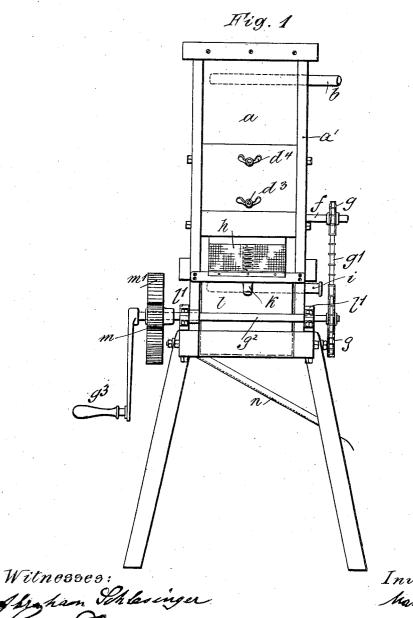
## M. ACH. APPARATUS FOR CLEANSING CORKS. APPLICATION FILED JAN. 21, 1907.

2 SHEETS-SHEET 1.



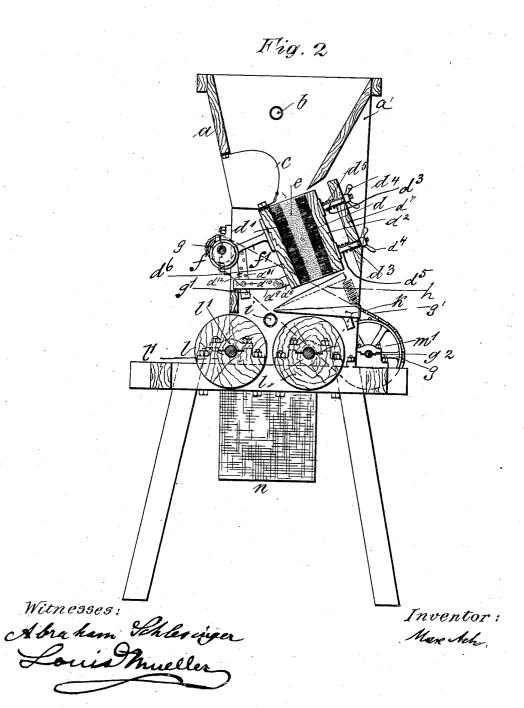
Inventor:

No. 880,955.

PATENTED MAR. 3, 1908.

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APPARATUS FOR CLEANSING CORKS.
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THE NORRIS PETERS CO., WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

MAX ACH, OF EGG, VORARLBERG, AUSTRIA-HUNGARY.

## APPARATUS FOR CLEANSING CORKS.

No. 880,955.

Specification of Letters Patent.

Patented March 3, 1908.

Application filed January 21, 1907. Serial No. 353,316.

To all whom it may concern:

Be it known that I, Max Ach, a subject of the King of Bavaria, residing at Egg, Vorarlberg, in Austria-Hungary, have invented certain new and useful Improvements in Apparatus for Cleansing Corks, of which the fol-

lowing is a specification.

This invention relates to a machine for the efficient cleansing of corks used as stoppers for bottles, or as bungs for barrels and the like, the machine being suitable for removing cork-powder and the like from new corks and deposits or impurities from used corks which are to be re-used as bungs. The cleansing is effected by simple mechanical means, the corks being energetically brushed, washed and rinsed, then treated with rollers to squeeze out the water, and again rinsed so that they leave the machine in a perfectly clean condition.

An embodiment of the invention is illustrated in the annexed drawing, Figure 1 being a side-elevation of the machine and Fig. 2 a front-view, with parts in section.

Fig. 2 a front-view, with parts in section.

The corks enter the machine through the feed-hopper a, which is preferably traversed by the perforated tube b for the supply of hot water. The hopper a and other members of the machine are carried by a frame and to facilitate the passage of the corks to these brushes, and prevent congestion, a vibratory plate or shaker c is preferably attached to the lower edge of the hopper on one side and to the movable brush d. The brush-mechanism comprises a pair of brushes d d. facing each other, and preferably also brushes e arranged laterally with regard to the brushes d d., so that the corks pass through a passage having brushes on all sides.

