

No. 646,327.

Patented Mar. 27, 1900.

J. H. THERIEN.
DRYING ROOM.

(No Model.)

(Application filed Jan. 3, 1899.)

2 Sheets—Sheet 2.

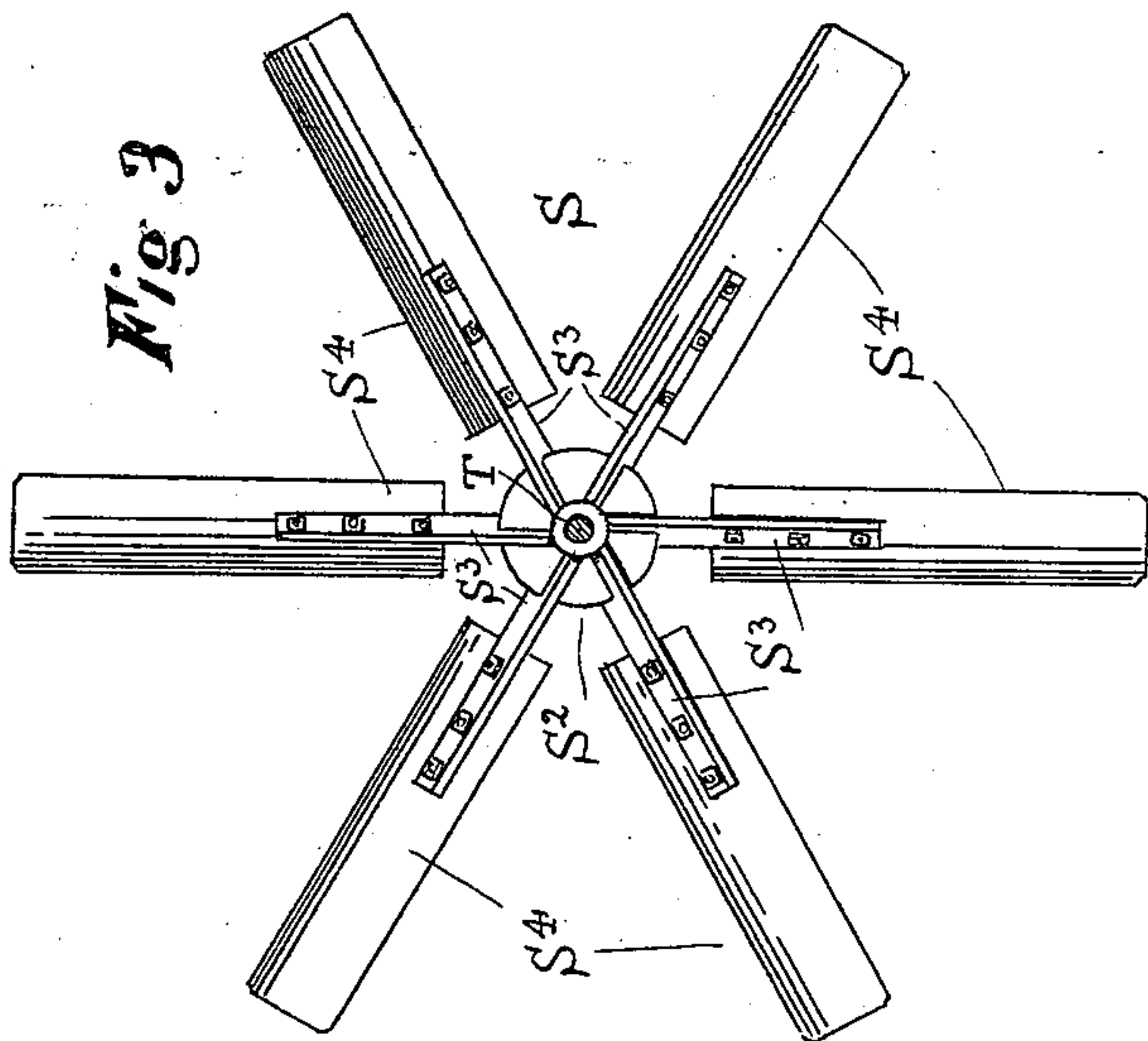


Fig. 3.

