

No. 622,220.

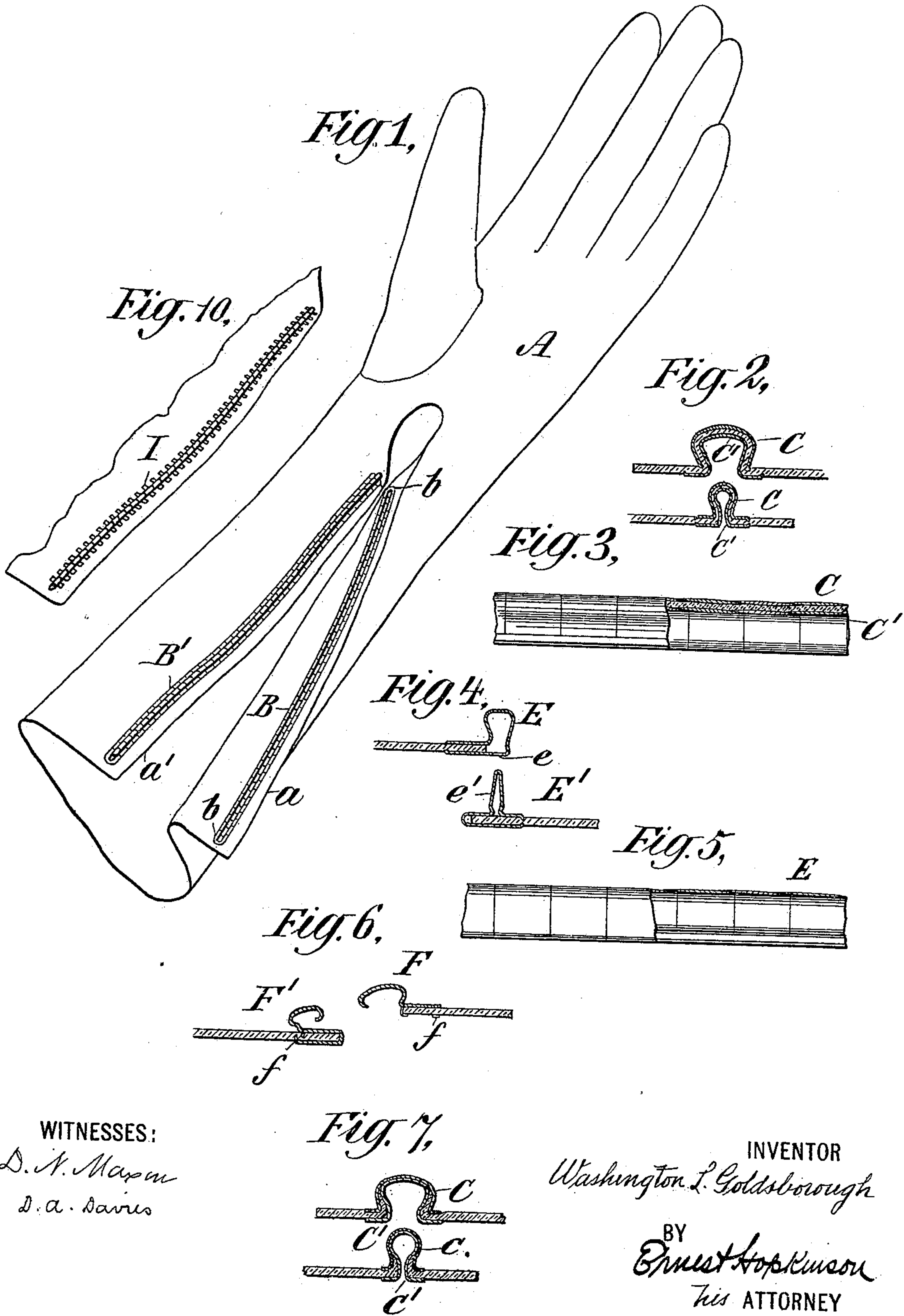
W. L. GOLDSBOROUGH.  
GARMENT FASTENER.

Patented Apr. 4, 1899.

(No Model.)

(Application filed Oct. 12, 1897.)

