(No Model.)

A. C. MATHER.

GLOVE FASTENING.

No. 330,501. Patented Nov. 17, 1885.

Fig. 1.

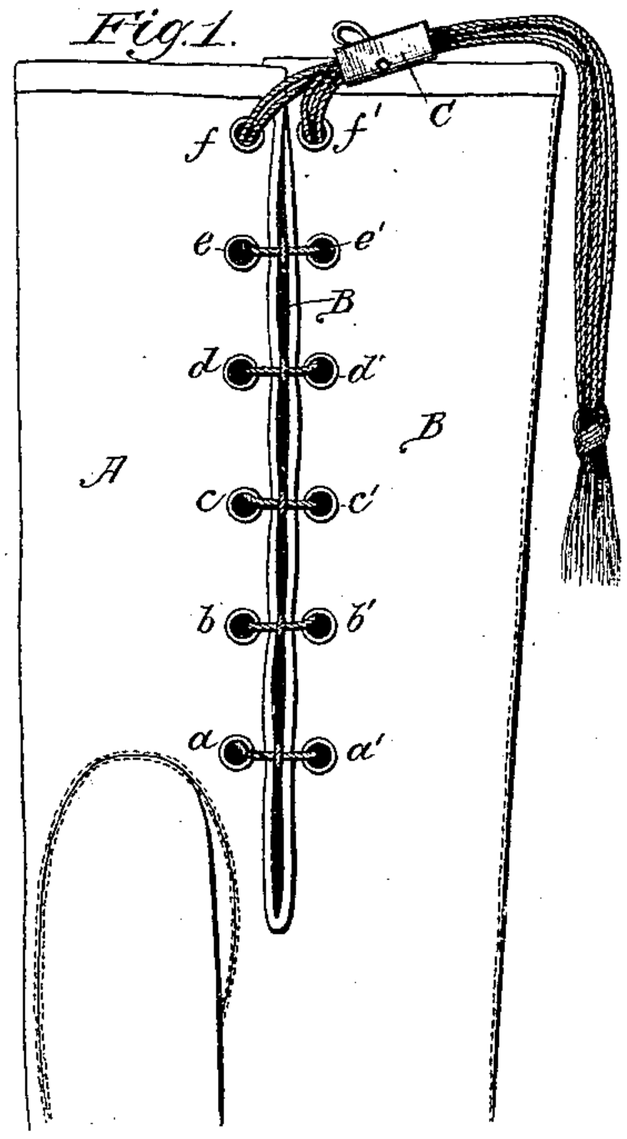


Fig. 2.

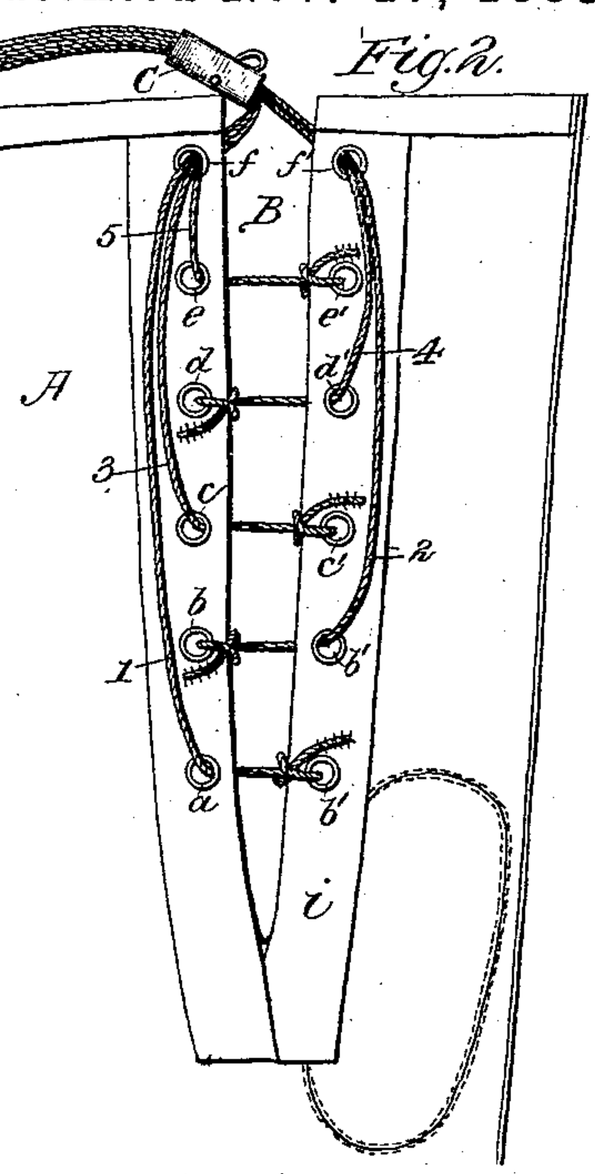


Fig. 3.

