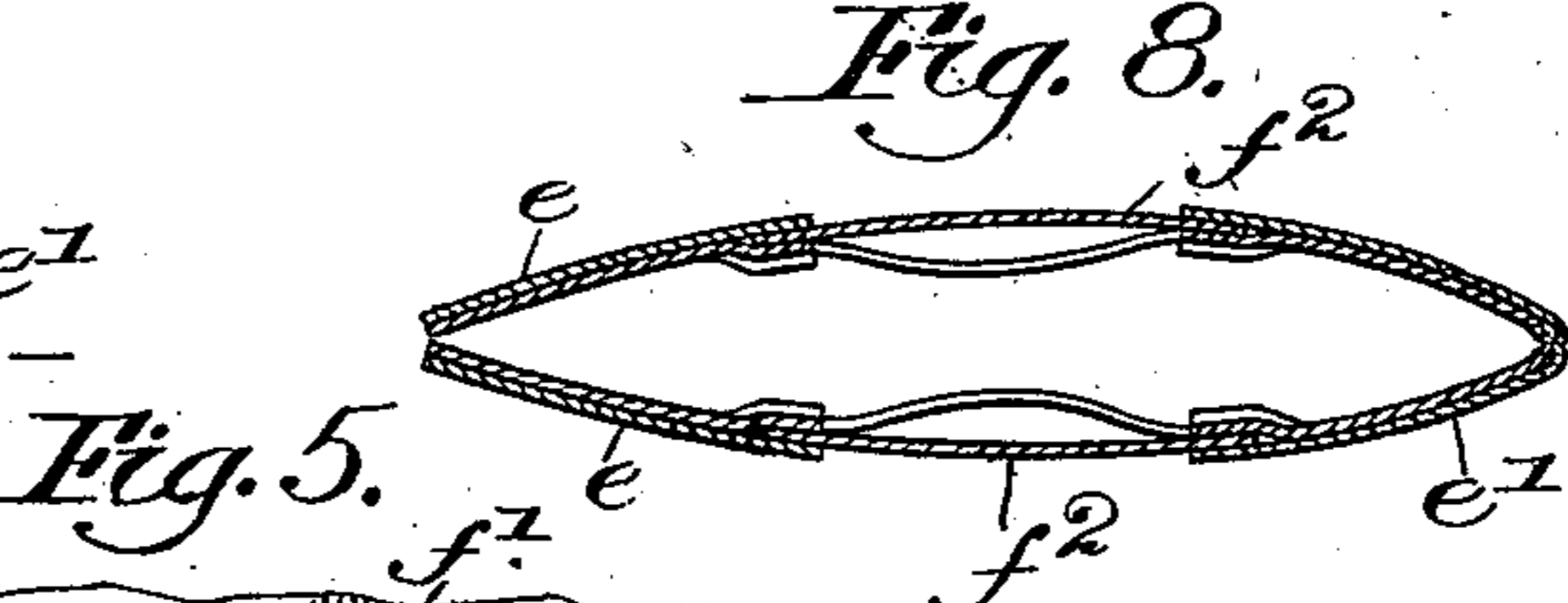
