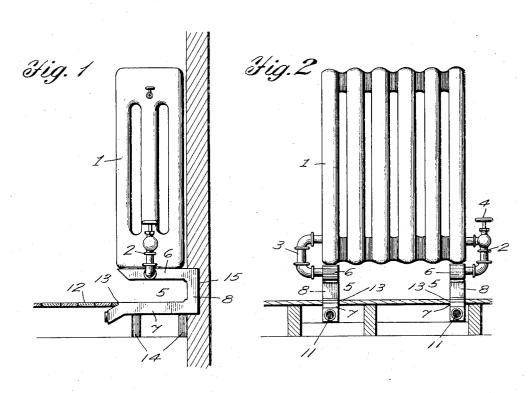
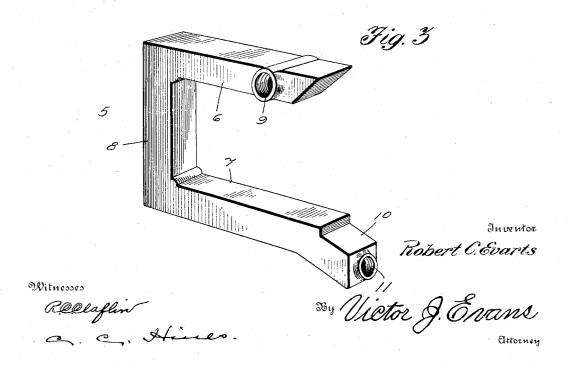
PATENTED MAR. 24, 1908.

No. 883,103.

R. C. EVARTS.
RADIATOR CONNECTION.
APPLICATION FILED JUNE 21, 1907.





## UNITED STATES PATENT OFFICE.

ROBERT C. EVARTS, OF BEAVER FALLS, PENNSYLVANIA.

## RADIATOR CONNECTION.

No. 883,103.

Specification of Letters Patent.

Patented March 24, 1908.

Application filed June 21, 1907. Serial No. 380,177.

To all whom it may concern:

Be it known that I, ROBERT C. EVARTS, a citizen of the United States of America, residing at Beaver Falls, in the county of 5 Beaver and State of Pennsylvania, have invented new and useful Improvements in Radiator Connections, of which the following is a specification.

This invention relates to improvements in 10 steam or hot water heating systems, and particularly to a connection for coupling the radiator with the supply and return pipes.

The radiators now in common use are carried by supporting feet resting upon the floor 15 and are connected by branch pipes with the supply and return pipes extending upwardly through the floor. This construction and arrangement of the radiators necessitates the cutting of carpets, oil cloth and other floor 20 coverings in order to fit around the pipes, while the feet of the radiator offer obstructions to the use of a brush or broom in cleaning out dust or dirt which may have accumulated beneath the radiator.

The object of the present invention is to provide a connection which will obviate these objections, and whereby the radiator will be supported above the floor and connections made with the circulating pipes beneath the floor, thus leaving the entire surface of the floor free to be cleaned and carpets or other coverings to be laid over the floor without cutting them to fit around the pipes or connections.

In the accompanying drawings illustrating the invention,—Figure 1 is an end elevation showing the application of the device to a radiator. Fig. 2 is a front elevation of the radiator, showing the arrangement of two 40 connections for supporting and connecting the same with the supply and return pipes.

Fig. 3 is a perspective view of one of the connections.

Referring to the drawing, 1 represents a 45 steam or hot water radiator of any preferred construction, and 2 and 3 the branch pipe connections for coupling the same to the supply and return pipes of the system, the former being provided with a valve 4 for 50 controlling the supply of the hot water or steam to the radiator.

The improved connection constituting the invention is in the form of a hollow conductor 5 comprising upper and lower horizontal 55 limbs 6 and 7 and a union or vertical limb

of the device. The upper limb 6 has a threaded aperture 9 at one side for connection with the branch pipe 2 or 3, while the lower limb, which is of relatively greater 60 length than the said upper limb, is provided at its outer end with a downturned portion 10 having a threaded opening 11 for connection with the supply and return pipes.