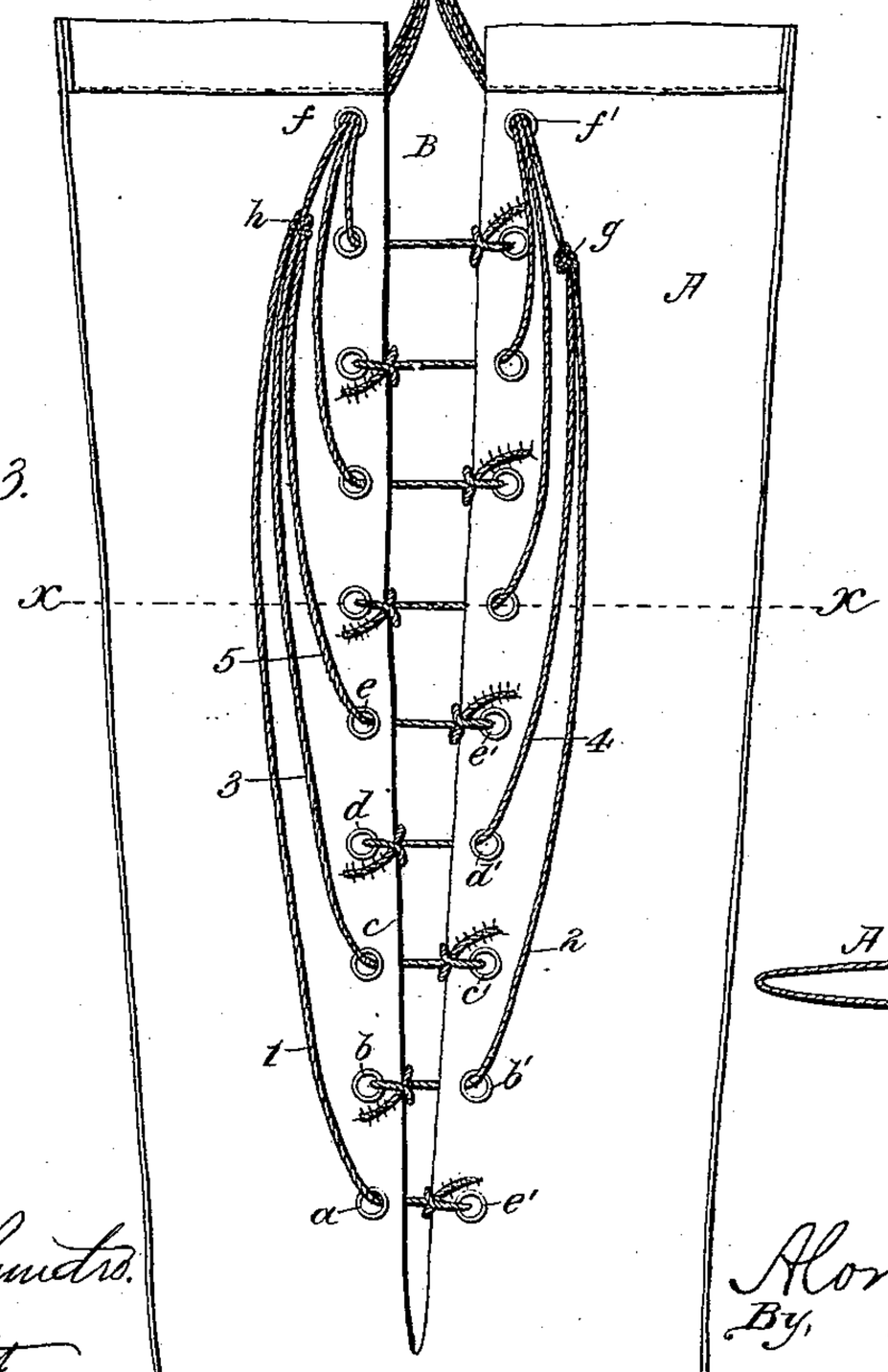
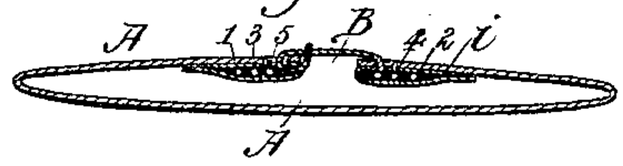


Fig. 4.



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UNITED STATES PATENT OFFICE.

ALONZO C. MATHER, OF CHICAGO, ILLINOIS.

GLOVE-FASTENING.