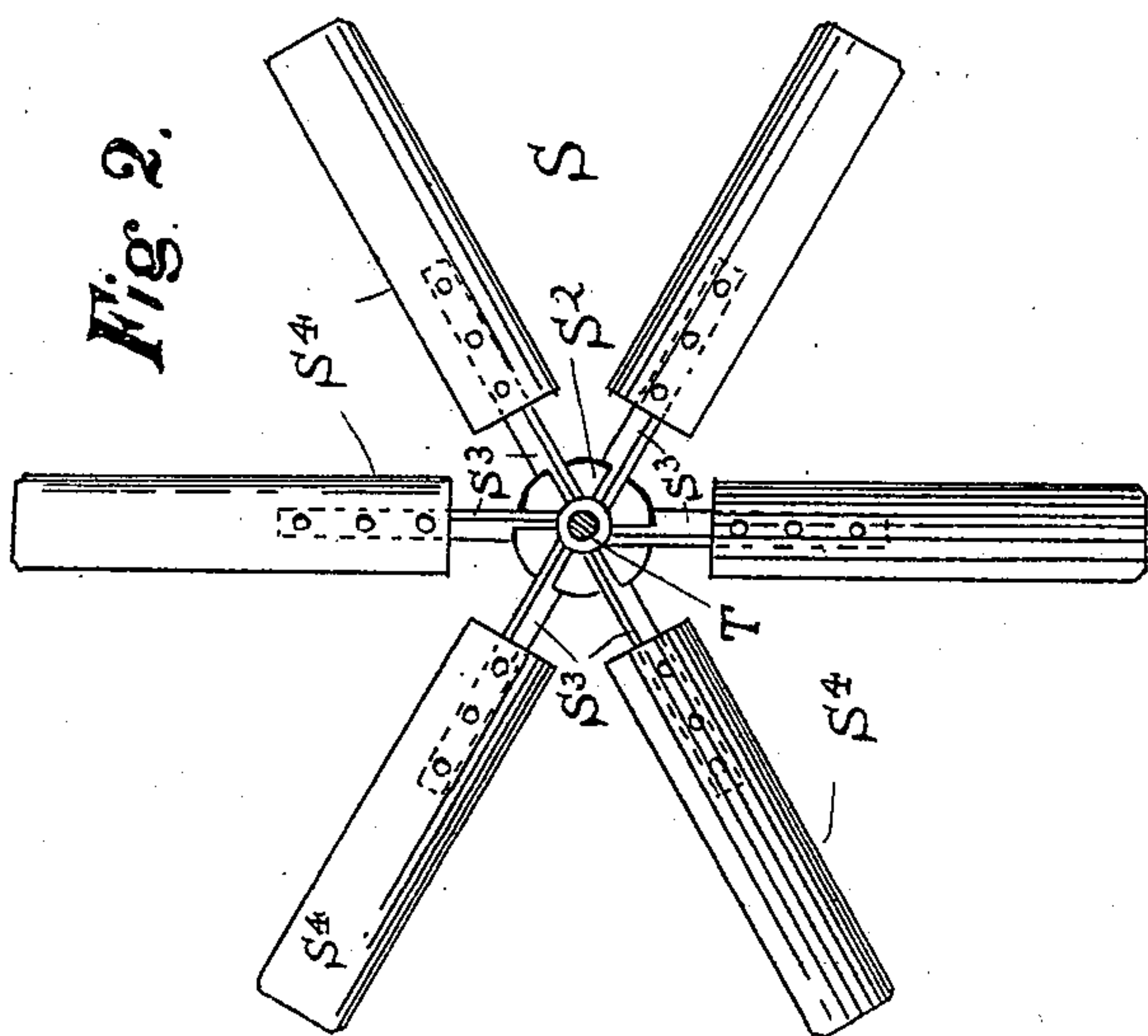


Fig. 2.

Fig. 4.

