

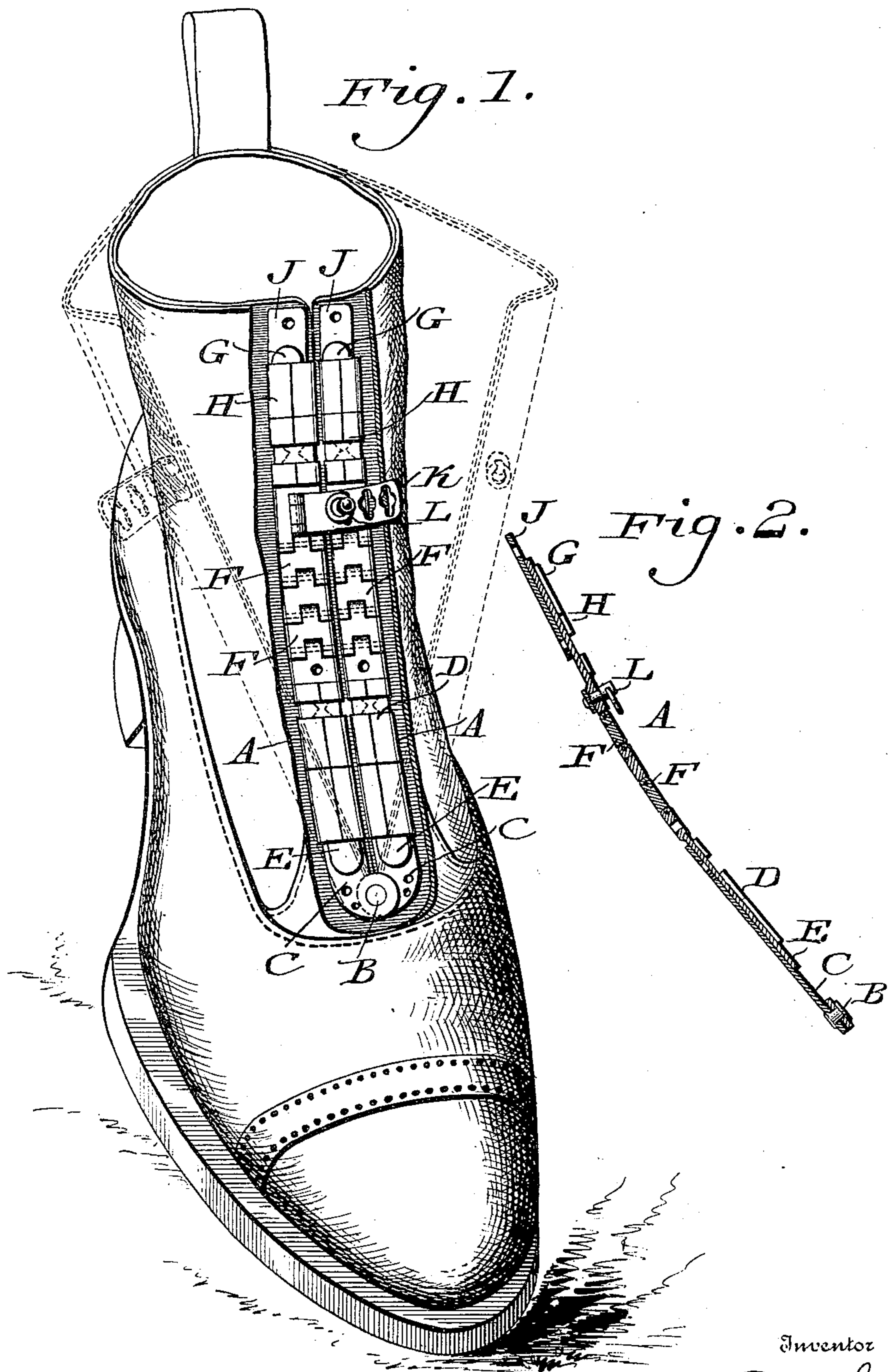
No. 670,192.

