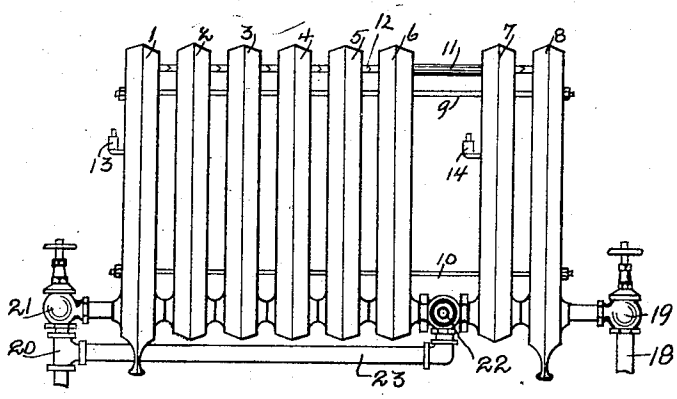
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RADIATOR

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## RADIATOR

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The device, the subject of this invention is a radiator, and particular objects of the invention are to construct and provide a radiator that may be operated either in part or as a whole.

It is well known that under certain conditions and particularly when the exterior temperature is mild and yet not warm, that it is often desirable to maintain a certain amount of heating fluids circulating through a radiator and yet if the radiator is fully turned on the heat would become oppressive and disagreeable.

It is also well known that in certain types of systems it is not possible to partially turn off the valve which controls the supply of heating fluid to the radiator, as to partially turn off the valve would check the circulation to such an extent that high condensation would take place within the radiator, and as a result thereof, the radiator would soon become flooded and temporarily useless.

It is further well known that in systems where long radiators are employed or in systems where through circulation is present it is not economical or convenient to partially close the supply valve as to do this causes the radiator to act as a condenser lowering the efficiency of the system by filling the system full of water.

It is also well known that in hot-water systems the system operates most efficiently if full circulation through each radiator is allowed or if the radiator is to be turned off, that it be fully turned off.

To overcome the aforesaid objections and to provide a device which will meet all the necessary requirements, I have devised and constructed the radiator which I am about to describe, and the accompanying drawing should be referred to for a complete understanding of the specification which follows:—

In the drawing:—

The drawing shows a radiator arranged for a two-pipe system.

Similar reference numerals indicate like parts in the figure where they appear.

The radiator here shown is what may be termed an eight-section radiator, and in the figure the sections are numbered 1 to 8 inclusive, commencing with the left hand section. It will be noted that while the sections 1 to 6 inclusive are arranged, connected and secured in the ordinary manner, the sections 7 and 8 are separated from the remaining sections 1 to 6 by an intervening space.

Tie rods or bolts as shown at 9 and 10 are employed as usual and I provide a sleeve 11 adapted to pass over adjacent lugs on the sections 6 and 7, the lugs being shown at 12 are the lugs found on radiator sections.

I also provide the customary air valve 13 and I may provide an additional air valve as shown at 14 for a purpose that will appear later.

The construction shown is a two-pipe steam or vapor system, the supply pipe being shown at 18 through which the steam enters to pass through the valve 19 into the radiator, and normally the steam and water of condensation would pass through the discharge pipe 20 and valve 21. Between the sections 6 and 7 of this radiator, I place a valve 22 which is a three-way valve. This valve may cut off the steam from sections 1 to 6 inclusive, and at the same time open a passage through the by-pass pipe 23 of the system.

It will of course be understood that I may arrange the secondary valve 22, between any of the sections of a radiator, the number of isolated sections to be determined by the particular conditions under which the device is required to operate, and therefore modifications may be made within the scope of the appended claims without departing from the principle or sacrificing the advantages of this invention.

Having carefully and fully described my invention, what I claim and desire to secure by Letters Patent is

1. A radiator comprising a plurality of sections, certain of said sections being separated from other of said sections, all said sections being secured to form an integral radiator, a valve between said separated sections and the remaining sections and means for by-passing the circulatory medium around certain of said sections.

2. A radiator comprising a plurality of sections, certain of said sections being sep-

arated from other of said sections, all said sections being secured to form an integral radiator, a valve between said separated sections and the remaining sections and means for by-passing the circulatory medium around certain of said sections and air valves in each said group of sections.

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