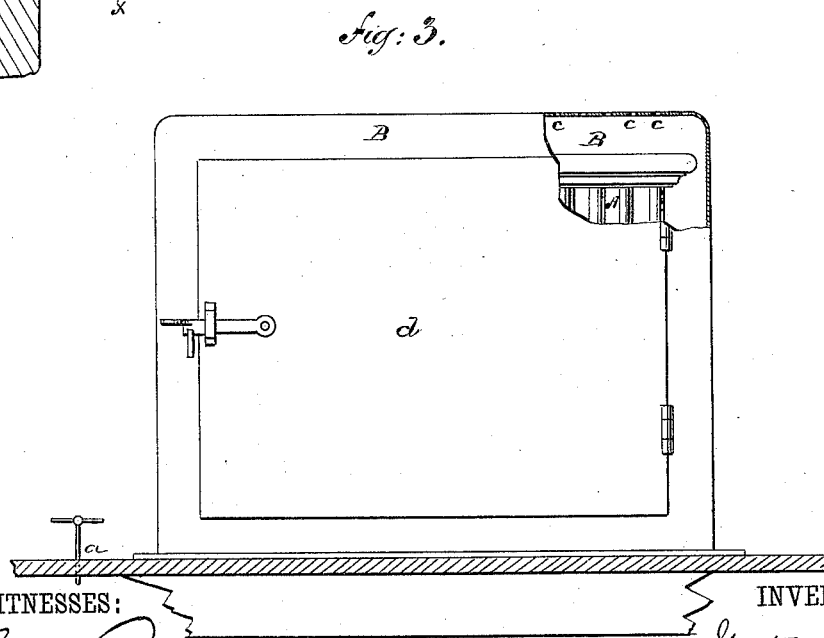
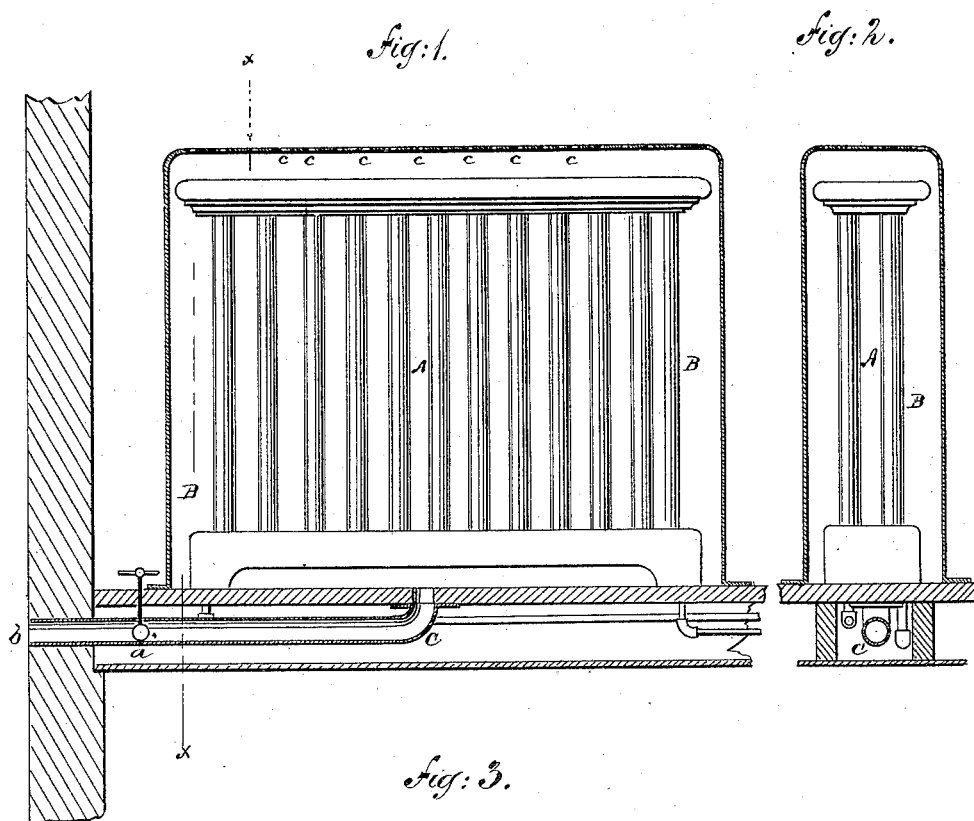


(No Model.)