In the use of the invention, a pair of con- 65 nections or conductors are employed, the upper horizontal arms 6 forming a support bearing against the underside of the radiator at the ends thereof, as clearly shown in Fig. 2, whereby the radiator is supported above 70 the surface of the floor 12, while the lower limb 7 of each connection occupies an opening 13 formed in the floor and rests upon beams or supports 14 disposed below the same, with its end 10 projecting beneath the 75 adjacent edge of the floor for connection with the supply or return pipe. The vertical limb 8 may or may not be embedded in the wall or set into a suitable recess 15 therein, as shown in Fig. 1. By this arrangement a 83 clear floor surface will be provided beneath the radiator, whereby the disadvantages hereinbefore mentioned are obviated.

It will be understood that in the use of the device in a single pipe heating system in 85 which the steam is supplied to the radiator and water of condensation conducted back to the boiler through the same pipe, one of the connections alone will be connected with the pipe, while the other may have no other 90 function than to serve as a support. In a double pipe system in which one pipe serves as a supply conductor and the other as a return conductor, one of the connections will be coupled to the supply pipe and the other 95

to a return pipe in the manner shown.

The advantages of my invention will be apparent from the foregoing description, taken in connection with the drawings, and it will be seen that it provides a simple, inex- 100 pensive and effective device for the purpose. Having thus described the invention, what

is claimed as new, is:-

1. A combined support and pipe connector for radiators, comprising a casting having 105 an upper horizontal limb to support the radiator, said limb being provided with means for connecting it with a pipe communicating with the radiator, a lower horizontal limb adapted to occupy an opening in the floor 110 below the radiator and provided with a down-8 connecting the horizontal limbs at one end | turned portion for connection with a supply

or return pipe, and a vertical limb connecting the rear ends of the horizontal limbs.

2. A combined support and pipe connector for radiators, comprising a conductor b having integral upper and lower horizontal limbs, and a vertical limb connecting said horizontal limbs at one end, the upper horizontal limb being provided with a side aperture for connection with a pipe communicat-10 ing with the radiator, and the lower horizontal limb having a depending portion provided with an opening for connection with a supply

or return pipe. 3. A combined support and pipe connec-

15 tor for radiators, comprising a substantially U-shaped casting, the upper limb of the casting having a side opening and the lower limb a downwardly offset terminal provided with

an opening.

4. A combined support and pipe connector for radiators, comprising a U-shaped conductor, having upper and lower horizontal limbs and a vertical limb connecting the horizontal limbs at one end of the device, said

25 limbs being integral with each other, the upper limb being provided with a side opening and the lower limb with an offset termi-

nal having an opening.

5. A combined support and pipe connec-30 tor for radiators, comprising a substantially U-shaped casting, forming upper and lower horizontal arms and a vertical arm connecting said horizontal arms at one end of the connector, the upper horizontal arm being 35 adapted to support the radiator above the floor line and being provided with a side opening for connection with a pipe communicating with the radiator, and the lower hori-

zontal arm being adapted to fit within an opening in the floor below the radiator, and 40 provided at its free end with a downwardly projecting terminal having an opening for connection with a supply or return pipe.

6. The combination with a floor having openings therein, of a radiator supported 45 above the openings, and conductors having upper limbs arranged above the floor and supporting the radiator, said limbs having means for connecting the same with pipes communicating with the radiator, lower 50 limbs arranged with the floor openings and lying flush therewith, said limbs being provided below the floor line with means for connecting the same with supply or return pipes, and a vertical connection between the upper 55 and lower limbs of each support lying in rear of the radiator.

7. The combination with a floor having openings therein and a radiator, of conducting supports for the radiator, each of said 60 supports forming a duct having an upper limb disposed above the floor and upon which the radiator rests, a lower limb arranged within the adjacent opening in the floor and provided beneath the same with 65 means for connection with a pipe, the upper limb being connected with the radiator, and a vertical limb connecting said upper and lower limbs and arranged in rear of the plane of the radiator.

In testimony whereof, I affix my signature

in presence of two witnesses

ROBERT C. EVARTS.

Witnesses:

A. R. LEYDA. HENRY BLOOM