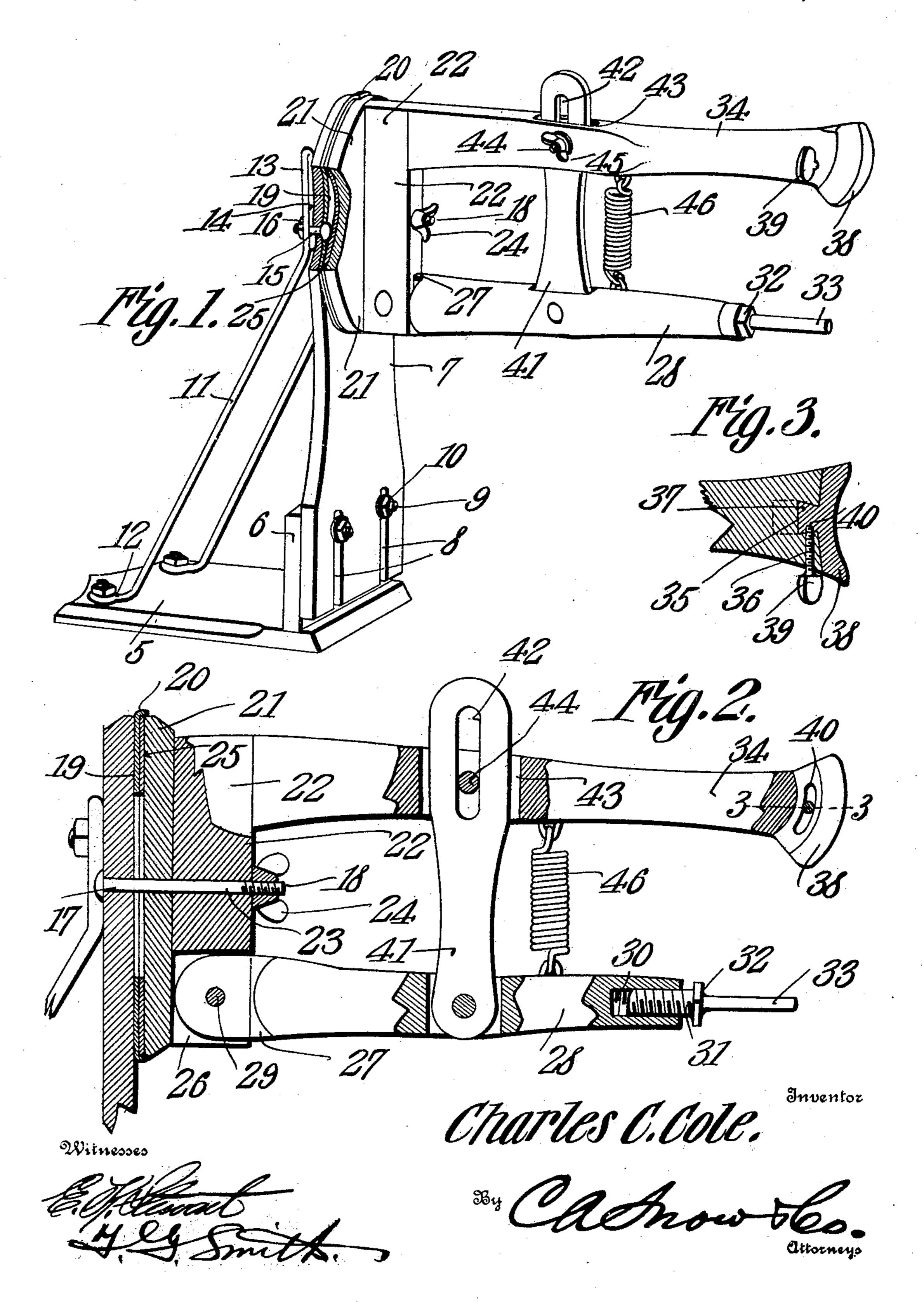
C. C. COLE.

LAST JACK.

APPLICATION FILED MAY 1, 1909.

962,747.

Patented June 28, 1910.



## UNITED STATES PATENT OFFICE.

CHARLES C. COLE, OF CAMDEN, NEW JERSEY, ASSIGNOR OF ONE-TENTH TO RAYMOND E. BLACK, OF CAMDEN, NEW JERSEY.

LAST-JACK.

962,747.

Specification of Letters Patent. Patented June 28, 1910.

