W. R. CHASE.

LAST FOR BOOTS OR SHOES.

Patented July 3, 1888. Fig. 1. No. 385,502. :Ж Fig_8_ t A Fig.2.Fig. 4.

United States Patent Office.

WILLIAM REUBEN CHASE, OF LYNN, ASSIGNOR TO HIMSELF AND CHARLES A. SHAW, OF BOSTON, MASSACHUSETTS.

LAST FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 385,502, dated July 3, 1888.

Application filed April 30, 1888. Serial No. 272,270. (No model.)

To all whom it may concern:

Beitknownthat I, WILLIAM REUBEN CHASE, of Lynn, in the county of Essex, State of Massachusetts, have invented a certain new and useful Improvement in Boot or Shoe Lasts, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved last, the block being represented as 15 elevated; Figs. 2, 3, 4, 5, and 6, views partially in section, showing certain details of construction; and Figs. 7 and 8, views showing alternative forms of constructing certain of the parts.

20 Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to that class of boot or shoe lasts which are provided with blocks; and it consists in certain novel features, as hereinafter fully set forth and claimed, the object being to produce a more effective and otherwise desirable article of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the body of 35 the last, B the block, and C H the cords by which the block is attached to the body.

The block B is provided with a hole, 44, which extends longitudinally through it, the forward end of said hole opening on the lower 40 side of the block at 47, where it is connected with a short groove, 95. A socket, f, is formed in the rear end of the block, and a socket, 54, on its lower side near its rear end.

The body A is provided with a seat, 50, for the block, and with a V-shaped socket, 58, at the forward end of said seat for receiving and "centering" the V-shaped forward end, 57, of said block.

A centrally-arranged longitudinal groove, be placed a short distance inward from the 50 45, is cut in the block seat 50, and at the rear edge, provided its mouth is so formed as to 100

end of said groove a hole, 49, is bored in the body A. A hole or socket, m, is formed in the upper edge or corner, 75, of the heel portion of the body, the mouth of said hole being preferably slightly funnel-shaped or flaring 55 and opening partially through the side of said heel portion and partially through its top 85, as best seen in Fig. 3. The cord C is inserted in the hole 44 in the block B and provided at its outer end with a knot, 14, incased in a 60 metallic clip or pull, E, its inner end being inserted in the hole 49 and secured by a screw, D. The head of said screw projects above the plane of the block-seat 50 and enters the socket 54 when the block B is seated, said 65 socket and screw constituting a block lock, which assists in preventing the block from accidentally sliding longitudinally or laterally on its seat. One end of the cord H is inserted in the hole or socket m of the body A and 70 the other in the hole or socket f of the block B, said cord being secured in said sockets by screws t, for which, however, pins or any other suitable means of fastening may be substituted, if desired.

To prevent the cord H from unraveling and enable the screws t to hold it more securely, its ends are incased in metallic clips, 65, which are indented or grooved, as shown at b, to prevent them from being detached, one or more 80 grooves being employed, as desired. The body of one of the clips is preferably left plain, as shown at z in Fig. 6, the plain portion being stamped with letters, figures, or symbols to identify the work.

The object in forming the hole or socket m in the corner 75 of the heel portion of the body A is to enable the cord H to be bent down, as shown in Fig. 3, to permit the workman to pound with a hammer on the top 85 of the 90 heel and drive it into the boot or shoe, and also to enable said cord to be bent upward, as shown by the dotted lines 99 in Fig. 3, to prevent it from getting between the last and upper of the boot or shoe during the lasting process, and thereby injuring the work. Said hole may be placed at either side or at the rear of the heel portion, as preferred. It may also be placed a short distance inward from the edge, provided its mouth is so formed as to recommend the same should be should be placed as the same should be should be so formed as to recommend the same should be shou

open partially through the side and partially through the top of the heel portion, as described. The cord C rests in the groove 45 and hole 44 when the block is seated, and, be-5 ing entirely housed or concealed within the last, will not wear out or break as readily as when exposed. By opening the groove 45 directly into the hole 49 the cord C can be kept in better position by the screw D than would 10 otherwise be possible. The short groove 95 in the block also serves to assist in adjusting the cord C in seating the block.

The corner or edge 75 of the heel portion of the body may be beveled or chamfered, and 15 the hole m formed in the bevel, as shown in Fig. 8, and the screw D may be placed in another position and a separate screw or plug used to secure the end of the cord C, if desired, the socket 54 being, of course, changed accord-20 ingly, without entirely departing from the

spirit of my invention.

Instead of making the forward end, 57, of the block V-shaped and providing a V-shaped socket, 58, in the body to receive it, the block 25 may be kept in position by a pin, 60, inserted in the end of the block, as shown in Fig. 7, or

by any other suitable means.

It is well known that when the block of a last is secured to its body by a cord, in the 30 usual manner, the cord is liable to be broken and the block separated and mislaid, thereby causing much annoyance and loss of time, this being more especially the case with very large or heavy lasts. The use of the two cords H 35 C prevents the block from becoming entirely detached from the body of the last, however large or heavy it may be, and hence obviates that objection. When the last is small enough or its weight such as to warrant it, one of the 40 cords may be omitted, if desired. In case the cord C is omitted, the hole 44 and grooves 45 and 95 may also be omitted and the socket fplaced higher in the block to some advantage -as, for instance, at the point 48. The forward end of said cord may also be attached to the body at any other convenient point, if desired.