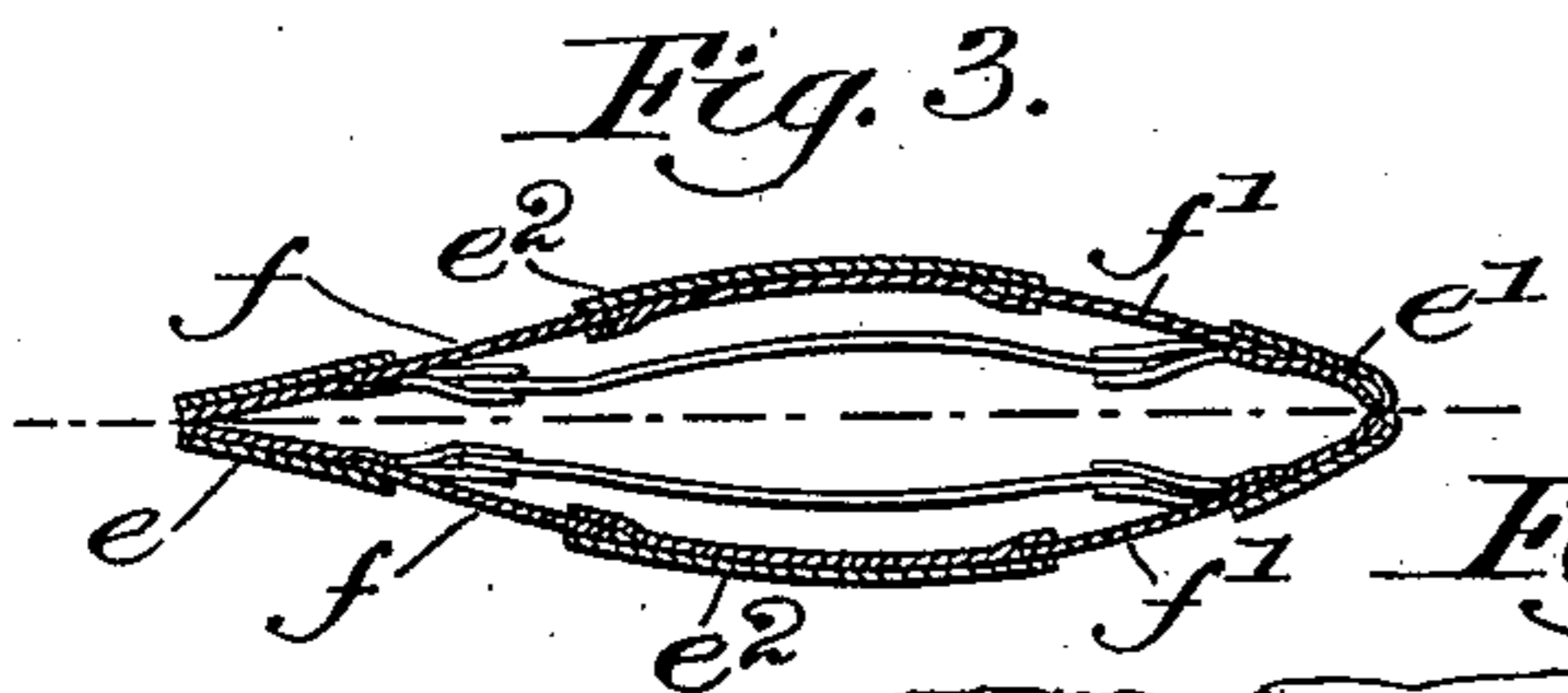