Application filed May 1, 1909. Serial No. 493,335.

To all whom it may concern:

Be it known that I, CHARLES C. COLE, a citizen of the United States, residing at Camden, in the county of Camden and State 5 of New Jersey, have invented a new and useful Last-Jack, of which the following is a specification.

It is the object of the invention to provide an improved construction of shoemaker's 10 last jack for supporting the last and the shoe upper while applying the sole, and specifically to provide a novel form of base or support for the same.

In the accompanying drawing; Figure 1 15 is a perspective view of a last jack embodying the present invention, Fig. 2 is a vertical longitudinal sectional view therethrough, Fig. 3 is a horizontal sectional view on the

line 3—3 of Fig. 2.

In the drawings, the support for the last jack, is illustrated as embodying a base 5, having an upstanding flange or wing 6 which extends transversely thereof adjacent the forward edge; and, a head 7 which is 25 in the nature of a plate formed at its lower end with slots 8 through which project studs 9, upon the forward face of the wing or flange 6, there being nuts 10 threaded upon these studs whereby to hold the head 7 at vertical 30 adjustment upon the base. This head extends above the base to a sufficient distance to position the last supporting jack directly in front of a seated workman and it is braced in upright position through the me-35 dium of brace rods 11 which at their lower ends are permanently secured as at 12 to the base 5 and at their upper ends are bent to extend vertically as at 13 and are slotted as at 14 for the engagement therethrough of 40 studs 15 upon the rear face of the head 7 adjacent the upper end thereof, there being nuts 16 threaded upon the studs to hold the usual socket in the ordinary shoe last. said upper ends of the brace rods firmly against the said rear face of the head.

It will be understood from the foregoing that by loosening the nuts 10 and 16, the head 7 may be adjusted vertically and after it has been properly adjusted, these nuts are to be tightened whereby to securely 50 brace and support the head in proper position. For a purpose which will be presently explained, the head is formed, at its upper

opening there is engaged a threaded stem 18 which is located axially of an annular 55 bearing plate 19 secured upon the front face of the head. This plate 19 is formed at intervals at its outer edge with lugs 20.

The last jack proper is comprised in part of a base indicated by the numeral 21 and 60 formed or provided upon one face with a boss 22, through which and the said plate is formed an opening 23 for the passage of the threaded stem 18, there being a winged or other form of nut 24 threaded upon this 65 stem whereby to hold the base 21 firmly in position against the front face of the head 7, the base 21 being provided upon its rear face, or in other words, that face which bears against or opposes the head 7, with an 70 annular bearing plate 25, similar to the plate 19. This plate 25 is of a diameter substantially equal to the diameter of the plate 19 and is confined between the lugs 20 upon the said plate 19, it being understood 75 that the base of the last jack may be rotatably adjusted upon the head 7 and held at such adjustment through the medium of the said nut 24 and the function of such adjustment will presently be explained. At 80 one end, the boss 22 is formed with a slot 26, which receives an ear 27 formed at the lower end of a last standard 28, there being a pivot bolt 29 engaged through the boss at its said end and through the ear 27 whereby 85 to pivotally connect the said standard with the boss. In its outer end, the standard 28 is formed with a threaded socket 30 in which is adjustably received a threaded stud 31 having a squared head 32 for the 90 engagement of a wrench or other suitable tool whereby it may be rotated and this stud 31 is further formed with a tang 33 which is adapted to engage or seat in the

It will be understood from the foregoing that before disposing a last upon the tang 33, the said tang may be adjusted by engaging a wrench with the head 32 of the stud 31 and rotating the said stud, the ad- 100 justment serving to extend or retract the last to the desired degree with respect to the outer end of the standard 28. There is a coöperation between this adjustable last supporting tang and the toe support of the 105

end, with an opening 17, and through this I jack as will be presently made clear.

The toe supporting upright is indicated on the drawings by the numeral 34, and is rigidly secured to the boss 22 and projects at an angle therefrom and at its outer end 5 this upright is formed with a slot 35 and through one side with an opening 36 which opens into the slot. This slot 35 is in the upper end of the upright 34 has its walls located in inwardly diverging planes and the slot receives a rib 37 which is formed upon the under side of a toe block 38, which rib is wedge shape in cross section whereby to fit snugly in the slot. The extremity of the upright is convexed in the direction of 15 extent of the slot 35 as is clearly shown in the longitudinal sectional view of the drawings and this convexity describes the arc of a circle. The under side of the toe block 38 is concaved in the direction of its ex-20 tent, or more specifically speaking in the direction of extent of the rib 37 thereon and to a degree corresponding to the degree of convexity of the extremity of the upright. As a consequence, the toe block 25 38 may be rocked upon the extremity of the upright whereby to assume various angular positions with respect thereto and it is held in adjusted position with respect to the upright through a medium of a suitable set 30 screw 39 which is engaged through the opening 36 and projects at its end into an arcuate groove 40 formed in the adjacent side of the rib 37, it being understood that the said end of the set screw bears against the inner wall 35 of the groove for the purpose stated.

