

No. 770,074.

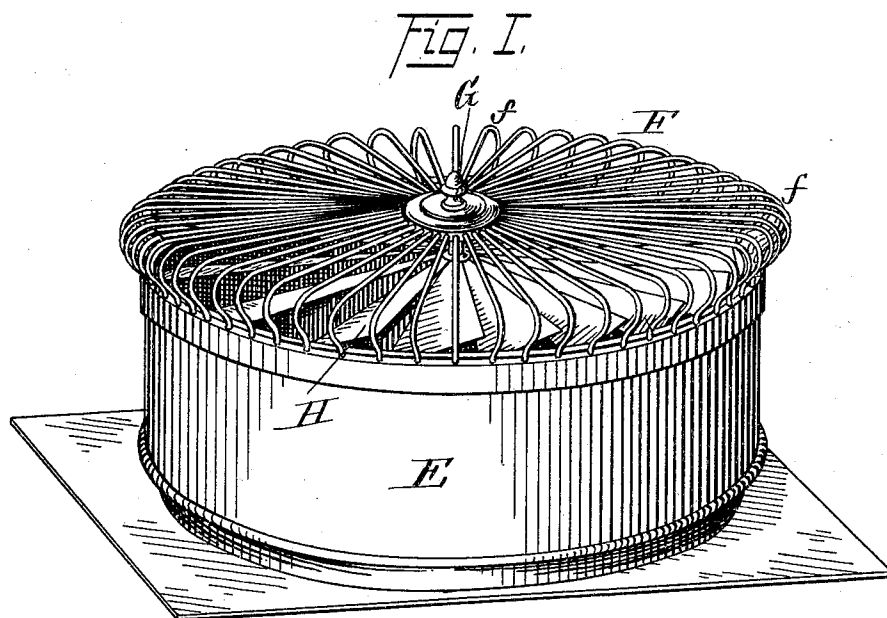
PATENTED SEPT. 13, 1904.

W. A. & M. D. KILMER & M. A. POSSONS.
ATTACHMENT FOR HOT AIR REGISTERS.

APPLICATION FILED SEPT. 9, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

F. L. Curand

W. S. Boyd.

Inventors.

W. A. Kilmer.

M. D. Kilmer.

M. A. Possons.

per W. H. Singleton,

Attorney.

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2 SHEETS—SHEET 2.

