

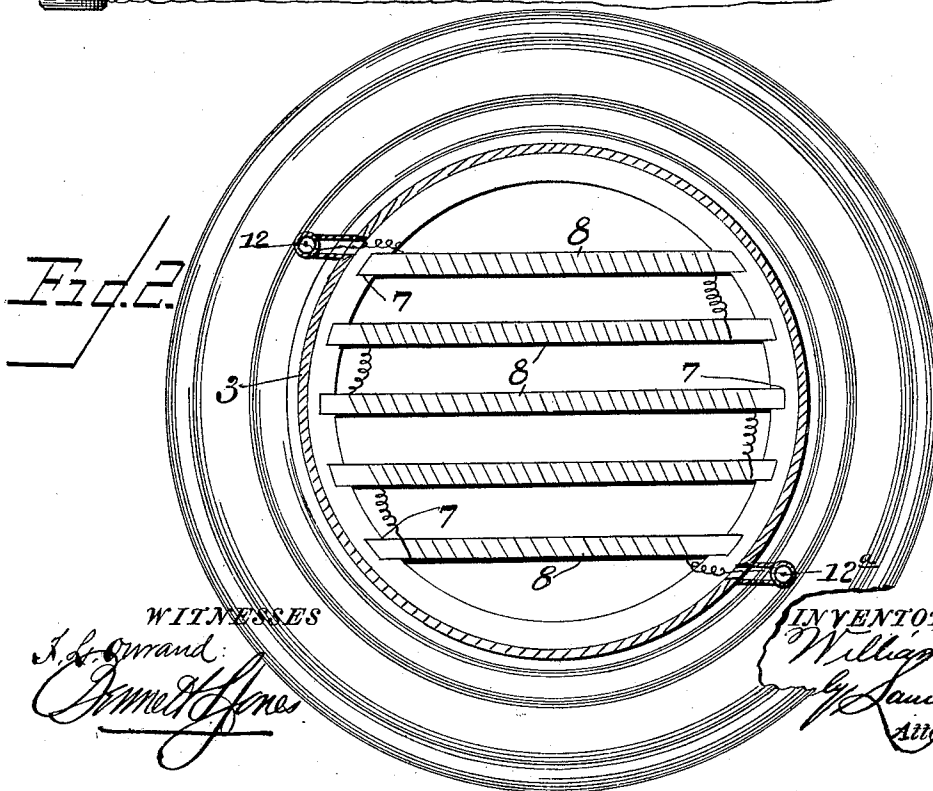
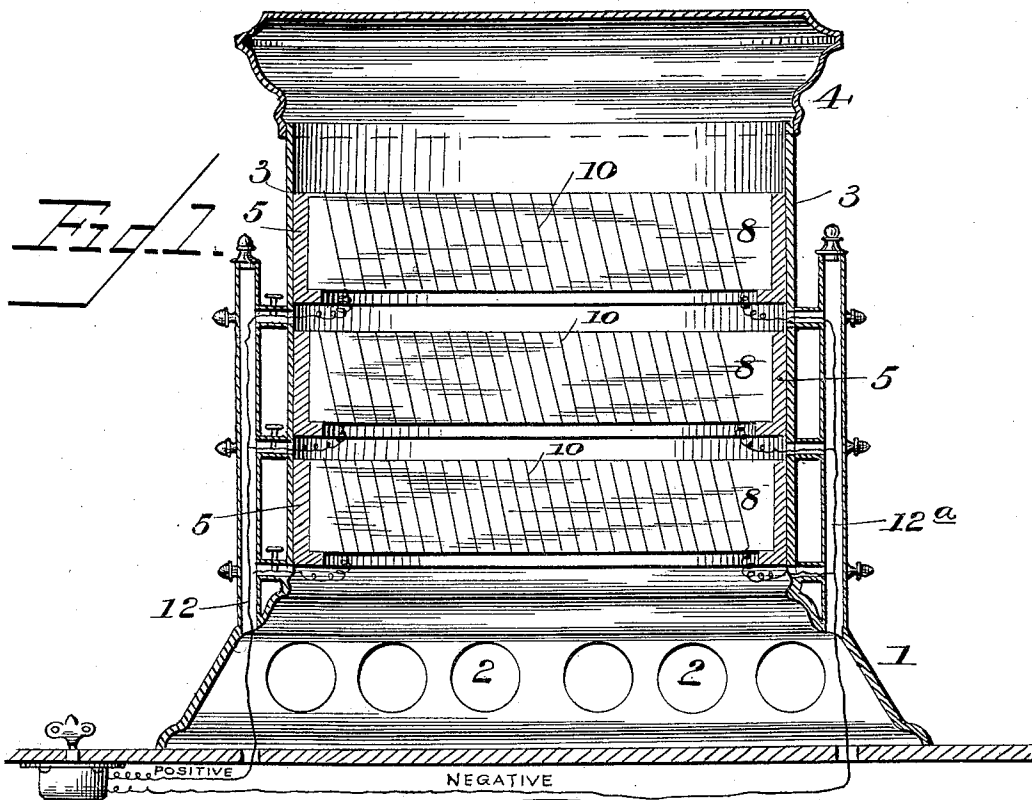
(No Model.)

