

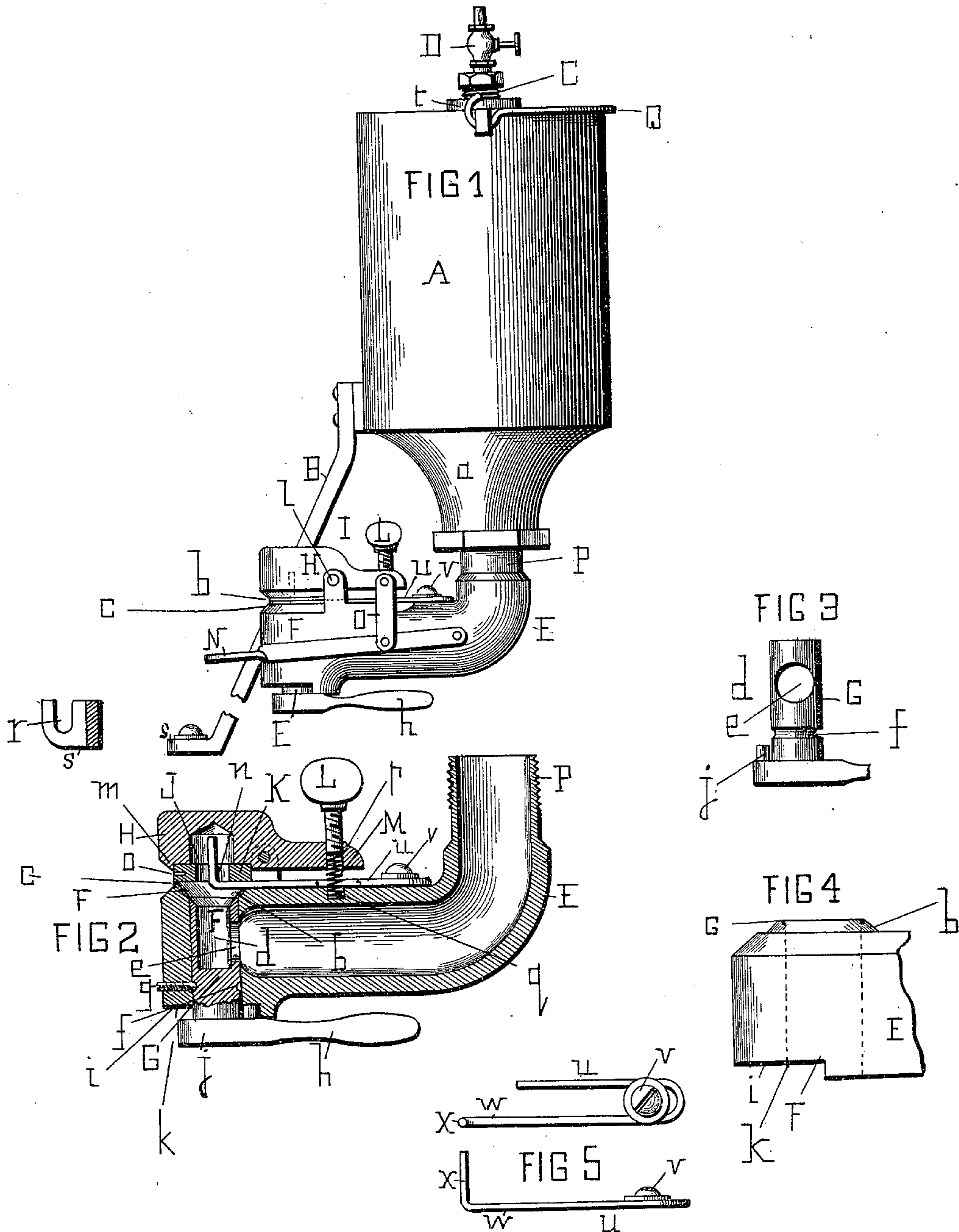
No. 626,185.

Patented May 30, 1899.

