

H. & H. E. RAUCH.
 APPARATUS FOR REMOVING PITCH FROM CASKS AND THE LIKE.
 APPLICATION FILED APR. 27, 1912.

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Patented Oct. 8, 1912.

2 SHEETS—SHEET 1.

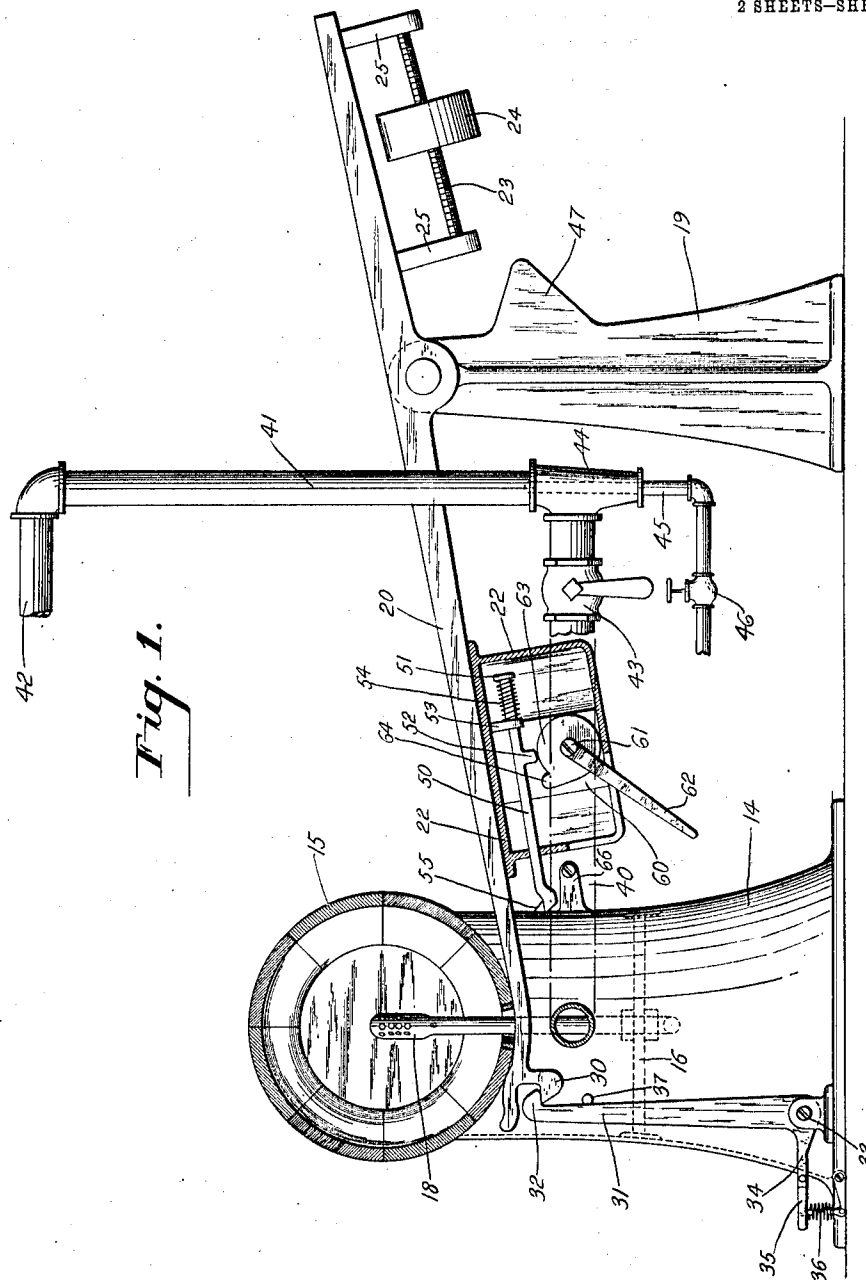


Fig. 1.

