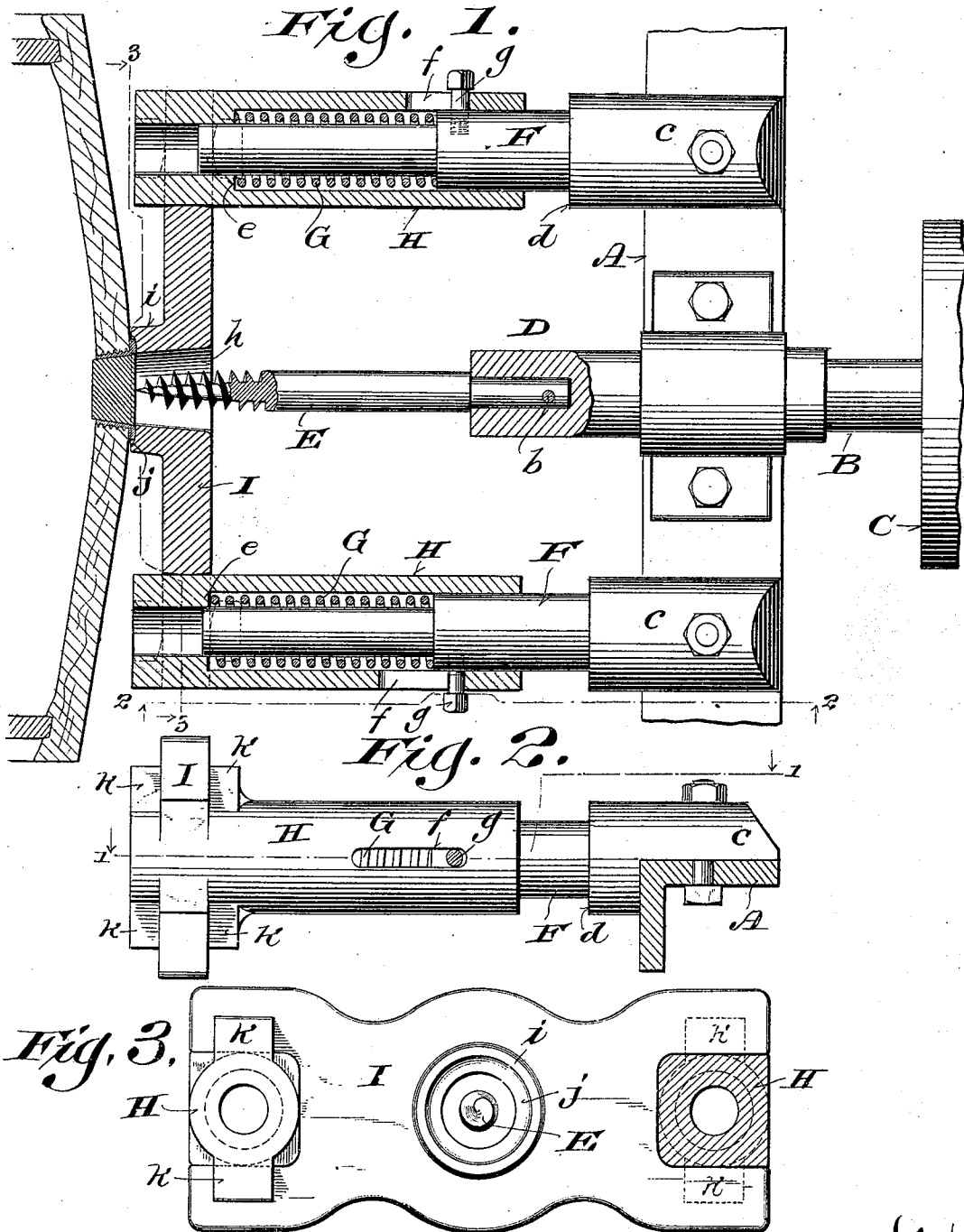


(No Model.)

J. U. KRAFT.
BUNG EXTRACTING MACHINE.

No. 519,021.

Patented May 1, 1894.



Witnesses.
Geo. W. Young.
H. E. Oliphant

Inventor
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UNITED STATES PATENT OFFICE.

JOHN U. KRAFT, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF TO
HENRY RAVE, OF SAME PLACE.

BUNG-EXTRACTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 519,021, dated May 1, 1894.

Application filed January 29, 1894. Serial No. 498,304. (No model.)

To all whom it may concern:

Be it known that I, JOHN U. KRAFT, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Bung-Extracting Machines; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to improve the machine set forth in Patent No. 477,599 issued to myself assignor of one-half to Henry Rave; and said invention consists in certain peculiarities of construction and combination of parts hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings: Figure 1 represents a plan view partly in section on line 1—1 of the preceding figure and illustrates the general construction and application of my improved machine; Fig. 2, a side elevation partly in section on line 2—2 of the preceding figure; Fig. 3, a front elevation partly in section on line 3—3 of the first figure.

Referring by letter to the drawings A represents a frame, B a shaft, C a driving pulley and D a tool-chuck of substantially the same construction and relative arrangement as similar devices shown and described in the above named patent.

As one of the features of the present machine I prefer to employ a pointed tool E having a sharp edged spiral thread that is flat on the side toward the point and beveled on the opposite side, it having been found that such a tool will readily cut its way into a bung and not split the same while in a bushing, and the shank of said tool is held in the chuck D by a key b or other suitable means.

