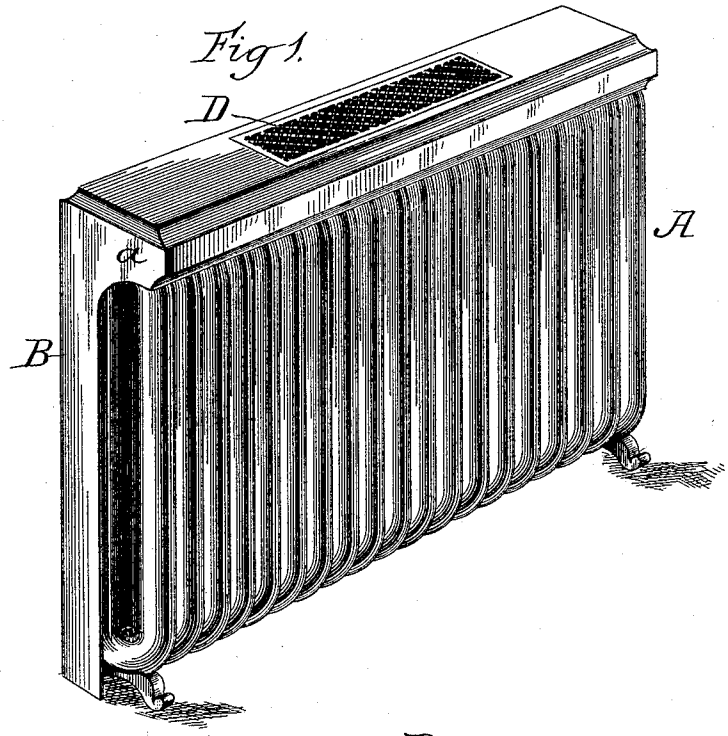
(No Model.)

E. KIRK, Jr.

DEFLECTOR FOR RADIATORS.

No. 484,638. Patented Oct. 18, 1892.

Fig 1.



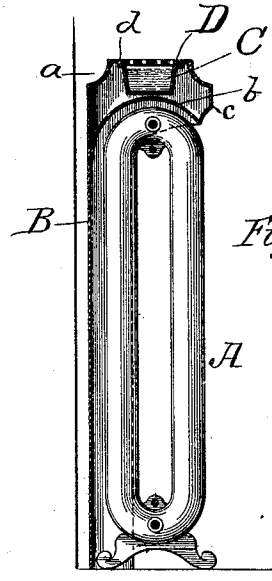


Fig 2.

Witnesses
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UNITED STATES PATENT OFFICE.

EDWARD KIRK, JR., OF CHICAGO, ILLINOIS.

DEFLECTOR FOR RADIATORS.

SPECIFICATION forming part of Letters Patent No. 484,638, dated October 18, 1892.

Application filed April 4, 1892. Serial No. 427,679. (No model.)

To all whom it may concern:

Be it known that I, EDWARD KIRK, Jr., of Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Deflectors for Radiators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Heretofore deflectors for radiators have been constructed, mainly, to direct the rising hot-air current generated by the radiator out into the room, so as to avoid discoloring the adjacent walls back of the same. This the old-style deflectors do to a great extent, but fail to accomplish wholly. It is therefore the object of my invention to avoid noticeable discoloration of the walls altogether and to deflect the heat, so that whatever discoloration does take place in the room will be evenly distributed, and consequently not be particularly noticeable and offensive to the eye.

My invention has as a further object the rendering of the heated air humid and agreeable, instead of dry and rasping, as is usually the case, substantially as hereinafter fully described, and as illustrated in the drawings, in which—

Figure 1 is a perspective view of my invention. Fig. 2 is a transverse vertical section therethrough.

Referring to the drawings, A represents the pipes or coils of a radiator, which are usually arranged vertically in series, as shown, and are supported by suitable feet or legs above the floor.

B represents the deflector, which is generally placed between the wall and the radiator, so as to protect the walls from the direct heat.

The deflector may be of any desired design to enable it to deflect the heat of the radiator (no matter what construction the latter may be) outward; but so far as the application to it of my improvements is concerned it always should have a vertical partition-wall, which is interposed between the radiator and the wall of the room, and always should have a hood *a* overhanging the top of the radiator and projecting out far enough to direct the hot-air currents outward into the room. I prefer, also, that it be provided with end walls, which walls should be in the sides of the radiator. At least it must have the ends of the hood closed.

The hood of my improved deflector is built up higher than those of the usual run of deflectors, so as to permit of the introduction of my improvements and incidentally to permit of a more graceful and ornamental design. In order to deflect the heat directly out from this hood, I provide the same with a false roof *b*, which conforms to the shape of the top of the radiator and arches over the same and which connects the rear wall of said deflector and drop-wall *c* of the front of the hood, as shown. Thus between the false roof *b* and the top of the hood is a hot-air space or chamber, in which the temperature of the radiator is somewhat modified, so that, if desired, articles capable of withstanding a moderate degree of heat can be placed on the top of said hood. The reduction of the temperature of the top of this hood *a* is accomplished to a still greater extent by means of the water-pan C. This water-pan is located immediately under the top of the hood, to which it is preferably attached, and may extend under the entire length of the same or under only a portion thereof. This pan is preferably made of copper, so as not to oxidize, and is supplied with water at intervals, as needed, through the opening *d*, which is covered by the cover D, made, preferably, of cast-metal fretwork. The water in pan C vaporizes slowly, but sufficient to render the heat of the room in which said radiator is placed humid and agreeable. Besides doing this, the current of vapor rising through the fretwork-cover D from the pan effectually serves as a screen to protect the walls back of said radiator from the more or less dusty hot-air current in front of it arising from under the hood of the deflector. It is a well-known fact that the dry heated air generated by radiators always carries small particles of dust with it, which, as said hot air arises, are deposited and adhere to the walls back of and adjacent to said radiators, and these dry hot-air currents from the same, even when the radiators are provided with the old-style deflectors, swerve back toward the walls and discolor them. This, as experience has amply demonstrated, it does not do when an

upward current of vapor-laden air is interposed between said dry hot-air current and the wall.

If desired, the false roof of the hood of my improved deflector might be dispensed with. I much prefer its use, however, because then the hood is made less of a hot-air drum, the water in the pan does not vaporize too fast, and the hot air from the radiator is deflected outward in a better manner than it would otherwise be.

What I claim as new is—

1. The combination, with a radiator, of a deflector having a hood overhanging said radiator and provided with a false roof which arches over the top of the radiator and connects the front and rear walls of said hood, and a water-pan secured to the top of the hood above said false roof, from which the vapor arises and escapes through said hood, as set forth.

2. The combination, with a radiator, of a deflector consisting of a vertical wall interposed between said radiator and the adjacent walls of the room, the hood supported by said vertical wall and overhanging said radiator, the top of which is provided with a suitable opening therein, a false roof arching over the top of said radiator and connecting the front and rear walls of said hood, a water-pan secured to the top of said hood beneath said opening, and a fretwork-cover for said opening, as set forth.

EDWARD KIRK, JR.

Witnesses:
ROBERT R. PRYOR,
FRANK D. THOMASON.