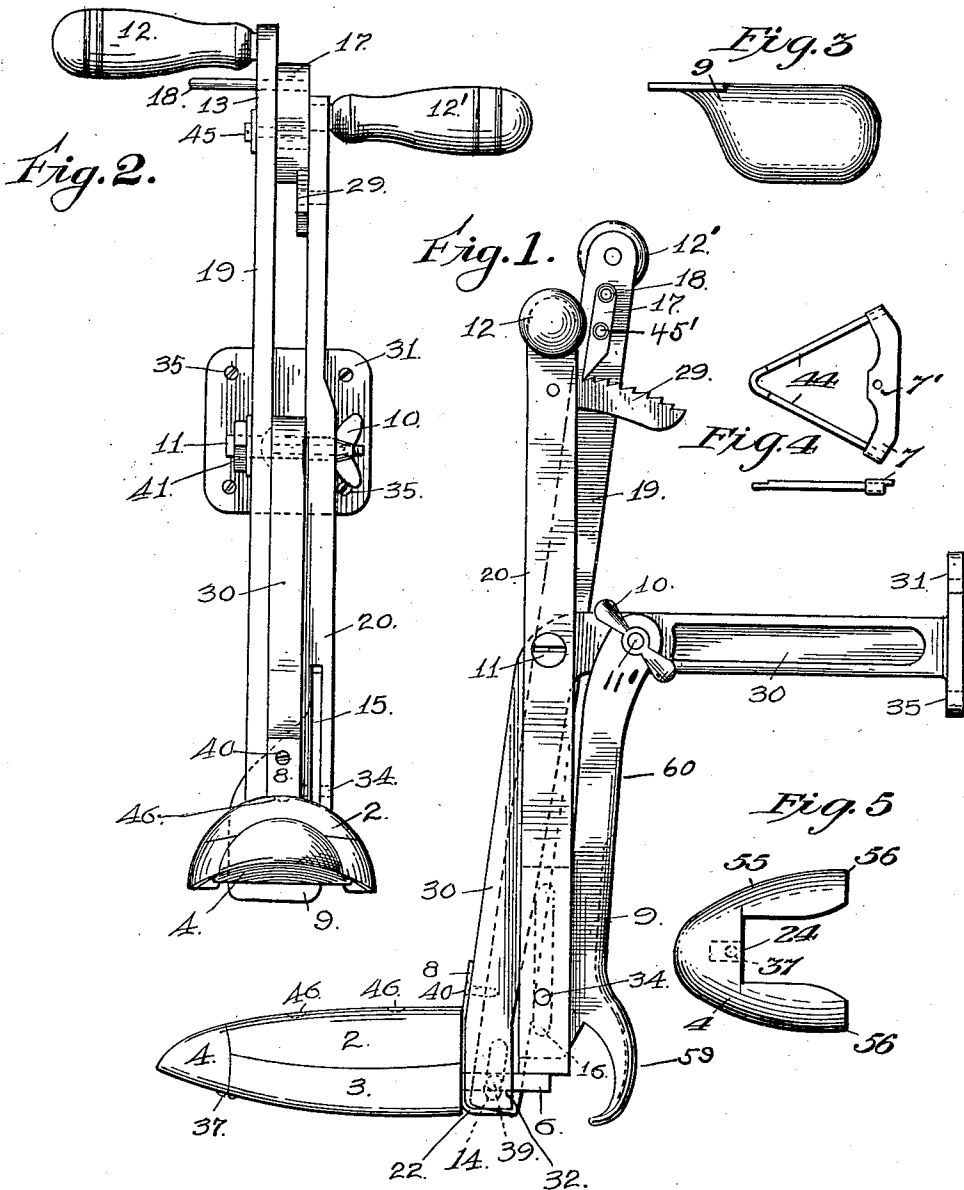


L. SONNTAG.
SHOE HOLDER.
APPLICATION FILED JUNE 1, 1910.

1,023,887.

Patented Apr. 23, 1912.