2 Sheets—Sheet 1.

W. SNEE.
ELECTRIC HEATER.

No. 507,941.

Patented Oct. 31, 1893.



WITNESSES

J. L. Grand
C. M. L. G. S.

INVENTOR:

William Snee,
by James C. Cagge & Co.
Attorneys.

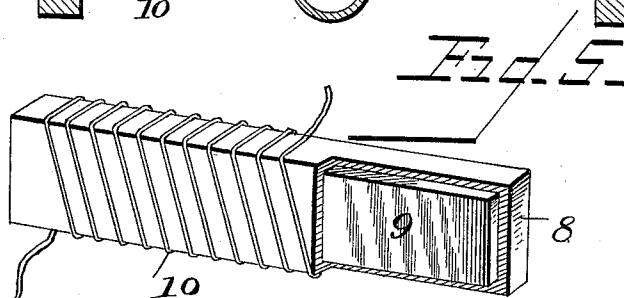
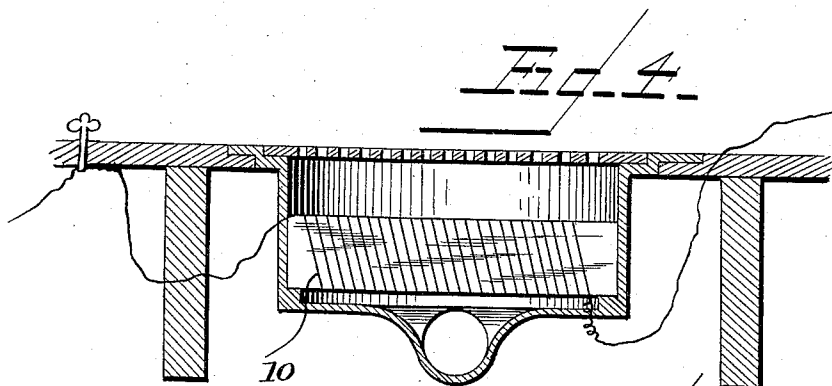
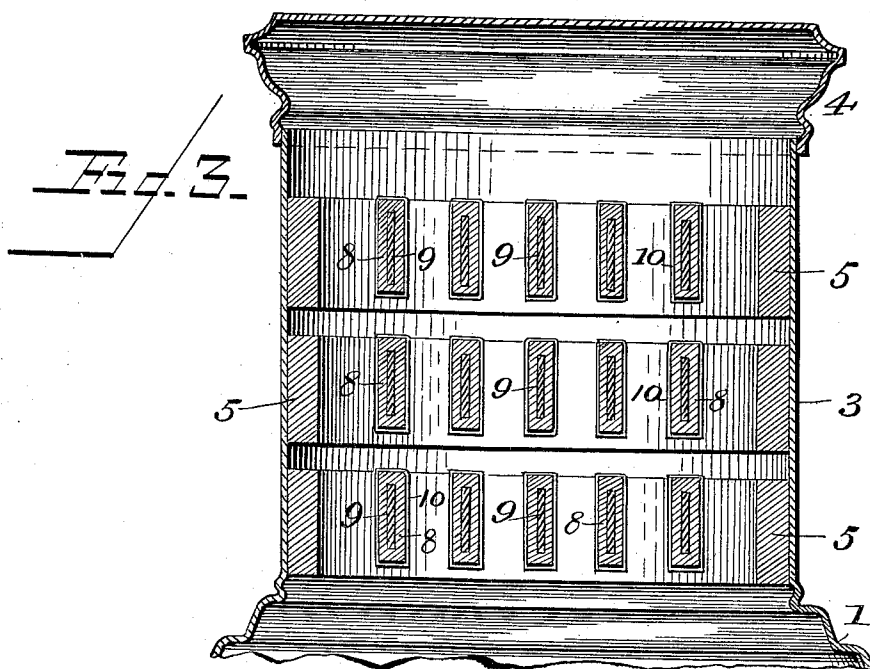
(No Model.)