In the use of my improved last the block may be readily removed from the boot or shoe 50 without unbuttoning the upper by pulling on the cap E or cord H, the rear end of the block being first raised slightly to unlock it or detach it from the head of the screw D. In place of said screw Dany other suitable block-lock may 55 be employed, if preferred. The metallic cap E may also be omitted and the knot 14 in the cord C used without a cap to prevent the cord from being withdrawn from the hole 44.

By attaching one end of the cord H to the 60 extreme rear end of the block, the block may be pulled from the shoe more readily and to better advantage by said cord than if it were

attached at any other point.

The hole or socket m is preferably inclined, 65 as shown in Fig. 3; but this is immateral, provided its mouth is so formed or located that edge or corner of the heel portion of the body of the last, or approximately so. Said cord H may also be secured to the body by any other 70 suitable means than shown, provided it is so arranged as to lead from the edge or corner of the heel portion of the body, or approximately so.

Having thus explained my invention, what 75

I claim is-

1. In a last for boots or shoes, a body, as A, provided with the hole or socket m in the upper edge or corner of its heel portion, a block. as B, provided with the hole or socket f in its 80 rear end, the cord H, having its ends respectively inserted in said sockets, and the screws t, for securing the ends of the cord in said sockets, all being combined and arranged to operate substantially as described.

2. In a last for boots or shoes, a body, as A, provided with the hole or socket m in the upper edge or corner of its heel portion, a block, as B, provided with the hole or socket f in its rear end, the cord H, provided with the me- 90 tallic clips or casings 65 and having its ends respectively inserted in said sockets, and the screws t, for securing the ends of the cord in said sockets, all being combined and arranged to operate substantially as set forth.

3. In a last for boots or shoes, a body, as A, provided with a hole or socket, m, in the upper edge or corner of its heel portion, a block, as B, provided with the hole or socket f in its rear end, the cord H, having its ends respect- 100 ively inserted in said sockets, the screws t, for securing the ends of the cord in said sockets, and a lock for said block, all being combined and arranged to operate substantially as described.

4. In the last herein described, the combination of a body, a block, a cord, and a lock for the block, one end of said cord being attached to the block in such position as to lead from its rear end and the other secured to the 110 body in such position as to lead from or approximately from the upper edge or corner of the heel portion of said body, substantially as set forth.

5. In a last for boots or shoes, the combina- 115 tion of the block B, having the hole 44 and socket 54, the body A, provided with the groove 45 and hole 49, and the cord C and screw D, said cord being inserted in the hole 44 and having its outer end provided with a knot or 120 pull and its inner end secured to the hole 49 by said screw, substantially as described.

6. In a last for boots or shoes, the block B, provided with the hole f and socket 54, the body A, provided with the hole m, the screw 125 D, inserted in said body with its head projecting and adapted to register with the socket 54 when the block is seated, the cord H, provided with the clips 65 and having its ends respectively inserted in the holes mf, and the screws 130 t, for securing said cord in said holes, substantially as set forth.

7. In a last for boots or shoes, the body A, the cord H will lead or draw from the upper | provided with the groove 45, having its rear

105

385,502

end terminating in the hole 49, in combination | seated being disposed or housed partially in a 35 with the cord C, connected with the block of the last and having one of its ends inserted in said hole, and the screw D, for securing the end of the cord in said hole, substantially as described.

8. In a last for boots or shoes, the body A, provided with the groove 45, hole 49, and socket m, the block B, provided with the sock-10 ets 54 and f and the hole 44, the cord-II, having its ends respectively inserted in the sockets m and f, the screws t, for securing said ends in said sockets, and the cord C, inserted in the hole 44 and having one of its ends secured in 15 the hole 49 by the screw D and the other provided with a knot or pull, all being combined and arranged to operate substantially as described.

9. In the last herein described, the combi-20 nation of a body, a block, a cord connecting said body and block, and a lock for said block, one end of said cord being secured to the block and the other secured to the body by the blocklock or a portion thereof, and said last provided with an opening in its interior, in which the main portion of said cord is disposed or housed when the block is seated, substantially as set forth.

10. In the last herein described, the combi-30 nation of the following intrumentalities, to wit: a body, a block adapted to be seated on said body, a lock for said block, and a cord connecting said block and body, the body or main portion of said cord when the block is

hole extending lengthwise through said block and partially in a groove in the interior of the last, one end of said cord being secured to the rear portion of said body by the block-lock or a portion thereof and the other protruding 40 through the rear or outer end of the hole in the block and provided with a knot or pull, substantially as described.

3

11. In a last for boots or shoes, the cord C, provided with the metallic pull E, in combi- 45 nation with the block B, provided with the hole 44, body A, provided with the hole 49 and groove 45, and a lock for the block, said cord being inserted in the hole 44 and having one of its ends secured in the hole 49 by the 50 block-lock or a portion thereof, substantially as set forth.

12. In a last for boots or shoes having a longitudinal groove in its interior for the blockcord, the combination, with the last-body pro- 55 vided with a block-seat, and with a V-shaped socket at the lower end of said seat, of a block having a V-shaped end for fitting said socket and provided with a longitudinal cord-hole, a cord disposed in said hole and groove and con- 60 necting said block and body, and a block-lock, said cord being secured to said body by the block-lock or a portion thereof, substantially as described.

WILLIAM REUBEN CHASE.

Witnesses:

O. M. SHAW, E. M. SPINNEY.