WITNESSES

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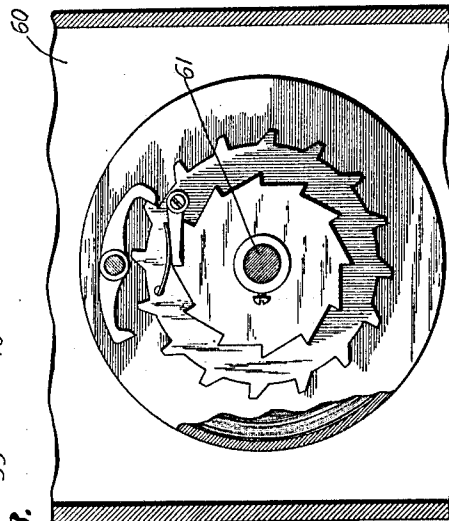
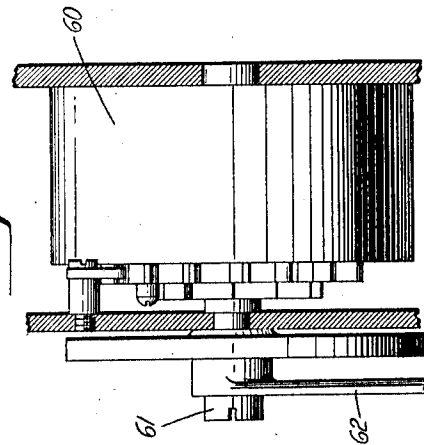
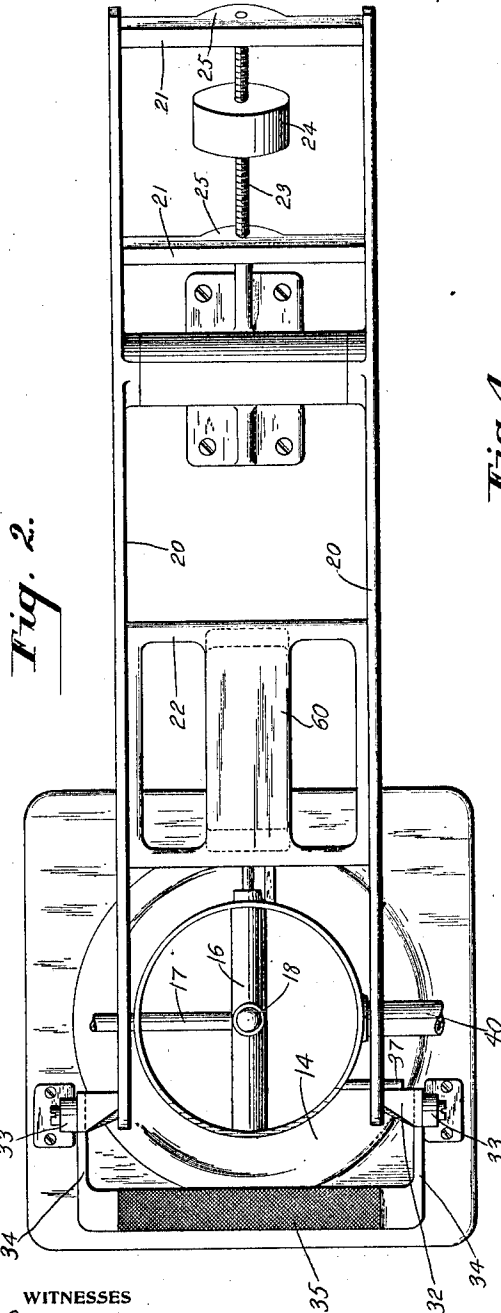
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WITNESSES
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APPARATUS FOR REMOVING PITCH FROM CASKS AND THE LIKE.

1,040,410.

Specification of Letters Patent.

Patented Oct. 8, 1912.

Application filed April 27, 1912. Serial No. 693,693.

To all whom it may concern:

Be it known that we, HENRY RAUCH and HARRY E. RAUCH, each of whom is a citizen of the United States, and a resident of Mount Vernon, in the State of New York, have invented certain new and useful Improvements in Apparatus for Removing Pitch from Casks and the Like, of which the following is a specification.

It is well known in the art that it is desirable to furnish casks and other packages, used for transporting and holding beer and other fluids, with an internal coating of pitch, which serves to render the package liquid tight, and which is also advantageous in other ways. After such a cask has been emptied of its contents and is to be refilled with a fresh supply, it is usual to repitch it by spraying it with hot liquid pitch, but before doing this it is often considered desirable to remove the old pitch, and various means have been employed for accomplishing this purpose. All of those which have heretofore been in use have, however, been unsatisfactory, either because of their liability to burn or otherwise injure the package, their unadaptability for rapid operation, their inefficiency, or for other reasons.

Our invention seeks to obviate these and other objections, and to provide a simple, efficient and easily managed apparatus for removing from beer casks and the like the internal coating of pitch with which they have been provided.

