

No. 765,123.

PATENTED JULY 12, 1904.

R. BROWN & T. EVANS.

SHOE FASTENING.

APPLICATION FILED DEC. 17, 1903.

NO MODEL.

Fig. 1.

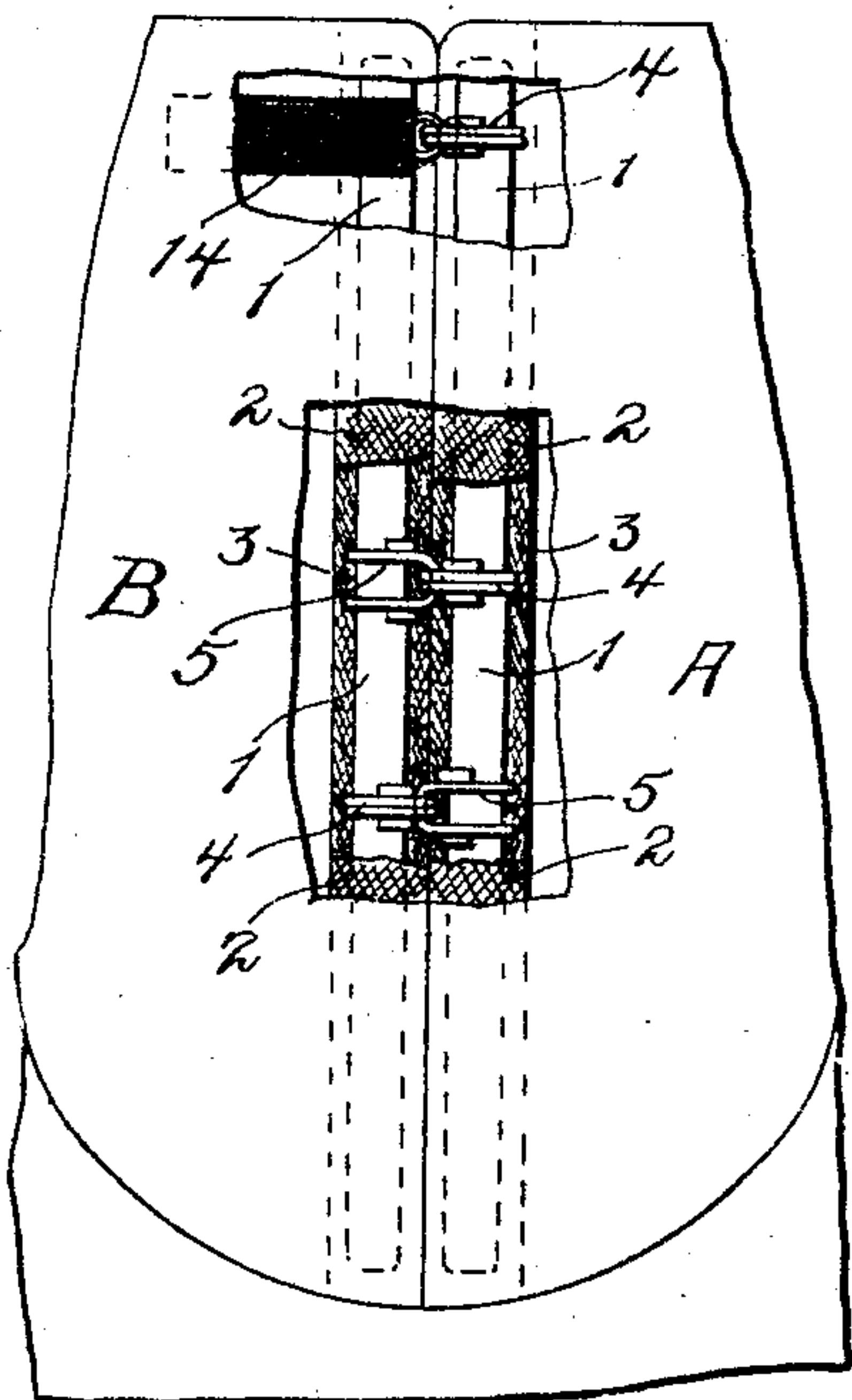


Fig. 2.