A. B. McCOY.
CEMENTING APPARATUS.

(Application filed Jan. 23, 1897. Renewed July 15, 1898.)

(No Model.)



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CEMENTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 626,185, dated May 30, 1899.

Application filed January 23, 1897. Renewed July 15, 1898. Serial No. 686,037. (No model.)

To all whom it may concern:

Be it known that I, ALONZO B. MCCOY, a citizen of the United States, residing at Burlington, in the county of Burlington and State of New Jersey, have invented certain new and useful Improvements in Cementing Apparatus for Shoe-Vamps; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The invention is for applying cement to the skived edges of vamps, uppers, and other parts of shoes requiring cementing.

It consists in an upright closed-top cement-tank, to the bottom of which is removably attached a cement gravity-pipe provided with a cock for controlling the cement-supply to a cement-seat raised on the gravity-pipe and chamfered or reduced at its top to form a narrow vamp-support, and thus prevent the cement from running over other than the vamp skived edge or part to be covered with cement. A tilting jaw, pivoted on the top of the gravity-pipe and working under yielding pressure, has a cement-chamber above the fixed cement-chamber of the gravity-pipe, which receives its cement through said fixed chamber and one and the same gravity-pipe.

On reference to the accompanying sheet of drawings, making part of this specification, Figure 1 is a side elevation of a cementing apparatus embodying my invention. Fig. 2 is a vertical and longitudinal section of the cement gravity-pipe and tilting jaw. Fig. 3 is a surface view of the plug-cock. Fig. 4 is a shortened view of the end of the cement gravity-pipe, showing the cement-seat raised above the gravity-pipe and chamfered or reduced at its top to form a narrow vamp-support, and thus prevent the cement from spreading over the part of the vamp not to be covered with it; and Fig. 5 is a plan view of the vamp-guide means.

Similar letters refer to similar parts in the several views.

A is a cement-tank having a suitable number of carrying-legs B. It is closed at the top,

with the exception of a filling screw-plug C and a petcock D, and has a cement-supply gravity-pipe E screwed or otherwise removably attached to its open bottom *a*. Said pipe has a raised valve-seat and cement-chamber F at its outer end, which terminates at its upper end in a flared cement-seat *b*, extending above the top of the supply-pipe E and chamfered or reduced to form a knife-edge or narrow vamp-support C, and thus prevent the cement from running over other than the skived edge of the vamp.

G, Figs. 2 and 3, is a plug-valve in the continuous valve-seat and cement-chamber F, having an axial opening *d*, shown in full lines, Fig. 2, and is provided with a side entrance-port *e*, communicating the axial opening *d* with the gravity-pipe E for forming a gravity cement flow from the tank A to the chamber F. A circumferential groove *f* is formed in said plug-valve G, into which extends the end of a pin *g*, Fig. 2, projected through the pipe E for holding it from dropping out of its seat when operated through the medium of a lever-handle *h*, Figs. 1 and 2. For limiting the turning of the valve G the bottom *i* of the valve-seat F, against which the collar *j* turns, is partially cut away at *k* for the cock-lever *h*, which abuts the ends thereof in full opening and closing.

H is a cementing-jaw which is capable of a tilting motion on a transverse pin or pivot *l* in bearings I on the gravity-pipe E. It has a cement-chamber J, Fig. 2, which has no independent cement gravity-pipe or supply-channel, but receives its cement by gravity through the cement-chamber F of the gravity-pipe E, above which it is located. At the mouth of the cement-chamber J is formed an annular groove *m* for the reception of an annular absorbent pad K, whose opening *n* can be slightly smaller than the cement-chamber J to hold the cement from dropping out and to have it absorbed by the pad K for applying to an upper or vamp when two are cemented at a time. Screws or pins *o*, extending through the end of the tilting jaw H into the pad K, serve to hold it in the annular groove or seat *m*. The degree of pressure of the pad K on the chamfered or reduced top edge *c* of the bottom cement-chamber F or on an intervening vamp

being cemented is regulated by a screw L, which engages an opening in the inner end of the tilting jaw II, and a spiral spring M, bearing endwise between the screw in its opening *p* and an opening *q* in the top of the pipe E, whereby a yielding pressure is imparted to the cementing end of the jaw consequent upon the degree of pressure of the screw on the spring.

