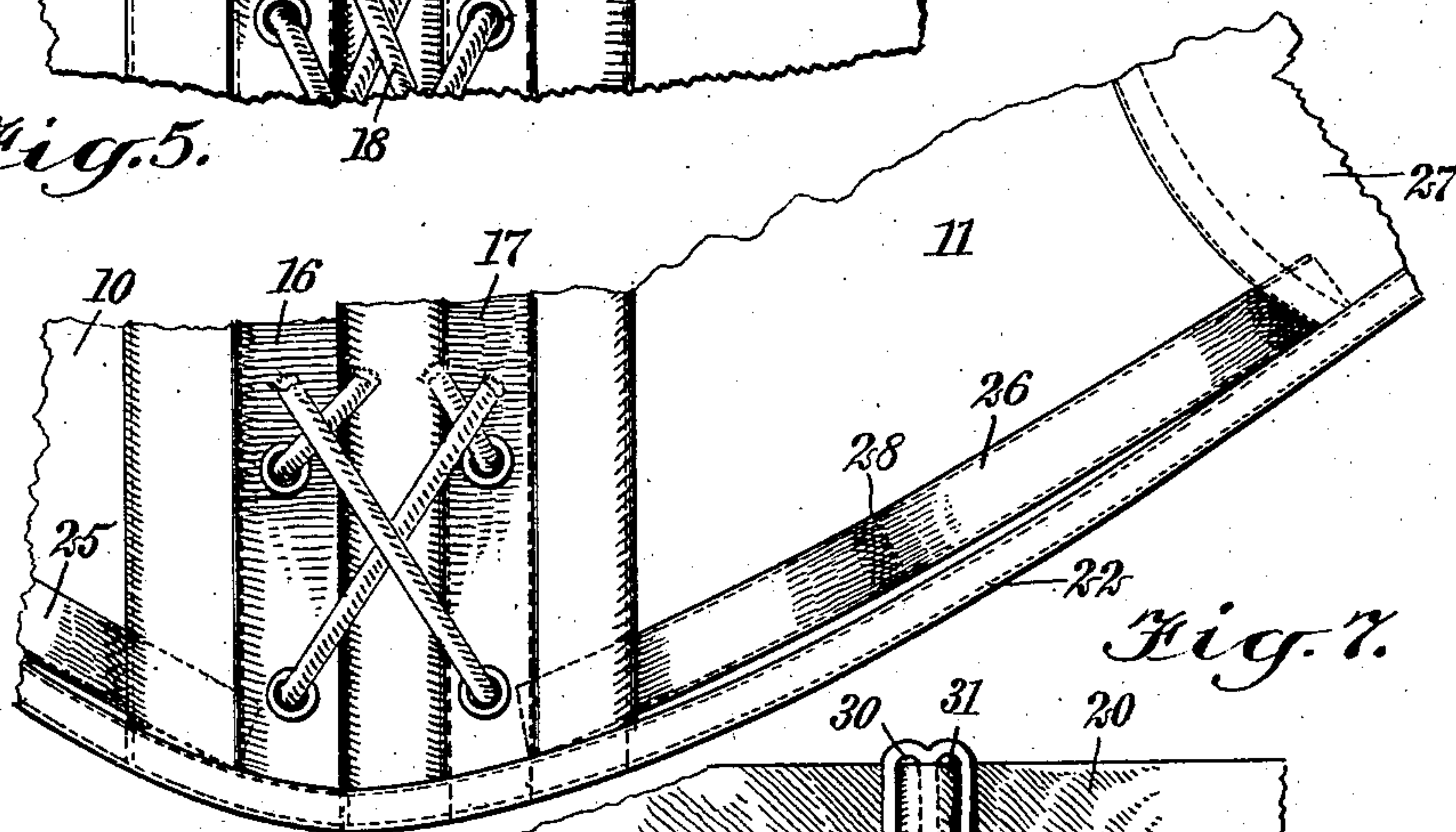


Fig. 7.