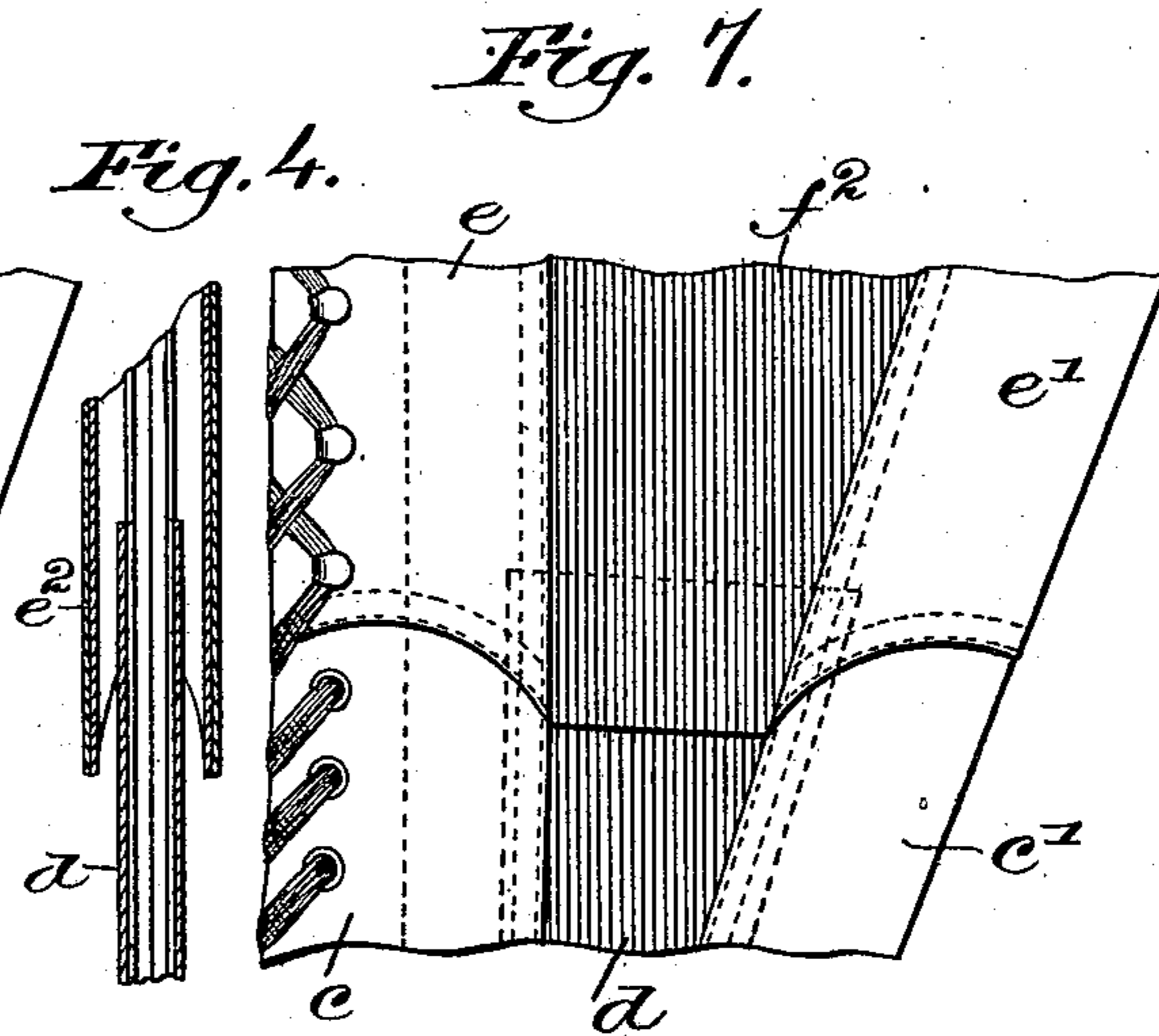
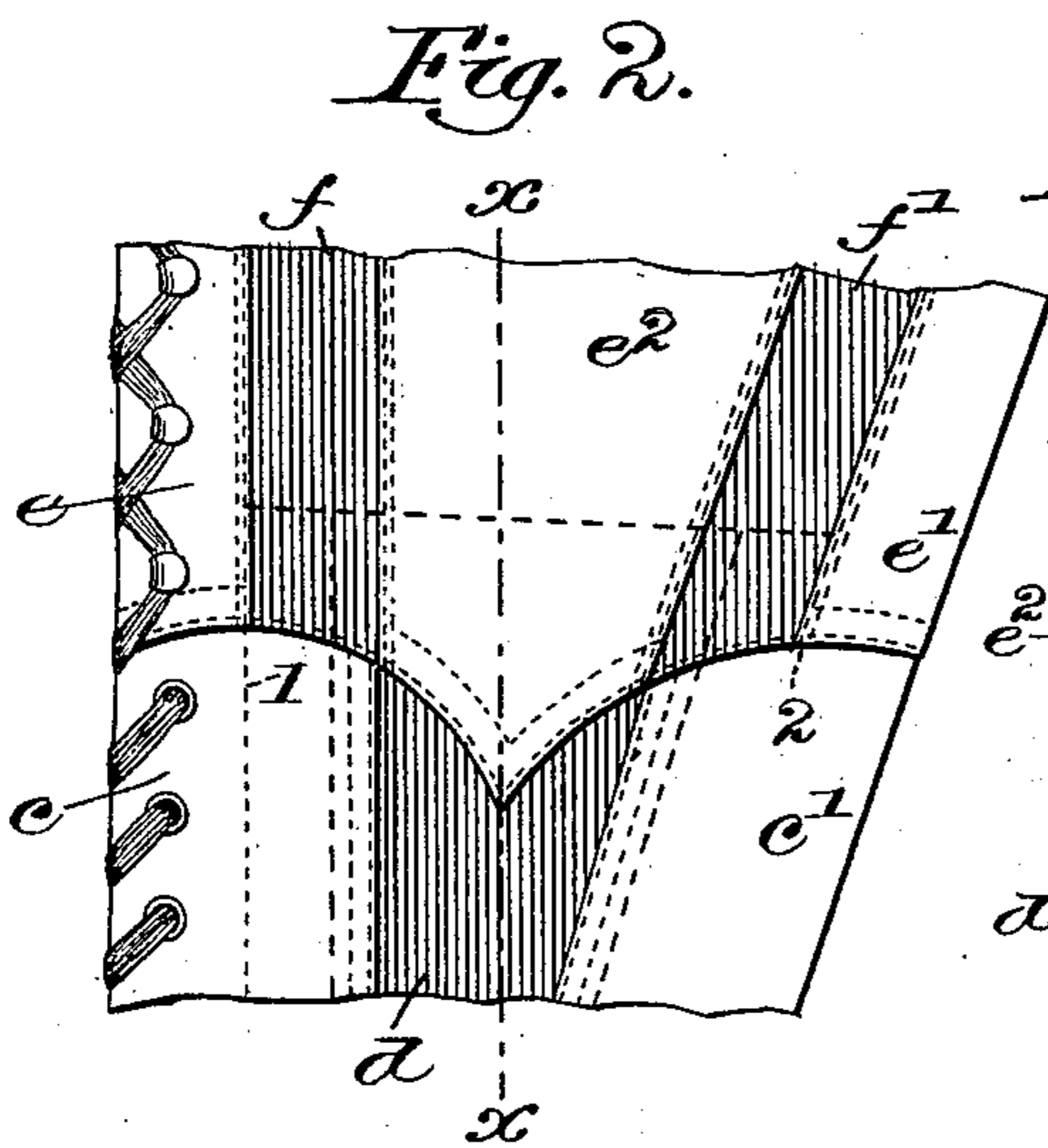