For closing and holding the tilting-jaw cement-chamber J and its absorbent pad K on the bottom or gravity-pipe cement-chamber F while filling said chamber J through said gravity-pipe chamber F and generally operating the tilting jaw a link-motion is employed, consisting in a hand-lever N, pivoted to the side of the gravity-pipe E, and a connecting-link O, pivoted between said lever N and the tilting jaw II, by which when the cock G is properly turned said tilting-jaw cement-chamber J is supplied by gravity with cement from tank A through the only pipe or channel E into the cock G and cement-chamber F, and thence through the opening *n* in the annular pad K into said chamber J, by which two vamps can be cemented at a time.

As shown, Figs. 1 to 5, the tank A is elevated and rests on legs B, assisted by notches *r* in the feet *s*, which engage the screws *t* on the holding-bench. The slots engage the screws or plugs and on the machine being turned a perfect hold is effected.

To fill the tank A with cement, the plug-valve G is closed and the screw-plug C and its petcock D removed, by which the tank A and the gravity-pipe E are filled through the screw-opening of said screw-plug C.

It will be seen that there is no air left in the tank to dry up the cement, and should it be required it can be admitted through the petcock D and its screw-plug C. When the tilting jaw II is closed on the gravity-pipe vamp-seat F by the lever N, the valve G is turned so that there is communication from the tank A through the only supply-channel or gravity-pipe E into the cement-chamber F, and thence to the cement-chamber J of the tilting jaw II. Both chambers F J being supplied by gravity with cement through one and the same single channel or gravity-pipe E should the cement become dry and clogged, and thus interfere with the operation of the vamp-cementer, the hindrance can be removed by taking apart and heating the tank A, gravity-pipe E, valve G, and the tilting jaw II, which, being preferably of cast-iron, readily submit to heat without injury for burning out the dried cement.

The top edge of a shoe-vamp is covered with cement on its skived edge, which is turned over so as to be stuck together with the cement and subsequently stitched for finish and effect. When but one vamp at a time is to be covered with cement on its skived edge, the tilting jaw II is rendered inoperative by withdrawing its pivot *o* and detaching it from the gravity-pipe E, or it can be held open by the lever N. The skived edge of the vamp is passed by hand over the reduced edge *c* of the cement-chamber F and covered with cement. When two vamps are to be cement-covered at a time, they are placed together with their skived edges outward and moved between the cement-chambers F J. The screw L and spring M afford the requisite pressure for bringing the cement-chambers together without interfering with the work. The lever N moving in unison with the tilting jaw does not impede the action of the jaw, it being for closing and holding the cement-chambers together while filling the upper cement-chamber J through the lower one. A guide for regulating the insertion of the vamp between the jaws consists in a doubled wire *u*, held in place on the gravity-pipe E by set-screw *v*, its long arm *w* extended into the cement-chamber F and upturned at *x*.

I claim—

1. In a cementing apparatus, the combination of a gravity-pipe, a vamp or cement seat on the gravity-pipe, and a tilting jaw pivoted on the gravity-pipe and provided with a cement-chamber which receives cement through the gravity-pipe cement-chamber and the same gravity-pipe, for the purpose shown and described.

2. In a cementing apparatus, the combination of a gravity-pipe, a tilting jaw pivoted on the gravity-pipe under yielding pressure, and means for closing and holding the tilting jaw on the gravity-pipe cement-chamber while filling the tilting-jaw cement-chamber from the gravity-pipe cement-chamber, for the purpose shown and described.

3. In a cementing apparatus, the combination of a cement-chamber, a gravity-pipe, a tilting jaw, and an adjustable guide which regulates the extent of insertion of the vamp into the cementing-chamber, for the purpose shown and described.

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

ALONZO B. MCCOY.

Witnesses:

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