W. F. LAUTENSCHLAGER.

HAND CEMENT APPLIER.

APPLICATION FILED JUNE 7, 1909.

992,885.

Patented May 23, 1911.

Fig. 1.

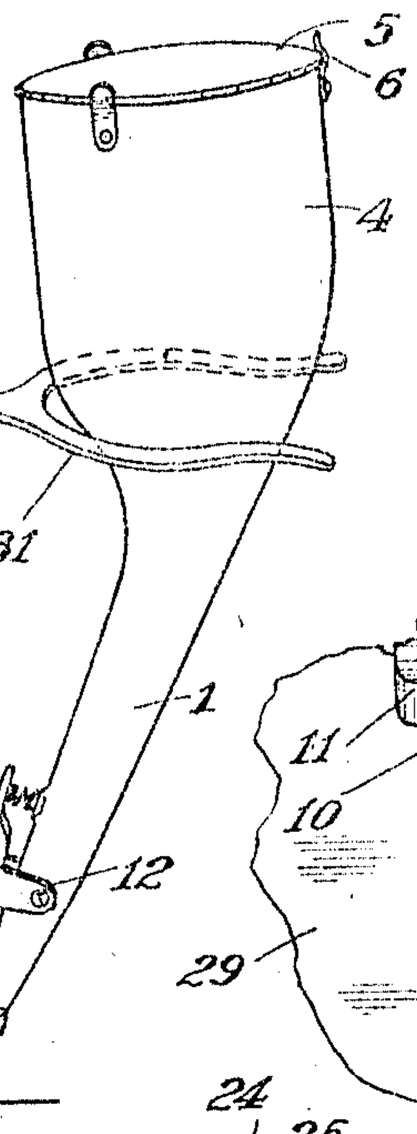


Fig. 2.

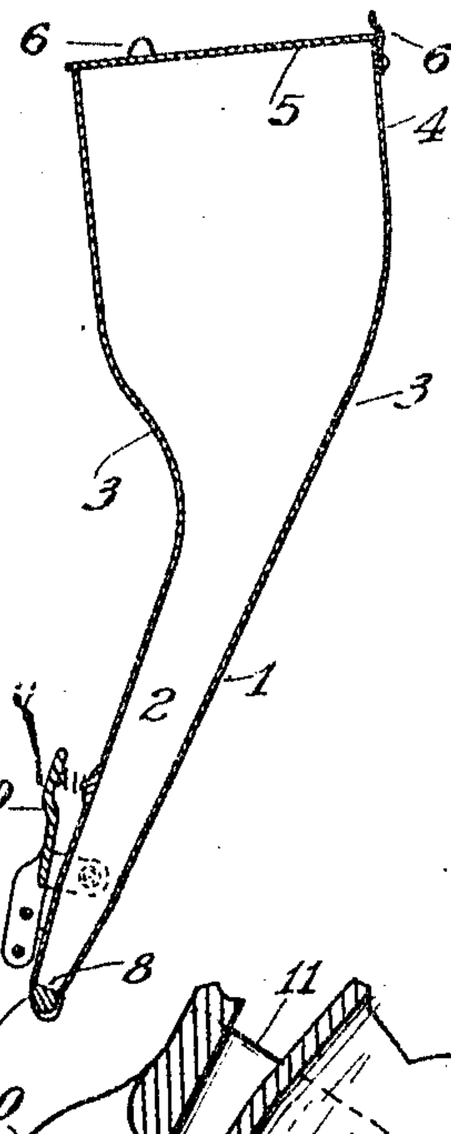


Fig. 9.

