

R. W. NICOLLS & J. BOGUM.
 DEVICE FOR THE EXTRACTION OF SPIRITS FROM USED BARRELS AND CASKS.
 APPLICATION FILED MAR. 1, 1909.

950,512.

Patented Mar. 1, 1910.

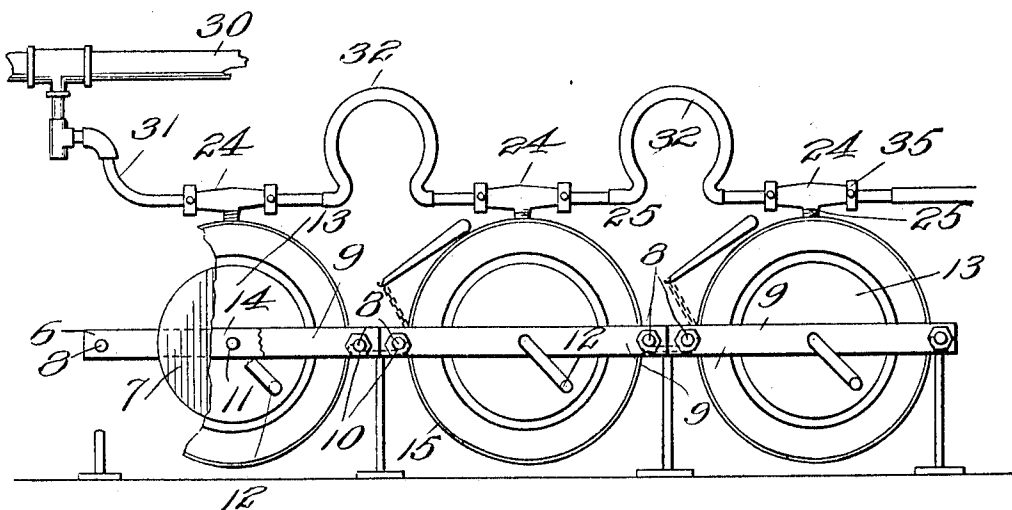


Fig. 1.

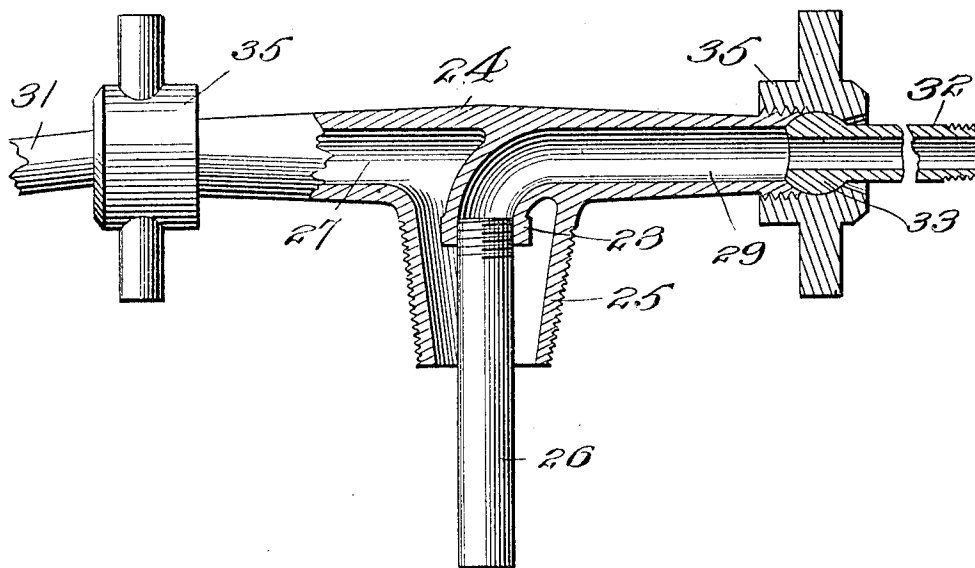


Fig. 2

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DEVICE FOR THE EXTRACTION OF SPIRITS FROM USED BARRELS AND CASKS.

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Specification of Letters Patent.

Patented Mar. 1, 1910.

Application filed March 1, 1909. Serial No. 480,642.

To all whom it may concern:

Be it known that we, ROBERT W. NICOLLS and JOSEF BOGUM, citizens of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Devices for the Extraction of Spirits from Used Barrels and Casks, of which the following is a specification.