2 SHEETS—SHEET 1.

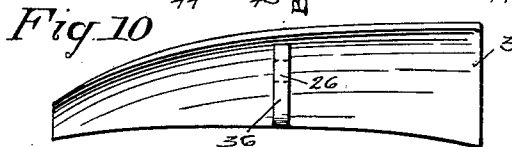
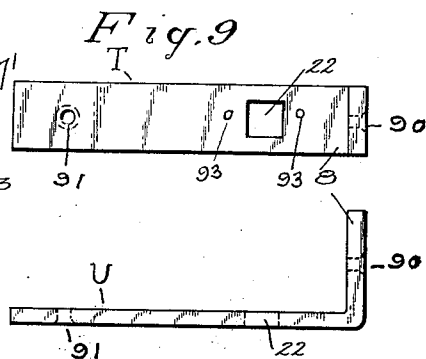
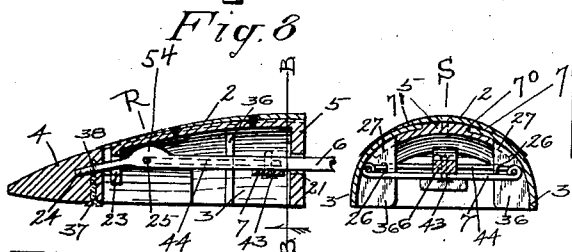
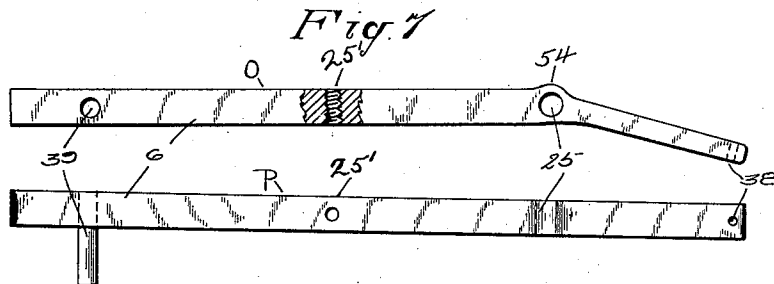
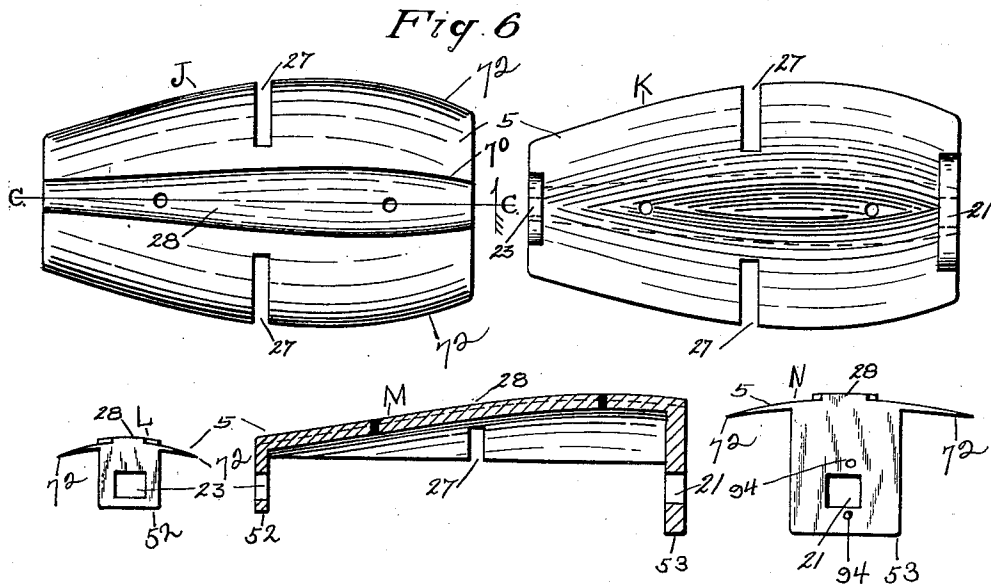


Witnesses:
Arthur L. Lee.
Chas. Sonntag

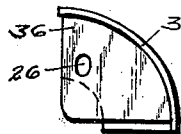
Inventor:
Lincoln Sonntag

1,023,887.