The invention consists in the novel construction, arrangement and combination of devices and parts as hereinafter more particularly described.

In the accompanying drawings Figure 1 shows a side elevation of an apparatus constituting one embodiment of our invention; Fig. 2 is a plan view of the same; and Figs. 3 and 4 are detailed views illustrating the timing device which forms a part of our invention as hereinafter more fully described.

In carrying our invention into effect according to the embodiment which we have selected for the purpose of description and which is herein described and illustrated in the accompanying drawings, we provide a support for the cask or package, of approximately cylindrical form but with a somewhat enlarged base. This support is designated in the drawings by 14. The top is shaped so as to readily receive the cask,

which is designated 15. Inside of the support may be provided a strengthening member 16, and a pipe for conveying gas, or a mixture of gas and air, is provided, designated 17, which bears a burner 18 which projects upward and is adapted to enter the interior of the cask as shown in Fig. 1.

At a suitable distance in the rear of the support 14 is located an upright support or fulcrum 19, and pivotally supported upon said fulcrum is a frame which serves to elevate the package from the burner when the operation is completed. This frame consists of side bars 20 and transverse bars 21 rearward of the fulcrum, and bears a depending frame 22 forward of the fulcrum which serves as a support for the timing device hereafter to be described. Extending longitudinally of the frame borne by lugs 25 upon the bars 21 is a screw-threaded rod 23, which bears a cylindrical or disk-like weight 24, which is provided with an axial bore which is internally screw-threaded to correspond with the threads upon the rod 23. On said fulcrum support are lugs 47 which project rearwardly so as to engage with the forward cross-bar 25 when the frame swings.

The forward ends of the side frames 20 are provided with toes or catches 30, which engage with toes or hooks 32 upon upwardly extending arms 31. These arms 31 are pivotally secured at the base of the apparatus to lugs 33, and bear forwardly extending elbows 34, connecting which is a treadle 35. Underneath this treadle may be a spring 36 for elevating the same and keeping the catches 30 and 32 normally in engagement with each other. Projecting laterally from the support 14, near its upper end, is a stud or stop 37, against which the arms 31 rest and by which they are prevented from moving too far backward when they are not in engagement with the catches 30 on the side bars 20.

Extending out from the side of the support or casing 14, near its upper end, is an exhaust pipe 40, which may be led away to any convenient discharge point. In the embodiment of our invention herein shown and described, the pipe is led backward for a short distance and then runs upward as at 41 and then discharges as at 42. At a suitable point a shut-off valve 43 is provided, and in the form shown in the drawings (see

Fig. 1) a T-joint 44 connects the horizontal pipe 40 and the vertical pipe 41. Through the lower end of this T-joint enters a pipe 45, which is connected with any
 5 suitable source of supply of compressed air, steam, or the like, and which may be provided with a suitable valve 46.

The timing device which forms a part of our invention will now be described. In
 10 the frame 22 which depends from the side bars 20, is slidably mounted a rod 50, provided with a flanged head 51 and a downwardly projecting stud 52. Between the flanged head 51 of this rod and a suitable
 15 stop 53 secured to the frame 22 is a spring 54 adapted to contract and impel the rod 50 forward against the casing 14; and when the apparatus is in the position shown in Fig. 1, the forward end of the rod 50
 20 lies just below and in engagement with a stop 55 on the rear side of said casing 14, thus preventing the forward end of the frame 20 from swinging upward. Supported in the frame 22 is a case 60 containing the time measuring mechanism,
 25 which may consist of any suitable train of clock work actuated by a spring and controlled by an escapement. The main driving shaft of the clockwork is designated as 61, and operatively secured to this shaft is a disk 63 provided with a tooth 64; also
 30 secured to said shaft is an arm or lever 62. It will be observed from Figs. 3 and 4 that as the lever 62 is depressed or swung downward, the clockwork is wound and also at the same time the disk 63 partially rotated so that the tooth 64 is drawn backward out of engagement with the lug 52 of the rod 50; it will also be obvious that as the escape-
 35 ment permits the clockwork to run down, the disk 63 will be partially rotated in the reverse direction, bringing the tooth 64 into engagement with the lug 52, and the arm or lever 62 into engagement with the stop
 40 66 which projects rearwardly from the support or casing 14.