G. BLAU, Jr.  
STEAM RADIATOR.

No. 302,702.

Patented July 29, 1884.



WITNESSES:  
*Chas. Nida*  
*Julian M. V. Anderson.*

INVENTOR:  
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# UNITED STATES PATENT OFFICE.

GUSTAV BLAU, JR., OF JERSEY CITY, NEW JERSEY.

## STEAM-RADIATOR.

SPECIFICATION forming part of Letters Patent No. 302,702, dated July 29, 1884.

Application filed September 17, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, GUSTAV BLAU, JR., of Jersey City, county of Hudson, and State of New Jersey, have invented a new and useful Improvement in Steam-Radiators and other Similar Heating Contrivances; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying sheet of drawings, forming part of this specification.

This invention is in the nature of an improvement in steam-radiators and other similar heating contrivances; and the invention consists in the device hereinafter particularly shown, described, and claimed.

In the accompanying sheet of drawings, Figure 1 is a longitudinal section of casing; Fig. 2, a cross-section of same; Fig. 3, view showing hinged section or door.

Similar letters of reference indicate like parts in the several figures.

The great objection found to exist in the application of steam-radiators and similar devices for heating rooms is the well-known one that they generally heat over and over again the same air—that is, the surrounding air in the room. The result is the air becomes vitiated and unfit to breathe, causing headaches and lassitude to the occupants of the chamber; and sometimes, indeed, worse results. The present invention is designed to remedy the difficulty and cause the heating apparatus to give out pure warm air quite as healthful as the external air, but heated to a pleasant temperature. To that end I inclose the ordinary steam-radiator A within a casing, B, of thin sheet metal or other suitable material. This casing is portable or detachable, and when placed over the ordinary radiator it entirely surrounds it as would a box, the floor of the apartment on which it rests forming the bottom. Opening into and extending from the bottom of the casing is an air-pipe, C, of any convenient diameter and length. Into this pipe is fitted a damper, *a*. The open end of the pipe or its mouth *b* passes through the building or in some suitable manner to the open air. The upper surface of the casing B is perforated with holes *c*. Now, when in operation, the fresh air from without passes through the pipe C into the casing B and beneath the radiator A, ascending around its heated tubes, and finding exit through the perforations *c* of the casing, in a heated state, into

the room, the exit from the perforations *c* and the supply through the air-pipe C causing a constant circulation of fresh-heated air to be supplied to the apartments, the volume of which may be regulated by opening or closing more or less the damper *a*. If desired, the casing B may be divided into hinged sections, or have hinged door *d* secured to it, so that when the steam or other heat is first turned on to the radiator and the door or sections opened the radiator will speedily heat the cold room by its direct radiation in precisely the same manner as it would do without the casing referred to. The radiator and room having been warmed, the door or sections may be closed, the damper *a* opened, and the pure fresh air admitted, as above recited.

It is obvious from the foregoing that by my invention the occupants of the apartment wherein it is placed will be supplied with a wholesome atmosphere of pure heated air, conducive to health and comfort. Under some circumstances the perforations *c* may be dispensed with, and the casing B be allowed to open freely into the room without obstruction.

I do not claim anything covered by the United States Letters Patent No. 271,723, granted February 6, 1883, and No. 175,241, granted March 28, 1876, and the German Letters Patent No. 19,000, each and all of which patented inventions relates to fixed casings which are practically part of the radiator or heater. My invention differs from these in being a detachable and portable perforated cover for ready application to an ordinary heat-radiator, combined with a valved fresh-air pipe leading into it from outside the building in which the radiator is located, whereby I gain the results set forth.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A detachable cover for a steam-radiator, provided with perforations, in combination with a radiator and a valved fresh-air pipe leading from outside the building to the radiator, substantially as described.

GUSTAV BLAU, JR.

Witnesses:

G. M. PLYMPTON,  
JULIAN McV. ANDERSON.