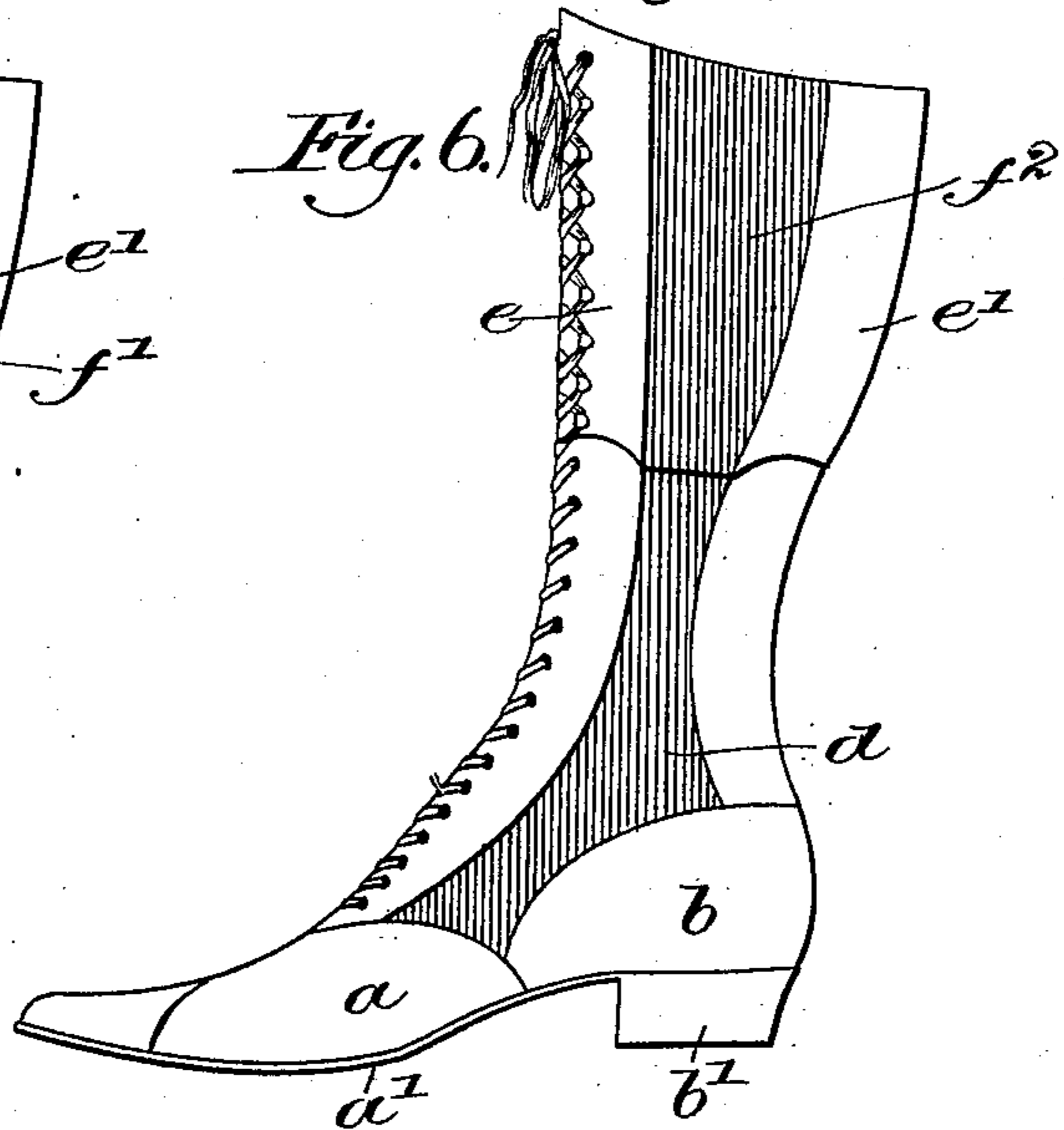
