(No Model.)

S. WILLERSHAUSEN.

HEATER FOR GLUE AND OTHER SUBSTANCES.

No. 264,808. Patented Sept. 19, 1882.

Fig. 1.

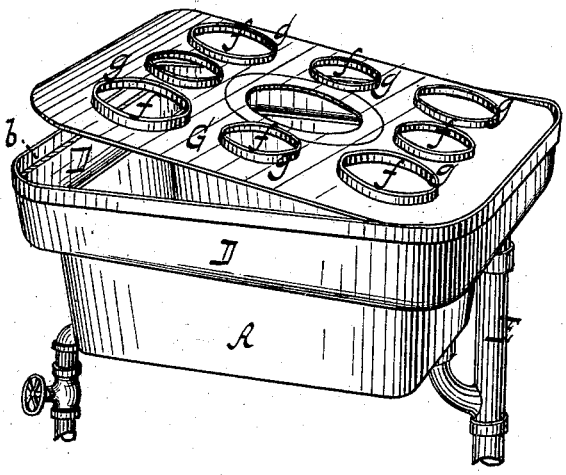


Fig. 2.

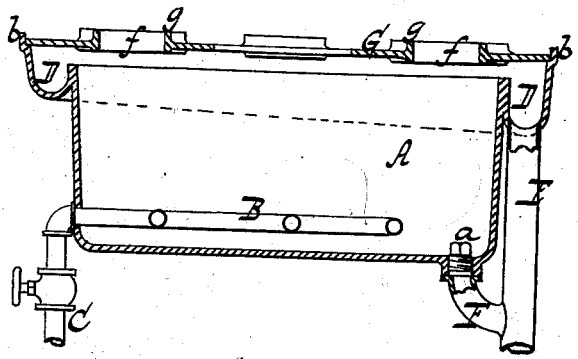
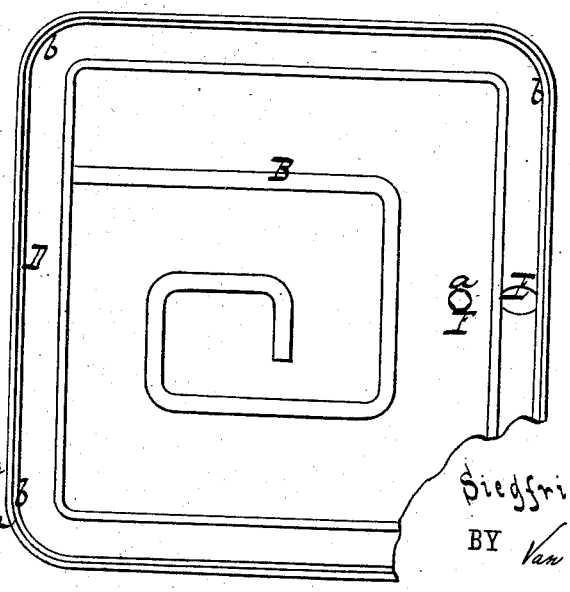


Fig. 3.



WITNESSES:

William Miller

Chas. Wahlers

INVENTOR

Siegfried Willershausen

BY Van Santvoord & Hauff

ATTORNEYS

UNITED STATES PATENT OFFICE.

SIEGFRIED WILLERSHAUSEN, OF NEW YORK, N. Y.

HEATER FOR GLUE AND OTHER SUBSTANCES.

SPECIFICATION forming part of Letters Patent No. 264,808, dated September 19, 1882.

Application filed July 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, SIEGFRIED WILLERSHAUSEN, a citizen of the German Empire, residing at New York, in the county and State of New York, have invented new and useful Improvements in Heaters for Glue and other Substances, of which the following is a specification.

This invention relates to certain improvements in the construction of heaters for glue and other substances, said improvements being pointed out in the following specification.

In the accompanying drawings, Figure 1 represents a perspective view. Fig. 2 is a vertical section. Fig. 3 is a plan or top view when the cover is removed.

Similar letters indicate corresponding parts.

In these drawings, the letter A designates a box made of cast-iron or any other suitable material. In the interior of this box, near its bottom, is situated a steam-coil, B, to which steam is admitted through the pipe C and discharged at the end of the coil. In the upper part of the box is formed a trough, D, the bottom of which is inclined, as shown in Fig. 1, and from the lowest point of this bottom extends the overflow-pipe E. From the bottom of the box A extends a pipe, F, which is provided with a stopper, *a*, and which by preference leads into the overflow-pipe. On the outside wall of the trough D is formed a ridge, *b*, which supports the cover G, said ridge being situated at such an elevation above the top edge of the inside wall of the trough that the water from the interior of the box has free access to the trough throughout its entire circumference. In the cover G are a series of openings to receive the vessels which contain the glue or other substance to be heated. The box A is filled with water, and by admitting steam to the coil B the water is rapidly heated to and maintained at a temperature near its boiling-point. The steam which issues from the coil into the water condenses therein and the surplus water flows off through the overflow-pipe E.

Heretofore heaters of this class have been constructed without the trough D, the overflow-pipe being made to extend up into the box to the desired level, so that its mouth communicates with the body of the water in the box only at a single point. If a full head of steam is admitted to the coil, the water in the box is caused to rise rapidly, and it is driven out through the openings in the cover before it has time to discharge through the overflow-pipe, thereby causing much inconvenience. By the application of the trough D, I have obviated this difficulty. If a full head of steam is admitted to the coil B in my box, the water which is driven upward is received in the trough D, whence it escapes through the overflow-pipe E without rising up through the openings in the cover, and the heater can be easily kept clean. Furthermore, the water in the box A is liable to become dirty in a short time, and I have applied the pipe F so as to be able to clean the box without difficulty. Furthermore, the openings *f* in the cover G are provided with raised rims *g*, which form guards to prevent the water from flowing out and soiling the surface of the cover.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, substantially as hereinbefore described, of the box A, the trough D, formed in said box, the cover G, supported at an elevation above the top edge of the inside wall of the trough, and the overflow-pipe emanating from the bottom of the trough.

2. The combination, substantially as hereinbefore described, of the box A, the trough D, formed in said box, and having an inclined bottom, as described, the cover G, supported at an elevation above the top edge of the inside wall of the trough, and the overflow-pipe emanating from the lowest point of the bottom of the trough.

3. The combination, substantially as hereinbefore described, of the box A, the trough D, formed in said box, the cover G, supported at an elevation above the top edge of the inside wall of the trough, the overflow-pipe emanating from the bottom of the trough, and the pipe F emanating from the bottom of the box A.

4. The combination, with the water-chamber A, having a steam-coil, B, of the cover G, having openings *f* and vertical flanges *g*, substantially as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

SIEGFRIED WILLERSHAUSEN. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.