This invention relates to means for cleaning barrels, and involves improved devices for use in the extraction or recovery from the barrels of spirits which have soaked into the same, as well as the purification of the barrels in order to fit them for further service.

The novel means claimed herein include an improved bung or device for attaching a steam pipe to the barrels.

The invention will be more fully evident from the following description and the accompanying drawings.

In the drawings, Figure 1 is a side elevation showing several barrels connected up for treatment. Fig. 2 is a sectional view of the bung or device for connecting the steam pipe to the barrels.

Referring specifically to the drawings, 6 indicates a beam or support against which the barrels are placed, with the heads at one end thereof resting against circular supports or plates 7. Rigidly connected to the beam are several pairs of tension rods 8, and the front end of each pair of rods is connected by a cross bar 9 held thereto by nuts 10 screwed on the ends of the rods. A cross bar 9 supports a screw 11 which is operated by a hand crank 12 and arranged to bear at its inner end against a follower 13 which is carried by a cross piece 14 one end of which pivots on one of the rods 8 and the other end of which will swing up or down from or to position with the follower 13 opposite the head of the barrel. These devices form the subject of a divisional application. A series of barrels are preferably set in a row, as shown, and held against the beam by the clamping devices. The sides or staves of the barrels will also preferably be supported against bursting by means of bands 15 clamped around the same, as indicated in Fig. 1.

The bung or connecting device consists of a metallic tubular casting having an elongated body 24 from one side of which projects a tapered screw-threaded branch or

boss 25 which surrounds a pipe 26 at a distance therefrom to provide an outlet passage which connects with the outlet bore 27. The inlet pipe 26 is screwed into a socket 28 formed at the end of the inlet bore 29 in the end of the body 24 opposite to the outlet bore 27. The branch 25 is intermediate the ends of the tubular body, which ends thus form convenient handles for turning the device as the branch is being screwed into the bung hole.

A pipe for supplying the steam, superheated steam, or other agent used, from any suitable source is indicated at 30 and it is connected by a branch pipe 31 to the first of the series of barrels, said pipe being connected to the inlet side of the head or device which is screwed into the bung hole of the barrel, and the outlet side is connected by a pipe or hose 32 to the next barrel of the series, and other barrels are similarly connected in succession. A flexible coupling is preferably used, allowing the connection to be made at any angle. As shown, this coupling comprises a ball and socket joint formed by means of a ball 33 on the end of the pipe 32 which fits into a socket at the end of the body 24, and is held in place by a screw collar 35 which is screwed on the end of the body 24 and binds the ball thereto. This flexible coupling is advantageous since it allows a connection of the barrels and pipes without exact alinement, and also accommodates barrels of different sizes, and permits the connection to be quickly made.

It has been found that an arrangement of the barrels in series of three is most effective for the intended purpose. The final outlet pipe from the last barrel is extended to a condenser and thence to a still for the recovery of the spirits which will be contained in the condensed matter, the distillation being effected in a well known manner.

In the operation of the apparatus the barrels to be treated are set up in the frame and clamped by the devices described, in order to withstand the pressure at which the steam is applied, which is considerable. One of the bungs or connecting devices is then screwed into the bung hole of each barrel. It is essential that they be screwed or otherwise firmly held therein to stand the pressure. The bungs are then connected up in series by the pipes 32 and connected to the steam pipe. Superheated steam or other fluid agent is then forced in and enters

through the passage 29 and pipe 26, and at the high temperature employed volatilizes and completely absorbs the spirits and other volatile matters therein, and the steam passes
5 thence to the next barrel and so on throughout the series, becoming finally fully charged and passing thence to the condenser and the still. The flow of steam is practically continuous for the length of time required to
10 completely clean the barrels. The steam is then turned off and the barrels removed and a new set of barrels put in place and the operation repeated.

We claim:

15 A device for introducing a fluid into a barrel or the like, comprising an elongated tubular structure having inlet and outlet

bores in opposite ends and a laterally projecting tubular threaded branch intermediate said ends adapted to enter the bung hole
20 of a barrel and communicating with one of said bores, said ends forming handles whereby the device may be turned to screw the branch into a bung hole, and a pipe extending through said branch and spaced there-
25 from and communicating with the other of said bores.

In testimony whereof, we affix our signatures in presence of two witnesses.

ROBERT W. NICOLLS.
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Witnesses:

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