2 SHEETS—SHEET 2.



WITNESSES
Chas. Holtz.
Chas. Sonntag.



INVENTOR
Lincoln Corntag

UNITED STATES PATENT OFFICE.

LINCOLN SONNTAG, OF SAN FRANCISCO, CALIFORNIA.

SHOE-HOLDER.

1,023,887.

Specification of Letters Patent.

Patented Apr. 23, 1912.

Application filed June 1, 1910. Serial No. 564,473.

To all whom it may concern:

Be it known that I, LINCOLN SONNTAG, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Shoe-Holders, of which the following is a specification.

My invention relates to improvements in shoe-holders or devices for holding shoes for cleaning and polishing.

The object of my invention is to provide in a shoe-holder having an expansible and contractible form shaped to fit the forepart of a shoe including curved side members, a toe-piece and a longitudinal shaft therein provided with inclined arms, an improved part interiorly secured to each of said side members for moving as well as guiding the same transversely, and an improved shaft for moving said toe-piece, the movement of which not only extends said toe-piece but guides it so that the same moves in a sloping position, and a further object is to provide an improved pivotally supported piece for securing a shoe rearwardly which may be used not only for short shoes but also for shoes of considerable length by reason of the extension of said piece in its rearward movement.

Additional objects and advantages of my invention will hereinafter appear.

To said ends my invention consists in the novel construction, arrangement and combination of parts which I shall now fully describe by reference to the accompanying drawings and particularly point out in the appended claims.

Referring to the accompanying drawings illustrating my device, Figure 1 is a side view of my said device; and Fig. 2 is a front view thereof—the remaining views being views of parts of the device. Fig. 3 is a rear view of the lower portion of the heel piece hereinafter mentioned for engaging the counter of a shoe. Fig. 4 is a plan view of the arms for extending the wings of the front portion of the device or foot form and beneath said plan view is a side view of one of said arms. Fig. 5 is a top plan view of the toe-piece hereinafter mentioned. Fig. 6 contains a plan view J and a bottom view K of the frame supporting the top plate and the wings, and also contains a view of the front support L and the rear support N depending from said frame and a central

longitudinal section M of said frame. Fig. 7 is a side view O of the shaft running longitudinally under said frame and a plan view P thereof. Fig. 8 contains a central longitudinal section R of the form A or front portion of the device and a transverse section S of said form taken on line B—B of said longitudinal section. Fig. 9 contains a rear view T of the strap securing the form A to the bracket 30 and a longitudinal side view U of the same. Fig. 10 contains a longitudinal view of one of the wings 3 showing its interior and a side view of the blade 36 interiorly secured to said wing.

Referring to the figures of said drawings, A shows the form shaped to enter the front portion of a shoe secured to the downwardly projecting arm of bracket 30, including shaft 6, being a toe support, and constituting the front portion of the device, the remainder of said device as shown in Fig. 1 being designated the rear portion thereof.

The form A has a top portion or plate 2 which slopes longitudinally from the rear of the plate to the front end of the same, the front end projecting over the toe-piece or block 4. The whole of the front end of said plate is tapered to the sharp side edges thereof which are illustrated in Fig. 8 so that when the toe-piece 4 is extended the downward slope of said plate will be continued. The said top plate curves transversely from its longitudinal center line to a sharp or tapered edge on each side thereof and is preferably not integral with frame 5 to which it is secured by screws 46, such curvature being provided for the upper and lower sides or surfaces of said plate as shown in section in Fig. 8. The frame 5 has end supports for sustaining rod or shaft 6 and has curved branches 72 projecting laterally therefrom for sustaining wings 3. The wings 3 consist of curved plates having tapered front ends to continue the curvature of the tapered front end of plate 2 when said wings forming the sides of form A are extended by the operation of the device. The frame 5 is provided with a ridge or raised portion 28 having sides 70 against which the inner edges of wings 3 abut when the form A is reduced to its smallest compass and which also maintains plate 2 at a sufficient distance from the branches so that wings 3 may slide easily in the channels formed by