SPECIFICATION forming part of Letters Patent No. 330,501, dated November 17, 1885.

Application filed July 24, 1885. Serial No. 172,511. (No model.)

To all whom it may concern:

Be it known that I, ALONZO C. MATHER, a citizen of the United States, residing in Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Gloves, of which the following is a specification.

This invention relates to improvements in gloves having a slit, on either side of which are opposing eyelet-holes, through which is passed a lacing cord or cords. Heretofore a single lacing-cord hitched to the lower eyelet has been carried in a zigzag path across the slit from one eyelet-hole to the other, so as to run freely therein, and a double cord has been carried in like manner through, so as to run freely in, the eyelets, with the two cords crossing each other at a point between each pair of two opposing eyelets. In either of these forms the strain of the cord when pulled upon is in an oblique line relative to both the length of the slit and the glove, and tends not only to strain the glove, but cause it to buckle or full between the eyelets on both sides of the slit. A greater objection, however, is that when the cord is pulled in efforts to close the slit the strain is not uniformly distributed to all of the eyelets, and is greatest on the eyelets next the extremity of the slit; and hence while the slit may be closed at its extremities it will be open at points intermediate said extremities, especially if, as is customary, the glove is intended to be close fitting, and this objection increases as the length of the slit and number of eyelet-holes are increased. Eyelet-holes and lacing-cords for closing the slits of gloves are desirable, because they do not hurt or mark the wrist and arm, as do hook devices, or disfigure the glove, and may be more quickly and conveniently operated to close the slit, especially of a tight fitting glove; but as the lacing-cords have heretofore been connected with the eyelets they cannot be successfully used on gloves having any considerable length, and particularly those which extend to or above the middle of the forearm of the wearer.

The objects of my invention are to avoid the objections above set forth by having the lacing-cords connected with the eyelets in such a manner that their strain will not only be exerted uniformly on each and every eyelet-hole of the slit, but in a line transverse to the length of the slit and glove, whereby the buckling or fulling of the glove between the eyelet-holes will effectually be prevented, and particularly in gloves of considerable length, or when without regard to length the eyelet-holes are numerous. These objects are attained by devices illustrated in the accompanying drawings, in which—

Figure 1 is a detail front elevation of a glove embodying my invention; Fig. 2, a similar view of the front of the glove from its inner side; Fig. 3, a similar view of a glove provided with a longer slit and corresponding increase in number of eyelets and cords, and illustrating the manner of disposing of some of the cords for decreasing the number of ends projecting from the glove; Fig. 4, a transverse section of the glove through a pair of opposing eyelets on line *x x*, Fig. 3, and showing the arrangement of the tape or other fabric forming a passage for the cords and for strengthening the glove.

Similar letters of reference indicate the same parts in the several figures of the drawings.

The glove A is provided with the usual slit, B, extending out of the end of the glove; but so far as this invention is concerned the slit may be closed at both ends, as in a class of gauntlets sometimes worn. In Figs. 1 and 2, on each side of the slit, are opposing eyelet-holes to the number of six pairs, which, for convenience of description, are designated as pairs *a a'*, *b b'*, *c c'*, *d d'*, *e e'*, and *f f'*, arranged in the order named, beginning with the inner and closed end of the slit. Preferably knotted, but may be otherwise rigidly secured in the eyelet-hole *a'*, is a lacing-cord, 1, which passes freely through the opposing eyelet, *a*, and thence is carried on the inner side of the glove out through the eyelet-hole *f* on the same side. Likewise secured on the opposite side of the slit in the eyelet *b* is a lacing-cord, 2, which passes freely through the opposing eyelet, *b'*, and thence out of the eyelet *f'* at the end of the glove. A lacing-cord, 3, is similarly secured in the eyelet *c'*, which is on the

side of the slit opposite the point of attachment of the cord 2, which cord 3 passes freely through the eyelet *c*, and thence out the eyelet *f*, and in like manner lacing-cord 4 is attached to eyelet *d*, passed through eyelet *d'*, and out eyelet *f'*, and lacing-cord 5 attached to eyelet *e'*, passed through eyelet *e*, and out through eyelet *f*. After the cords are thus secured in position they are preferably straightened out and all knotted together near their free ends, but may be secured in any other manner; but knotting is preferable, because an ornamental tassel may be formed by untwisting the extremities of the cord beyond the knot. Each cord differs in length as the distance is between two pairs of eyelets, and all the cords are of such a length as will permit the slit to be fully opened without detaching any of the cords from an eyelet and to permit the attachment of a slide-fastener, C, of some suitable construction for clamping the cords together and preventing any of the cords slipping in the eyelets after the cords are tightened to close the slit, as will be clearly understood by reference to Fig. 1.