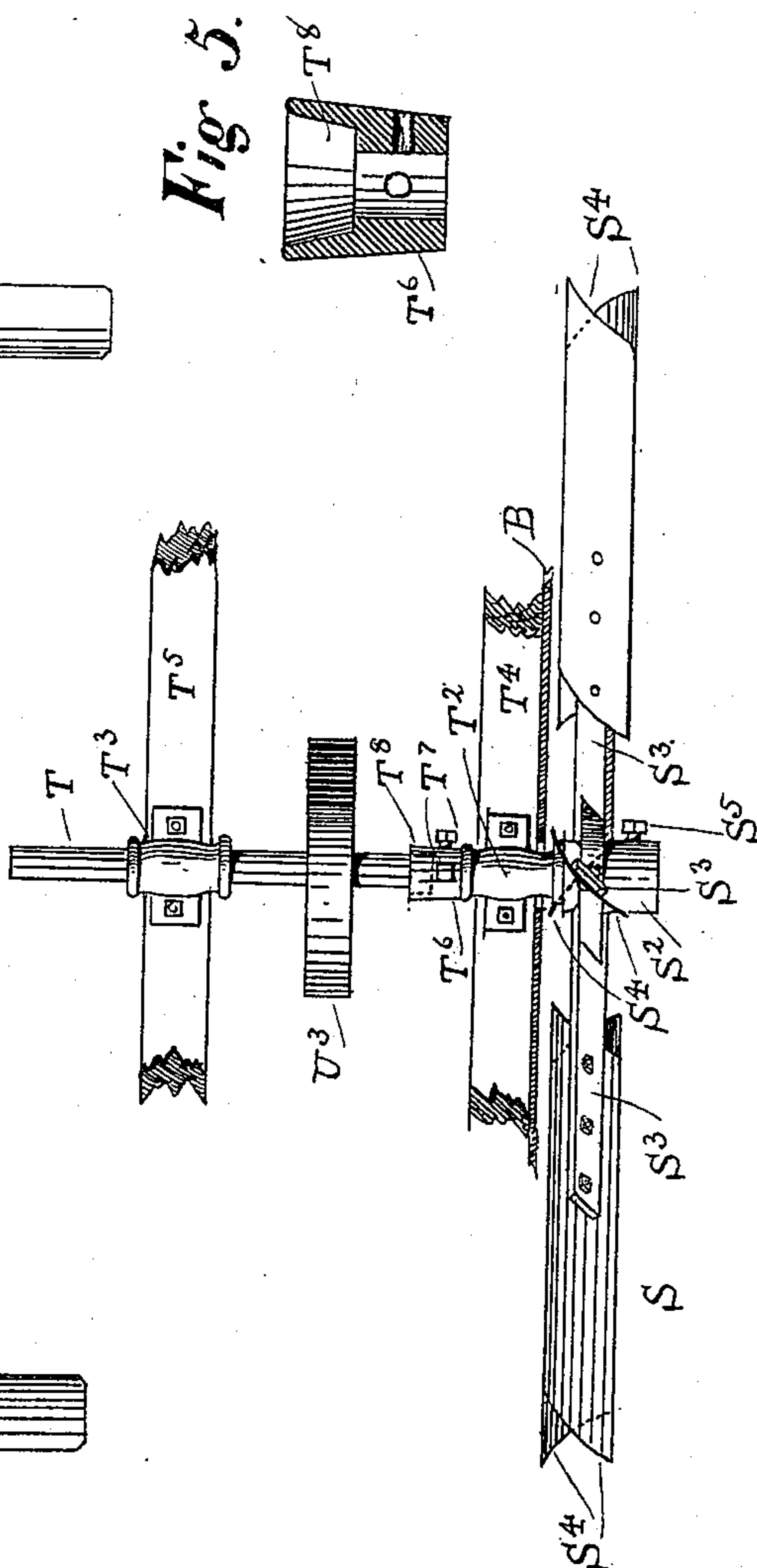


Fig. 5.

Witnesses.

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DRYING-ROOM.

SPECIFICATION forming part of Letters Patent No. 646,327, dated March 27, 1900.

Application filed January 3, 1899. Serial No. 701,029. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. THERIEN, a citizen of the United States of America, and a resident of the city and county of San Francisco, in the State of California, have invented certain new and useful Improvements in Drying-Rooms, of which the following is a specification.

This invention has reference to drying rooms or closets for laundries.

The object of the invention is to simplify the construction of drying-rooms of the class here mentioned and to make them so as to gain time with their use.

Referring to the drawings hereto annexed for a detailed description of my said improvement, Figure 1 is a perspective view of the entire drying-room and parts thereto belonging. Fig. 2 is a top view of a peculiarly-constructed fan used in the upper part of the drying-room. Fig. 3 is a bottom plan of the same fan. Fig. 4 is a side view of the said fan and parts thereto connected. Fig. 5 is a vertical section of a combined collar and oil-cup for the shaft of the fan. Fig. 6 represents in side elevation and in end view one of the middle bars on which shirts are hung in the drying-room. Fig. 7 represents also in end view and in side elevation one of the bars on which cuffs and collars are hung. Fig. 8 is a detail giving a cross-section of one of the T-bars that fasten together the panels of the racks of the drying-room at the top. Fig. 9 is a detail showing part of the base-board across which the guide-bars that fasten together the bottoms of the said racks are adapted to slide. Fig. 10 is a broken perspective view of the exhaust-box of the drying-room.

A, A², A³, and A⁴ are respectively the floor, ceiling, right side wall, and rear wall of the apartment where the drying-room is located.

The drying-room is a hermetically-closed structure, and consists of a frame B, boarded up on the outside and lined all around on the inside with sheet-iron over its posts, so as to form air-chambers between the boards and the sheet-iron. This frame has openings in front for a suitable number of racks to slide in and out, four being shown in the construction represented by Fig. 1. Each of these racks is composed of two panels C C²,

one in front and the other in the back, two battens C³ C⁴ by the sides of each panel, a T-bar C⁵ at the top, and a guide-bar C⁶ at the bottom. These parts are joined and fastened to one another by means of top castings D, bottom castings D², and join-bolts D³. The several racks are hung and arranged to ride on one-inch-pipe rails E, which are about twice the length of the drying-room and extend from the back of it to a series of pipe-hangers F in front. They are suspended on said rails by sheaves G, that are journaled in the upper ends of the hangers H, forming part of the top castings D. The bottoms of the racks are steadied and kept from swinging from side to side, when they are pulled out, by means of the bars C⁶, which have each a guide-piece C⁷ underneath, that fits in a suitable notch C⁸ in the front part of the drying-room. Each rack is provided with a handle J. The T-bars C⁵ are provided each with a series of hooks K, adapted to receive shirt-hangers L, such as the one which is shown in Fig. 6. The bars C⁹ (shown in said Fig. 6) are bars that are placed in the middle of the racks, as represented in Fig. 1. They are nearly square and have hooks K and hangers L similar to those of the T-bars above.