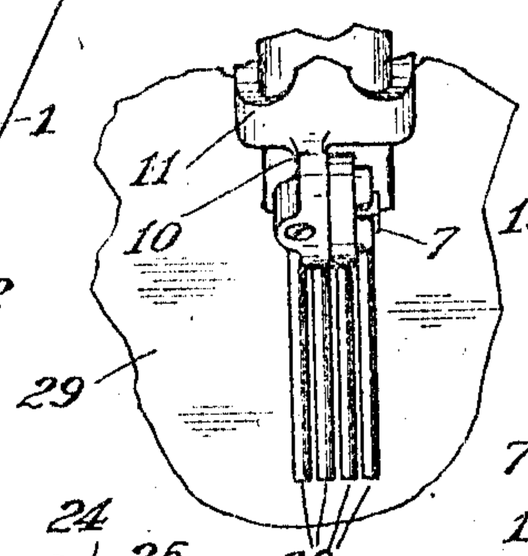


Fig. 3.

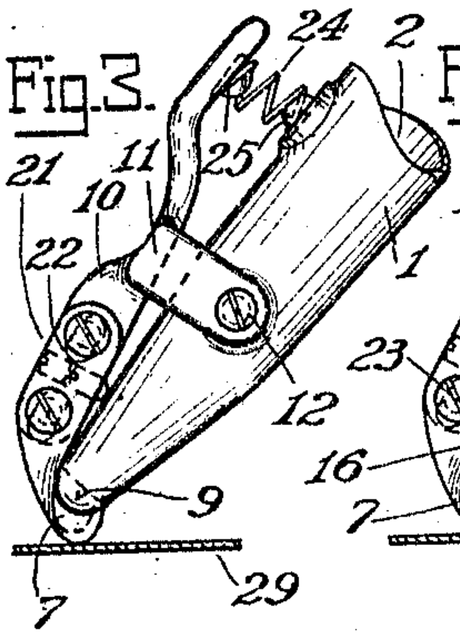


Fig. 4.

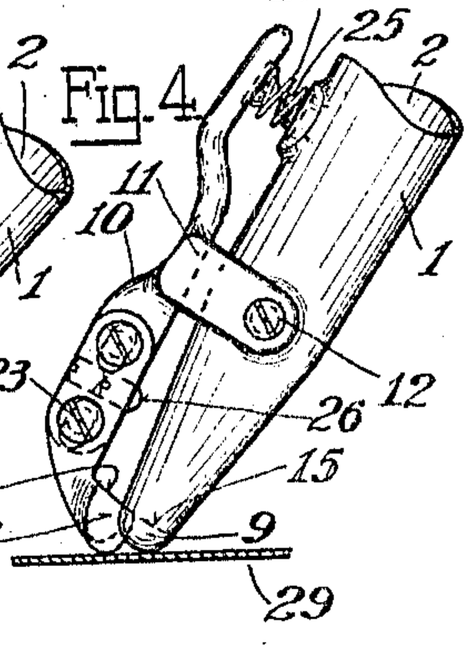


Fig. 5.