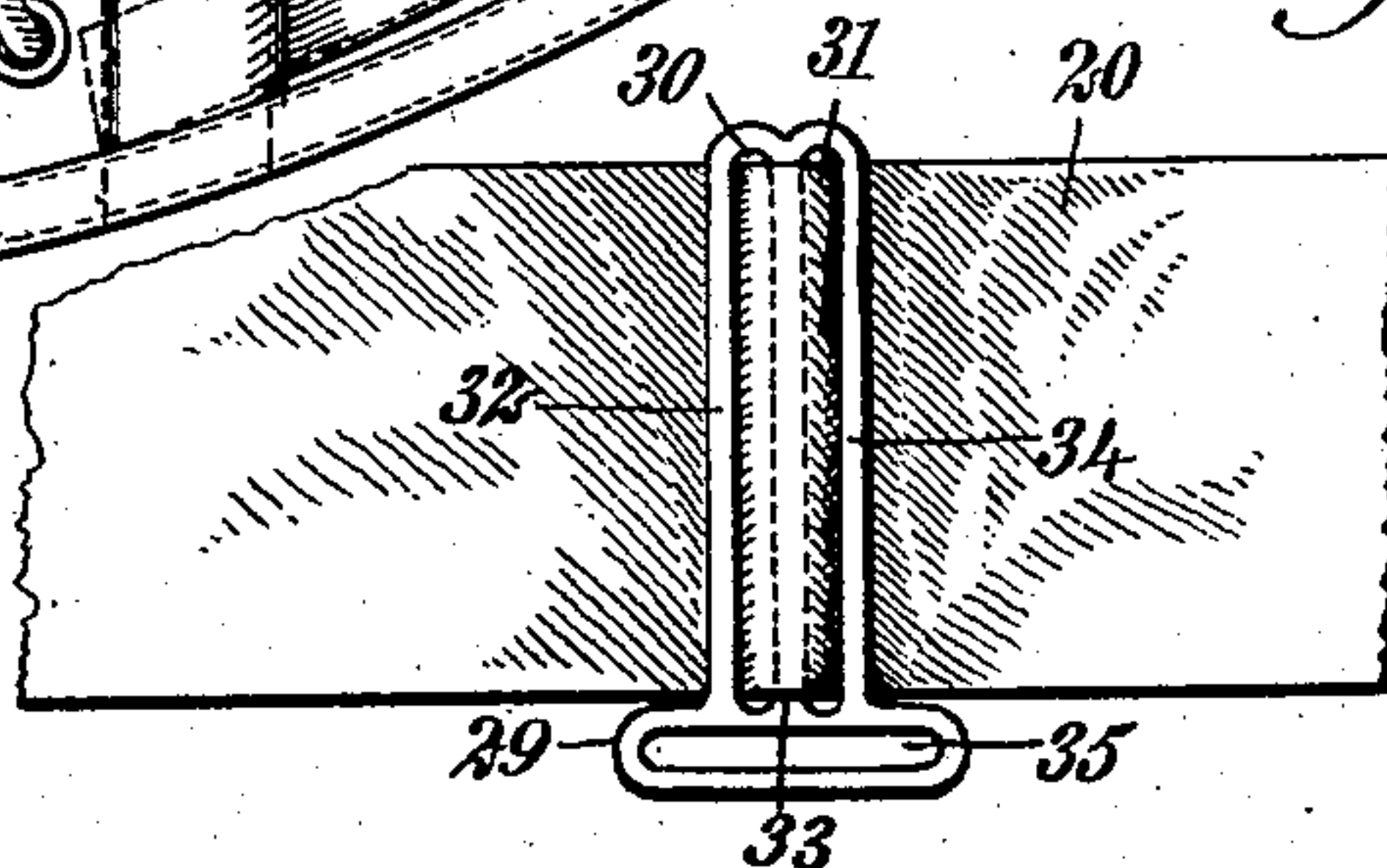
