No. 723,433. PATENTED MAR. 24, 1903.

E. H. AREND.

REGISTER FASTENER.

APPLICATION FILED APR. 10, 1902.

NO MODEL.

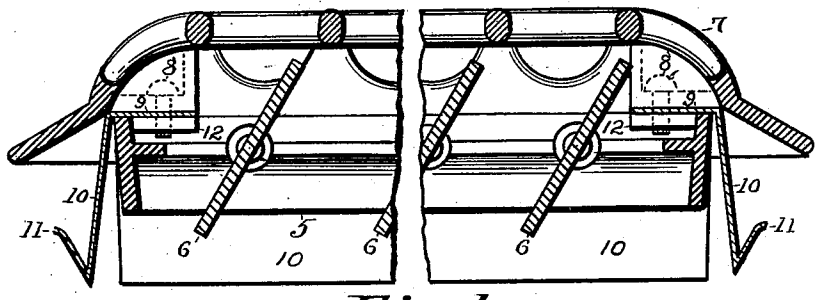


Fig. 1.

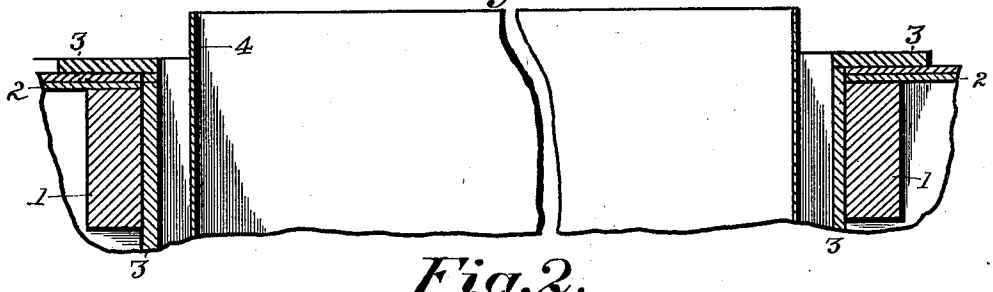


Fig. 2.

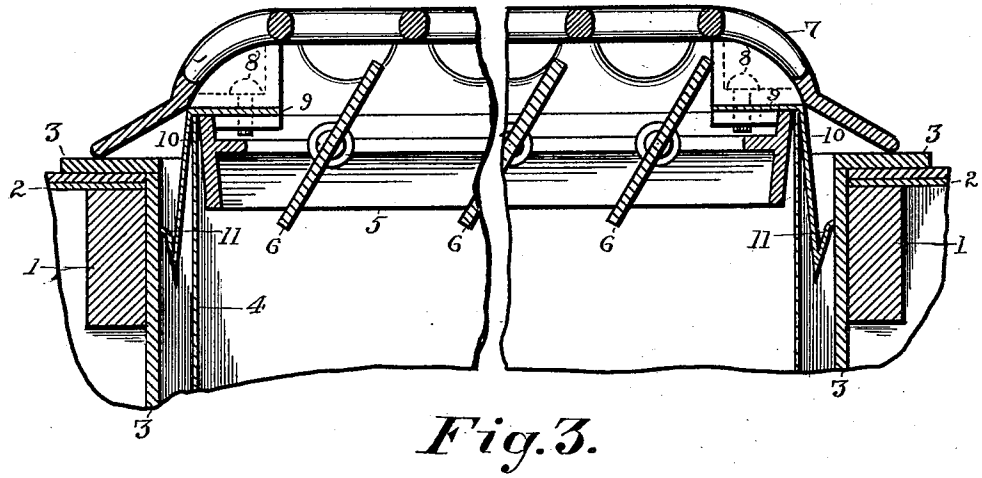


Fig. 3.

Witnesses:

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDWARD H. AREND, OF AKRON, OHIO, ASSIGNOR OF ONE-HALF TO FRANK J. MISHLER, OF AKRON, OHIO.