Bolted or otherwise rigidly secured to the frame A in opposite directions from the shaft B are the shouldered butts c of a pair of parallel stems F having shoulders d and reduced forward extremities. Spiral springs G are arranged on the reduced forward portions of the stems F to impinge the shoulders d and loose on said stems are sleeves H of such bore as to provide inner shoulders e in opposition to the outer ends of the springs. Longitudinal slots f in the sleeves H engage pins g of any suit-

able form that extend laterally from the guide-stems F in rear of their shoulders d, and said pins serve as stops to limit forward movement of said sleeves, rearward movement of the same being limited by the shouldered butts of said guide-stems.

In that form of my machine herein illustrated, the shouldered butt of one guide-stem extends farther toward the front than the other, and the pin-engaging slots in the sleeves have a proportional difference of length in the same direction, the longest slot being in the sleeve on the guide stem having the shortest butt, whereby when one of said sleeves comes to a stop in the course of its rear travel the other may proceed farther on its way. However the same result may be obtained without variation in the length of said slots.

As one of the principal features of the present machine, I show the parallel reciprocative sleeves H connected together at their outer ends by a plate I, the latter having a central aperture h in line with the tool E and of sufficient area to permit passage of bungs drawn on said tool. As herein shown the apertured portion of the plate I is forwardly extended in the form of a boss i provided with an annular recess j that serves as a seat for a bung-bushing, but it would be no departure from my invention to omit the boss and have the entire plate flush with or beyond the outer ends of the sleeves. As a matter of detail, the ends of the plate I are preferably recessed and straddle the sleeves H between lugs k thereon whereby said plate is held in place without the employment of bolts, screws or other fastening devices.

In the application of that form of my machine herein shown and described, a keg or barrel is positioned so as to have the bung-bushing thereof engage the recessed boss i adjacent to the aperture in the plate I and said keg or barrel being pressed toward the rear the bung is fed to the tool E that is rotated by power applied to the driving-pulley above specified. The tool E having started into the bung there is a draw on the keg or barrel and consequent compression of the springs G incidental to rearward travel of the plate connected sleeves H on the guide-stems F, but owing to the fact that the bung-bushing is in

contact with the plate I it cannot be started from its position in said keg or barrel, this being one of the principal advantages of the present machine. The free rearward movement of the plate connected sleeves for a time insures a good engagement of the tool and bung after which said bung begins to draw out of said bushing, and when the machine is so organized that one of the sleeves comes to rest earlier in its rear travel than the other, as herein set forth, the keg or barrel will tend to cant and the leverage thus obtained aids the start and withdrawal of the aforesaid bung. A bung having been withdrawn the expansion of the springs G will automatically return the sleeves and their connecting plate to normal position.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A bung-extracting machine comprising a suitable frame provided with a pair of parallel guide-stems, sleeves loose on the stems, an apertured plate connecting the sleeves, a rotative bung-engaging tool in line with the plate aperture intermediate of said stems, and suitable means for effecting a yielding resistance to rearward travel of said sleeves as well as an automatic return of the same to normal position substantially as set forth.

2. A bung-extracting machine comprising a suitable frame provided with a pair of parallel guide-stems, spring-controlled sleeves reciprocative on the stems, an apertured plate connecting the sleeves, and a rotative bung-engaging tool in line with the plate aperture intermediate of said stems, substantially as set forth.

3. A bung-extracting machine comprising a suitable frame provided with a pair of parallel guide-stems, sleeves having a differential movement on the stems, an apertured plate connecting the sleeves, a rotative bung-engaging tool in line with the plate aperture intermediate of said stems, and suitable means for effecting a yielding resistance to rearward travel of said sleeves as well as an automatic return of the same to normal position, substantially as set forth.

4. A bung-extracting machine comprising

a suitable frame provided with a pair of parallel guide-stems having shouldered butts and reduced forward extremities, spiral springs on said extremities of the stems, longitudinally slotted sleeves loose on the stems and of such bore as to provide shoulders opposed to the outer ends of the springs, lateral pins on said stems engaging the sleeve-slots, an apertured plate connecting the forward ends of the sleeves, and a rotative bung-engaging tool in line with the plate-aperture intermediate of the aforesaid stems, substantially as set forth.

5. A bung-extracting machine comprising a suitable frame provided with a pair of parallel guide-stems, sleeves loose on the stems, an apertured plate connecting the sleeves, a recessed boss forming a forward extension of the apertured portion of the plate, a rotative bung-engaging tool in line with the plate-aperture intermediate of said stems, and suitable means for effecting a yielding resistance to rearward travel of said sleeves as well as an automatic return of the same to normal position, substantially as set forth.

6. A bung-extracting machine comprising a suitable frame provided with a pair of parallel guide-stems, sleeves loose on the stems, an apertured plate having recessed ends straddling the sleeves, lugs extending from said sleeves at opposite sides of the plate, a rotative bung-engaging tool in line with the plate-aperture intermediate of said stems, and suitable means for effecting a yielding resistance to rearward travel of the aforesaid sleeves as well as an automatic return of the same to normal position, substantially as set forth.

7. A bung-extracting machine provided with a rotative pointed tool having a sharp edged spiral thread flat on the side toward the point and beveled on the opposite side, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

JOHN U. KRAFT.

Witnesses:

N. E. OLIPHANT,
HENRY DANKERT.