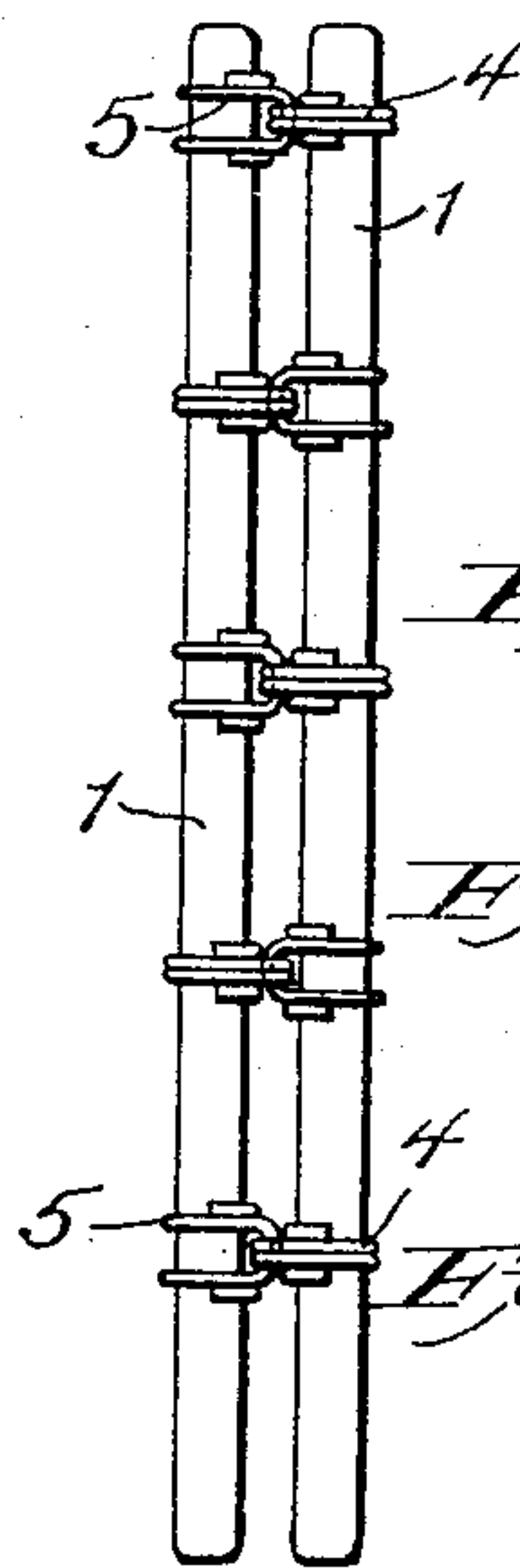


Fig. 3.

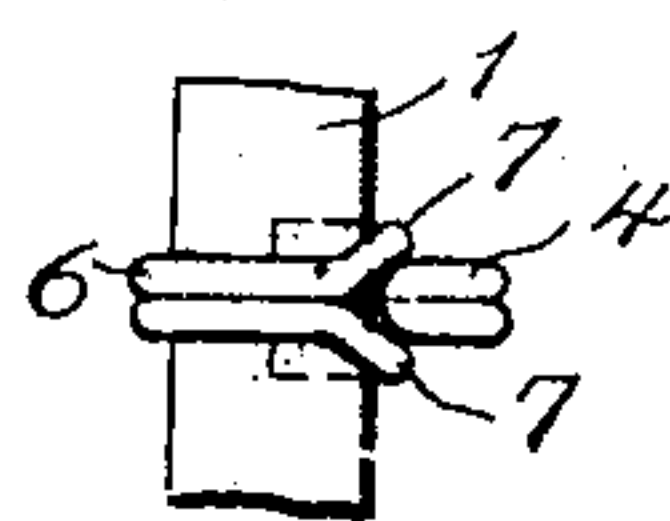


Fig. 4.