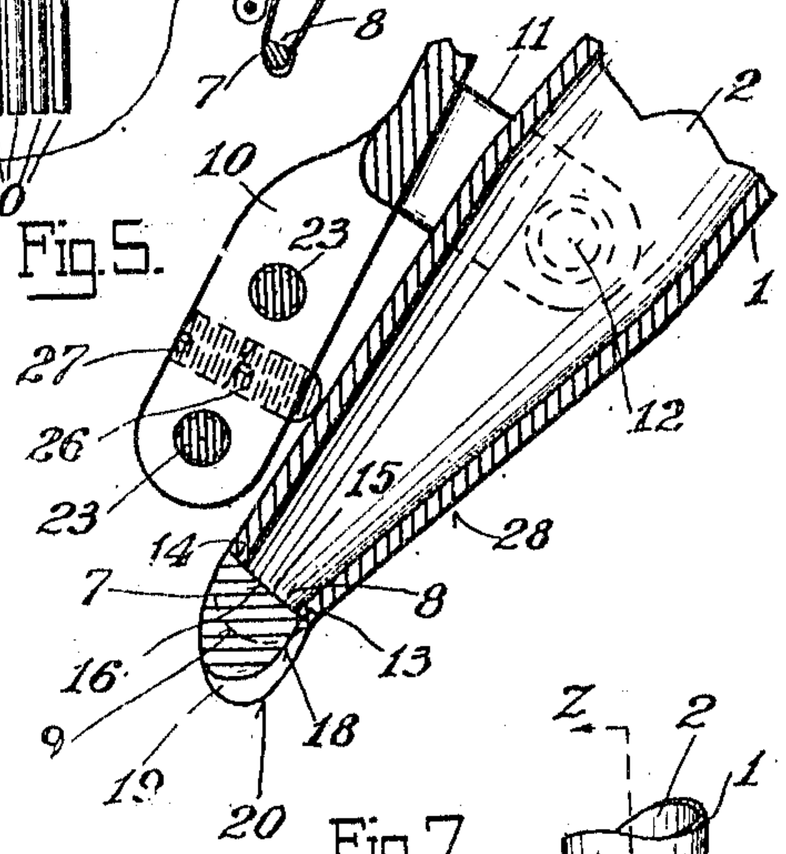


Fig. 6.

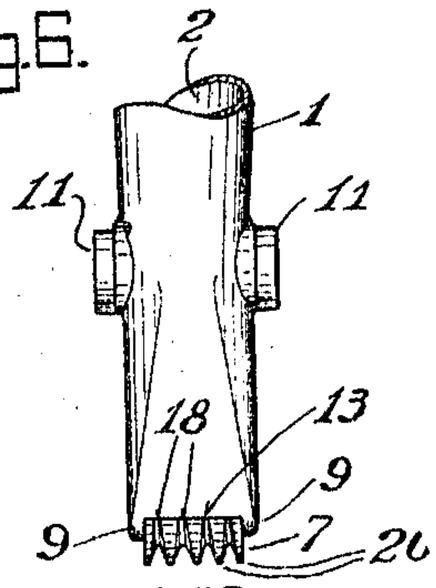


Fig. 8.

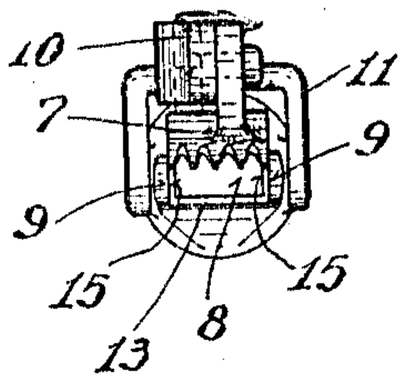
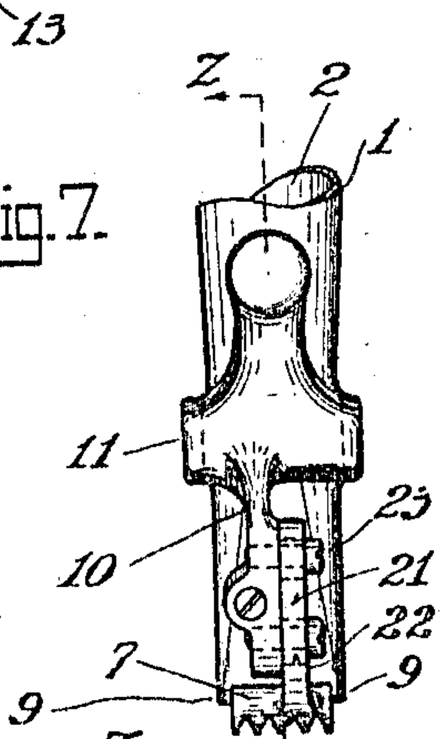


Fig. 7.



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HAND CEMENT-APPLIER.

992,885. Specification of Letters Patent. **Patented May 23, 1911.**

Application filed June 7, 1909. Serial No. 500,711.

To all whom it may concern:

Be it known that I, WILLIAM F. LAUTENSCHLAGER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Hand Cement-Appliers, of which the following is a specification.

It is the object of my invention to provide a hand cement applier in which the cement is conducted through a handle by which the applier is manually manipulated.

It is a further object of my invention to provide a hand cement applier which has a gate obstructing the passage of cement to the stock, and which gate is opened for permitting passage of cement to the stock by the act of passing the applier over the stock.