Inwardly of its outer end, the last standard is formed with a slot, one end of which is presented toward the upright 34 and pivoted in this slot is one end of an arm 41 40 which is formed at its other end with a longitudinally extending slot 42 and projects at its last mentioned end into a slot 43 formed in the said standard 34 at a point corresponding to the location of the slot in the 45 standard 28. Through the walls of the slot 43 in the upright 34 are formed alined openings through which is engaged a bolt 44 having threaded thereon a winged adjusting nut 45, it being understood that by tightening this 50 nut the said side walls of the slot 43 will frictionally grip the slotted end of the arm 41 whereby to hold the same against movement in the slot 43 in the upright 34 whereby the last standard 28 will be held in ad-55 justment with respect to the upright 34. In order that adjustment of the last standard 28 may be more readily accomplished a spring 46 is connected at one end to the said standard preferably outwardly 60 of the arm 41 and at its other end to the upright 34, the tendency of the spring being normally to swing or draw the standard 28 in the direction of the upright 34.

From the foregoing description of the in-65 vention it will be readily understood that a

last of the ordinary construction, having a shoe upper fitted thereon, is fitted to the tang 33 and is supported by the said tang and that the winged nut 45 is then loosened and the last standard 28 carrying the said 70 tang is adjusted angularly with respect to the upright 34 whereby to bring the toe of the last and the upper thereon, in position against the toe block 38, the toe block being adjusted upon the upright to proper posi-75 tion to support the toe, if necessary. After this has been accomplished, the last and the upper thereon will be firmly held in position in advance of the operator and the sole may be readily applied to the upper. Not 80 only does the toe block 38 serve to steady the last and relieve the tang 33 of the strain but it also prevents turning of the last upon the said tang by which it is supported, any desired adjustment of the last being secured 85 by rotating the base 21 upon the stem 18 carried by the head 7 heretofore described.

What is claimed is:—

1. In a device of the class described, a base, said base having an upstanding wall, a 90 plate disposed against the wall and formed with slots, set bolts engaged through the wall and through the slots in the plate, whereby to hold the plate in vertical adjustment upon the wall, and a last standard supporting base 95 mounted for adjustment about a center upon

the plate.

2. In a device of the class described, a base, said base having an upstanding wall, a plate disposed against the wall and formed 100 with slots, set bolts engaged through the wall and through the slots in the plate whereby to hold the plate at adjustment vertically with respect to the wall brace rods permanently secured at their lower ends 105 to the base rearwardly of the wall thereupon and projecting upwardly at an angle toward the plane of the wall, the said brace rods at their upper ends being slotted, set bolts engaged through the plate and through the 110 slots at the upper ends of said brace rods and a last standard supporting base rotatably adjustably mounted upon the plate at the upper end thereof.

3. In a device of the class described, a 115 base, said base having an upstanding wall, a plate disposed against the wall and formed with slots, set bolts engaged through the wall and through the slots in the plate whereby to hold the plate at adjustment ver- 120 tically with respect to the wall, brace rods permanently secured at their lower ends to the base rearwardly of the wall thereupon and projecting upwardly at an angle toward the plane of the wall, the said brace rods at 125 their upper ends being slotted, set bolts engaged through the plate and through the slots at the upper ends of said brace rods, a last standard supporting base rotatably adjustably mounted upon the plate at the up- 130

per end thereof, an annular wear plate secured upon the first mentioned plate at its upper end, an annular wear plate secured upon the rotatable base and bearing against the first mentioned wear plate, and lugs formed at the outer edge of one of the wear plates and engaging over the corresponding edge of the other wear plate.

In testimony that I claim the foregoing as my own, I have hereto affixed my signa- 10 ture in the presence of two witnesses.

CHARLES C. COLE.

Witnesses:

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Ernest P. Stuebing, John D. Couster.