2 Sheets—Sheet 1.



WITNESSES:  
D. N. Mason  
D. A. Davis

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Ernest Hopkinson  
His ATTORNEY

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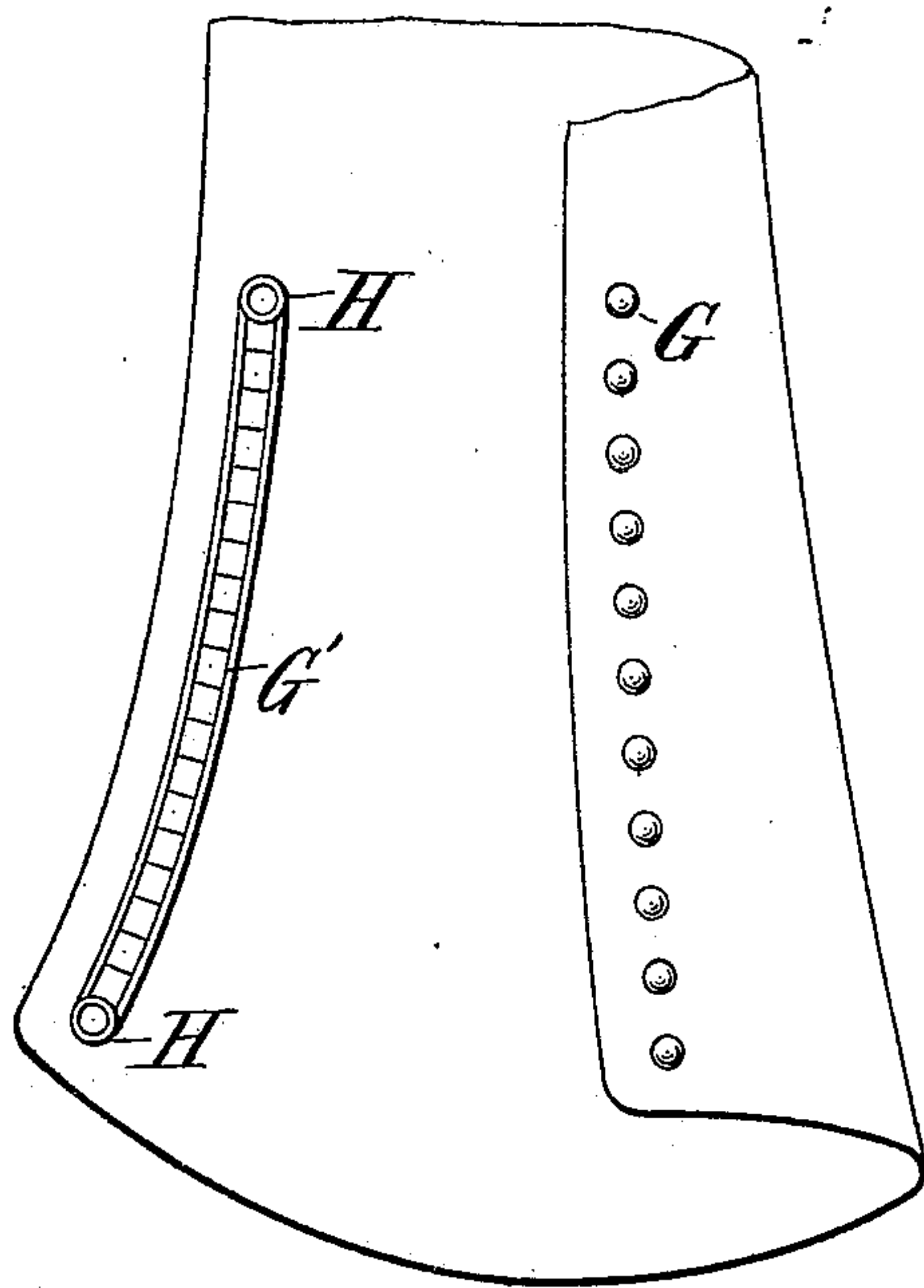
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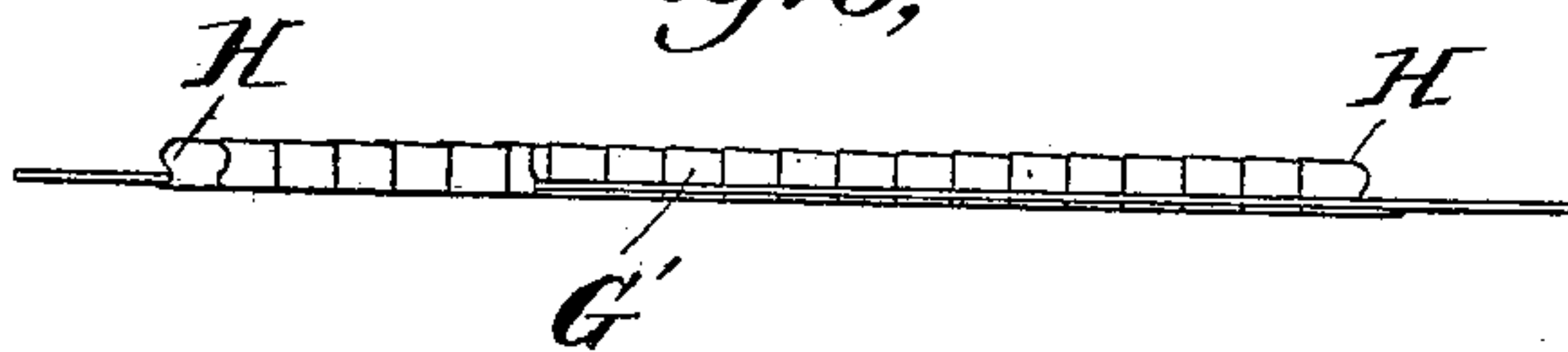
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2 Sheets—Sheet 2.

