

No. 689,697.

Patented Dec. 24, 1901.

W. S. TUTTLE.
SMOKE PIPE REGISTER.
(Application filed Nov. 13, 1900.)

(No Model.)

Fig. 3.

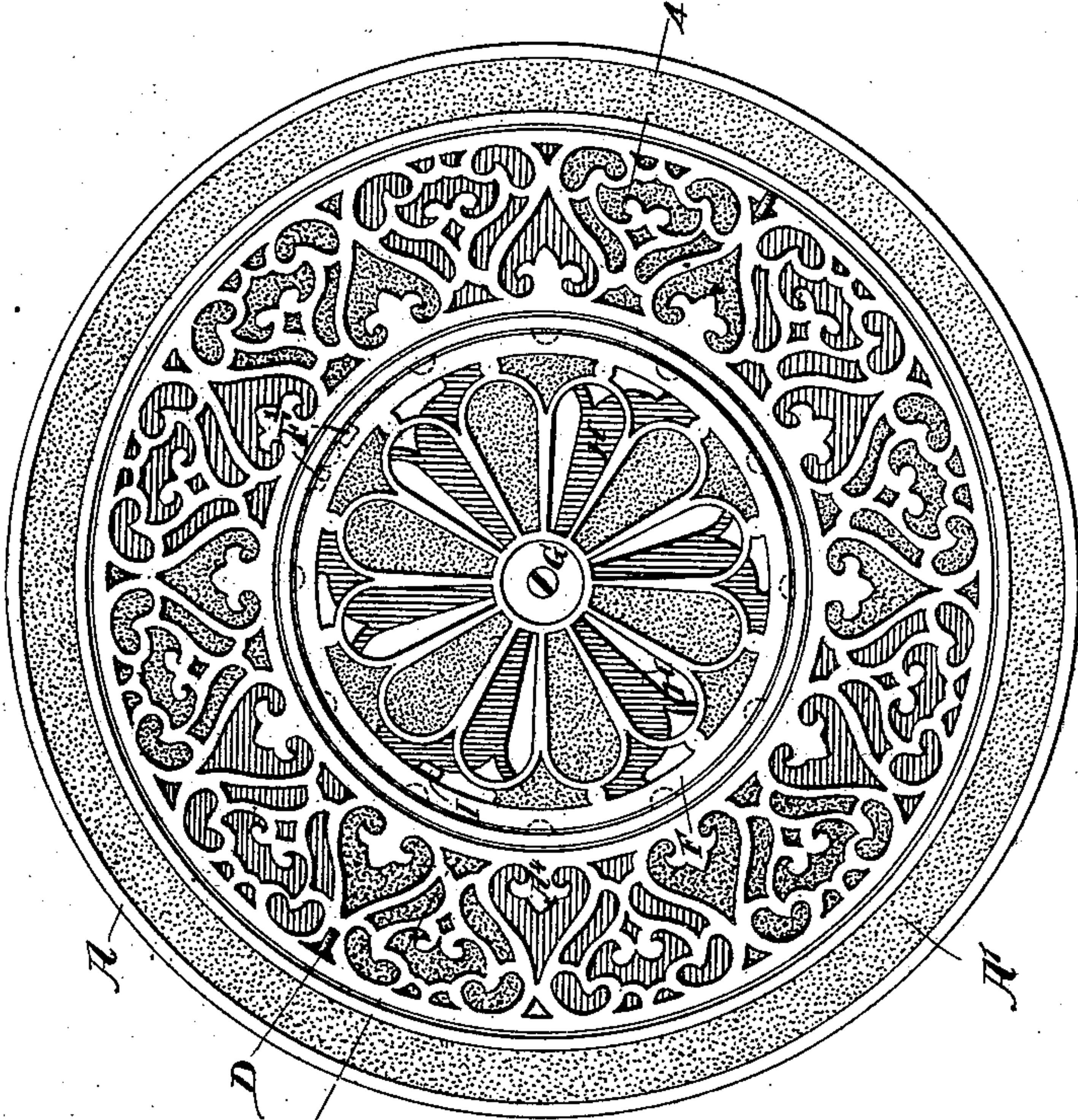
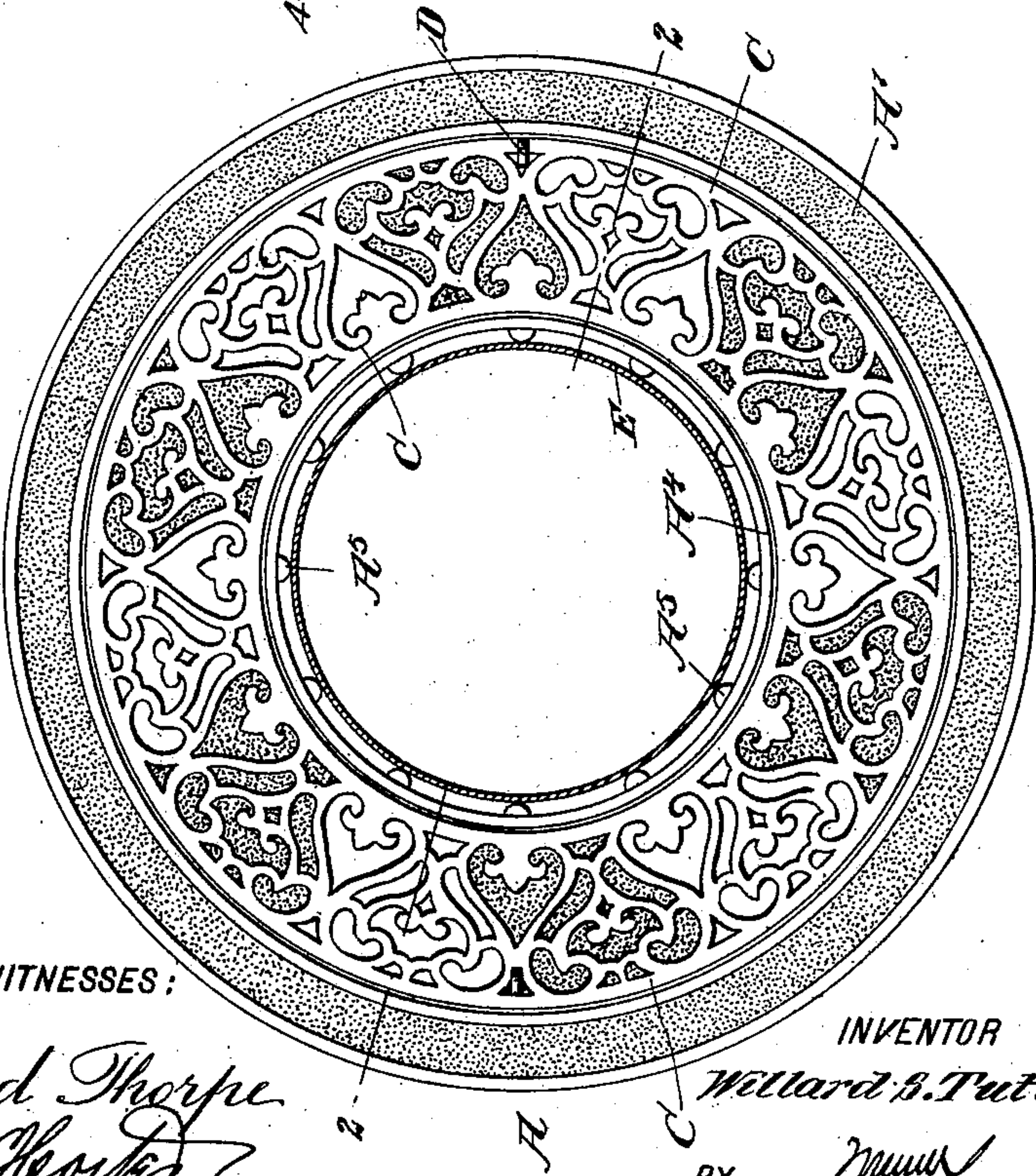