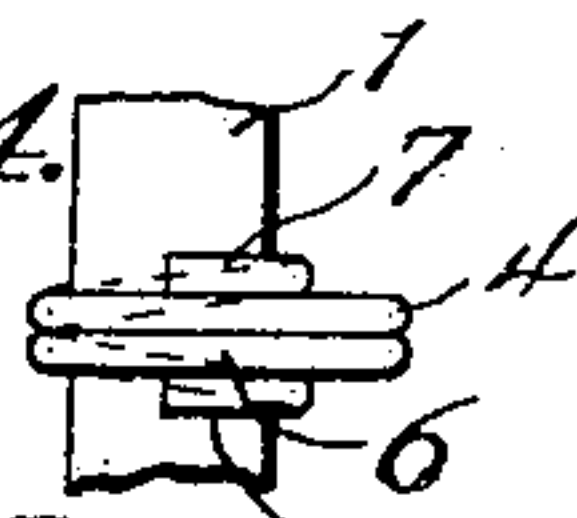


Fig. 5.

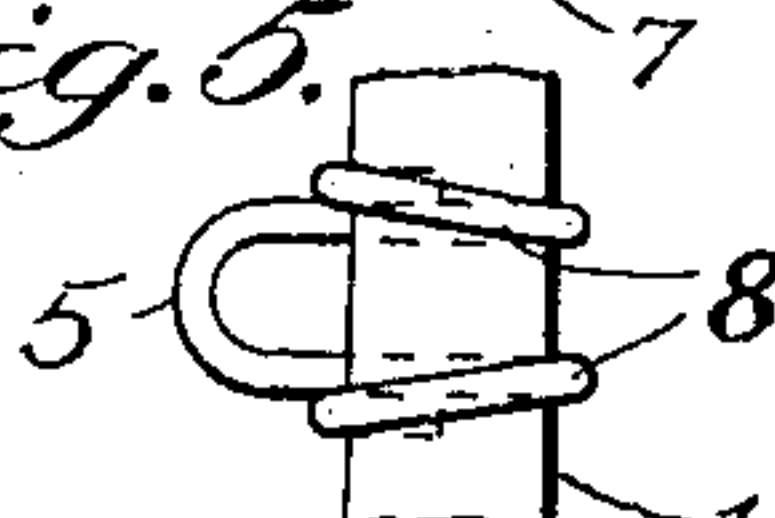


Fig. 6.

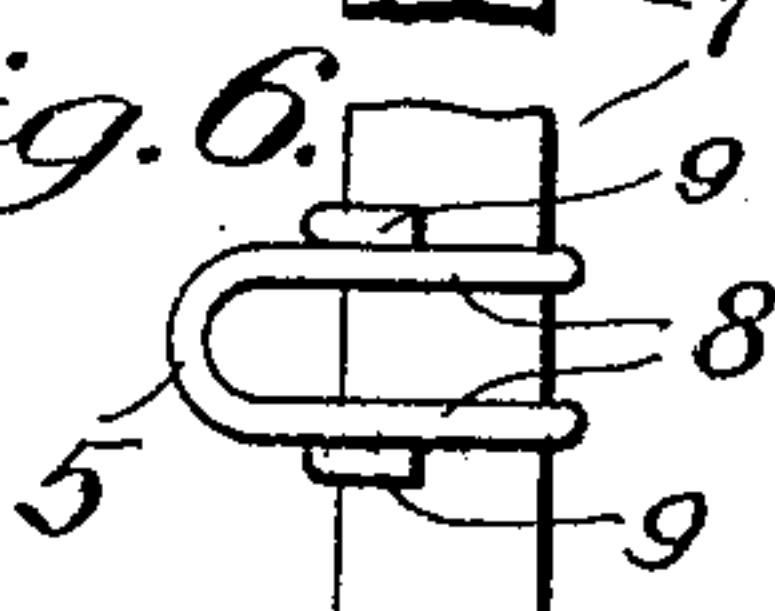


Fig. 11.

