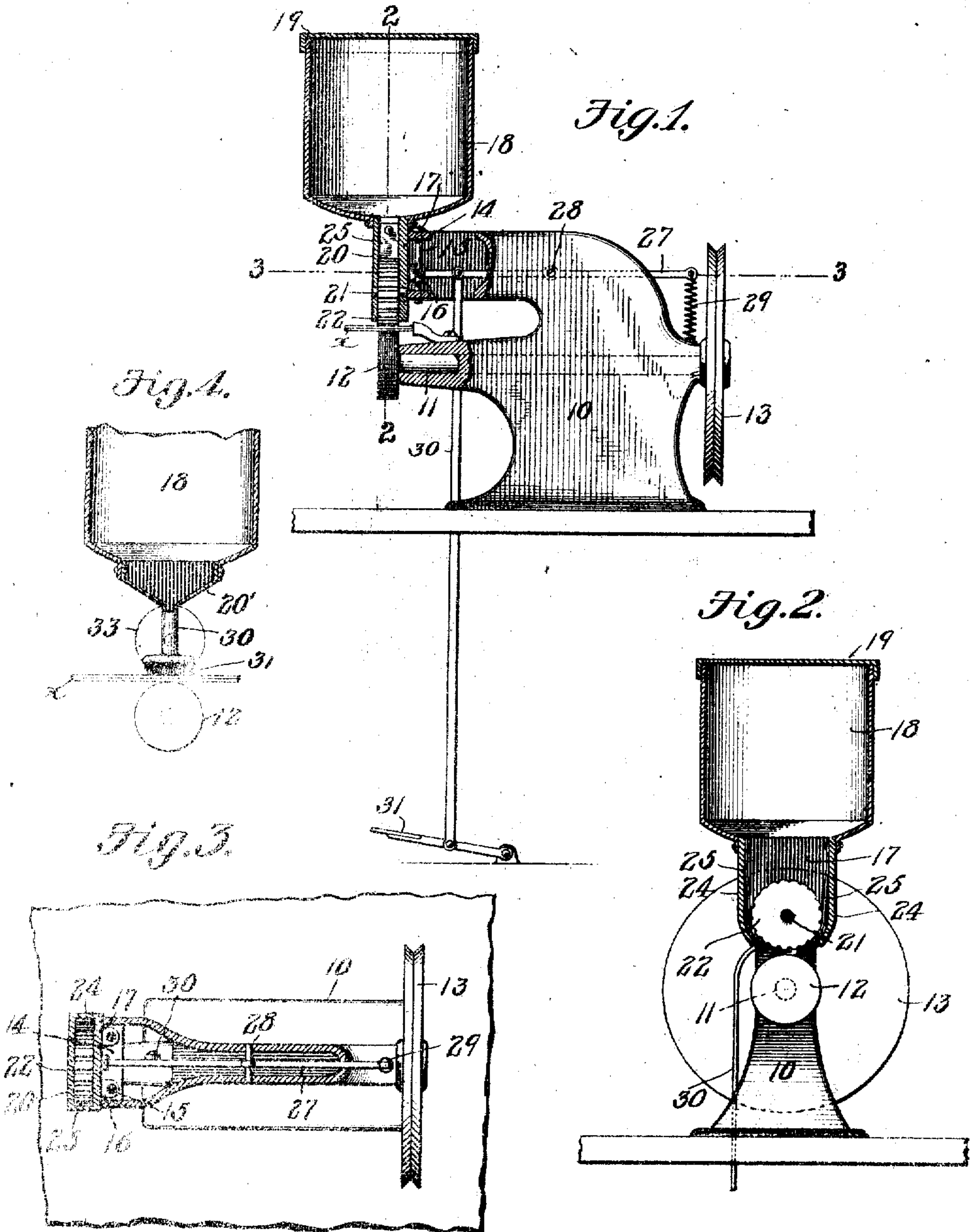


No. 829,536.

PATENTED AUG. 28, 1906.

W. L. MARSH.
CEMENTING MACHINE.
APPLICATION FILED JAN. 18, 1906.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIS LINCOLN MARSH, OF ST. LOUIS, MISSOURI.

CEMENTING-MACHINE.

No. 829,536.

Specification of Letters Patent.

Patented Aug. 28, 1906.

Application filed January 18, 1906. Serial No. 296,709.

To all whom it may concern:

Be it known that I, WILLIS LINCOLN MARSH, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Cementing-Machine, of which the following is a specification.

The principal object of the present invention is to provide a machine for applying cement or similar material to various articles, the machine being adapted especially for the application of rubber or other cement to the sections of a shoe-upper prior to stitching.

A further object of the invention is to provide a machine in which the cement may be arranged in a closed vessel or reservoir in order to avoid loss by evaporation and in which it is discharged only while goods are being passed through the machine.

A further object of the invention is to provide a cement-applying machine in which the cement is fed from a reservoir by an applying-roller that is operated through the medium of the strips of leather or other articles to which the cement is being applied.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a vertical section of a cementing-machine constructed in accordance with the invention. Fig. 2 is a transverse sectional view of the same on the line 2 2 of Fig. 1. Fig. 3 is a sectional plan view on the line 3 3 of Fig. 1. Fig. 4 is a detail sectional view illustrating a slight modification of the invention.

