F. PFLUGER & E. CHRISTENSEN.

EXPANDER AND FLANGER.

APPLICATION FILED DEC. 26, 1908.

929,706. Patented Aug. 3, 1909.

Fig. 2.

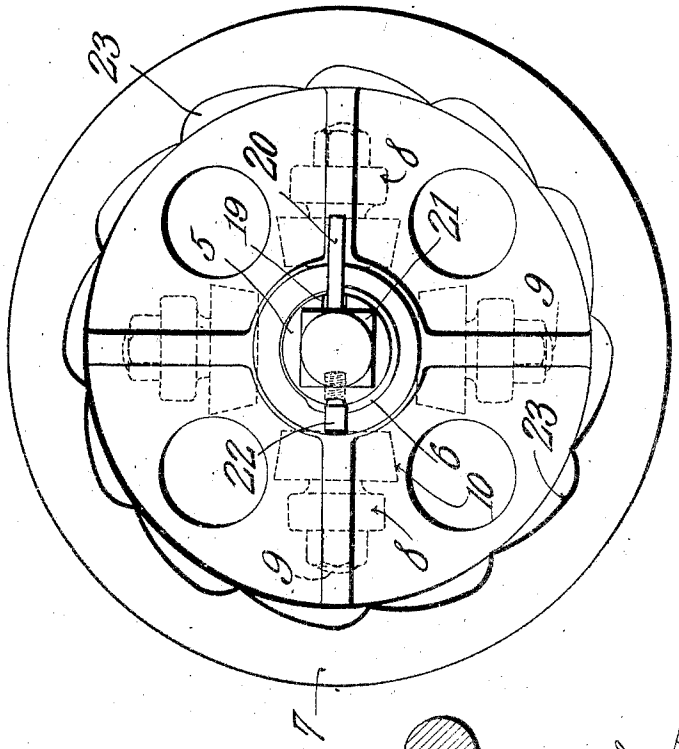
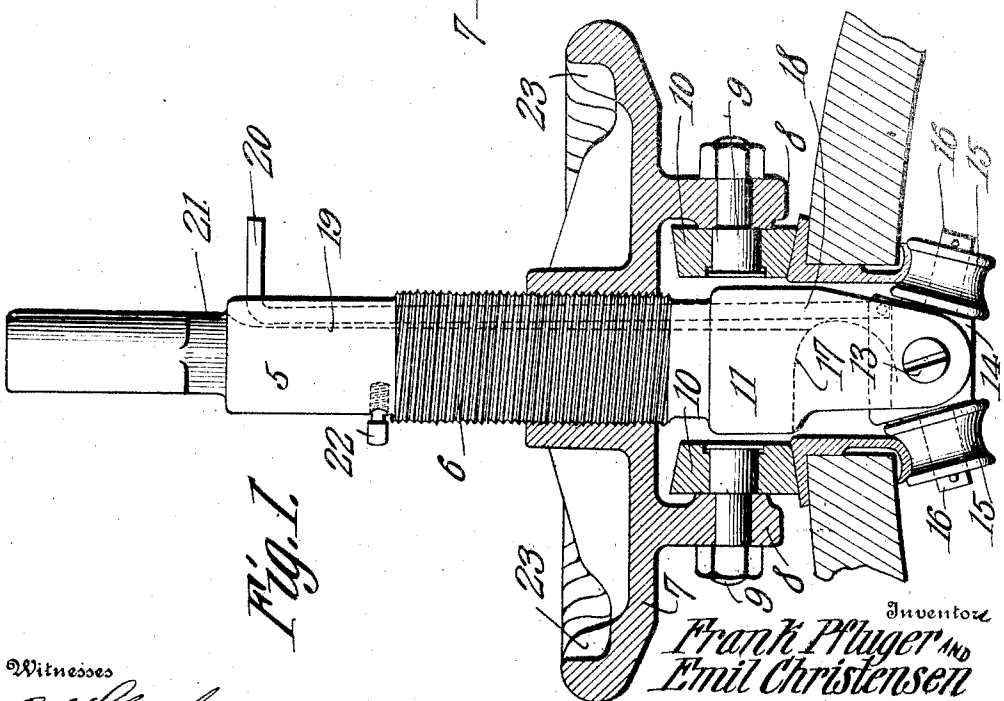


Fig. 1.