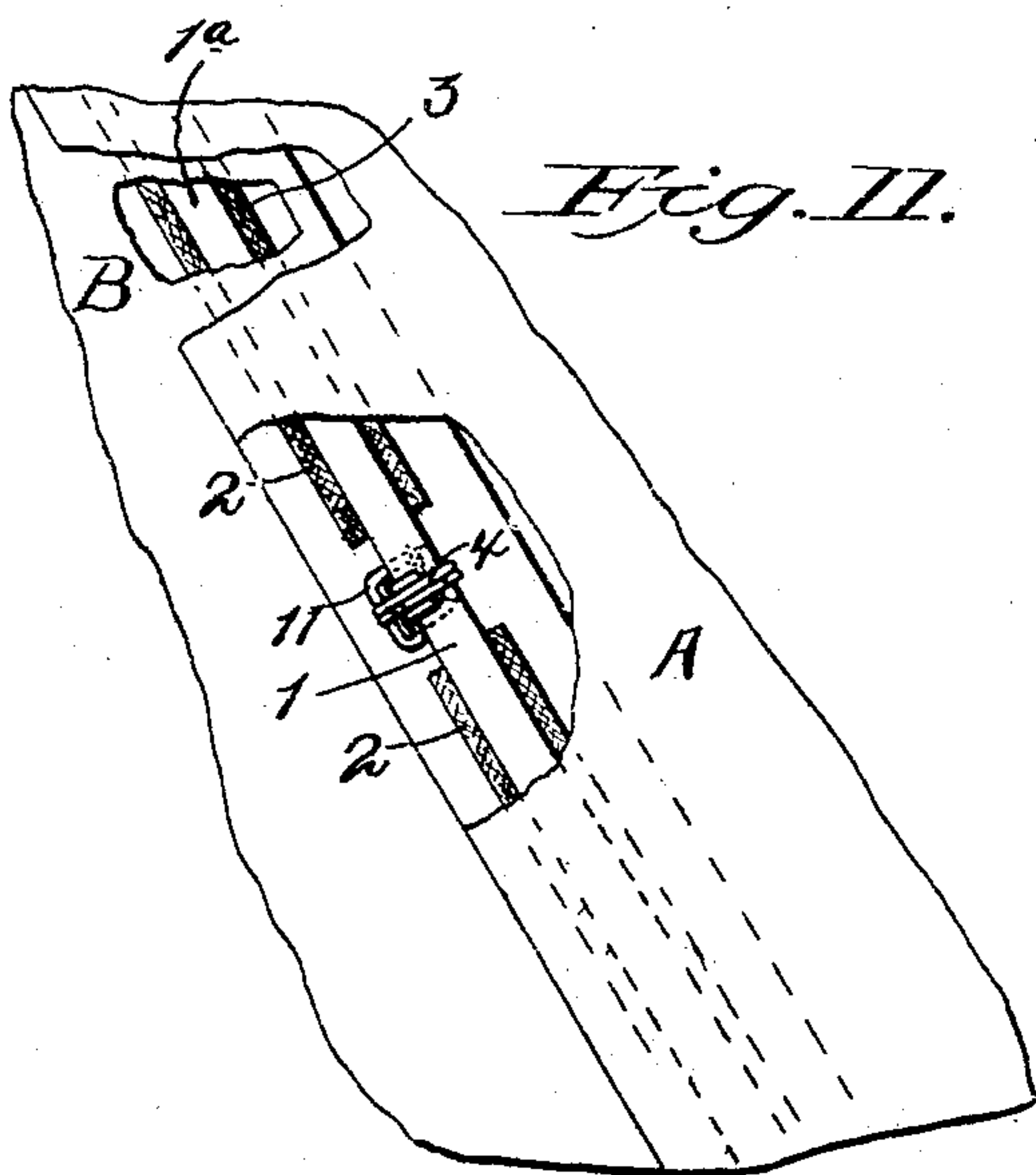


Fig. 9.

