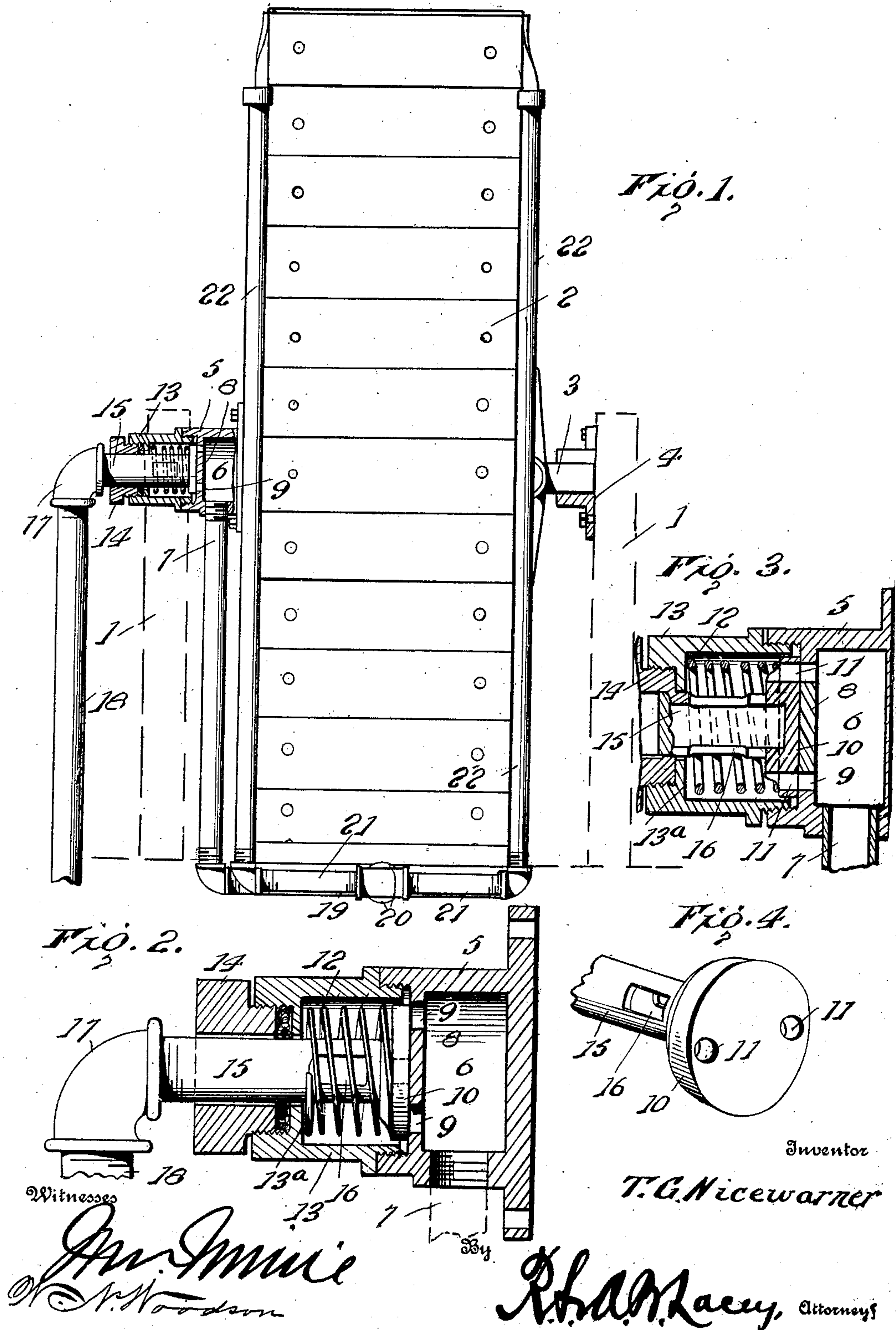


No. 861,477.

PATENTED JULY 30, 1907.

T. G. NICEWARNER.
APPARATUS FOR THAWING ICE FROM ICE CANS.

APPLICATION FILED MAY 23, 1906.



UNITED STATES PATENT OFFICE.

THEODORE G. NICEWARNER, OF BELINGTON, WEST VIRGINIA, ASSIGNOR OF ONE-FOURTH TO GEORGE E. CAIN, ONE-FOURTH TO WILLIAM WORTH TETER, AND ONE-FOURTH TO WARE & VIQUESNEY, A FIRM.

APPARATUS FOR THAWING ICE FROM ICE-CANS.

No. 861,477.

Specification of Letters Patent.

Patented July 30, 1907.

Original application filed September 29, 1905, Serial No. 280,712. Divided and this application filed May 23, 1906. Serial No. 318,404.