the separation of the plate 2 from said branches when lateral pressure is exerted on said wings. The said branches of frame 5 have slots 27 in which blades 36 rest and which blades act as guides to the wings in their lateral movement and also as links to extend and retract the wings transversely so as to increase or decrease the size of form A laterally to accommodate shoes of various sizes. The said side members 3 are of identical form and construction except that one of said wings is fitted for one side of the form A and the other one for the other side of said form as shown in Fig. 8. Rod or shaft 6 is a straight shaft except that the forward end of said shaft slopes downwardly as shown in Fig. 7. The said shaft 6 has an opening 25 through which the apex of arms 44 extend and which arms, being preferably bent to the shape shown in Fig. 4, are secured rearwardly to the underside of said shaft by cross-piece 7 having end openings into which arms 44 fit, the said cross-piece being secured by means of a screw passing through aperture 7', and into threaded aperture 25'. The said arms pass through openings 26 in blades 36 by which the arms are extended through the forward movement of shaft 6 and are retracted by the rearward movement of said shaft. The openings 26 in blades 36 of wings 3 are preferably of elliptical form extending perpendicularly so as to permit a slight downward movement in the extension of said wings and a slight upward movement in the retraction of the same to prevent any tendency to bind in such movement. The position of blade 36 and slot 27 of frame 5 is substantially midway between depending supports 52 and 53. The shaft 6 has a projection or lug thereon 54 positioned at the commencement of the downward slope of said shaft which engages the sloping underside of frame 5 and directs said shaft downwardly in a sloping position in the forward movement of said shaft, the lower side of the forward sloping portion of said shaft engaging the bottom of the aperture 23. The height of the aperture 23 is such as to afford sufficient space for the movement of the sloping or inclined portion of the shaft 6 therein. As the main portion of the shaft 6 has a slight inclination in its movement the aperture 21 is of sufficient height to admit of this inclination. Toe-piece or block 4 has a body or main portion 55 which is curved, resembling the point of a last, and has two legs 56, each of which extends rearwardly from one of the sides thereof, the upper edge of each of said legs being curved transversely and longitudinally. The aperture 24 extends at the center line in the rear of the body of said toe-piece into the same and contains the front end of shaft 6 which is secured there-

in by screw 37 passing upwardly through a threaded aperture in said block and through an opening 38 in the forward end of shaft 6. The upper sides of the said legs are curved and engage the forward underside of frame 5 in the same manner as lug 54 of shaft 6, whereby the said block is directed slopingly in the extension of said shaft. The underside of said toe-piece or block 4 is curved upwardly slightly toward the point thereof to conform to the upward curve of the sole of the shoe which may be on the form A.

The bracket 30 contains an aperture therethrough 32 wherein shaft 6 is contained and is slidable. The said shaft rests loosely in said opening 32 so as to admit of a slight inclination of the same for the sloping direction of toe-piece 4. The shaft 6 is movable by means of lever 19 which has a slot 14 therein near its lower end into which extends pin 39 secured in said shaft, the movement of said lever moving pin 39 and said shaft.

Heel piece 9 is suspended from bracket 30 by means of a bolt 11' passing through the upper portion of said bracket and an opening near the upper end of said heel piece, the said piece being secured on the bolt by wing nut 10, and by which bolt it is pivoted to the bracket. The lower inner portion of said heel piece has a slide projecting forwardly therefrom provided with a slot 16, which slide is contained and is slidable in the slideway or slot 15 in lever 20, the said heel piece being linked to said lever by pin 34 secured in an opening in said lever and passing through said slot 16. The lower portion 59 of said heel piece 9 is curved rearwardly and longitudinally and arm 60 of said heel piece the upper end of which is bent rearwardly is placed at a sufficient distance or inclined from lever 20 so that when the lower portion of said lever moves rearwardly its engagement with the pivotally suspended heel piece 9 will cause it to move rearwardly with the lower end of said lever but at the same time will extend said heel piece so that some portion of the curved exterior of said heel piece at its lower end will be adapted to engage the counter of a shoe notwithstanding that the lower portion of said lever is forced rearwardly to the limit of its extension. Levers 19 and 20 for the operation of the device are pivoted forwardly to the bracket 30 at its corner, lever 19 being pivoted on one side of said bracket and lever 20 on the other side of the same as shown. The said levers are preferably so pivoted by a bolt 11 extending through suitable openings in the same and an opening in said bracket, such bolt having nuts 10 and 41 securing the same. Means for locking said levers are positioned near the upper end thereof. Le-