*Fig. 8,*



*Fig. 9,*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WASHINGTON LAIRD GOLDSBOROUGH, OF NEW YORK, N. Y.

## GARMENT-FASTENER.

SPECIFICATION forming part of Letters Patent No. 622,220, dated April 4, 1899.

Application filed October 12, 1897. Serial No. 654,926. (No model.)

*To all whom it may concern:*

Be it known that I, WASHINGTON LAIRD GOLDSBOROUGH, a citizen of the United States, residing in the city, county, and State of New York, have invented a new and useful Improvement in Garment-Fasteners, of which the following is a specification.

My invention relates to that class of fasteners for gloves, boots and shoes, gaiters, corsets, and other articles of clothing in which separable parts of metal or other hard substance coact in performing the fastening function.

My invention consists in a continuous or substantially continuous flexible fastener whereby the process of fastening is facilitated, the strain upon the fastener and the garment fastened is distributed, the dressy and unwrinkled condition of the garment is retained, and the field for fastener ornamentation is increased, while the wearer's freedom of movement is preserved.

I am aware that longitudinally-extending separable flat whalebones or steel springs bearing isolated holes or sockets on the one separable part and bearing buttons or studs on the other separable part, which whalebones or steel springs possess more or less flexibility in given directions, have been constructed. These are neither "continuous" fasteners nor "flexible" fasteners as such terms are used by me and are not within the scope of my invention. By a "continuous" fastener I mean one the female or receiving part of which or the male or entering part of which (or both of said parts) is itself longitudinally continuous. By a "flexible" fastener I mean one not dependent for its flexibility upon the inherent elasticity of the material of which it is composed, but which derives flexibility from its subdivision into sections or segments. These terms are used in the claims with the meanings just given and are intended to limit the claims to that extent.

In the accompanying drawings, Figure 1 is a perspective view of a glove provided with one form of my improved fastener. Fig. 2 illustrates in central vertical section one of the sections (both male and female) attached to a suitable support, such as a glove material or fabric. Fig. 3 is a central longitu-

dinal section of a portion of the fastener of the form shown in Fig. 2. Fig. 4 is a view similar to Fig. 2, showing another form of fastener. Fig. 5 is a view in longitudinal section of a portion of a fastener of the form shown in Fig. 4. Fig. 6 is a view, similar to Figs. 2 and 4, of another modified form of fastener; and Fig. 7 shows still another modification of fastener, illustrated similarly to Figs. 2, 4, and 6. Fig. 8 illustrates in perspective, as applied to a glove wrist-opening, another modification of embodiment of my invention. Fig. 9 is a longitudinal central section of the female part shown in Fig. 8, and Fig. 10 is a view in perspective of a form of fastening device in which the base is made narrower than the engaging part.

Like letters of reference refer to like parts throughout the several views of the drawings.

Referring to the drawings in detail and especially to Fig. 1, wherein the invention is shown as applied to the wrist-opening of a glove, A designates the glove, of which a designates one edge of the wrist-opening, to which is secured the female or receiving part of the fastener B, the other edge a' carrying the entering or male part B'. To prevent the movement of the two parts of the fastener longitudinally relatively to each other, the initial and final sections of the female part are each made with a closed end b.