Witnesses

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UNITED STATES PATENT OFFICE.

FRANK PFLUGER AND EMIL CHRISTENSEN, OF PORTLAND, OREGON.

EXPANDER AND FLANGER.

No. 929,706. Specification of Letters Patent. Patented Aug. 3, 1909.

Application filed December 26, 1908. Serial No. 469,279.

To all whom it may concern:

Be it known that we, FRANK PFLUGER and EMIL CHRISTENSEN, citizens of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented a new and useful Expander and Flanger, of which the following is a specification.

This invention relates to improvements in the element shown and described in our Patent Number 810,431, dated January 23rd, 1906, the present invention being directed more particularly to the thrust rollers, they being, in the present instance, carried by the feed wheel of the implement, by reason of which a smoother job is possible, and the implement may also be more strongly made.

The invention also has for its object certain novel and advantageous structural details, to be hereinafter described and claimed.

In the accompanying drawings:—Figure 1 is an elevation of the invention, partly in section. Fig. 2 is a plan view.

Referring, more particularly, to the drawings, 5 denotes the stock of the implement, having, intermediate its ends, a threaded portion 6, on which a feed-wheel 7 is mounted, the bore of the latter being screw-threaded for this purpose. The feed-wheel is formed with depending ears 8, having perforations for the axles 9 of the thrust rollers 10.

At the lower end of the stock is a head or enlargement 11, provided with a slot, in which is pivotally mounted on a pin 13, the axle 14 of the expanding rollers 15, said axle having at its ends spindles 16, on which said rollers are mounted. The head is recessed on one side, as indicated at 17, to receive one of the rollers 15, when the implement is being placed in operative position within the bushing. The axle 14, as in our former patent hereinbefore referred to, is swung by means of a lever 18 connected thereto, and lying in a longitudinal groove or channel 19, made in the stock 5, the free end of the lever being laterally presented to form a handle 20. The hereindescribed method of mounting the flanging rollers is practically the same as in our former patent.

The upper end of the stock 5 has a squared portion 21, so that it may be fitted into a socket of an operating member. Adjacent to the upper end of the threaded portion 6, the stock is fitted with a set screw 22, to limit the upward travel of the feed-wheel 7. The rim of the feed-wheel is formed with corrugations 23, in order that a better hold may be had.

The operation of the implement herein described is the same as the one shown in our former patent #810,431, it being inserted into the bushing by swinging, through the lever 18, the axle 14 on its pivot, so as to bring one of the rollers 15 into the recess 17. The implement is then inserted into the bushing, after which the axle is swung back to bring the rollers into operative position. The feed-wheel 7 is now turned until the thrust rollers 10 are in contact with the outer end of the bushing, and the flanging rollers 15, with the inner end thereof. The stock 5 is then rotated, the feed-wheel being simultaneously operated to force the rollers closer together, whereby the inner end of the bushing is expanded and formed into an outwardly disposed flange, which engages with the inner surface of the keg, adjacent to the bunghole, and holds the bushing securely therein. If desired, the stock may be held stationary, and the barrel rotated.

By mounting the thrust rollers directly on the feed-wheel, they will continually change their position with respect to the flanging rollers, which results in a smoother job, and give a certain flexibility, which is much desired, and, besides, enables the implement to be more strongly constructed. The thrust rollers are frusto-conical, by reason of which they will lay down the flange closer to the keg.

What is claimed is:—

A flanging implement comprising a stock having a threaded portion, flanging rollers carried at one end of the stock, a feed wheel rotatably mounted on the threaded portion of the stock, and thrust rollers carried by the feed wheel, and movable therewith, whereby the position of the thrust rollers with respect to the flanging rollers is caused to continually change as the feed wheel is operated.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

FRANK PFLUGER.
EMIL CHRISTENSEN.

Witnesses:
ALBERT REHM,
FRED PETERS.