(No Model.)

T. DAVIS.

RADIATOR.

No. 266,979. Patented Nov. 7, 1882.

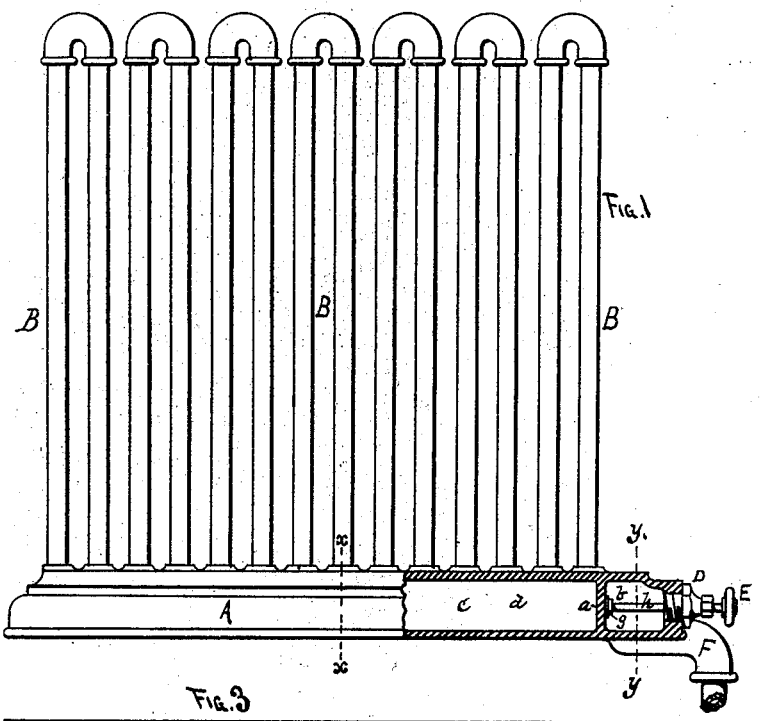


Fig. 1

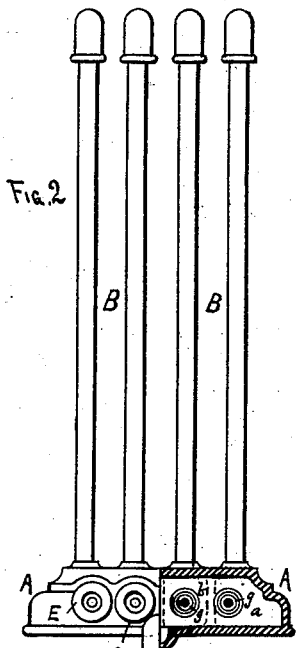


Fig. 2

Fig. 3

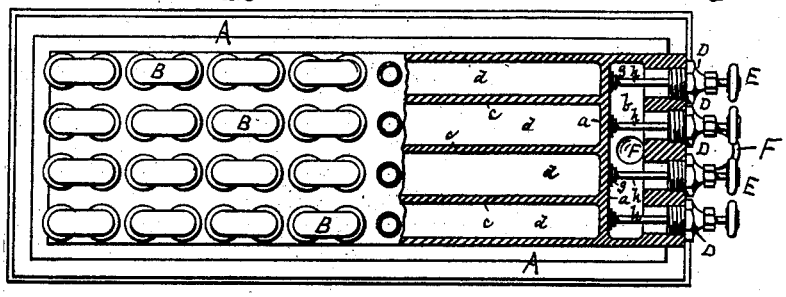


Fig. 4

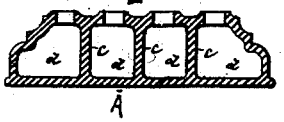
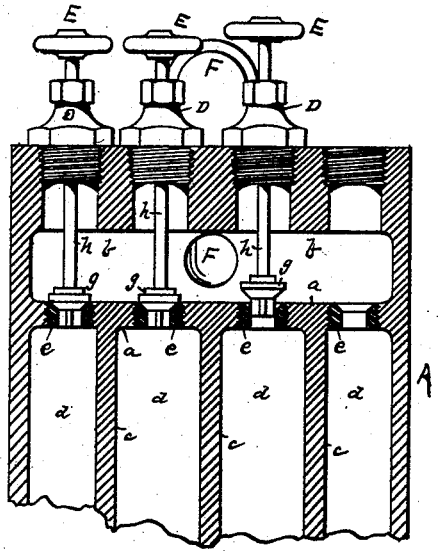


Fig. 5



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UNITED STATES PATENT OFFICE.

THOMAS DAVIS, OF ST. PAUL, MINNESOTA.

RADIATOR.

SPECIFICATION forming part of Letters Patent No. 266,979, dated November 7, 1882.

Application filed May 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS DAVIS, a citizen of the United States, and a resident of St. Paul, in the county of Ramsey and State of Minnesota, have made certain new and useful Improvements in Radiators, of which the following is a specification.

This invention relates to radiators used in systems of steam or hot-air heating; and it consists in the construction and arrangement of parts, substantially as shown and specifically described.

In the drawings, Figure 1 is a side elevation. Fig. 2 is an end elevation; and Fig. 3 is a plan view, partially in section, the right-hand lower half of Fig. 2 being in section on the line *y y* of Fig. 1. Fig. 4 is a cross-section of the base on the line *x x* of Fig. 1. Fig. 5 is an enlarged horizontal section of a portion of one end of the base and the valves.

A is the base, and B the steam-pipes, constructed in any well-known manner, except that a transverse partition, *a*, is formed in the base near one end, thereby producing a compartment, *b*, and the remainder of the interior of the base is divided by horizontal partitions *c* into as many compartments *d* as there are horizontal rows of the pipes B running from end to end of the base A, each row of pipes thus opening down into a separate compartment *d*, the base A and partitions *a c* being all cast in one piece.

Through the transverse partition *a*, opposite each compartment *d*, brass valve-seats *e* (see Fig. 5) are screwed, in which valves *g* are seated, the stems *h* of the valves running out through screw stuffing-boxes D in the base A, and ending with hand-wheels E, by which the valves may be operated to open or close communication between the compartment *b* and compartments *d*.

The openings through the end of the base A for the stuffing-boxes D will be large enough to permit the valve-seats *e* to be inserted through them and fitted into their places.

F is the main steam-supply pipe, which is arranged to lead into the compartment *b* from any point. By this arrangement the radiator is divided into as many separate sections as there are horizontal rows of pipes, and each section is provided with its own steam-supply compartment *d* and controlled by its own valve, so that any separate section may be supplied with steam or cut off at pleasure. Thus all or only a portion of the radiator may be used, which will be a very useful feature when it is required to reduce or increase the temperature, or when only a moderate degree of heat is required.

I am aware that it is not new to construct a steam-radiator with two or more rows of tubes, each row having its own steam-chamber, valve inlet and outlet, and I lay no claim thereto; but

What I claim as new is—

In a radiator, a base, A, divided by partitions *c* into a series of compartments, *d*, and by transverse partition *a* into an end compartment, *b*, in combination with independent rows of pipes B, opening into compartments *d*, supply-pipe F, and valves *g*, passing through compartment *b*, and controlling communication between compartments *b* and *d* through partition *a*, substantially as set forth.

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

THOMAS DAVIS.

Witnesses:
C. N. WOODWARD,
EDWARD ROTERT.