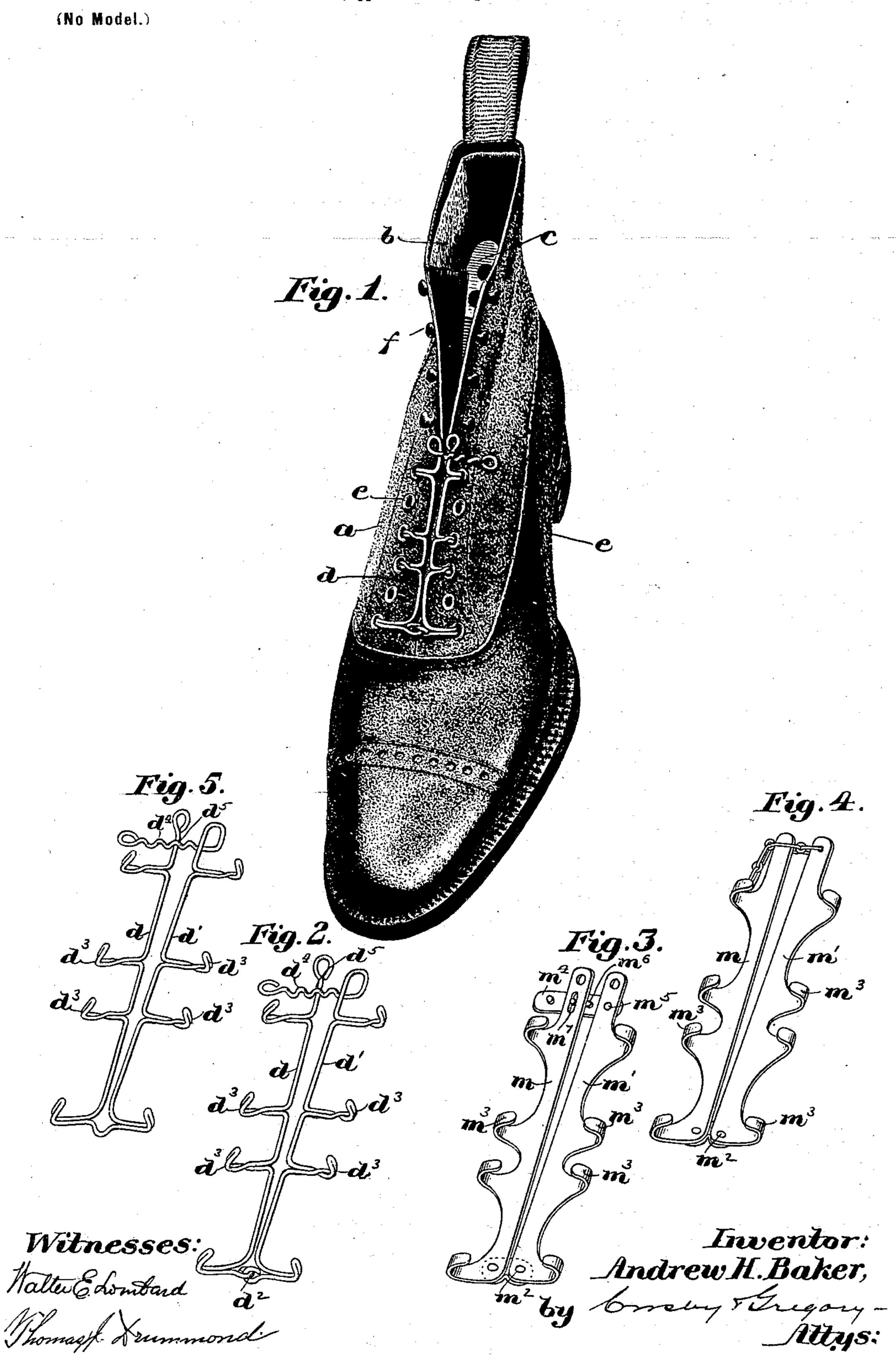
A. H. BAKER. FASTENER FOR SHOE UPPERS.

(Application illed Apr. 19, 1898.)

(No Model.)



United States Patent Office.

ANDREW H. BAKER, OF BROCKTON, MASSACHUSETTS.

FASTENER FOR SHOE-UPPERS.

SPECIFICATION forming part of Letters Patent No. 624,287, dated May 2, 1899.

Application filed April 19, 1898. Serial No. 678, 146. (No model.)