2 Sheets—Sheet 2.

W. SNEE.
ELECTRIC HEATER.

No. 507,941.

Patented Oct. 31, 1893.



WITNESSES:
F. E. Howard
Amos H. Snee

INVENTOR:
William Snee
By Lewis Daguerre & Co
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM SNEE, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF THIRTEEN-SIXTEENTHS TO ABNER OWENS AND JOHN A. SNEE, OF SAME PLACE.

ELECTRIC HEATER.

SPECIFICATION forming part of Letters Patent No. 507,941, dated October 31, 1893.

Application filed December 27, 1892. Serial No. 456,435. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SNEE, a citizen of the United States, and a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Electric Heaters; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in electric heating devices, and consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings: Figure 1 represents a central sectional view of a heater by which my improved method may be carried into effect. Fig. 2 is a horizontal section, on the line $x-x$, Fig. 1. Fig. 3 is a section, taken at right angles to Fig. 1. Fig. 4 is a view, showing the invention, applied to the floor of a building. Fig. 5 is a view of one of the heating plates.

To enable others skilled in the art to make and use my invention, I will now describe in detail the manner of carrying the same into effect.

Referring to the said drawings, the reference numeral 1 designates a circular base consisting of a ring or annulus having a series of holes 2, for the admission of air. Mounted upon this base is a cylindrical casing 3, having a top 4. Secured to the said casing on its interior by bolts or rivets are a number of superimposed rings 5, formed on their interior surfaces with vertical slots or grooves 7 extending to near the bottom thereof to receive the plates or bars 8, of non-conducting or insulating material, each consisting of an interior metallic stiffening core 9, coated or covered with asbestos, and wound spirally with conducting wires 10, forming part of an electric circuit. These rings are arranged one above the other as seen in Figs. 1 and 2, forming three sets or tiers with the non-conducting plates seated in the slots thereof. The non-conducting plates of each set or tier may be connected together in series with positive and negative conductors 12 and 12^a, from a dynamo or

source of electricity, or the said plates may be connected direct with said conductors, as may be found desirable or convenient. Each set or tier of the said plates is independent of the others and should be provided with a suitable switch for throwing it into and out of circuit.

The operation is as follows: The parts being constructed and arranged, as shown in the drawings, a current of electricity is passed through the wires wound upon the asbestos plates, which become highly heated, heating the air in the casing, which enters the same through the holes in the base and escapes through the top. By cutting one or more of the sets or tiers out of the circuit, a correspondingly decreased volume of heat will be produced.

In Fig. 4 I have shown the heating devices applied to the floor of a building. In this case a circular hole is cut in the floor, and one of said rings with its plates, is inserted therein, between the joists 13. The upper end of this ring is provided with a flange 14, by which it may be screwed or bolted to the floor and a groove 14^a in which is seated a perforated plate or cover 15. The base of this ring is made solid with an opening for the passage of a flue leading to the outside of the building for conducting air to the heated plates.

It will of course be understood that the wires wound around the plates are of less conductive capacity than the wires from the generator, so as to form a resistance to the current.

Having thus described my invention, what I claim is—

In an electric heater, the combination with a casing, the ring or annulus secured thereto having an annular flange at its lower end, and a series of vertical slots in its interior surface, of the non-conducting plates seated in said slots and wound with wires forming part of an electric circuit, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

WILLIAM SNEE.

Witnesses:

BENNETT S. JONES,
ARTHUR B. SEIBOLD.