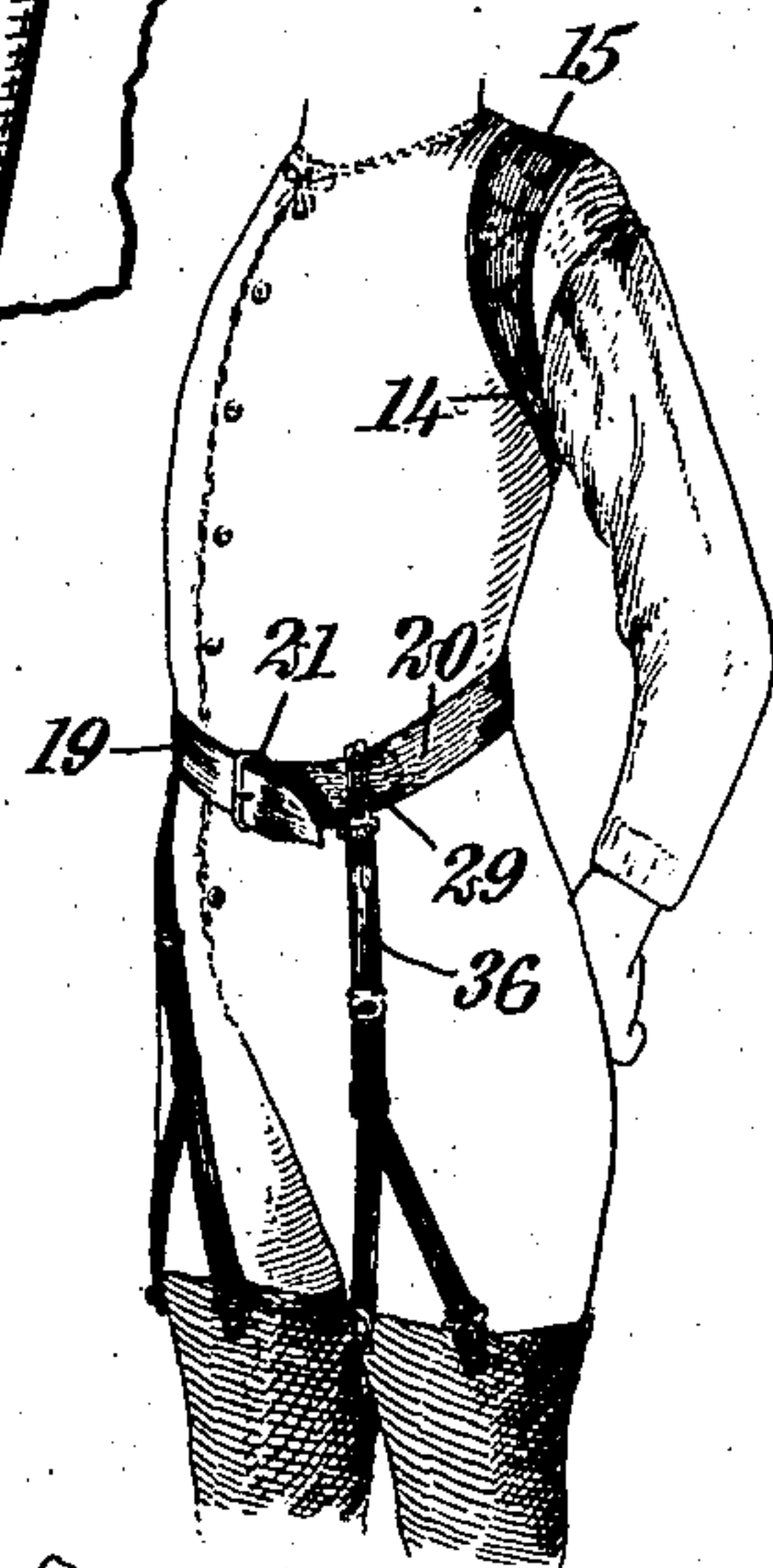