In Figs. 2 and 3 are shown in detail, on an enlarged scale, the sections going to make up the complete fastener, wherein the parts are secured to the supporting goods by the clamping action of the several constituent parts, thus obviating the necessity of cutting or mutilating the material. In these figures, C designates the outer or cap piece, and C' the inner casing, the supporting material being clamped between the two, whereby the parts are secured. Of course any other means of securing the fastening device to the supporting material may be availed of, as by providing the sections with cleats. Each of the sections both of the cap-piece and the inner casing is preferably made, as shown in Fig. 3, with tapering edges overlying each other in scale fashion. Other means of engaging the contiguous sections may be used, however, so long as an unbroken engaging surface is provided. It may be remarked that this form



of fastener is one specially adapted to be secured to a garment at a point somewhat removed from the edge, as shown in Fig. 1.

Referring now to Figs. 4 and 5, there is illustrated in these figures a fastening device applied to the extreme edge of a garment at the securing-opening and consisting of a female or receiving part E, having a neck or entering opening *e*, and a male part E', having an extended projecting stud *e'*, the parts being secured to the material by cleats or prongs.

In Fig. 6 is illustrated another form of fastening device comprising interlocking hooks, the female part consisting of a hook F, secured to the edge of the material by cleats or prongs *f*, and the male part consisting of a hook portion F', of shape substantially conforming to the shape of the inner surface of the part F and also secured by prongs, one or both the parts being made continuous, as in the case of the other form of fastener.

The construction shown in Fig. 7 is similar to the construction shown in Fig. 2 except that the supporting material is cut longitudinally, the edges of the fabric clamped between the cap-piece and inner casing both in the case of the male and the female parts, and the heads of both the parts constituting the fastener are composed entirely of metal by reason of the fact that the outer cap and the inner casing are forced into contact without any intervening material.

In Figs. 8 and 9 is illustrated another modification of the invention. In these views one of the coacting parts is shown as continuous and the other as consisting of a series of engaging devices isolated from each other, but adapted to engage the opposed continuous part. Also in this embodiment of the invention the initial and final portions of the fastening consist of engaging devices acting independently of the remaining portion of the fastening and operating to resist movement of the meeting edges of the garment material relatively to each other in a longitudinal direction, thus positively holding the ends of the fastening device. While in the illustration the female part is shown as continuous and the male part as consisting of separate engaging pieces, it will of course be perfectly obvious that the converse of this may be constructed and the male part made continuous and the female part of separate engaging pieces; also, that the independently-acting initial and final fastenings may be made entirely separate and stand apart from the rest of the fastening device. In this construction the male parts or studs are designated by the letter G and the female parts by the letter G', the individual female parts being indicated by the letter H.

In Fig. 10 is shown a construction in which the base I is made shorter than the engaging part, whereby the flexibility of the fastener is enhanced by the greater freedom of play between the several sections.

While the invention is here illustrated as consisting either of two flexible engaging parts extending in unbroken continuity along the edge of a garment-opening or of such a part on one side of the garment-opening and a series of independent corresponding engaging parts on the other edge of the garment-opening, it will be plainly apparent that the invention may be embodied by segregating either one or both the engaging parts into several series.

It will be seen that by the present invention the two contiguous edges of an extended garment-opening are secured in such manner as to permit of a maximum degree of flexibility, while at the same time they are positively held so that they come into contiguity or abutment practically throughout their entire length; also, that the tendency of the contiguous edges of the garment-opening to yawn and be unduly stretched at the points of fastening (where the edges of the opening are held together at points some distance apart) is overcome and the strain upon the goods composing the garment is distributed and taken up along the whole extent of the abutting or contiguous edges, thus holding the goods in a dressy unwrinkled condition, these results being accomplished without restricting or hampering the freedom of movement of the wearer. Preferably the sections going to make up the complete parts will overlap each other in scale fashion, and I have thus shown them in the drawings; but it is obvious that other means of engaging sections with each other may be employed.