To all whom it may concern:

Be it known that I, ANDREW H. BAKER, of Brockton, county of Plymouth, State of Massachusetts, have invented an Improvement in Fasteners for Shoe-Uppers, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

In the manufacture of boots and shoes what is called the "upper" is first made, after which it is applied to the last and then bottomed by the application of the sole or soles thereto, and prior to the application of the 15 shoe-upper to the last it is customary to tie the sides of the upper, adjacent the lacing or other opening, together, so as to cause the upper smoothly and tightly to fit the last, for if the upper were not thus tied about the last it 20 would loosen thereupon and lose its proper position upon the last. Attempts have been | made to improve the former method of tying the sides of the upper together with a string by providing pieces of leather provided with 25 two rows of projections adapted to enter and engage the usual lacing-eyelets adjacent the

being inserted in the eyelets to hold the latter and the edges of the upper together about the 30 last. An objection to this device is that while the projections may be inserted in the eyelets to close the upper before the upper is applied to the last and while they may operate to hold the sides of the upper together about the last 35 while the last remains in the shoe, yet because the holding projections are rigidly connected it is impossible to remove the last without removing the holding projections from the lacing-eyelets, which in such a device can be 40 done only with great difficulty and frequently to the injury of the eyelets or the holding

edge of the lacing-opening, these projections.

projections. holding devices or fasteners employed for the 45 above-mentioned purpose, and the special features of my invention will be hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1, in perspective, shows a shoe of usual construction in position 50 upon a last with one form of fastener containing my invention in position holding the

edges of the shoe-upper together. Fig. 2 is an under side view of the fastener by itself. Figs. 3, 4, and 5 are other forms of device illustrating my invention.

Referring to the drawings illustrating various forms of my invention and in particular to Figs. 1 and 2, α indicates a usual shoe-upper provided with a usual lacing or other fastening opening b, arranged in position upon a 60 usual last, a portion of which within the shoe is indicated at c, the edges of the upper adjacent the opening b being provided at their lower ends with usual eyelets e and at their upper ends with fastening or lacing hooks f, 65 the eyelets and the hooks illustrating different types of fastening means which are or may be employed to fasten the shoe upon the foot when the shoe is in use, although it is understood that my invention is not limited 70 to its use in connection with these or any particular forms or types of fastenings with which the edges of the shoe-upper may be provided.

The fastener shown in Figs. 1 and 2 con- 75 sists of two separable members d d', connected at one of their ends, as by a joint d^2 , so as to enable the said members to be separated or opened and closed as desired. These members d d' are respectively provided with en- 80 gaging portions or projections d^3 , (shown as laterally-extended hooks or lugs,) they being formed in Figs. 1 and 2 in such manner as to enter and engage the eyelets e at the edges of the shoe-upper. The number of these projec- 85 tions may be varied according to the dictates of the manufacturer or user, I having herein shown each member of the fastener as provided with four engaging portions, although it is obvious a greater or less number may be 90 employed. At their ends opposite the flexible connection d^2 the said members are provided with suitable means for locking them My invention has for its object to improve | in open or closed position or at any intermediate position between the two extremes, such 95 locking or holding means in the devices of Figs. 1 and 2 consisting of a corrugated or serrated arm d^4 , the serrations or corrugations of which are adapted to engage and take hold upon the extended portion d^5 of the coöperat- 100 ing member.

In use the fastener described will be ap-

plied to the shoe, as shown in Fig. 1, previous to the application of the upper to the last, the engaging portions d^3 being inserted in the corresponding eyelets of the shoe-upper while 5 the latter is opened or partly closed, after which the edges of the upper are drawn together, preferably before the last is inserted, and there secured by engaging the projection d^5 of one of the members with a suitable notch 10 or corrugation in the locking-arm d^4 of the other member, as best shown in Fig. 1, where the projection d^5 is shown as retained in engagement with the locking notch or corrugation by the material of the upper lying be-15 neath it and tending constantly to press it firmly in the locking notch or corrugation. The upper is now usually applied to the last and bottomed by the application of the soles thereto in usual manner, and when on com-20 pletion of the shoe or for any intermediate operation it is desired to remove the last for insertion of a follower or a heeling-last or any other of the many lasts employed at different stages of the manufacture by different manu-25 facturers the operator raises the free end of the locking arm or tongue d^4 , thereby disengaging the two members d d' and permitting them to be separated, thereby to release the engaging portions d^3 in the eyelets from the 30 holding tension and permitting the said eyelets and the edges of the shoe-upper to be opened for the removal of the last. If another or follower last is inserted, the upper may be again drawn about the new last or 35 follower and the members d d' of the fastener: again locked to secure the upper about this new last or follower, the engaging portions d^3 not necessarily being removed from engagement with the eyelets during the time in 40 which the upper was opened, although they may be so disengaged, if desired.