My invention is primarily designed for use in the boot and shoe industry where it is desired to provide a part with a spot, band or edge of cement in order to temporarily or permanently secure another part thereto, or to secure two portions of the same piece together. It is also applicable in other relations.

Various kinds of cement may be used in my improved device, whether known under the trade names of paste or cement, and I employ the term cement in its broadest signification. Instancing the advantage of its employment with the so-called liquid-cement of the boot and shoe industry, which is a cement usually containing caoutchouc and benzin, it may be stated that a usual method heretofore employed in applying cement of this character has been by hand with a brush, the brush being dipped into a cement-pot for transferring the cement therein to the stock. This method of application is wasteful and unclean, as the cement strings between the pot and the point of application of the brush, and it is also dangerous as the liquid-cement is highly inflammable, and the pot employed an open pot. In my improved device I avoid these objections and provide a closed receptacle for the cement, prevent waste thereof, provide a device in which the cement can be readily applied either at mere spots or for short streaks or long streaks, as may be desired, the gate of the device at once closing when the device is raised from the stock and opening as soon as pressure is applied for applying the cement.

The invention will be further readily understood from the following description and claims, and from the drawing, in which latter:

Figure 1 is a perspective view of my improved device, shown supported on a fork in convenient position for handling. Fig. 2 is an axial longitudinal section of my improved device on a line corresponding to the line *z*—*z* of Fig. 7. Fig. 3 is a side elevation of the applying end of my improved device showing the same contacting the stock ready for the application of cement. Fig. 4 is a side elevation of the applying end of my improved device showing the same presented toward the stock with the gate open and the cement being applied. Fig. 5 is an axial longitudinal section of the applying end of my improved device on the line *z*—*z* of Fig. 7, showing the same on an enlarged scale for better illustration. Fig. 6 is a front elevation of the applying end of my improved device. Fig. 7 is a rear elevation of the same. Fig. 8 is an end elevation of the same; and, Fig. 9 is a front elevation of the applying extremity of my improved device showing the same applying a strip of cement on a piece of stock.

1 represents a handle by which my improved device is manipulated, which has in it the passage 2 for the cement and forms a cement-conduit. The handle preferably flares outwardly, as at 3, and merges into the cement-cup 4, the flare 3 being of such form that an inside wall is provided for the cup and passage which will permit the cement to continuously flow toward the applying end of the handle by gravity.

5 is a lid, which may be in the form of a disk, and is held in place on the cup by means of spring-clasps 6.

7 is a gate which closes the mouth 8 of the cement-passage 2. It is received between ears 9 at said mouth. The gate is shown on a lever 10 provided with a yoke 11, the tines of which are received at the respective sides of the handle and pivoted on screws 12. The pivotal axis of the lever is preferably at the longitudinal middle of the passage 2. The mouth has a forward lip 13, and rear lip 14 and side-cheeks 15. The outer end-faces of the lips and side-cheeks and the inner face 16 of the gate, are adapted to contact each other when the gate is closed. These faces are arc-shaped, the arcs whereof

are described from the pivot of said lever as their center, so that the said inner face 16 will contact the outer end-faces of said lip and side-cheeks when said gate is closed, and will continuously contact the end-faces of said rear lip and of said side-cheeks throughout the movements of said gate so that leakage of cement will be prevented, and further so that the flow of cement may be accurately regulated. The applying side of said gate is provided with grooves 18 which pass to and around the outer end of said gate as shown at 19, the grooves enlarging as they recede from the mouth 8. Ribs 20 for the applying side of said gate are thus formed. The gate is preferably adjustable toward and from its pivot in order to insure close contact between its inner face and the lips and side-cheeks. For accomplishing this I provide the gate with a shank 21 provided with slots 22 through which screws 23 pass into the lever. For normally closing said gate I provide the spring 24 between the outer end of the lever and the handle, the spring being shown held in position by buttons 25 on the handle and lever. For limiting the forward movement of the gate I provide a set-screw 26 which is screwed into the lever and contacts the handle, a tandem set-screw 27 holding the same in adjusted position.