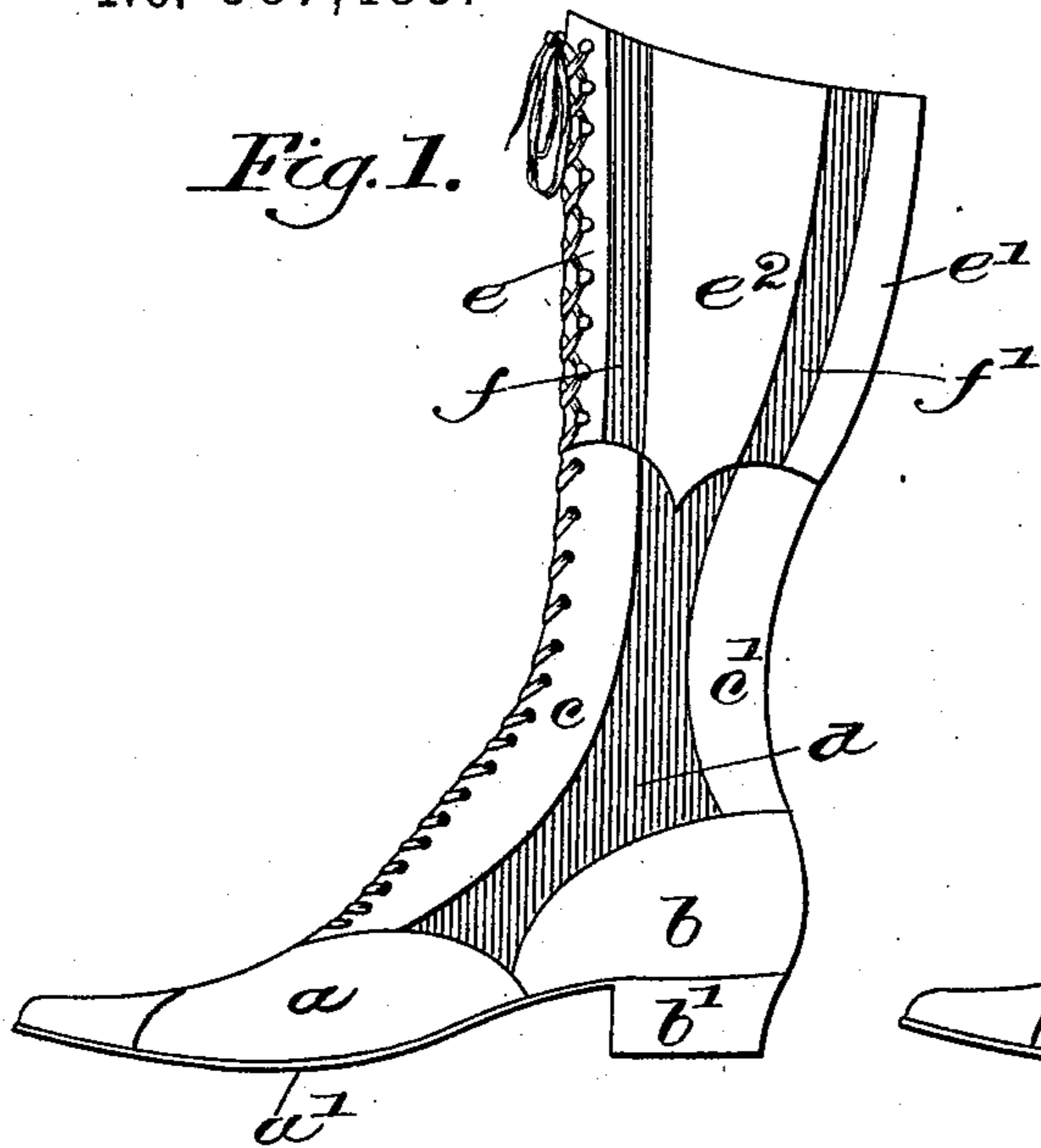