Fig. 6.



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UNITED STATES PATENT OFFICE,

ROBERT F. MACCLEMMY, OF NEW YORK, N. Y.

BODY-BRACE.

948,234.

Specification of Letters Patent.

Patented Feb. 1, 1910.

Application filed April 9, 1909. Serial No. 488,825.

To all whom it may concern:

Be it known that I, ROBERT F. MACCLEMMY, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Body-Brace, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in body braces, and more particularly to improvements in the body brace disclosed and claimed in my prior application, Serial Number 466,543, filed December 8, 1908. In the specific construction illustrated in my previous application above referred to, I employ two stays extending substantially vertically along the back portion of the brace, and each of these stays has its upper end connected to the body of the garment. When the two stays are drawn together at the top by the lacing, the fabric portion intermediate the two stays is folded to form a plait. With the two stays uniform, there is no tendency for this plait to fold in either direction and there is nothing to determine the exact position which it shall assume.

In my present invention one of the main features resides in the construction of the upper ends of the stays, so that one of the stays is secured across its top and the other stay is left partially free, so that it may overlap the first-mentioned stay and the intermediate portion will be folded to a definite and predetermined position.

In body braces of the character to which my invention relates, difficulty is often experienced due to the tangling of the lacing and the twisting of the belt portions. In my present invention I so construct the garment at its lower edge that the belt portions have sliding engagement therewith but are held in approximately a predetermined position, so that when the garment is put on, the belt portions come to the proper position and the tangling or twisting of the lacing is prevented.

A further important feature of my present invention relates to the particular mechanism for supporting stockings from the body brace. A tightening of the belt portions of the garment tends to tighten the lacing and draw the shoulders backwardly,

but it does not increase the tension about the waist of the wearer. In my present construction I employ a hose supporter connected to the front portions of the belt, so that the weight or downward pull of the stockings will be, not upon the waist, but will be transmitted around the belt portion to the lacing and thus to the shoulders. The downward pull of the stockings will aid in holding the wearer erect rather than tend to pull the wearer forward or bring an undesirable strain about the waist.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which—

Figure 1 is a perspective view of the back portion of one of my improved body braces as it appears when in use; Fig. 2 is a back view of the garment on an enlarged scale; Fig. 3 is a detail of the upper ends of the stays and the adjacent portions, the stays being spaced apart; Fig. 4 is a view similar to Fig. 3, but showing the stays drawn together and overlapping; Fig. 5 is a detail showing the lower portion of the stays and the belt-holding device; Fig. 6 is a front view showing my improved garment as applied to a child and illustrating my improved stocking supporter; and Fig. 7 is a detail view of the belt showing my stocking-supporting attachment connected thereto.

In my improved body brace, I provide a back portion of inelastic material, formed of two separated back sections 10 and 11 and a central connecting portion 12. Each back section has an upwardly and forwardly-extending shoulder strap portion 13, and a portion 14 disposed beneath the arm pit and terminating in front of the shoulder. The shoulder strap portions 13 and 14 of each section are united together adjacent the front side of the shoulder by a reinforced seam 15, and the lower shoulder-strap forming portion 14 may be reinforced and padded to prevent its wrinkling and to render the garment soft and comfortable. At the lines of intersection between the two back sections 10 and 11 and the central connecting section 12, I provide two verti-

cally-disposed reinforced stays 16 and 17, each provided with a series of eyelets for lacing 18. The lacing is formed of a plurality of separate strings or cords of different length and the opposite ends of each of the cords are connected to two belt portions 19 and 20, which may be secured together in front of the body at the waist line by a suitable buckle or other fastening means 21. The parts so far referred to do not in themselves constitute any portion of my present invention, but are constructed substantially as shown in my prior application above referred to.