Patented Mar. 19, 1901.

A. BROUGHTON.  
SHOE FASTENER.

(Application filed Apr. 7, 1900.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

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## SHOE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 670,192, dated March 19, 1901.

Application filed April 7, 1900. Serial No. 11,962. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED BROUGHTON, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Fasteners for Shoes, Gloves, &c., which improvement is fully set forth, and particularly pointed out in the claims.

My invention consists of a fastening for a shoe, glove, &c., embodying a pair of jaws whose members are provided with links or articulations whereby the jaws may conform to the shape of the foot and yield to the motions thereof, while at the same time said jaws are made rigid in lateral direction, so that they may be brought close together and remain so and avoid gaps in the opening of the upper of the shoe, &c.

It further consists in adapting said members to be adjusted in length relatively to the length of the opening in the shoe, glove, &c.

Figure 1 represents a perspective view of a fastener for a shoe embodying my invention. Fig. 2 represents a longitudinal section thereof.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A A represent jaws which are hinged at their lower ends, as at B, and formed of the bottom bars C, the ears D, the tongues E, the links F, the tongues G, the ears H, and the top bars J. The ears D are connected with the bars C, and the tongues E, which freely enter said ears, are connected with the lower links of the series of links F. The tongues G, which freely enter the ears H, are connected with the upper links of the series of links, and said ears H are connected with the upper bars J, the parts on each jaw when assembled being continuous of each other and when in position capable of movement without disconnection from the ears. In proper parts of said members are openings whereby the jaws may be stitched, riveted, or otherwise secured to the walls of the opening, in the present case that of the upper of a shoe.

It will be seen that the links F form articulations which permit the jaws to conform in a measure to the curvature of the foot, espe-

cially over the instep of the foot, so as to set with ease thereon and yield with the motions thereof, and owing to the tongues and the ears the jaws may be extended relatively to the length of the opening in the upper which they occupy. Furthermore, the joints or axes of the links are horizontal, whereby while said links may yield, especially over the instep, they are rigid in lateral direction, whereby the two jaws may be brought close together and remain closed when fastened without liability to separate and form gaps in the opening of the upper.

Connected with one of the jaws is the plate or clasp K, in which are slots, either of which is adapted to receive the head L of the other jaw, whereby the jaws, and consequently the opening in the upper, may be closed. The jaws have a common axis B on the plates C, whereby when said jaws are brought together they abut tightly, as shown in Fig. 1, thus preventing the existence of a gap between the same when the shoe is closed. I preserve the flexibility or pliability of the jaws over the instep, where pressure is generally created thereon and where great freedom of motion of the shoe is required in walking, by placing the articulations or articulated sections F of the jaws between the ends thereof, so as to occupy the instep.

It will be seen that when the clasp K is disconnected from the head L the jaws may be readily separated and the shoe accordingly opened.

As the articulated portions bend to assume a curved position the length must necessarily be lengthened or shortened according to the direction of the curvature, and to permit of this the jaws are made automatically extensible in the manner above described, and thus the ease and comfort of the shoe greatly increased. The jaws have a common axis, whereby their inner sides or edges close tightly against each other without liability to open laterally, while the articulated portions F yield forwardly and backwardly with the motions of the foot, thus avoiding stiffness occasioned by the closed condition of the jaws, on the contrary imparting flexibility to the jaws where they most need the same.

Having thus described my invention, what

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

1. A pair of jaws for the purposes specified, each provided with intermediate articulated  
5 portions, loosely and slidably connected with fixed end portions, and thus automatically extensible with the curvature of the articulated portions, and a fastening hinged to one of the jaws and engaging means on the other.  
10 2. The combination of two jaws pivoted on a common axis and each composed of bottom

bars with ears, top bars with ears, tongues slidable through the ears of said top and bottom bars, and intermediate articulated portions connecting said tongues, whereby the  
15 jaws are flexible over the instep and at the same time automatically extensible.

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Witnesses:

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