

(No Model.)

R. G. PETERS.

DISCHARGE MECHANISM FOR VACUUM PANS.

No. 384,071.

Patented June 5, 1888.

Fig. 1

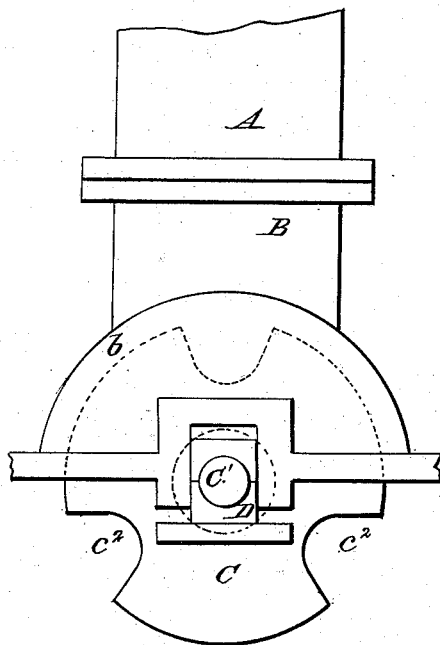
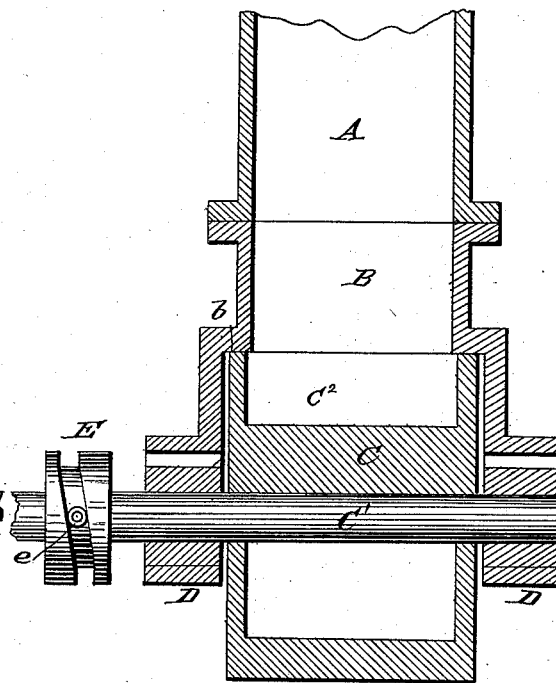


Fig. 2.



WITNESSES:

Fred L. Dietrich
P. B. Turpin.

INVENTOR:

R. G. Peters.
BY *Munn & Co.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

RICHARD G. PETERS, OF MANISTEE, MICHIGAN.

DISCHARGE MECHANISM FOR VACUUM-PANS.

SPECIFICATION forming part of Letters Patent No. 384,071, dated June 5, 1888.

Application filed July 28, 1887. Serial No. 245,520. (No model.)

To all whom it may concern:

Be it known that I, RICHARD G. PETERS, of Manistee, in the county of Manistee and State of Michigan, have invented a new Improvement in Discharge Mechanism for Vacuum-Pans, of which the following is a specification.

This invention is an improvement in discharge mechanism for the legs of a salt-vacuum or other similar pan; and it consists in certain details of construction and novel combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation, and Fig. 2 a sectional view, of my invention.

The leg A may be that of a vacuum-pan, as is preferred, or of other suitable vessel, for containing the salt solution, and to it I secure, or with it is formed, the valve-shell B. Manifestly the leg-pipe may be used with any ordinary form of vacuum-pan, and I have not deemed it necessary to illustrate a pan in disclosing my present invention.

The shell B (shown in Figs. 1 and 2) is fitted to receive the valve C, and has an open bottom. This shell has concave bearings at *b* for the circumference of the circular valve, which is fixed to the shaft *C'*, journaled in bearings D, so that such valve may be revolved. I form the shell and valve relatively so that the valve may be moved to a limited extent in the direction of its axis, the movement of the valve along the bearings *b* serving to prevent any irregular wear of such bearing. To effect this longitudinal movement of the valve as it is revolved, I provide its shaft with a cam-groove, E, entered by a fixed pin, *e*, this construction serving, as will be readily understood, to give the valve a longitudinal to-and-fro motion, so that its wearing-surface and the wearing-surfaces of the shell shall be kept even. I provide

this valve C with a pocket or pockets, *C'*—usually three—as shown, arranged on different radii, so that one pocket will be in position to receive salt from leg A while the others are discharging, as will be understood from Figs. 1 and 2, the valve being properly fitted in its shell to prevent wastage of the liquid from the shell.

Manifestly the valve shown in Figs. 1 and 2 may be turned by hand or by any suitable power, as may be desired.

Having thus described my invention, what I claim as new is—

1. In an apparatus substantially as described, the combination of the leg or pipe having a valve-casing, a pocketed valve rotatably supported in said casing and made of less length than the distance between the side walls of said casing, and mechanism whereby the valve may be reciprocated longitudinally in its casing, substantially as described, and for the purposes specified.

2. In an apparatus for use in the manufacture of salt, the combination of the leg or pipe provided at its lower end with a valve-casing, the rotary pocketed valve supported in said casing and capable of reciprocating in the direction of its axis in said casing, the shaft secured to said valve and supported in suitable bearings and provided with a circumferential spiral groove, and the fixed pin or stud entering said groove, whereby the shaft and its valve may be reciprocated longitudinally as the shaft is revolved, substantially as and for the purposes specified.

RICHARD G. PETERS.

Witnesses:

HENRY W. CAREY,
RAY B. GILLETTE.