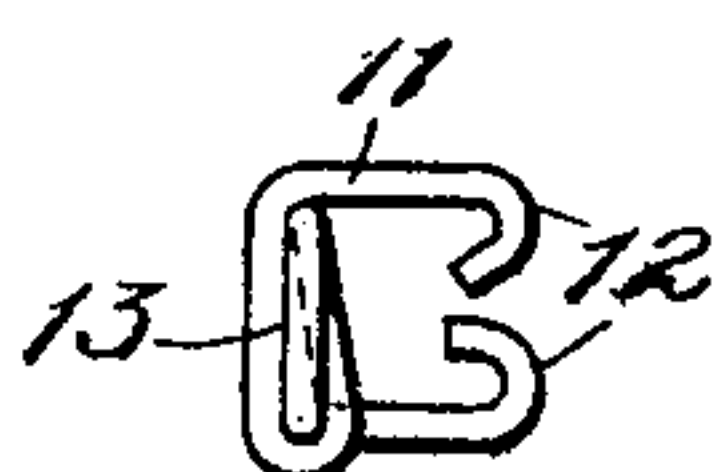


Fig. 10.

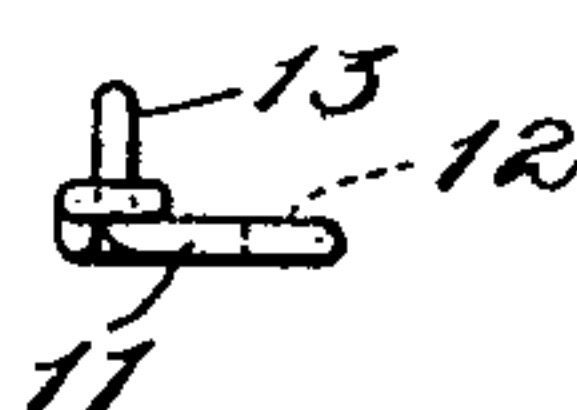


Fig. 7.

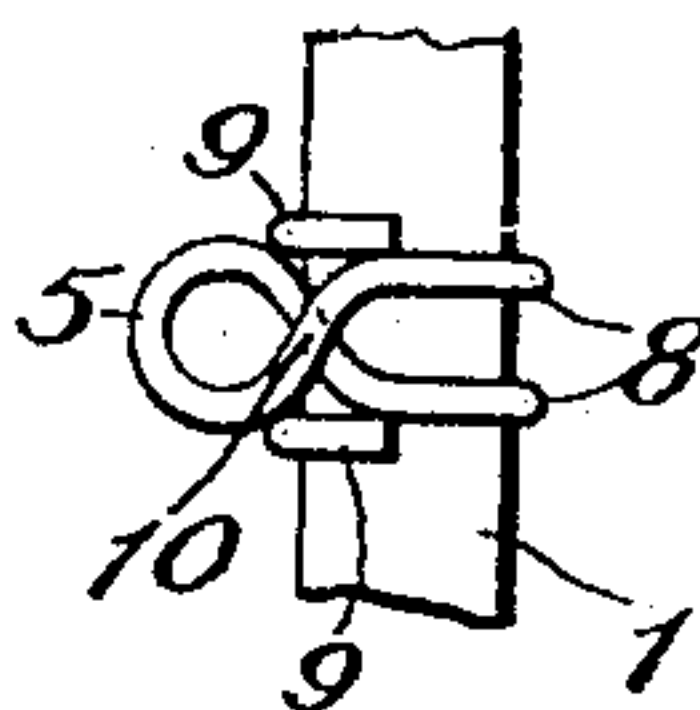
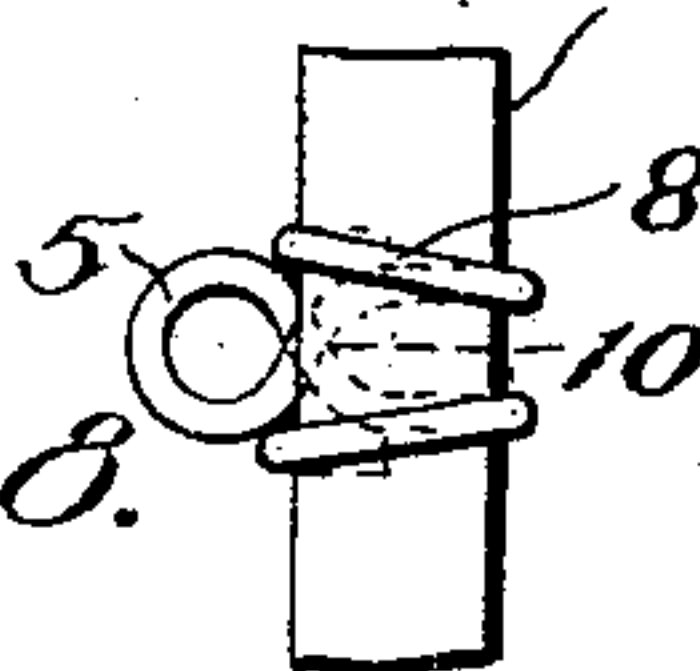