In my present invention, the two reinforced stays 16 and 17 are overlapped at their lower ends, as is illustrated particularly in Figs. 2 and 4, and both of these stays are secured to the back sections 10 and 11 and to the lower end of the central connecting portion 12 by a tape or binding 22 encircling the entire periphery of the garment. At the upper ends of the reinforced stays, one of them, 16, is secured to the connecting portion 14 and the adjacent back section by an upper portion 23 of the same piece of binding that extends across the lower end. The reinforced stay 16 is thus secured in position across the upper end and across the lower end and along the rear toward the shoulder, but at the edge toward the opposite section it is free for the passage of the cords between the connecting portion 12 and the under surface of said stay. The other reinforced stay, 17, at its lower end, overlaps the stay 16 and is secured in position across the entire width of its lower end by the binding 22, but at its upper end it is partially free and unattached to the upper binding 23. The stay 17 need not be free across the entire width of its upper end, but may be free for only that portion intermediate the row of openings through which the cords extend and the other vertical edge, as is illustrated in the drawings. This free upper end may have a separate piece of binding 24 to give the article a more finished appearance.

With the garment in position upon the body, the drawing together of the front ends of the belt sections tightens the cords or lacing and draws the upper ends of the stays toward each other. When they are spaced apart a limited extent, they are in the position indicated in Figs. 2 and 3, but as the lacing is drawn tight, the vertical edges of the stays at their upper ends not only meet but may slide past each other a limited distance to the position indicated in Fig. 4. As the lacing is tightened the connecting portion 12 between the two back sections 10 and 11 becomes slightly folded to form a plait, and as the stay 17 slides over the stay 16 at the upper end this plait is

deflected or caused to assume a position beneath the stay 17, so that it will be as smooth as possible upon the surface toward the body of the wearer. Without this sliding of one stay over the other and the freedom of the upper end of the upper stay, the central connecting portion 12 will not be compelled to assume any definite position upon the tightening of the lacing and the plait form may be irregular or wrinkled.

As the lacings from each stay extend diagonally across to the opposite belt section and the successive cord sections are arranged alternately, it is found that the ends of the belt sections often become twisted between the cords or twisted around each other, particularly when the garment is put on hurriedly. To obviate this and compel the belt sections to assume a predetermined position in respect to the back sections, yet at the same time permit the belt sections to be drawn longitudinally, I provide two pieces of tape 25 and 26, each extending along the lower edge of its corresponding back section closely adjacent to and parallel with the binding 22. One end of each of these tapes is secured in position between the corresponding back section and the adjacent end of the reinforced stay, and the opposite end of each tape is secured to its corresponding back section beneath the end of the corresponding outer reinforcing layer 27, referred to more particularly in my prior application. Each of these tapes is also secured to its back section by a line of stitching 28 intermediate the ends of the tape, so as to form a loop or passage beneath the tape and intermediate the line of stitching 28 and the edge of the reinforcing layer 27. The two belt sections 19 and 20 extend from their corresponding cords through the passages beneath these tapes and are thus held in approximately the proper position, so as to be readily grasped by the wearer in putting on the garment. The tapes prevent the two belt sections from becoming twisted around each other, and prevent the belt sections from becoming intertwined with the cords or lacing. As soon as the garment is placed in position the tapes automatically hold the belt sections in approximately the proper position ready to be grasped by the wearer and buckled together in front.