To all whom it may concern:

Be it known that I, THEODORE G. NICEWARNER, a citizen of the United States, residing at Belington, in the county of Barbour and State of West Virginia, have
5 invented certain new and useful Improvements in Apparatus for Thawing Ice from Ice-Cans, of which the following is a specification.

This invention contemplates certain new and useful improvements in apparatus for facilitating the work of
10 dumping artificial ice blocks out of the cans in which they have been formed, such for instance as that type of apparatus illustrated in the Patent Number 821,957 granted to me May 29th, 1906, of which this case is a divisional application.

15 For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which

20 Figure 1 is a side elevation of my improved ice dump, parts being shown in section. Fig. 2 is a sectional view on an enlarged scale of one of the bearings for the tiltable casing. Fig. 3 is a similar view with parts in a different position from that shown in Fig. 2. Fig. 4 is
25 a detail perspective view of the valve and one end of the nipple designed to direct the steam and hot water to the valve.

Corresponding and like parts are referred to in the following description and indicated in all the views of
30 the drawings by the same reference characters.

Referring to the drawings the numeral 1 designates suitable uprights or standards between which is tiltable mounted a box or casing 2 designed to receive the cans of ice. At one side of the casing is secured a trunnion
35 3 which is mounted in a bearing 4 projected from one of the standards and at its other side the said casing is provided with a hollow hub 5 which forms a journal resting in the other standard 1. The hub 5 is provided with a water cavity or chamber 6 from which leads an
40 outlet pipe 7, and said hub is provided with a plate 8 constituting a valve seat and formed with ports 9. The ports 9, are intended to be controlled by a disk valve 10 provided with ports 11 designed for position either
45 in or out of registry with the ports 9. This valve is held to its seat by a helical spring 12 and is intended to be fixed or stationary. Secured in the outer end of the hub 5 is a cap 13 in the outer end of which is secured a stuffing box 14 and within the stuffing box is a nipple
50 15 provided with a lateral opening 16 and preferably abutting with its end against the valve 10. The cap 13 is provided with an inwardly extending annular flange 13^a extending close to the nipple 15 and forming a seat for the rear end of the spring 12. The outer end of the nipple 15 is secured in an elbow 17 and a supply pipe
55 18 is secured to the other end of the elbow and leads from any suitable source of supply. The outlet pipe 7

is connected at one end by an elbow to a laterally extending pipe 19, which in turn is connected by a pipe 20 and a coupling to spray pipes 21. Each of these latter is provided with a plurality of apertures and is connected at its end to one of the two longitudinal spray
60 pipes 22 which are correspondingly provided with jets or apertures for the egress of the hot steam.

In the operation of this device, the disk valve 10 is stationary and in the normal upright position of the
65 box or casing 2, the ports 11 of said valve stand out of alinement with the ports 9 in the valve seat 8, thereby shutting off the communication between the supply pipe and the water chamber 6 which leads to the spray
70 pipes. When, however, the box or casing is tilted the rotation of the hollow hub 5 will bring the ports 9 into registry with the ports 11 of the valve, and thereupon open communication is established between the supply
75 pipe and the water chamber 6, so that the hot water or steam may pass from the supply pipe out of the nipple to and through the registering ports and thence to the
80 spray pipes, from whence it will issue in streams or jets to effect a sufficient melting at the edges of the ice blocks as to facilitate the dumping of the block.

Having thus described the invention what is claimed
85 as new is:

1. An apparatus of the character described, comprising standards, a box or casing provided with trunnions journaled in said standards whereby the casing is arranged to tilt; one of said trunnions constituting a hollow hub provided with ports and a valve seat, spray pipes for said casing, a pipe establishing communication between said hollow hub and the spray pipes, a supply pipe provided with a branch designed to enter said hub and having a lateral port therein communicating with the interior of the hub
85 through the ports thereof, and a spring pressed valve provided with ports and arranged to be held stationary against the valve seat in said hub, the ports of the valve being arranged to register with the ports of the hub when the latter is turned, as and for the purpose set forth. 95

2. An apparatus of the character described, comprising standards, a box or casing provided with trunnions journaled in said standard whereby the casing is arranged to tilt, one of said trunnions constituting a hub provided with an apertured plate providing a water chamber and ports leading thereto, a cap secured to said hub and provided at its outer end with an inwardly extending annular flange, a stuffing box secured in the outer end of said cap, a valve provided with ports and designed to abut against the outer side of said plate, the ports of the valve being adapted to register with the ports of the said plate, a spring mounted in said cap and pressing against said valve the outer end of the spring bearing against the flange of the cap, a nipple extended through said stuffing box into the cap and provided in said cap with a lateral opening, a supply pipe connected to said nipple, and spray pipes arranged around said casing and having communication with the chamber of said hub. 100 105 110

In testimony whereof I affix my signature in presence of two witnesses.

THEODORE G. NICEWARNER. [L. S.]

Witnesses:

A. J. STALNAKER,
H. H. JONES.