Fig. 8.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ROBERT BROWN AND THOMAS EVANS, OF PHILADELPHIA,
PENNSYLVANIA.

SHOE-FASTENING.

SPECIFICATION forming part of Letters Patent No. 765,123, dated July 12, 1904.

Application filed December 17, 1903. Serial No. 185,538. (No model.)

To all whom it may concern:

Be it known that we, ROBERT BROWN, a subject of the King of England, and THOMAS EVANS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Shoe-Fastenings, of which the following is a specification.

Our invention relates to an improvement in shoe-fastenings.

The object of the invention is to provide a fastening of the hook-and-eye type which when applied to the upper of the shoe will be completely concealed from observation.

Another feature lies in a stiffening means to which the hooks and eyes are secured, thus preventing wrinkling of the upper and whereby the hooks and eyes are permanently held in position to assure a ready coupling of their engaging parts.

Still another object resides in arranging the top and hook and eye so as to give to pressure, thereby preventing the top of the upper from binding. By providing the shoe with the fastenings all inconvenience and annoyance occasioned by buttons, laces, and the like is obliterated.

Finally, the object of the invention is to provide a fastening of the nature indicated that will be strong, durable, and neat, and one that will be simple and comparatively inexpensive to manufacture, and also one in which the working parts will not be liable to get out of order.

With the above and other objects in view the invention consists in the novel details of construction and operation, a preferable embodiment of which is described in the specification and illustrated in the drawings, wherein—

Figure 1 is a partial elevation of the upper of a shoe broken away to show the stiffening-strips and their coverings. Fig. 2 is a top plan view of the stiffening-strips. Fig. 3 is a detail view showing the top of the hook. Fig. 4 is a detail view showing the bottom of the hook. Fig. 5 is a detail view of the top of the eye. Fig. 6 is a like view of the bottom

of the eye. Fig. 7 is a view of the top of another form of eye. Fig. 8 is a similar view of the bottom of the eye. Fig. 9 is a detail view of still another form of eye. Fig. 10 is a side elevation of the eye shown in Fig. 9; and Fig. 11 is an elevation of a part of an upper, showing the form of eye illustrated in Figs. 9 and 10 and broken away to show the stiffening-strips and their coverings.

In the drawings the numeral 1 designates the stiffening-strips, which are formed of any pliable substantial material. However, we prefer to use thin sheet metal. These strips are generally secured to the under surfaces of the adjacent portions A and B of the upper between two pieces of fabric 2 and 3 and set back a short distance from the meeting edges of the portions A and B. The fastening is usually applied to the central front portions of the upper, which is slit and provided with a tongue, as is ordinarily the practice in the art of shoemaking.