REGISTER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 723,433, dated March 24, 1903.

Application filed April 10, 1902. Serial No. 102,187. (No model.)

To all whom it may concern:

Be it known that I, EDWARD H. AREND, 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 Register-Fasteners, of which the following is a specification.

My invention has relation to improvements in devices for holding hot-air registers in place either in the floor or a side wall and particularly the latter.

The object of my invention is to produce a new and improved device of the nature stated that will be simple in construction, will hold the register by an elastic spring-pressure against dislodgment from jarring or accidental cause, but be sufficiently yielding to permit the withdrawal when desired, and which will perform the further function of protecting the surrounding woodwork from scorching or danger of fire from excessive heat in the register and prevent the entrance of smoke or dust around the register and confine the heat to the register-box.

To the accomplishment of the aforesaid object my invention consists in the peculiar and novel construction, arrangement, and combination of parts hereinafter described and then specifically pointed out in the claims, reference being had to the accompanying drawings, which form a part of this specification.

In the accompanying drawings, in which similar reference-numerals indicate like parts in the different figures, Figure 1 is a section of a detached register in longitudinal section and provided with my device; Fig. 2, a section of a side wall provided with the usual tin register-box, and Fig. 3 a similar section of the two combined.

Referring to the figures, 1 1 are sections of studding; 2 2, the lath; 3 3, the wood casing of the register-hole, and 4 the ordinary tin register-box, in which rests the lower half 5 of the register, in which is pivotally mounted the leaves 6 and on top of which is secured the open-work part or top 7 in the ordinary manner by screws 8. (Indicated by dotted lines.)

My device consists of a sheet-metal frame, preferably of tin, with a flat top 9 of like configuration as the top of the lower half 5 of the register, from the outer line of which it is bent downward at an obtuse angle, forming an apron 10, which extends for some distance downward and thence acutely upward (forming with the downward part a V shape in section) for a short distance and thence outward, constituting an edge 11 to engage the inner faces of the casing 3. The parts are united by placing the flat top 9 in the lower half 5 of the register, where it rests on corner-lugs 12. These lugs have screw-threaded openings to receive the screws 8, and the flat top 9 has corresponding but larger smooth openings, and the screws 8 bind these several parts together. The parts are so constructed that the area inclosed by the edges 11 is greater than the interior cross-sectional area of the casing 3, or, in other words, the distance between opposite edges 11 is greater than the distance between similar interior surfaces of the casing 3, so that when the register is placed this edge has to spring inward to enter the casing and when in place the resiliency of the apron and upturned part forces the edge 11 against the interior of the casing, thus holding the register in place, leaving an air-space between the casing and apron, which forms a safeguard for the woodwork against excessive heat in the register-box and register.

This device may be applied to all forms of registers, either polygonal or round.

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

1. An improved device for holding registers which consists of a sheet-metal apron or similar device to be connected with the register extending at an obtuse angle with the top of the lower half of the register, adapted to enter the register-casing and having an upturned part with an edge, said apron and upturned part to be compressed by being forced into the casing; and said edge to engage the interior of said casing by resiliency of said apron and upturned part.

2. An improved device for holding registers, which consists of a flaring apron to be connected with the register, having an outwardly-extending edge, to be compressed to enter the register-casing and to engage it, to protect the casing and prevent the escape of the register, substantially as shown and described.

3. The combination with a hot-air register comprising an open-work top and a frame for it to rest on, of a sheet-metal frame having a narrow flange about its top to rest between the top and frame of the register, the lower part of said frame being bent backward and outward, terminating in an outward-turned edge, the area inclosed by said edges being greater than the interior cross-sectional area of the casing to receive it, to engage the interior of the casing by its own resiliency, substantially as shown and described, and for the purpose specified.

In testimony that I claim the above I hereunto set my hand in the presence of two subscribing witnesses.

EDWARD H. AREND.

In presence of—
C. E. HUMPHREY,
C. P. HUMPHREY.