The fourth rack, on the right-hand side of the drying-room, has four bars M like the one shown in detail in Fig. 7. These bars are made of two halves bolted together and holding between them a number of wavy brass rods N, on which cuffs and collars are hung.

To heat the dry-room, I use a "square spiral" coil of steam-pipes P of one inch diameter or over. The steam-pipe Q from the boiler is connected with the top pipe P² of the coil P, and the steam after circulating through the coil is exhausted through the lowermost pipe P³. The vertical pipe R is put on for the purpose of blowing steam into the drying-room in case of fire.

S is a fan which I place at the upper part of the drying-room for the purpose of driving down the hot air that naturally rises from the steam-coil and is also forced up to the ceiling of the room by the damp air produced by the moisture in the clothes that are brought in to be dried. This fan consists of a hub S², arms S³, radiating therefrom, and blades S⁴, bolted

to said arms. The arms S^3 are cast in one piece with the hub S^2 and are set obliquely therein at an angle of from thirty-five to forty-five degrees, as shown in Figs. 2, 3, and 4. The blades S^4 have a curvature of about three-quarters of an inch on a six-inch width, and the arms S^3 are bolted centrally to their under side. The curve is upward, and when the fan is set in place horizontally within the drying-room the upper edges of the blades are about three-eighths of an inch from the ceiling of the room, while their lower edges are about three inches and a half from the same. The effect of the peculiar curvature given to the blades imparts strength to the fan, also makes it easier to drive the fan, requiring less power, and causes the blades to work at such angles that more of the hot air is displaced and forced down at any one time than can be accomplished with any other fan heretofore known.

The fan S is secured by set-screws S^5 to the lower end of a vertical shaft T , which is journaled in bearings T^2 T^3 , bolted to beams T^4 T^5 , that are located above the drying-room. The shaft T is held up in its bearings by means of the collar T^6 , which is secured to it by set-screws T^7 and rests on a suitable washer placed on top of the journal box or bearing T^2 . The upper part of the collar T^6 is formed into a cup T^8 , designed to hold waste saturated with oil, and therefore keeps the shaft lubricated. The top box or bearing T^3 is lubricated in about the same way. The vertical shaft T is run from the main driving-shaft U through the pulleys U^2 and U^3 and the belt U^4 .

The damp air which usually gathers in the lower half of the drying-room is displaced by the hot air forced down by the fan and is driven out through the interstices between the racks at the rear and up through the exhaust-box V and flue V^2 . The exhaust-box V is made of galvanized iron and occupies about one-half of the empty space between the racks and the back of the room, to which it is fastened. It is placed at about one-third the height of the room and has a row of triangular air-openings V^3 running along its en-

tire length. The lower front board of the drying-room also has draft-holes W to help the ventilation. The draft, it will be understood, can be regulated—that is to say, increased or lessened at will—by simply opening or closing the triangular pieces that are cut out of the exhaust to make the air-openings V^3 .

What I claim is—

1. In a drying-room, the combination with a suitable casing, clothes-supporting racks therein, heating-coils extending around the bottom of the casing throughout substantially the whole extent thereof beneath the racks, a fan located at the top of the casing above the racks, and an exhaust at one side of the casing intermediate the heating-coil and the fan, substantially as described.

2. In a drying-room, the combination with a substantially-rectangular casing, clothes-supporting racks filling the central interior thereof, a horizontally-arranged fan above the racks in the top of the casing, and a heating medium directly beneath the racks in the lower part of the casing comprising a pipe constructed to form a substantially-rectangular coil corresponding to the contour of the casing in cross-section and extended to occupy substantially the whole of the space in the lower portion of the casing so that heat will rise therefrom throughout the entire interior of the casing and directly through the racks, substantially as described.

3. In a drying-room, the combination with a suitable casing, clothes-supports therein, a heating medium at the lower end thereof, means for causing a circulation of heated air through the clothes and a steam-inlet pipe R connected with the heating medium and projecting into one end of the casing at approximately the center thereof, and a controlling-valve in said pipe, substantially as and for the purpose described.

Signed by me at San Francisco, California, this 14th day of December, A. D. 1898.

JOSEPH H. THERIEN.

Witnesses:

A. H. STE. MARIE,
CHAS. T. STANLEY.