(No Model.)

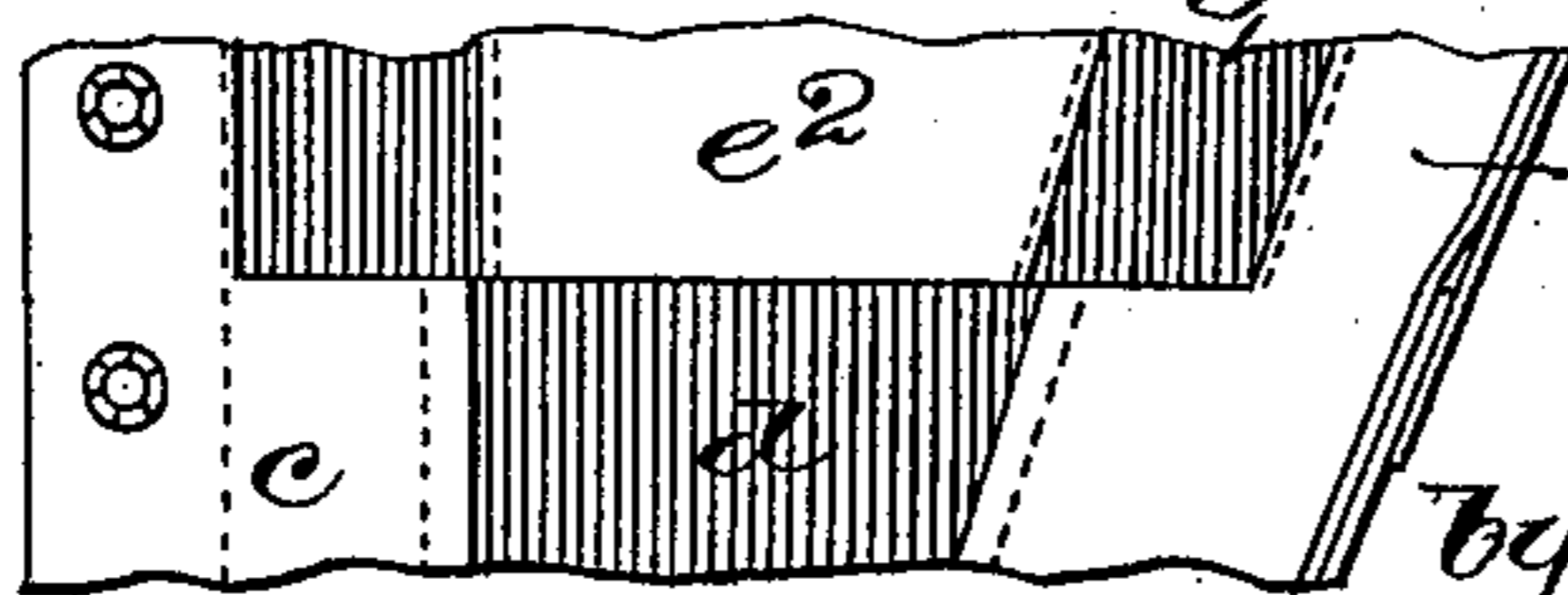
L. HILL.
BOOT OR SHOE.