When the glove is unlaced, as shown in Fig. 2, it may be laced and the slit closed by grasping and pulling on the clustered and projecting ends of the cords, and preferably by taking hold of the knot common to all, so as to impart a simultaneous and uniform strain on all the cords. As each cord strains upon but two eyelets which oppose each other, except the upper eyelets, *f f'*, which may be termed "guide-eyelets," the strain of the cord is in a line substantially transverse to the length of the slit and glove, and, while all of the eyelets are simultaneously actuated, each pair of opposing eyelets are actuated by a cord independent of the other cords or eyelets. When the common knot is taken hold of to tighten the cords, if the slit, as is sometimes the case, is wider open at its outer than its inner end, the inner eyelets will be closed upon each other before the outer ones, because of there being more slack in the cords of the outer ones, which must be taken up before their strain is imparted to their respective eyelets; and it may here be observed that as a result the slit is uniformly closed along its entire length, even though the glove is a tighter and closer fit at any one point than another along the slit and without having to separately take hold of and pull any one cord more than the other, though this may be done, if desired, and the common knot be omitted. It may also be observed that whether or not there may be a common knot, the opposing eyelets of a pair are directly under the control of the operator, so that the strain upon the glove or the closing of the slit at a point between any two opposing eyelets may be varied at will.

In gloves which are more than a standard length—such, for example, as is shown in Fig. 3—it is not desirable to have the ends of all the cords carried through the upper two and opposing eyelets and project beyond the glove. To obviate this objection, the cords 2 and 4, after allowing for the required slack in each of them, and such a slack that when they are both tightened the slit will be uniformly closed by their respective eyelets, are knotted together at *g* and but one of them carried through the eyelet *f'*. So also, the three cords 1, 3, and 5 may be knotted at *h*, as shown in the same figure, and but one of them carried through the eyelet *f*. This same principle may be carried out in gloves of any length and to any extent—that is to say, a single projecting cord for each side—but it is preferred not to reduce the number to an extent which shall require the knot to be carried out the upper eyelets when straining the cords to close the slits.

In practice I propose to form a closed passage on the inner side of the glove for the cords to run in, and at the same time strengthen the glove along its slit edges, and to this end is employed a tape, *i*, secured to the glove by the eyelets, then folded over away from the slit, as shown in Fig. 4, and having its edges stitched together and, if desired, to the glove, so as to hold it approximately flat.

In securing the ends of the cords to the eyelets it is preferred to knot them to give an ornamentation to the glove, as shown in Fig. 1, and afterward stitch down the ends, as indicated in Figs. 2 and 3; but they may be secured in any other manner desired.

While I have shown and described the cords as secured to alternating and diagonally-opposite eyelets, it will be no departure from my invention to secure two or more cords in respective eyelets on the same side of the slit—as, for example, cord 2 may be secured to eyelet *b'* and pass freely through the eyelet *b* and up through the eyelet *f* with cord 1, while cord 5 may be secured to the eyelet *e*, pass freely through the eyelet *e'*, and pass with cord 4 out the upper eyelet; but in any case it is preferred that the same number of cords be knotted upon opposing sides of the slit.

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

1. A glove provided with a slit having on each side a series of opposing eyelets, in combination with lacing-cords, each cord rigidly attached at one end respectively in and next an eyelet and laced through the eyelet directly opposite the eyelets of attachment, said cord being passed out the glove through the upper eyelet on the same side of the slit as the eyelet through which they are respectively laced, substantially as described.

2. A glove provided with a slit having on each side a series of opposing eyelets, in combination with lacing-cords, each cord secured at one end respectively in and next alternate eyelets diagonally opposite each other and laced through the eyelet directly opposite the one next which they are secured, and passed out the glove through the upper eyelet on the

same side of the slit as the eyelets through which they are laced, substantially as described.

3. A glove provided with a slit having on each side a series of opposing eyelets, in combination with lacing-cords secured at one end respectively in and next eyelets, said cords being laced through the eyelet directly opposite the ones in which they are next secured, and two or more of said cords being knotted together, and one only of the cords so knotted passed out the glove through the upper eyelet of the slit, substantially as described.

4. A glove provided with a slit having on each side a series of opposing eyelets, in combination with lacing-cords secured at one end respectively in and next an eyelet, said cords being laced through the eyelet directly opposite the one in which they are next secured, and passed out the glove through the upper eyelet and secured together by a knot common to all their projecting ends, substantially as described.

5. A glove provided with a slit having on each side a series of opposing eyelets, in combination with lacing-cords secured at one end respectively in and next an eyelet, said cords being laced through the eyelet directly opposite the one to which they are secured and passed out the glove through the upper eyelet, and a sliding clasp for gripping said cords, substantially as described.

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