Fig. 1.



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Fig. 4.

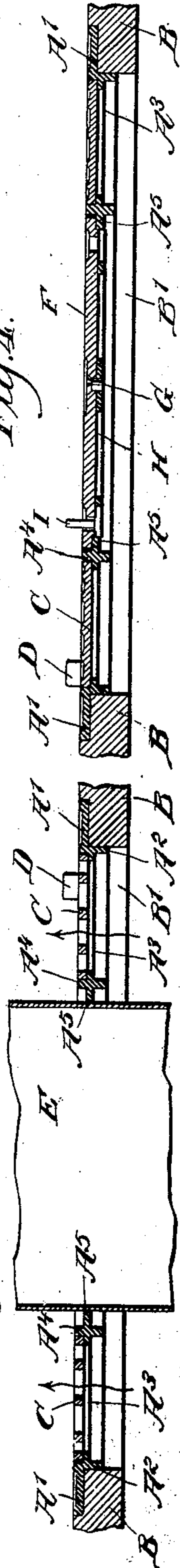


Fig. 2.

UNITED STATES PATENT OFFICE.

WILLARD S. TUTTLE, OF BROOKLYN, NEW YORK.

SMOKE-PIPE REGISTER.

SPECIFICATION forming part of Letters Patent No. 689,697, dated December 24, 1901.

Application filed November 13, 1900. Serial No. 36,367. (No model.)

To all whom it may concern:

Be it known that I, WILLARD S. TUTTLE, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Smoke-Pipe Register, of which the following is a full, clear, and exact description.

The invention relates to heating-drums or smoke-pipes usually extending from a room through the ceiling and the floor above into an upper room and connecting with the chimney to carry off the smoke and gases and radiate heat into the room above to heat the same.

The object of the invention is to provide a new and improved smoke-pipe register for holding a smoke-pipe in position in the floor and arranged for obtaining desired control of the heated air passing from a room below to the room containing the register.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claim.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the improvement with the smoke-pipe shown in position and in section. Fig. 2 is a sectional side elevation of the same on the line 2 2 in Fig. 1. Fig. 3 is a plan view of the improvement with the smoke-pipe removed and the center piece in position, and Fig. 4 is a sectional side elevation of the same on the line 4 4 in Fig. 3.

The improved smoke-pipe register consists, essentially, of a register-body A, having an annular flange A', resting on the floor B, and an annular flange A², extending downwardly and fitting against the wall or opening B' in the floor B. (See Figs. 2 and 4.) From the flanges A' A² extends inwardly an annular perforated portion A³, over which operates a ring-shaped perforated regulator C, adapted to be turned by the operator engaging a knob or handle D, integral with the regulator C. By turning the regulator C its perforated portions can be moved to coincide with the perforations in the portion A³ of the register-body

A, so that communication can be established through the body when the perforations coincide, or the communication be cut off when the perforations are moved out of coincidence by the operator turning the regulator C accordingly.

The inner portion of the regulator-body is ring-shaped, as shown at A⁴, and from this ring extend inwardly-spaced lugs or projections A⁵, forming abutments for a smoke-pipe E to hold the same in position and to leave sufficient space between the ring and the smoke-pipe for the circulation of heat from the lower room up to the upper room along the outside of the smoke-pipe, as will be readily understood by reference to Figs. 1 and 2.

When the smoke-pipe E is not in position—say during the summer—then the central opening in the register is closed by a center piece F, having perforations and resting on the lugs or projections A⁵, thus forming a seat for the center piece. The outer edge of the center piece fits close to the ring-shaped inner end A⁴ of the register-body, thus enabling the register to be closed perfectly.

In the center of the center piece F is arranged a pivot G, on which is mounted a perforated regulator H, extending, preferably, on the under side of the center piece and having a handle I, reaching through one of the perforations in said center piece, to permit the operator to turn the regulator H and bring its perforations in or out of coincidence with the perforations in the center piece. On the under side of the center piece F are arranged a pair of depending lugs F', spanning one of the projections or lugs A⁵, so that the center piece is held against movement when the operator manipulates the handle I for turning the regulator H. When the center piece is in position, communication between the lower and upper room by way of the register can be entirely shut off by turning the regulators C and H into such positions that their perforations do not coincide with the perforations in the body portion A³ and the center piece F, and when it is desired to establish communication between the two rooms then such communication can be had either at the body portion by turning the regulator C or at the center piece by turning the regulator H or by turning both regulators, if desired. Thus

the register can be entirely closed to cut off communication between the two rooms, or it can be partly or fully opened, as desired, to establish more or less circulation of air between the two rooms by way of the register. Hitherto this has been accomplished by having two center pieces, one solid and one open. To open or close the center, it was necessary to substitute the one for the other. It is understood that when the smoke-pipe is taken out the center piece can be readily placed in position, and when it is again desired to use the smoke-pipe the center piece can be taken out and stored away until it is required.

15 Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

A smoke-pipe register, comprising an an-

nular perforated plate provided with a regulator adapted to cover the perforations and 20 with projections on its inner periphery a perforated center piece adapted to be seated upon the said projections and carrying a rotatable plate adapted to cover the perforations, said center piece being provided with lugs coact- 25 ing with the projections on the annular plate to prevent relative movement of center piece and plate, as set forth.

In testimony whereof I have signed my name to this specification in the presence of 30 two subscribing witnesses.

WILLARD S. TUTTLE.

Witnesses:

THEO. G. HOSTER,
EVERARD BOLTON MARSHALL.