No. 587,483.

Patented Aug. 3, 1897.



Witnesses:
A. C. Hammond,
Edward G. Allen.



Inventor:
Lebbeus Hill,
by Lewis Gregory

UNITED STATES PATENT OFFICE.

LEBBEUS HILL, OF LYNN, MASSACHUSETTS.

BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 587,483, dated August 3, 1897.

Application filed January 30, 1897. Serial No. 621,265. (No model.)

To all whom it may concern:

Be it known that I, LEBBEUS HILL, of Lynn, in the county of Essex and State of Massachusetts, have invented an Improvement in Boots or Shoes, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

10 This invention has for its object to provide an article of manufacture—to wit, a boot or shoe—containing a novel combination of co-operating features or elements constructed and arranged with especial reference to the adaptation or use of the boot or shoe for bicycle and horseback riding and other athletic purposes.

15 The principal aim of my invention has been to provide a boot or shoe which, though it may be high—that is, made to reach nearly or quite to the knee—is nevertheless capable of convenient and economical manufacture, and one which may be opened for application to and removal from the foot with the same facility as the ordinary “Bal” shoe of lesser height and different construction now commonly found upon the market, and, further, a boot or shoe which while upon the foot and which while embracing not only the instep and ankle portion thereof for a greater or less portion above the ankle is nevertheless free to permit independent and full expansion and contraction both of the instep portion and in the vicinity of or above or below the ankle.

20 Such a shoe as involves my novel combination of features permits the utmost freedom of independent action at both sides of the foot and above and below the ankle, making it an extremely desirable boot or shoe for the purposes above referred to, for which it is especially designed.

25 My invention generally consists in a high top boot the upper of which is divided horizontally, the divided parts at their adjacent edges being left free for a greater or less distance in order that they may have a certain amount of independent movement one relatively to the other, one or both said parts within the limits of their free edges being made expansible in desired manner to thereby permit independent expansion or contraction or adjustment of the divided upper and lower

parts of the upper, together with a conjoint expansion and contraction of the two parts as may be necessary to perfectly adapt the shoe to the particular use to which it may for the time being be put.

30 In the drawings illustrating my invention, Figure 1, in side elevation, shows one embodiment of my invention; Fig. 2, an enlarged detail of a portion of the upper of the shoe shown in Fig. 1 adjacent the dividing-line; Fig. 3, a top or plan view of Fig. 2; Fig. 4, a vertical section on the dotted line *x x*, Fig. 2; Fig. 5, an inner face view of one of the sides of the top; Fig. 6, a side elevation of a modified embodiment of my invention; Fig. 7, an enlarged detail of a part thereof, and Fig. 8 a top or plan view of Fig. 7.

35 Referring to the drawings, Figs. 1 to 5, inclusive, in the embodiment of my invention there shown the boot or shoe comprises the usual vamp and quarter or heel portions *a b*, provided with a suitable sole *a'* and heel *b'* and the front and back portions *c c'* of the upper, between which is arranged at each side of the shoe an expansible panel or portion *d* of desired shape or material, preferably elastic goring, preferably shaped as shown, I having found such shape to be excellently adapted for meeting the different lines of draft upon the upper while the shoe is in use.

40 To attain the object of my invention, I have extended the upper to form a top portion, shown as comprising the front and back top parts *ee'*, secured to or otherwise made integral with the front and back portions *cc'*, referred to, said portions *e e'* being expansibly connected, as by the strips of goring *ff'*, these latter, in the shoe shown in Figs. 1 to 5, being connected by an interposed non-expansible strip *e²*, the arrangement of the expansible portions extending substantially from the top to the bottom of both sides of the shoe being preferably the same, although not necessarily so.

45 Referring now particularly to Figs. 2 to 5, inclusive, the front and back parts *cc'* of the upper are shown as stitched firmly to the front and back parts *e e'* of the top portion of the shoe, said parts *c c'* and *e e'* being thereby made in effect integral, the parts *e e'* preferably overlapping the parts *cc'*, as indicated.

50 Between the points 1 and 2', where the stitch-

ing uniting the parts referred to terminates, the adjacent overlapping edges of the top and the upper are left free, as will be best understood by reference to Figs. 3 and 4, so that between the points 1 and 2 both the top of the shoe and the upper proper may have an independent movement one with relation to the other, and in this instance of my invention such movement in either part is or may be an expanding and contracting movement due to the interposition in such parts of the expandible portions d and $f f'$. It will be seen, therefore, that in effect a shoe embodying my invention has an upper which, speaking generally, includes all above the top of the vamp, is horizontally divided, as at the line 1 2, with the edges of the adjacent upper and lower divided parts left free, as between the points 1 and 2, for independent relative movement, both said parts being made expansible within the limits of said free edges, as by the goring shown or otherwise, to enable said parts to independently expand and contract or adjust themselves to the particular shape or form within the shoe at such points, and also to have a conjoint expansion and contraction for different sizes and for flexibility of the shoe when in use.