The fastening comprises a hook 4 and an eye 5, each preferably formed of a single piece of wire and bent around the strips 1. The hook 4 is formed with a straight shank 6, which extends under the strip 1 to its rear edge and is bent up and over the top of the strip, the ends 7 being spread to straddle the shank 6 and bent around the front edge of the strip and pressed flat against the under surface of the said strip. Thus it will be seen that the hooks are securely fastened to the strip. The eye 5 is similarly formed and secured to the strip 1 by rearwardly extending the shank 8, which is bent up and over the top of the strip around the front edge thereof and pressed against the bottom of the strip at its ends 9. Instead of extending the shanks 8 directly rearwardly they may be twisted or crossed, as shown in Figs. 7 and 8 at 10. The hooks 4 and the eyes 5 are arranged alternately on the strips 1, as shown in Fig. 2. The strips 1 being set back from the meeting edges of the portions A and B, causes only the ends of the hooks 4 and the eyes 5 to project beyond the said edges, and thus when the hooks and eyes are coupled the edges of the portions A and B butt, thereby

effecting a flush joint, completely concealing the fastenings, as is clearly shown in Fig. 1. The hooks and eyes and strips are secured between the pieces of fabric 2 and 3, which are secured together, and to the portions A and B of the upper, leaving only the engaging parts of the said hooks and eyes protruding. It is evident that the strips and the shanks and ends of the hooks and eyes are completely covered and that a neat and substantial fastening is provided. It is also apparent that the strips will hold the hooks and eyes in place and owing to their pliable nature will readily fit themselves to the instep and at the same time, being comparatively stiff, will prevent wrinkling of the upper.

In Figs. 9, 10, and 11 we have shown a modified form of fastening applied where the shoe is fastened on the side. A strip 1, having the hooks 4, above described, is secured to the under side of the portion A of the upper and set back so as to allow the end of the upper to project over the hooks to entirely conceal them. The stiffening-strip is covered by a piece of fabric 2, by which it is secured to the upper. Upon the outer surface of the portion B of the upper and in registering relation with the hooks are eyes 11. These eyes are preferably formed of a single piece of wire bent and coiled upon itself to form the loops 12, by which it is sewed or otherwise secured to the upper, and the eye portion 13, which is engaged by the hook 4. A stiffening-strip 1^a is sewed to the under surface of the portion B of the upper, preferably directly beneath the eyes 11, to hold them in place and prevent the upper from wrinkling.

In order to prevent the top of the upper from binding, we usually mount the top eye upon a piece of elastic—for instance, as shown in Fig. 1, where 14 designates the elastic—which is secured to the under surface of the portion B between the strip 1 and upper piece of fabric 2. By thus mounting the top eye it is capable of a movement independent of the shoe-upper. Other methods of mounting the eye so that the same will give to pressure may be employed.

Of course it is to be understood that various forms of hooks and eyes may be employed; but the most essential feature of our invention resides in the pliable stiffening-strips

which permanently secure the fastenings in place, assuring a ready coupling of the parts and obviating all tendency of the upper to wrinkle. These and other variations may be made in the construction and operation of the invention without departing from the spirit thereof.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a shoe-fastening, in combination with the shoe-upper, a continuous pliable strip secured therein adjacent to each edge of its slit, a plurality of interlocking members secured to the respective strips, one of the upper pair of interlocking members being fixed, an elastic strip secured in the upper, and extending on one side of the adjacent strip, and the other member of said upper pair being secured to said elastic strip, substantially as and for the purpose specified.

2. In a fastening of the type set forth, in combination with a strip of material, a fastener formed from a single piece of wire doubled to form an engaging end, and shank, said shank extending on one side of said strip, the two wire portions being continued around the strip and having their ends lying on the same side of the strip as the shank, and said shank projecting between said wire ends.

3. In a shoe-fastening, in combination with the shoe-upper, flexible strips arranged in said upper, pieces of fabric arranged on opposite sides of the strips, interlocking fasteners arranged in pairs and carried by said strips, and means for fastening the upper portion of one of the strips to the upper portion of the opposite edge of the upper, said means at the same time permitting the upper portion of the upper to move independently of the adjacent fasteners, said flexible strips being set back from the adjacent edges of the slit whereby the engaging ends of the fasteners will be covered.

In testimony whereof we affix our signatures in presence of two witnesses.

ROBERT BROWN.
THOMAS EVANS.

Witnesses:

WILLIAM ANTROBUS,
JOHN EVANS.