Similar characters of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The working parts of the machine are supported on a suitable frame 10, that is provided with bearings for the reception of a horizontally-disposed shaft 11, that carries at one end a work-supporting roller 12, formed of or covered with rubber or other yieldable material. At the opposite end of

the shaft is arranged a belt-wheel 13, which may receive motion from any suitable source of power.

At the head of the machine is arranged a pair of parallel horizontal plates 14, forming supports for a pair of spaced vertical guide-bars 15, that extend through lugs 16, formed at the rear of a vertically-movable reservoir-supporting plate 17. This plate 17 carries a reservoir 18, which may be of any desired size, and when used to contain rubber or similar cement is preferably provided with a cover 19 in order to prevent loss by evaporation.

The plate 17 forms the rear wall of a discharge-neck leading from the bottom of the reservoir, the front wall of said neck being formed by a plate 20. These two walls or plates are provided with bearings for the reception of a short shaft or stud 21, on which is mounted a cement-applying roller 22, the periphery of which is preferably corrugated in order that in rotating it may positively feed the cement from the reservoir. The two plates 17 and 20 are arranged to fit very closely against the opposite sides of the roller 22 and prevent the escape of any cement by leakage. The opposite end walls 24 of the discharge-neck are slightly curved at the bottom in order to follow the contour of the lower portion of the roller, and these end walls carry plate-springs 25, that fit snugly against the periphery of the roll and serve as doctors to prevent the passage of any cement except the thin film which will cling to the periphery of the roller and the cement which will remain in the grooves formed in the periphery of said roller.

The applying-roller 22 is arranged directly above the work-supporting roller 12, and when a strip of leather or other material to which the cement is to be applied is placed between the rollers the strip will serve as a means for transmitting movement from the revoluble work-supporting roller to the cement-applying roller, the latter being held firmly against the strip by the weight of the reservoir and the cement.

The plate 17 is engaged by the front end of a lever 27, that is pivoted on a stud 28, carried by the frame, and the rear end of such lever is connected to the frame by a tension-spring 29, which normally will hold the reservoir and the applying-roller elevated, so that the applying-roller will be held from engagement with the work-supporting roller. The

front end of the lever 27 is connected by a rod 30 to a pedal 31 within convenient reach of the operator, and when the pedal is depressed the front end of the lever is pulled down, allowing the reservoir and roller to descend by gravity until the roller engages the strip or other article previously placed on the work-supporting roller and to which the cement is to be applied.

10 In Fig. 4 is illustrated a slight modification of the invention, wherein the feed-roller 12 remains in place, while the reservoir 18 is provided with a discharge-neck 20' of somewhat modified construction, and from the neck leads a tube 30, through which the cement or other adhesive may be supplied to a brush 31, arranged to rest on the material 2. At the rear of the brush a roller or disk 33 may be placed for the purpose of maintaining the material in proper position and to assist in feeding movement. The auxiliary neck 20', the brush, and the disk 33 may be readily substituted for the neck 20 and cement-feeding roller shown in Figs. 1 and 2, as occasion requires.

I claim—

1. In a machine of the class described, the combination with a work-supporting roller, of means for revolving the roller, a normally inactive cement-applying roller, and a cement-reservoir from which cement is fed by the applying-roller, the latter receiving motion through the material placed on the work-supporting roller, and to which the cement is to be applied.

2. In combination, a work-supporting roller, a vertically-movable cement-reservoir, a cement-applying roller projecting from the bottom of the reservoir, and adapted to engage the material resting on the work-supporting roller, and means for revolving the work-supporting roller, thereby to transmit

movement to the cement-applying roller through the intervention of the material between said rolls.

3. In a machine of the class described, the combination with a yieldable work-supporting roller, of a shaft carrying the same, means for revolving the shaft, a vertically-guided cement-reservoir having a contracted discharge-neck at its lower end, a cement-applying roller projecting from the bottom of the neck, a spring tending to raise the reservoir, and maintain the rollers out of contact, and means for overcoming the stress of the spring to permit movement of the reservoir and cement-applying roller in the direction of the work-supporting roller.

4. In a machine of the class described, the combination with a frame, of a shaft journaled therein, a yieldable work-supporting roller mounted on said shaft, a pair of vertically-disposed spaced bars carried by the frame, a vertically-movable plate having perforated lugs through which said bars extend, said plate forming the rear wall of the discharge-neck, a reservoir communicating with such discharge-neck, front and rear plates arranged to form the remaining walls of the discharge-neck, a shaft journaled in the front and rear plates, a cement-applying roller carried by the shaft, doctors carried by the end walls of the neck and engaging the periphery of the roller, a spring-actuated lever normally tending to elevate the reservoir, and roller, and a pedal connected to said lever for overcoming the stress of the spring.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIS LINCOLN MARSH.

Witnesses:

SETH H. GARRISON,
OLIVE K. MARSH.