The applying end of the handle is provided with a taper face 28 at its applying side, whereas the ribs 20 project forwardly of said face and longitudinally beyond the ends of the ears 9.

When using the device, it is held slantingly as indicated in Figs. 3 and 4, Fig. 3 showing the same just as the outer end of the gate is contacting the stock, shown at 29. Upon pressure being applied for bringing the handle downwardly, the gate will yield, thereby opening the mouth until the ears 9 contact the stock as indicated in Fig. 4. The gate is opened more or less, dependent on the angle at which the handle is held. When the handle is held at but a slight angle from the horizontal, the gate will be forced backwardly to comparatively slight extent, just sufficient, for instance, to permit the feed of cement through the shallower parts of the grooves. The more nearly the handle is held in perpendicular position the greater will be the extent of opening of the mouth, and the greater will be the flow of cement therefrom. It will be noted further that in order to accommodate this greater flow of cement, the more nearly perpendicular the handle is held, the greater will be the depth of the portions of the grooves presented to the stock. The cement passing through the mouth is retained against sidewise spreading by the ears 9 at the ends of the gate, the cement being caused to pass through the grooves in the gate, whereby the cement is laid in smooth and regular strands as indicated at 30 in Fig. 9. The mere raising of the gate from the stock will permit the gate to close. In this manner the amount of cement it is desired to apply is easily regulated, a greater or less amount being applied according to the extent to which the gate is opened and the depth of the groove-portions presented to the stock. When manipulating the applier it is held in the hand and passed manually over the stock.

When not in use the applier is adapted to be hung on a prong 31 provided with a stem 32 having a foot 33 which is readily secured to any convenient point of the table at which the operator is working.

I prefer to make the handle, cup and lever of aluminum and the gate of steel, whereby I obtain an extremely light, strong and durable device which is readily manually manipulated.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a hand cement applier, the combination of a portable handle, said handle provided with a cement-conduit having a mouth at its applying end and a stock-contacting portion projecting outwardly beyond said mouth, and a movably mounted gate for obstructing said mouth projecting outwardly beyond said stock-contacting portion and having a stock-contacting portion provided with a cement feeding channel at its outer end, the angle of presentation of said cement-conduit to said stock with said stock-contacting portions in contact with said stock regulating the degree of opening of said mouth, substantially as described.

2. In a hand cement applier, the combination of a portable handle having a cement-passage extending longitudinally thereof and provided with a mouth at its applying end, a lever, and an obstructing gate for said mouth on said lever, said lever pivoted to said handle, the said mouth and gate having engaging faces which are arc-shaped, the arcs whereof are described from said pivot as a center, substantially as described.

3. In a hand cement applier, the combination of a portable handle having a cement passage extending longitudinally thereof and provided with a mouth at its applying end, a lever pivoted to said handle, an obstructing gate for said mouth having adjustable connection with said lever for adjusting said gate toward and from said mouth, the said mouth and gate having mating faces described on arcs having the pivot of said lever as their center, substantially as described.

4. In a hand cement applier, the combination of a portable handle, said handle provided with a cement-conduit having a mouth

at its applying end, a gate mounted for movement bodily crosswise of said mouth upon contact by said gate with the stock, said gate having a stock-contacting outer end provided with a cement feeding channel and there being a stock-contacting portion for said handle at the side of said gate, the said stock-contacting portion serving as a fulcrum upon said stock for said handle from which movement of said gate crosswise of said mouth is gaged, substantially as described.

5. In a hand cement applier, the combination of a portable handle having a cement-passage extending longitudinally thereof and provided with a mouth at its applying end, a lever pivoted to said handle, an obstructing gate for said mouth having adjustable connection with said lever for adjusting said gate toward and from said mouth, the said mouth and gate having mating faces described on arcs having the pivot of said lever as their center, and means for normally urging the closing of said gate, substantially as described.