ver 20 has a ratchet 29 secured to the inner side thereof and lever 19 is provided with a vertically acting pawl for engaging said lever. The pawl 17 is pointed at its lower end as shown in Fig. 1 and lever 19 has a slot 13 extending therethrough near its upper end. The said pawl is secured to said lever by a bolt 45' connected thereto which passes through said slot and is exteriorly secured by a nut 45, the said bolt as contained in said slot permitting the sliding movement of said pawl. Above said bolt 45' is a pin 18 which is also secured to said pawl and extends through said slot and beyond it as is shown in Fig. 2. The bolt and pin in slot 13 are positioned at sufficient distance from the respective ends thereof to afford the necessary play for said pawl in its vertical action. The said levers are respectively provided at their upper ends with lateral handles 12 and 12'. A wall plate 31 is secured at the rear end of bracket 30 for securing the same to a wall or post, holes 35 extending therethrough for fastening the device by means of screws. The curved lower portion or plate 59 of said heel piece 9 projects laterally therefrom beneath the horizontal arm of bracket 30 having wall plate 31. Strap 8 is suitably secured to support 53 of frame 5 by threaded screws passing through openings 93 and 94 in said strap and support. The strap 8 is secured to the bracket 30 by threaded screws such as screw 40, passing through openings 90 and 91 into suitable apertures in said bracket. The lateral movement of wings 3 through the forward movement of shaft 6 not only extends said wings transversely but also downwardly, thereby deepening form A and providing for increased depths of foreparts of shoes. The opening 22 in strap 8 is coincident with opening 21 of support 53.

Although I prefer to secure the heel piece 9 to the lever 20 by the pin 34 to keep such heel piece close to the lever to prevent the entrance of the rear end of the shoe upper of a short shoe between said lever and heel piece when disconnected and when placing such shoe on the device, still upon placing a longer shoe on the device when said pin is omitted, the contact of the shank 60 with the surface of the lever 20 immediately above the slideway 15 will on moving the lower portion of the lever rearwardly also force the heel piece in the same direction, the hanging heel piece returning by gravity to its former position on movement of such portion of the lever in the opposite direction, thereby enabling the device to be effectually operated notwithstanding the omission of the pin.

To operate the device the front portion of a shoe is drawn over the form A and the shoe being held in position with one hand the handle of lever 19 is grasped with the

other hand and the pin 18 of pawl 17 is raised with the thumb of the hand, whereupon said handle is pushed back until the form A is expanded so as to substantially fit or fill the portion of the shoe in which it is contained—thereupon the hand holding of the shoe is released, and the handle of lever 19 being still held, the handle of lever 20 is pulled forward until the counter of the shoe is engaged by the curved heel plate 59 through the rearward movement thereof. When the counter of the shoe is engaged as aforesaid, the pawl 17 is permitted to drop between the appropriate teeth of the ratchet 29, whereby the levers are locked. To release the shoe the pawl 17 is raised with the thumb upon the grasping of the handle of lever 19, and the handles of said levers are moved in directions opposite to the directions in which said handles are moved for the expansion of the device, as hereinbefore set forth.

I claim:—

1. In a shoe-holder having a front portion and a rear portion, a shaft in said front portion having a forwardly and inwardly inclined arm on each side thereof; a frame extending longitudinally in said front portion having depending end supports containing openings penetrated by said shaft and having sloping sides projecting therefrom containing slots extending through the side edges of said sides, and curved wings supported by said sloping sides and having blades resting in said slots interiorly secured to said wings and containing openings penetrated by said arms.