Where the two coacting parts are each made continuous, it will be seen that after the initial engagement of the two the further operation of fastening will be assisted and rendered easier by the guiding action which the two parts have upon each other; also, that in the construction in which only one of the parts is made continuous and the other of independent isolated engaging parts the initial engagement will bring the next engaging points into proximity, so that, the diagonal strain being taken up, the actual engagement can be effected by simply drawing the one edge of the garment to or over the other by a pull at right angles to the length of the fastener.

What I claim as new, and desire to secure by Letters Patent, is—

1. A garment-fastener composed of two longitudinally-extending coacting parts secured to the garment material one on each side of the opening to be closed, one of said parts having an engaging surface continuous throughout its length and made up of a plurality of sections open-ended in the direction of the longitudinal extent of said part, substantially as specified.

2. A garment-fastener composed of two longitudinally-extending coacting parts, secured to the garment material one on each side of the opening to be closed, one of said parts hav-



ing an engaging surface continuous throughout its length and made up of a plurality of sections open-ended in the direction of the longitudinal extent of said part, and means for preventing the longitudinal movement of the two parts relatively to each other, substantially as specified.

3. A garment-fastener composed of two longitudinally-extending coacting parts, secured to the garment material one on each side of the opening to be closed, one of said parts having an engaging surface continuous throughout its length and made up of a plurality of open-ended sections, each such section having its base, as I, shorter than its engaging surface, and means for preventing the longitudinal movement of the two parts relatively to each other, substantially as specified.

4. A garment-fastener composed of two longitudinally-extending coacting parts, secured to the garment material one on each side of the opening to be closed, one of said parts having an engaging surface continuous throughout its length and made up of a plurality of open-ended overlapping sections, substantially as specified.

5. In a garment-fastener, the combination of two coacting parts, one of which is continuous and flexible and made up of a plurality of overlapping sections, the overlapping portions of said sections being tapered, substantially as specified.

6. In a garment-fastener, the combination of two coacting parts, one of which is continuous and flexible and made up of a plurality of overlapping sections, and means for preventing the longitudinal movement of the two parts relatively to each other, substantially as specified.

7. In a garment-fastener, the combination of two coacting parts, one of which is continuous and flexible and made up of a plurality of overlapping sections, the overlapping portions of said sections being tapered, and means for preventing the longitudinal movement of the two parts relatively to each other, substantially as specified.

8. A garment-fastener composed of two longitudinally-extending coacting parts, secured to the garment material one on each side of the opening to be closed, one of said parts having an engaging surface continuous throughout its length and made up of a plurality of overlapping sections, each such section having its base, as I, shorter than its engaging surface, substantially as specified.

9. In a garment-fastener the combination of two longitudinally-extending coacting series of hooks, the hooks of one series overlapping each other at their side edges and hav-

ing an engaging surface continuous throughout the length of said series, and each hook of said series having its base shorter than its engaging surface, substantially as specified.

10. A garment-fastener composed of two longitudinally-extending coacting parts, secured to the garment material one on each side of the opening to be closed, one of said parts having an engaging surface continuous throughout its length and made up of a plurality of hooks, as F, overlapping at their side edges, substantially as specified.

11. A garment-fastener composed of two longitudinally-extending interlocking series of hooks, secured to the garment material, one series on each side of the opening to be closed, the hooks of one series overlapping at their side edges and presenting an engaging surface continuous throughout the length of said series, substantially as specified.

12. In a garment-fastener the combination of a series of overlapping sections forming a male part having a continuous engaging surface, and an opposed series of overlapping sections forming a female part having a continuous engaging surface, substantially as specified.

13. In a garment-fastener the combination of a series of overlapping sections forming a male part having a continuous engaging surface, and an opposed series of overlapping sections forming a female part having a continuous engaging surface, and means for preventing the longitudinal movement of the two parts relatively to each other, substantially as specified.

14. In a garment-fastener the combination of a series of overlapping sections forming a male part having a continuous engaging surface, and an opposed series of overlapping sections forming a female part having a continuous engaging surface, the initial and final sections of the female part having closed ends, substantially as specified.

15. A garment-fastener composed of two longitudinally-extending coacting parts, secured to the garment material, one on each side of the opening to be closed, one of said parts having an engaging surface continuous throughout its length and made up of a plurality of overlapping open-ended sections the overlapping portions of each of said sections being tapered, substantially as specified.

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

WASHINGTON LAIRD GOLDSBOROUGH.

Witnesses:

DAVID N. MAXON,

DAVID A. DAVIES.