It is evident that by providing the integral front and back edges or portions of the upper at both sides of the shoe with the independently-expandible portions arranged between said integral front and back portions, notwithstanding there is provision for independent expansion and contraction when necessary, yet there is, by reason of the integral front and back portions extending past both expandible portions, a certain responsive expansion and contraction of one expandible portion whenever the other expandible portion at the same side of the shoe is changed to any considerable degree. In other words, the arrangement of the independently-expandible upper and lower portions at both sides of the shoe between integral front and back portions combines in the same side of the shoe the independent expansion and contraction of the expandible portions when necessary, and at the same time provides a cooperative or responsive expansion and contraction of both under certain conditions, frequently present in riding and walking, so that I combine in one structure the advantages of a conjoint or cooperative expansion and contraction and the independent expansion and contraction, thus providing for the widest possible ease and adaptability of the shoe when upon the foot.

My construction, aside from its constructional features just described, possesses the added advantage that it can be made from material now at hand. For example, elastic goring is now made in width never exceeding eight inches—that is, the obtainable goring is eight inches in width—and since the goring must be introduced so that the

width is the distance from the top to the bottom of the shoe it is evident that as at present provided it is impossible to obtain goring of sufficient width to extend from the top to the bottom of a high top shoe.

My invention, as described, provided for the purpose of increasing the flexibility and adjustability in the high top shoe also furnishes a convenient means of utilizing goring of the width now put upon the market, which is best done by the overlapping of the adjacent edges of the divided upper and lower parts of the upper.

In Figs. 6 to 8, inclusive, the construction is substantially the same, except that the top parts e and e' are connected by a single piece of goring f^2 without the interposed middle non-expandible part e^2 , (shown in Fig. 1,) these two constructions well illustrating the range of adaptability both as to style and construction, which is possible for my invention.

A boot or shoe containing my invention is open substantially at the front from the top to a point below the instep for such a distance as will enable the boot or shoe to be applied to and removed from the foot without necessary expansion and contraction of the sides of the same, as is necessary in Congress types of shoes, from which my invention must be distinguished, and lacing, as shown, or other suitable means is provided for closing this front opening and the boot or shoe upon the foot and for adjusting, if desirable, the expansibility or expansion and contraction of the sides thereof.

As before suggested, it is essential that both sides of the shoe have the integral and expandible portions arranged to provide for certain movements and to present certain characteristics set forth in the claim; yet it is not essential to my invention that the shapes or particular details in the arrangement of the goring at the opposite sides of the shoe be identical in all cases.

The overlapping of the adjacent edges of the independently-movable top and bottom portions of the upper provides a tight joint at the meeting point of the two parts and furnishes opportunity for a more or less ornamental construction, although it is not necessary in my invention that the top and bottom parts actually overlap, as in some instances they may be brought together one opposite the other and the joint closed, if need be, by other means than overlapping.

While for the most economical form of construction I prefer that the horizontal line of division of the upper extend entirely around the shoe across the non-expandible or integral as well as the expandible portions thereof, yet in some instances it may be desirable that the divided part of the shoe embraces only the expandible portions thereof, leaving the non-expandible portion divided or not, as desired.

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

5 As an article of manufacture, a high top boot or shoe having a front opening extending from the top of the shoe to a point below the instep thereof to admit the foot without necessarily stretching or expanding the sides of the shoe, means to close said open front and the shoe upon the foot for use, both sides said shoe being provided with non-expansile portions extending substantially from the top to the bottom of the shoe at the front and back thereof, and expansile portions also extending substantially from the top to the bottom of the shoe and arranged between said non-expansile portions, both sides of said shoe being horizontally divided between their front and back portions with the adjacent

edges of said divided portions left free and independent for a distance between said non-expansile front and back portions for independent expansion and contraction of the same at both sides of the foot, the degree or extent of such expansion and contraction both across the instep and adjacent and above the ankle portions of the shoe and the conjoint action of the upper and lower expansile portions of the sides of said shoe being variable by the fastening means for said front opening, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEBBEUS HILL.

Witnesses:

JOHN C. EDWARDS,
GEO. W. GREGORY.