6. In a hand cement applier, the combination of a portable handle having a cement-passage extending longitudinally thereof and provided with a mouth at its applying end, said mouth provided with lips, a lever pivoted to said handle, a gate for said mouth on said lever, the said lips and the inner face of said gate constituting mating faces which are arc-shaped on circles having the pivot of said lever as their center, the pivotal axis of said lever when extended intersecting the middle of said cement-passage, substantially as described.

7. In a hand cement applier, the combination of a portable handle having a cement-passage extending longitudinally thereof and a mouth at its applying end, an obstructing gate for said mouth pivotally supported on said handle and mounted for moving crosswise of said mouth, the said handle having ears respectively at the ends of said gate and said gate projecting outwardly beyond the ends of said ears, the ends of said ears and gate forming stock-contacting faces, the stock-contacting faces of said ears being above the stock when said gate is closed and arranged to approach said stock by downward pressure applied by said handle to said stock-contacting face of said gate against the stock for shifting said gate crosswise of said mouth from obstructing position at said mouth, substantially as described.

8. In a hand cement applier, the combination of a portable handle having a cement-passage extending longitudinally thereof and a mouth at its applying end, an obstructing gate for said mouth pivotally supported on said handle, the said handle having ears respectively at the ends of said gate, said gate projecting outwardly beyond the ends of said ears and having cement-carrying grooves between said ears, the ends of said ears and gate forming stock-contacting faces, the stock-contacting faces of said ears being above the stock when said gate is closed and arranged to approach said stock by downward pressure applied to said handle whereby said gate is shifted from obstructing position at said mouth and the cement caused to follow said grooves, substantially as described.

9. In a hand cement applier, the combination of a portable handle, said handle provided with a cement-conduit having a mouth at its applying end, and a gate for obstructing said mouth, said gate provided with grooves at its applying side which are enlarged at the applying end of said gate, substantially as described.

10. In a hand cement applier, the combination of a portable handle provided with a cement-conduit having a mouth at its applying end, and a gate obstructing said mouth, said mouth and gate provided with closely adjacent mating faces, said gate being mounted for movement in the planes in which said mating faces extend, there being stock-contacting portions on said cement-conduit and gate the former of which serves as a fulcrum upon the stock for said handle from which movement of said gate is gaged and the latter of which is provided with a cement feeding channel, substantially as described.

11. In a hand cement applier, the combination of a portable handle, said handle provided with a cement-conduit having a mouth at its applying end and an ear projecting outwardly beyond said mouth, and a movably mounted gate for obstructing said mouth projecting outwardly beyond said ear, the applying side of said gate being provided with grooves, the contact of said ear with the stock to which cement is to be applied causing opening of said gate, and the angle of presentation of said cement-conduit to said stock regulating the degree of opening of said gate, substantially as described.

12. In a hand cement applier, the combination of a portable handle, said handle provided with a cement-conduit having a mouth at its applying end and an ear projecting outwardly beyond said mouth, and a movably mounted gate for obstructing said mouth projecting outwardly beyond said ear, the applying side of said gate provided with grooves which increase in size toward the outer end of said gate, the contact of said ear with the stock to be cemented causing opening of said gate, and the angle of presentation of said cement-conduit to said stock regulating the degree of opening of said gate and the presentation of differently sized

portions of said grooves to said stock regulating the amount of cement applied to said stock, substantially as described.

13. In a hand cement applier, the combination of a portable handle, said handle provided with a cement conduit having a mouth at its applying end, and a movably mounted gate for obstructing said mouth, the applying side of said gate provided with grooves which increase in size toward the outer end of said gate, said gate having a contact-part for the stock to be cemented for opening the same, the angle of presentation of said conduit to said stock regulating the degree of opening of said gate and the presentation of differently sized portions of said grooves to said stock regulating the amount of cement applied to said stock, substantially as described.

In testimony whereof, I have signed my name hereto in the presence of two subscribing witnesses.

WILLIAM F. LAUTENSCHLAGER.

Witnesses:
JOHN R. SCHINDEL,
LILLIAN BURNETT.