When the garment is made for children or young girls, the belt section is preferably provided with means for supporting the stockings therefrom. On each belt section I provide an attachment 29 stamped from sheet metal and of substantially the form shown in Fig. 7. This attachment is provided with two parallel slots 30 and 31 subdividing the attachment into three parallel bars 32, 33 and 34, for receiving the belt. The belt extends through one of these slots and back

through the other, and each slot is of a length approximately equal to the width of the belt and of a width approximately equal to the thickness of the belt. The attachment is thus bound in place by the tightening of the belt and it cannot slip or shift its position accidentally. At the lower end of the attachment is a transversely-extending slot 35 through which the elastic tape or ribbon 36 of a stocking supporter may extend. The attachment may be set at a slight angle to the belt in case the latter extends diagonally, so that the attachment will lie substantially vertically. By means of this improved stocking supporter attachment, all of the weight or pull of the stocking will be transmitted through the supporter to the belt and thence along the belt to the lacing and will tend to tighten the lacing. All of the pull of the stockings will tend to draw back the shoulders of the wearer and cause him to stand more erect. The pulling of the stockings does not increase the tension of the belt around the waist, particularly in the front, and in fact tends to loosen the belt at this point.

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

1. A body brace having an inelastic back portion, reinforced stays extending substantially vertically and each having one edge secured to said back portion, lacing connecting said stays, means for connecting both of said stays to said back portion across their lower ends, and means for connecting one only of said stays to said back portion across its upper end, whereby as said lacing is tightened said last-mentioned stay may partially slide over said first-mentioned stay at its upper end.

2. A body brace having an inelastic back portion, including two back sections and an intermediate connecting section, reinforced stays extending substantially vertically at the intersection of said connecting section with the two back sections, lacing connecting said stays, belt sections connected to the opposite end of said lacing, a binding extending across the lower ends of said stays and securing them to said back sections and said central connecting section, and a binding extending across the upper end of one of said stays and connecting the same to its corresponding back section, and the central connecting section, one of said stays having its upper end free to slide over the first-mentioned stay.

3. A body brace having an inelastic back portion, including two back sections and an intermediate connecting section, reinforced stays extending substantially vertically at the intersection of said connecting section with the two back sections, the lower ends

of said stays being overlapped or superposed and the upper ends of said stays being normally spaced apart, lacing connecting said stays, belt sections connected to the opposite end of said lacing, a binding extending across the lower end of said stays and securing them to said back sections and said central connecting section, and a binding extending across the upper end of one of said stays and connecting the same to its corresponding back section and the central connecting section, one of said stays having its upper end free to slide over the first-mentioned stay.

4. A body brace, comprising two back sections, reinforced stays extending along the rear edges of said sections, lacing connecting said stays, belt sections connected to said lacing and adapted to extend around the waist of the wearer, and strips of tape secured to said back sections along their lower edges and spaced therefrom throughout a portion of their length to leave passages through which said belt sections extend.

5. A body brace having an inelastic back portion formed of two back sections and an intermediate connecting section, stays extending substantially vertically along the meeting lines of said back section with said intermediate section and each having a free substantially vertical edge, lacing connecting said stays, belt sections connected to said lacing, a binding extending along the lower edge of said back sections and intermediate section and inclosing the lower ends of said brace, and tapes extending along the lower edges of said back sections and each having one end thereof secured beneath the adjacent end of the stay and having its opposite end secured to the back section at a distance from said stay to leave a passage or opening for the corresponding belt section.

6. A body brace, comprising two back sections, each having an armhole therein and having rear edges exposed adjacent each other, lacing connecting said edges, belt sections connected to said lacing and adapted to extend around the waist of a wearer for tightening said lacing, means for securing said belt sections together at their front ends, and stocking-supporting attachments adjacent the front ends of said belt sections and adjustable longitudinally of said belt sections, said belt-securing means permitting an adjustment of the tension of the lacing and the down-pull of the stockings upon said supporters, tending to increase the tension of said lacing.

7. A body brace having an inelastic back portion, reinforcing stays extending substantially vertically and each having one edge secured to said back portion, the lower ends of said stays being overlapped and secured to said back portion, and the upper ends of

said stays being normally spaced apart, a binding extending across the lower ends of said overlapped stays and the lower edge of said back portion, a lacing connecting
5 said stays, and belt sections connected to said lacing.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

ROBERT F. MACCLEMMY.

Witnesses:

ALFRED H. DAVIS,
JOHN P. DAVIS.