The joint or connection d^2 is preferably such—for example, as shown—as will enable the two members dd' to tilt one with relation to 45 the other or lie in different angles or planes, as will best enable them to lie flat upon the two edge portions of the upper where they are brought together over the crown of the last.

In Fig. 3 I have shown another form of my so invention wherein the separable members mm' are shown as formed from flat metal or other material, the engaging portions m^3 being struck up or bent upwardly therefrom, these two members being connected at one of 55 their ends, as by a link m^2 , and at their opposite ends fitted with a suitable locking means, as the locking-link m^4 , pivotally connected at m^5 to one of the members and provided with locking projections m^6 , adapted 60 to engage a suitable slot m^7 in the other of said members, the operation or manipulation of the device when in use being substantially as described in reference to the device of Figs. 1 and 2. In lieu of the locking-link m^4 , 65 with its projections, I may employ a chain attached to the free end of one of the members and provided with one or more links of

suitable shape and construction to embrace or slip upon the end of the coöperating member to hold the two together, as indicated in 70 Fig. 4. This latter construction is convenient because the end of the chain can be left. protruding through the lacing-opening and may be grasped by the operator and pulled to release the separable members when, as 75 may be, the fastener is applied interiorly or between the upper and the last. The chainfastener referred to is also of advantage whether the fastener is applied exteriorly or interiorly because of its great flexibility in 80 enabling the members or fasteners to lie flat upon and in the plane of the edge portions of the upper.

In Fig. 5 I have shown a fastener wherein the connected ends of the separable members 85 are not jointed together, but have a connect-

ing flexible portion or spring.

Obviously the engaging portions of the devices will be formed as required to properly engage eyelets or whatever form of fastening 9° devices are provided at the opposite edges of the opening in the shoe-upper, I having herein shown eyelets and correspondingly-shaped engaging portions, for the reason that eyelets are almost universally employed at the pres- 95 ent time.

My invention is not limited to the embodiment or embodiments herein shown and dedescribed, as obviously it may be varied in many respects without departing from the 100

spirit and scope of the claims.

Having described my invention without limiting myself to details, what I claim, and desire to secure by Letters Patent, is—

1. A fastener for shoe-uppers, consisting of 105 a plurality of connected members, separable one from another at their ends farthest removed from the point of connection, means on said members at that side of said connection adjacent said separable ends for tempo- 110 rary engagement with the edges of a shoeupper, and means to retain said separable ends in holding position.

2. A fastener for shoe-uppers, consisting of a plurality of connected members separable 115 one from another at their ends farthest removed from the point of connection, means on said members and between said connection and said separable ends for temporary engagement with the edges of a shoe-upper, and 120 means coöperating with said separable ends to retain the latter in adjusted holding position.

3. A fastener for shoe-uppers, consisting of a plurality of connected members, separable 125 one from another at their ends farthest removed from the point of connection, means on the said members and between the said connection and said separable ends for temporary engagement with the edges of a shoe- 130 upper, and locking means to retain said separable ends in holding position and constructed to permit release of the said holding ends for separation of the latter and the edges

of the shoe-upper without disengagement of the said members from the said edges, for

the purpose described.

4. A fastener for shoe-uppers, consisting of a plurality of connected members separable one from another at their ends farthest removed from the point of connection, eyeletengaging means on said members and between said connection and said separable ends for temporary engagement with the edges of a shoe-upper, and means to retain said separable ends in holding position.

5. A fastener for shoe-uppers consisting of a plurality of separable members flexibly connected one to the other at their ends, means for temporary engagement with the edges of a shoe-upper, and means adjustable to lock the

said members one to the other at or adjacent

their opposite ends.

6. A fastener for shoe-uppers consisting of 20 a plurality of members provided respectively with engaging portions, and means to lock said members one to the other in desired holding position, the connections between said members permitting adjustment thereof to 25 the plane of the edges of the upper.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

ANDREW H. BAKER.

Witnesses:

FREDERICK L. EMERY, EDITH M. STODDARD.