

(No Model.)

S. S. CLARK.
HOT AIR DEFLECTOR.

No. 554,909.

Patented Feb. 18, 1896.

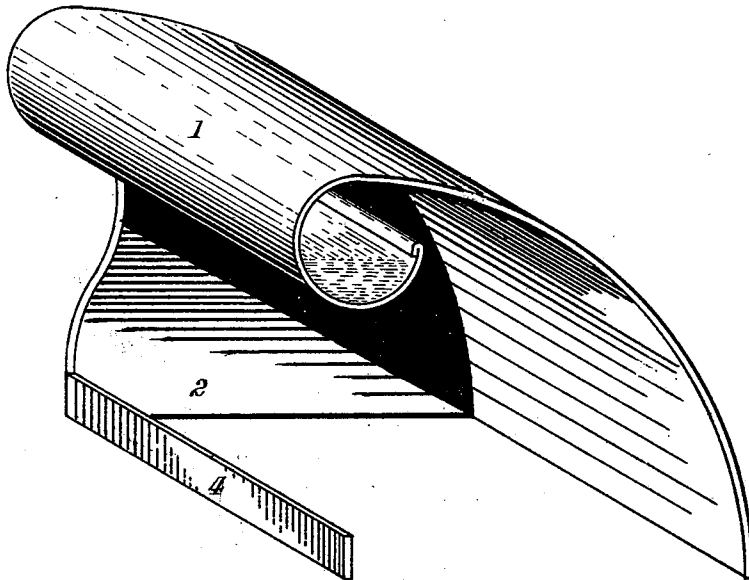


Fig. 1.

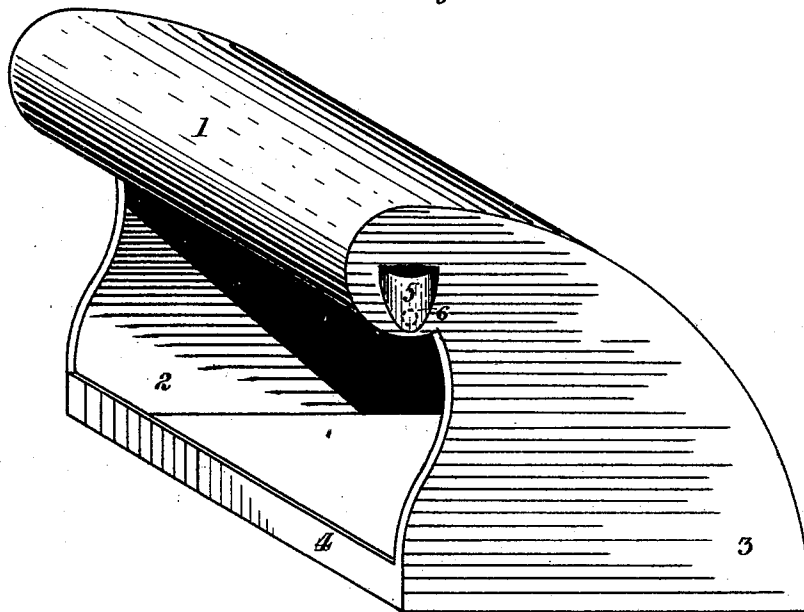


Fig. 2.

WITNESSES

D. H. Phelps
C. E. Humphrey

By His
ATTORNEY,

INVENTOR,
Samuel S. Clark:

C. E. Humphrey

UNITED STATES PATENT OFFICE.

SAMUEL S. CLARK, OF AKRON, OHIO.

HOT-AIR DEFLECTOR.

SPECIFICATION forming part of Letters Patent No. 554,909, dated February 18, 1896.

Application filed November 1, 1895, Serial No. 567,568. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL S. CLARK, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented a certain new and useful Improvement in Hot-Air Deflectors, of which the following is a specification.

My invention relates to the construction of hot-air deflectors for radiators, registers, &c., and has for its objects the production of a deflector which shall possess all the properties of the ordinary bent sheet-iron deflectors, and combine therewith an open tank of water into which all dust arising with the heated air on the under side of the deflector will lodge.

To the aforesaid objects my invention consists in the peculiar and novel construction, combination, and arrangement of the various parts hereinafter described, and then specifically claimed, reference being had to the accompanying drawings, forming a part of this specification.

In the accompanying drawings, in which similar reference-numerals indicate like parts in both views, Figure 1 is a perspective view with the nearer side removed to better illustrate the interior construction, and Fig. 2 a perspective of a complete deflector.

In the drawings, 1 is a wide piece of thin sheet metal bent in an involute curve, one end terminating in a sharp inturned curve of much less radius than the remaining portion thereof. This small curved portion is turned under and then up again, so as to nearly meet the concave side of the larger curve.

Each end is covered by side plates 2 and 3 of the same or stiffer metal, and are so cut as to conform generally to the configuration just described for the curved side 1. On the inner or side placed away from the walls of the building (the radiators or registers being usually placed close to the walls of the room) is a strap of metal 4, serving to hold the sides 2 and 3 firmly in place; but this is not absolutely necessary.

The inturned portion of plate 1 I fill with water, and it is expected that this will be kept filled at all times, and in order to determine whether it contains the required amount of water and also to furnish an easy method of filling the same I place on the outside of one of plates 2 or 3 a cup-shaped pocket 5, the side plate having an opening 6 near the bottom of this pocket to permit the water poured into it an entrance into the tank formed by the curved top, and also to serve as an indicator of the amount of water in it. The hot air arising from the register coming up through the open bottom of the deflector strikes its concave portion and passes along its surface around over the water and down and out its open side into the room, and during its passage the particles of dust reaching the highest portion of the concave part are precipitated into the water, there to remain until removed. The water being kept warm rapidly evaporates, and keeps the air in the room moist, preventing the extreme dryness incident to the use of hot-air furnaces.

What I claim is—

1. A deflector for hot air consisting of a pair of vertical side plates and a curved portion forming one side and top, said curved portion being bent downwardly to nearly form a circle, forming with said sides a tank for water, substantially as shown and described.

2. A deflector for hot air, consisting of an involute curved portion ending at the top in a sharp inturned part forming a tank with the sides, a pair of vertical side plates, and a pocket on one of said side plates connected by an orifice with said tank portion, substantially as shown and described.

In testimony that I claim the above I hereunto set my hand.

SAMUEL S. CLARK.

In presence of—

C. E. HUMPHREY,
C. P. HUMPHREY.