The operation of our invention is as follows: A suitable supply of gas or of mixed
 50 gas and air being admitted through the inlet pipe 17 to the burner 18 and there ignited, and the apparatus being in the position shown in Fig. 1, a cask 15 being placed upon the forward ends of the bars 20, the
 55 burner projecting into the interior of the cask through its bung hole, the clock work timing mechanism begins to operate. After the expiration of a certain predetermined time, (which can be fixed at as long a period as may be considered desirable), the disk
 60 63 will have rotated sufficiently to bring the tooth 64 into engagement with the lug 52 of the rod 50, and, continuing its movement further, will impel the rod 50 backward and thus release its forward end from
 65 the stop 55. The frame 20 being thereby

released, the weight 24 operates to depress the rear end of the said frame and elevate the forward end bearing the cask, too great a swinging of the frame 20 being prevented by the engagement of the forward transverse bar 25 with the lugs 47 on the fulcrum supports 19. The cask 15 is then removed, and another cask substituted therefor, the attendant pressing down the said cask and the forward end of the frame 20
 70 so that the burner 18 enters the bung hole, and the depression is continued until the rod 50 has again engaged with the stop 55.

It will be obvious that as the frame 20 swings upward, the end of the arm or lever 80 62 is held down by the stop 66, which results in swinging said lever 62 and also the disk 63 into the position shown in Fig. 1, thus re-winding the clockwork so as to adapt the same to repeat the operation just described of releasing the rod 50 and permitting the frame to swing upward and remove the cask from the burner. The period of operation of the timing device is of course of sufficient duration to thoroughly melt the pitch from the inside of the cask, but yet not long enough to unduly heat the cask and char or excessively dry the wood. It will be understood that the melted pitch flows down the inside of the cask and out of the bung hole, and may be
 85 received into a suitable receptacle placed inside the support or casing 14.

In some cases it may be desirable not to employ the automatic releasing mechanism the operation of which has just been described, and in such case the same may be dispensed with, or, if the machine is provided with same, it may be thrown out of operation by securing the rod 50 out of engagement with the stop 55. When this has
 90 been done, the apparatus may be operated by means of the releasing arms or levers 31 at the front of the machine, which are operated by the treadle 35.

It will of course be understood that when the automatic releasing mechanism is employed the foot releasing mechanism must be removed or in some suitable manner rendered inoperative.

The exhaust pipes 40, 41 and 42 are intended to draw from the hollow support or casing 14, and consequently from the interior of the cask, the products of combustion as well as the vapor from the melting pitch, and to discharge the same into the outer air.
 115 When necessary and desirable, this exhaust may be produced or facilitated by injecting into the vertical exhaust pipe 41 compressed air or steam through the pipe 45, in a manner which will be well understood.

The advantages of our invention will be evident from what has been above said with regard to its construction and mode of operation.

Having thus described our invention, what 130

we claim as new and desire to secure by Letters Patent is as follows:

1. In an apparatus for removing pitch from casks and the like, the combination with a support adapted to receive a cask, and a burner adapted to project into a cask and to heat the interior of the same; of a rocking frame, one end of which is adapted to elevate said cask and remove same from said burner.

2. In an apparatus for removing pitch from casks and the like, the combination with a support adapted to receive a cask, and a burner adapted to project into a cask and to heat the interior of the same; of a rocking frame, one end of which is adapted to elevate said cask and remove same from said burner; said rocking frame being provided with means for holding same stationary and with means for releasing said holding means and thereby permitting said frame to rock.

3. In an apparatus for removing pitch from casks and the like, the combination with a support adapted to receive a cask, and a burner adapted to project into a cask and to heat the interior of the same; of a rocking frame, one end of which is adapted

to elevate said cask and remove same from said burner; said rocking frame being provided with means for holding same stationary and with means for automatically releasing said holding means and thereby permitting said frame to rock.

4. In an apparatus for removing pitch from casks and the like, the combination with a support adapted to receive a cask, and a burner adapted to project into a cask and to heat the interior of the same; of a rocking frame, one end of which is adapted to elevate said cask and remove same from said burner; said rocking frame being provided with means for holding same stationary and with means for automatically releasing said holding means at predetermined intervals of time and thereby permitting said frame to rock.

In witness whereof we have hereunto signed our names this 25th day of April 1912, in the presence of two subscribing witnesses.

HENRY RAUCH.
HARRY E. RAUCH.

Witnesses:

EDMOND CONGER BROWN,
AGNES L. CLUNE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."