Certain of the brushes are adjustable but normally stationary, the other brushes being reciprocated by suitable means. In the example illustrated the brushes e are attached to the side frames of the machine. The stock  $d^2$  of the brush d is supported by screwthreaded rods  $d^3$  which pass through the transverse plate  $d^7$  of the frame  $d^1$  and are adjustable by means of wing-nuts  $d^4$  the brush d being thrust towards the brush  $d^1$  by springs  $d^5$ , and therefore being resilient. The brush  $d^1$  is oscillated by means of the eccentric f and eccentric strap rod  $f^1$  which is rigidly fixed to the stock  $d^6$  so that it receives upward and downward motion for

the purpose of producing friction on the corks and is also intermittently thrust towards the stationary brush d. The stock  $d^6$  of the brush  $d^1$  is also articulated at its 60 lower edge at d<sup>8</sup> to a link d<sup>9</sup> also articulated at  $d^{10}$  on a pin inserted in one of the holes  $d^{11}$ of the plate  $d^{12}$  fixed to the frame  $a^1$ . The eccentric f is preferably driven by means of the chain wheels and chain  $g, g^1$ , respectively. 65 The effect of the construction above described is that the upper end of the brush follows a substantially circular path of movement while the lower edge oscillates up and down substantially in the plane of the brush. 70 Below the brushes are arranged the inclined sieve h and the cold water pipe i, so that after being rinsed with hot water from pipe b and shaken and brushed by the brushmechanism the corks are again thoroughly 75 washed by the jets of water emitted by the pipe i which is perforated so that part of the water is ejected onto the sieve h, the soiled water being carried away by the duct k. The corks then pass over the pipe i to the 80 squeezing rollers l, carried by bearings  $l^1$ . One of the rollers l is rotated by means of gear wheels (not shown) from the shaft  $g^2$  of the lower chain wheel g said shaft being adapted to be rotated by a crank  $g^3$ , the stother roller l being rotated by friction. Clean cold water from the pipe i also flows downwards to the rollers, so that the corks are rinsed during the squeezing operation. The clean corks pass over the inclined sieve 90 n into a basket or other receptacle (not shown) placed below the machine, the water being drained off through the said sieve n.

The squeezing operation combined with rinsing, taking place after the preliminary 95 rinsing and brushing, completes the operation by which the corks are entirely freed from dirt, cork-dust, or foreign matter ad-

hering thereto.

What I claim as my invention and desire 100 to secure by Letters Patent of the United

States is:

1. A cork cleansing machine comprising in combination a frame, a feed hopper, stationary and movable coacting brushes in communication with said hopper between which the corks are caused to pass, squeezing rollers adapted to act on the corks after treatment by the brushes, and means intermediate the brushes and squeezing rollers for 110 treating the corks with liquid.

2. A cork cleansing machine comprising in

combination a frame, a feed hopper means for feeding liquid thereto, an adjustable stationary brush and a co-acting reciprocating brush below said hopper between which the corks are caused to pass, squeezing rollers adapted to act on the corks after treatment by the brushes, and means intermediate the brushes and squeezing rollers for further treating the corks with liquid.

3. A cork cleansing machine comprising in combination a frame, a feed hopper, vibratory means for agitating the contents thereof means for feeding liquid to said hopper, an adjustable stationary brush and a coacting

adjustable stationary brush and a coacting reciprocating brush below said hopper between which the corks are caused to pass, squeezing rollers adapted to act on the corks after treatment by the brushes, and means intermediate the brushes and squeezing rollers for further treating the corks with liquid.

4. A cork cleansing machine comprising in combination a frame, a feed hopper vibratory means for agitating the contents thereof means for feeding liquid to said hopper, an adjustable stationary brush and a co-acting 25 reciprocating brush below said hopper between which the corks are caused to pass an inclined sieve below the brushes, squeezing rollers adapted to act on the corks after treatment by the brushes, means intermediate the brushes and squeezing rollers for further treating the corks with liquid and an inclined sieve below said squeezing rollers.

In witness whereof I have signed this specification in the presence of two witnesses.

MAX ACH.

Witnesses:

ABRAHAM SCHLESINGER, LOUIS MUELLER.