

W. H. SWETT.
HEATING SYSTEM.
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1,024,161.

Patented Apr. 23, 1912.

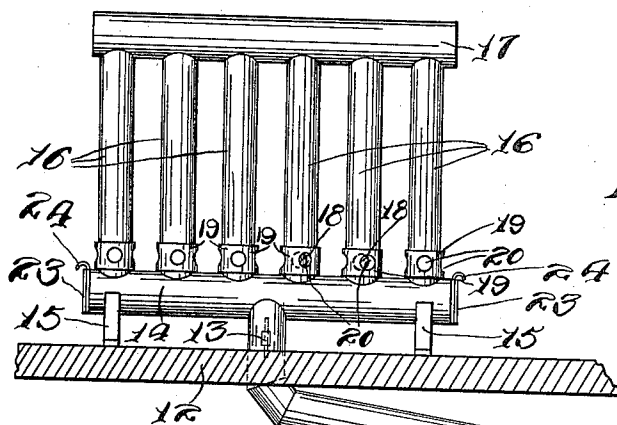


Fig. 1.

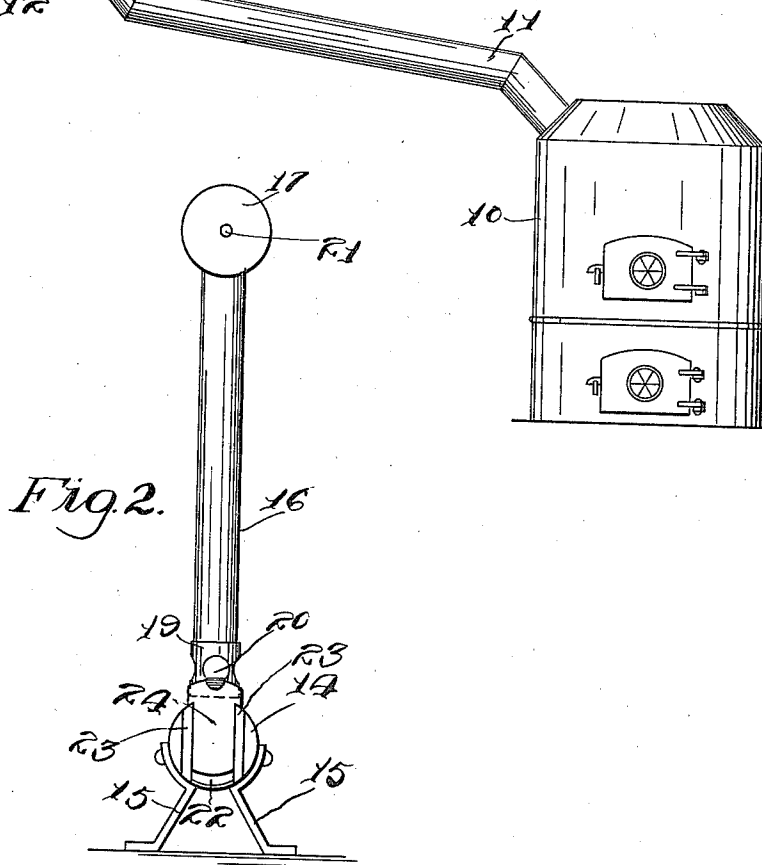


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

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HEATING SYSTEM.

1,024,161.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM HENRY SWETT, a citizen of the United States, residing at Berkeley, in the county of Alameda and State of California, have invented certain new and useful Improvements in Heating Systems, of which the following is a specification.

This invention relates to heating systems and the principal object of the same is to provide a heating system having a novel type of radiator so that heated air from the furnace can be used for heating the rooms.

In carrying out the objects of the invention, generally stated above, it will be understood, of course, that the essential features thereof are susceptible of changes in detail and structural arrangements, one preferred and practical embodiment of the invention being shown in the accompanying drawings, wherein:—

Figure 1 is an elevation of a furnace and of the improved radiator connected therewith. Fig. 2 is an end elevation of the radiator.

In the accompanying drawings the numeral 10 indicates a hot air furnace of any desired type which has a heat conveying flue 11 leading therefrom. It is of course, obvious that any number of flues may be provided. The flue 11 is carried through the floor 12 and has a damper 13 mounted in its upper portion. The radiator is connected with the upper end of the flue and comprises a lower cylinder 14 which is supported by means of the legs 15. A number of vertical pipes 16 lead from the lower cylinder and have their upper ends connected by a second cylinder 17 which is parallel with the cylinder 14. The lower ends of each pipe is provided with one or more openings 18 and a collar 19 surrounds the lower end of each of the pipes 16 and is provided with openings 20 adapted to be brought into registry with the openings 18. By turning the collars the size of the openings 18 can be regulated by bringing the openings 20 partially or wholly into registry with them or by moving the collars so

that the openings 18 will be entirely closed. The cylinder 17 has its ends each provided with an opening 21 so that heated air can pass out through the openings, thus permitting a draft through the radiator. Each end of the cylinder 14 is provided with a vertical opening 22 and has tracks 23 to each side of the opening so that a slide 24 may be mounted in each end of the cylinder. By raising the slides 24 the ends of the cylinder 14 may be opened so that heated air can escape through the cylinder directly into the room.

When using this device a fire is built in the furnace 10 and heated air passes through the flue 11 into the cylinder 14 from which it passes into the pipe 16 and into the cylinder 17. The heated air causes the radiator to be heated and thus heats the air in the neighborhood of the radiator. A portion of the heated air escapes through opening 21 and through the openings in the lower ends of the pipes 16 so that heated air enters the room. If it is desired to heat the room more rapidly the slides 24 are raised so that the heated air can pass directly from the cylinder 14 into the room. It will thus be seen that the room is heated not only by the radiator becoming hot, but also by the heated air escaping into the room through the openings 22. By turning the damper 13 the amount of heated air entering the radiator can be controlled.

What I claim is:—

1. A radiator comprising a lower cylinder, a plurality of vertical pipes leading from said cylinder, and provided with openings adjacent their lower ends, a collar surrounding each of said pipes and provided with openings adapted to be brought into registry with the openings in said pipe, and a cylinder connected with the upper ends of said pipes.

2. A radiator comprising a lower cylinder provided with vertical openings in its ends, and provided with tracks adjacent said openings, slides mounted in said tracks, a plurality of vertical pipes leading from said cylinder and provided with open-

ings adjacent their lower ends, collars surrounding the lower ends of said pipes and provided with openings adapted to be brought into registry with the openings of
5 said pipes, and a second cylinder connected with the upper ends of said pipes and provided with openings in its ends.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM HENRY SWETT.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."