2. In a shoe-holder having a front portion and a rear portion, a shaft in said front portion having a forwardly and inwardly inclined arm on each side thereof and a sloping front end, a frame extending longitudinally in said front portion having a front end support depending therefrom containing an opening, the bottom of which is engaged by the sloping front end of said shaft, and having sloping sides projecting therefrom containing slots extending through the side edges of said sides and said frame having a rear end support depending therefrom containing an opening loosely penetrated by said shaft, and curved wings supported by the sides so projecting and having blades resting in said slots and interiorly secured to said wings and containing openings penetrated by said arms.

3. In a shoe-holder having a front portion and a rear portion, a shaft in said front portion having a sloping front end; a frame extending longitudinally in said front portion having its bottom sloping forwardly and engaged by said shaft and having a front end support depending therefrom containing an opening having its bottom engaged by the sloping front end of said shaft

and a rear end support containing an opening loosely penetrated by said shaft.

4. In a shoe-holder having a front portion and a rear portion, a shaft in said front 5 portion having a sloping front end, a frame extending longitudinally in said front portion having its bottom sloping forwardly and engaged by said shaft, and having a front end support depending therefrom containing an opening having its bottom engaged 10 by the sloping front end of said shaft, and a rear end support containing an opening loosely penetrated by said shaft, and a toe-piece secured to the front end of said 15 shaft having a leg projecting rearwardly from each side thereof and engaging the sloping bottom of said frame.

5. In a shoe-holder a bracket having a horizontally projecting arm; a lever pivoted to the outer end of said arm, and a heel 20 piece depending from said arm rearwardly to said lever and having a slide containing a longitudinal slot connected to said lever.

6. In a shoe-holder a bracket having a 25 horizontally projecting arm, a lever pivoted to the outer end of said arm, and a heel piece pivoted to one side of said arm and near the said lever, the lower end of said heel piece being longitudinally rearwardly 30 convex and extending laterally beneath said arm.

7. In a shoe-holder a bracket, a lever forwardly pivoted to said bracket and having 35 its lower portion provided with a slide-way, a heel piece depending from said bracket rearwardly to said lever and having its lower portion provided with a longitudinal slotted slide seated and linked in said slide-way and having a convex lower end protruding rearwardly. 40

8. In a shoe-holder a bracket, a heel piece having its upper end bent rearwardly and pivoted to said bracket and having its lower 45 portion provided forwardly with a slide containing a longitudinal slot and having a convex lower end protruding rearwardly, and a lever pivoted to said bracket and preceding said heel-piece and having its lower 50 portion provided with a slideway consisting of a slot in said lever, and a pin extending

through said slideway and said slot in said heel piece.

9. In a shoe-holder a bracket, a lever having a curved ratchet secured to the inner 55 side thereof pivoted to one side of said bracket, a lever having a longitudinal slot therein and a handle extending laterally therefrom pivoted to the other side of said bracket, and a pawl running longitudinally 60 with the last mentioned lever above said ratchet and connected laterally to the inner side thereof and having a pin extending through said slot and beneath said handle.

10. In a shoe-holder the combination of a bracket having a horizontally projecting 65 arm and a downwardly projecting arm leading from the front end of said horizontally projecting arm; a frame secured to the lower portion of said downwardly projecting arm, and having end supports containing 70 openings extending downwardly therefrom, and having curved branches extending laterally therefrom provided with transverse slots extending through the said 75 branches; a pair of curved wings supported by said branches and having blades therein containing openings projecting through said transverse slots; a curved top plate overhanging said curved wings; a shaft 80 resting in said openings of said supports and having arms supported from the sides thereof inwardly and forwardly inclined and extending through the openings in said blades, and a lever pivoted forwardly to 85 said horizontally projecting arm and connected downwardly to said shaft.

11. In a shoe-holder a bracket, a lever pivoted to said bracket, and heel piece 90 linked rearwardly to said lever and having its lower end rearwardly convex and extending laterally beneath said bracket, said heel piece being pivoted to said bracket in proximity to its upper end.

In testimony whereof I affix my signature, in presence of two witnesses.

LINCOLN SONNTAG.

Witnesses:

R. B. TREAT,

C. McCULLOUGH.