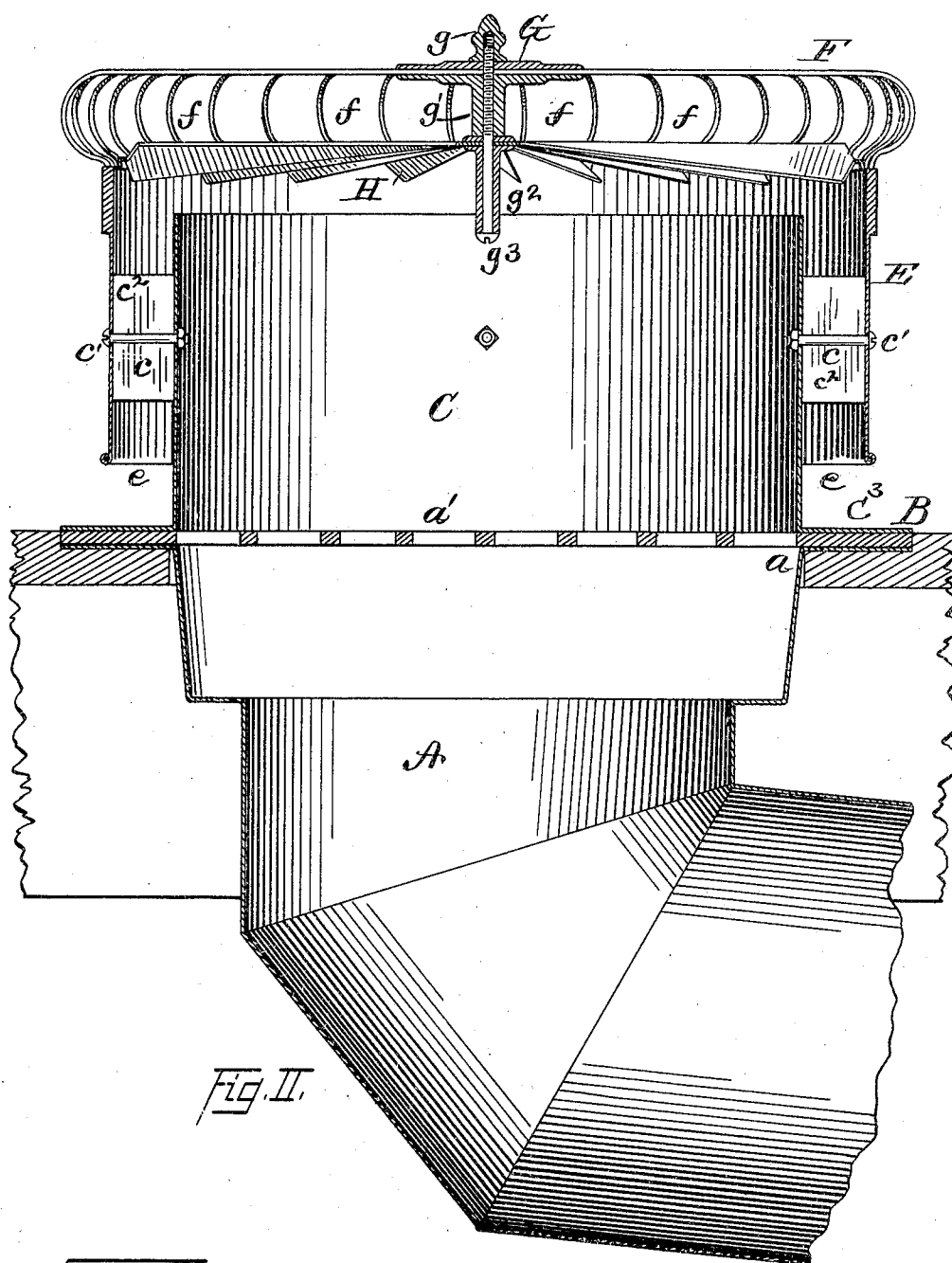


Fig. II.

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UNITED STATES PATENT OFFICE.

WILLIAM A. KILMER, MELVIN D. KILMER, AND MINARD A. POSSONS, OF
CLEVELAND, OHIO.

ATTACHMENT FOR HOT-AIR REGISTERS.

SPECIFICATION forming part of Letters Patent No. 770,074, dated September 13, 1904.

Application filed September 9, 1903. Serial No. 172,536. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM A. KILMER, MELVIN D. KILMER, and MINARD A. POSSONS, citizens of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Attachments for Hot-Air Registers, of which the following is a specification.

This invention relates to a new and useful improvement in attachments for hot-air registers. It is designed to produce a device in which there will be induced a better circulation of hot air to cause the cold air from the floor to rise and to be put again into circulation with the hot air, thereby maintaining a better and more equable temperature.

The invention consists in the construction hereinafter pointed out.

In the annexed drawings, Figure 1 is a perspective view of the device. Fig. 2 is a transverse section taken on a diameter.

In the drawings the letter A indicates a hot-air pipe leading from a furnace and opening at *a* through the floor B of a room where there may be a grid *a'*. Over the opening is secured a shell C, having its base *C*³, from which project bolts *c*, to the outer ends *c'* of which is secured the cap E, there being spacing-blocks *c*², through which the bolts *c* pass. The cap E is spaced away from the base *C*³, as at *e*. At the top it has a number of wires or bars F, which extend across the top of the cap E, there being spaces *f* between the bars F. At the center where the bars F cross one another there is secured a center piece G and an inside body *g'*. Under the wires or bars F there is secured to this center piece G a fan H, having attached thereto hollow stem *g*². The cap-nut *g* is placed above the wires or bars F. The inside body *g'* is fastened against the wires or bars on the under side. The fan H is placed against the body *g'* and is held by the bolt *g*³, which is threaded in the body *g'* and is securely locked by cap-nut *g*.

In use the hot air passes up through the pipe A and out through the top of the cap E,

the fan H being revolved by the outward rush of the hot air. As the hot air in passing out through the shell C rotates the fan H the rotation of the fan causes a suction around the outside of shell C, thereby inducing the cold air around the base to rise and commingle with the hot air which is distributed through the room, producing a better and more equable temperature throughout.

By the present improvement cold air is drawn from the floor of a room and put in circulation with the hot air, thereby tempering and more evenly maintaining the temperature throughout.

Having described our invention, what we claim is—

1. As a new article of manufacture, an improved hot-air register consisting of the shell, C, having a hot-air inlet and a hot-air outlet, the cap, E, around the shell, C, secured to said shell, there being a space between the cap, E, and shell, C, forming a cold-air passage within the cap and having a cold-air inlet and a cold-air outlet, the hot and cold air outlets coming together, and a fan, H, located where the two air-outlets come together.

2. The combination of the shell, C, having a hot-air inlet and a hot-air outlet, the cap, E, around the shell, C, secured to said shell, and the shell, C, forming a cold-air passage within the cap and having a cold-air inlet and a cold-air outlet, the spacing-blocks, *c*², between the cap, E, and the shell, C, the hot and cold air outlets coming together, and the fan, H, located where the two air-outlets come together, as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

WILLIAM A. KILMER.
MELVIN D. KILMER.
MINARD A. POSSONS.

Witnesses:

C. H. DAVIS,
WM. VOGT.