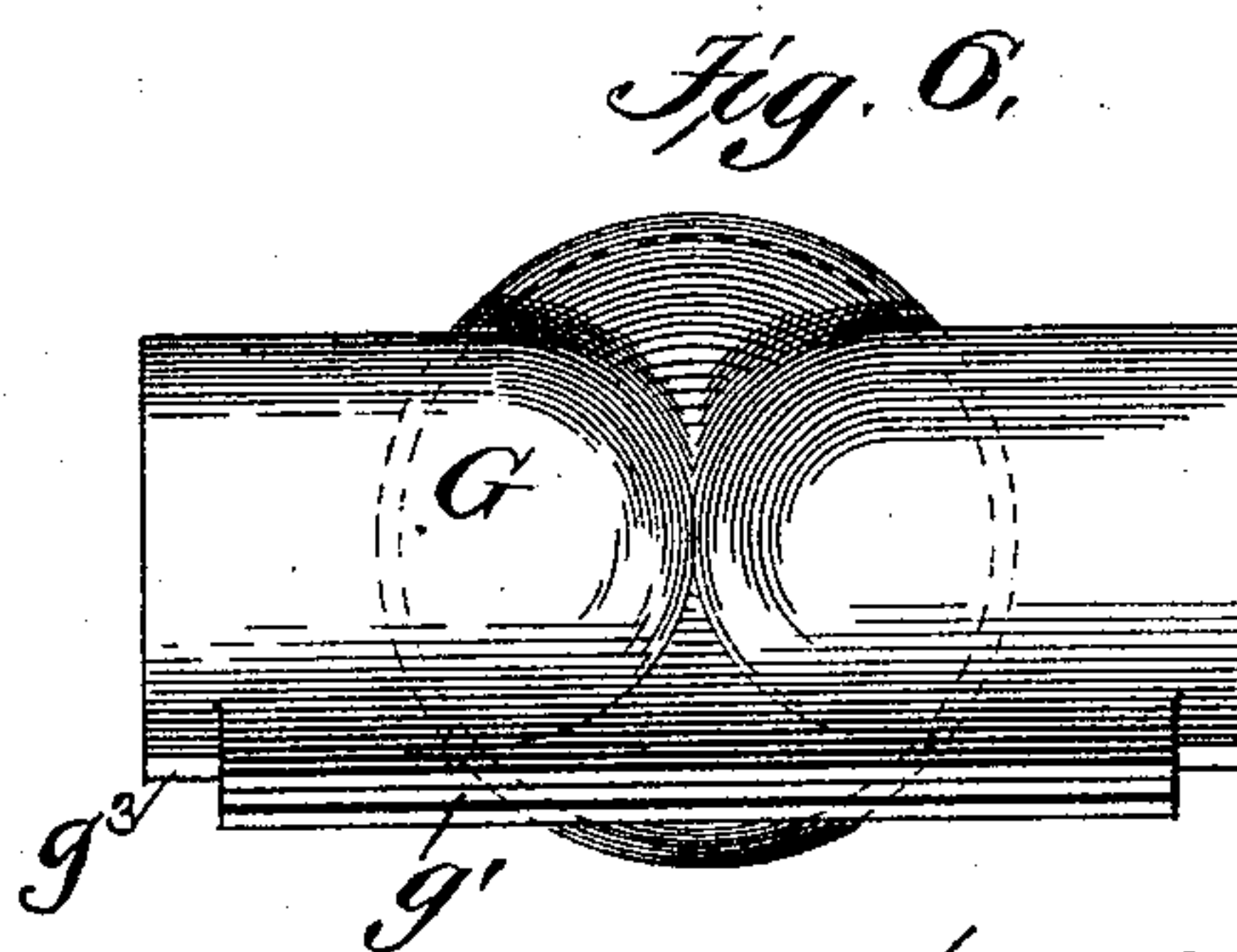
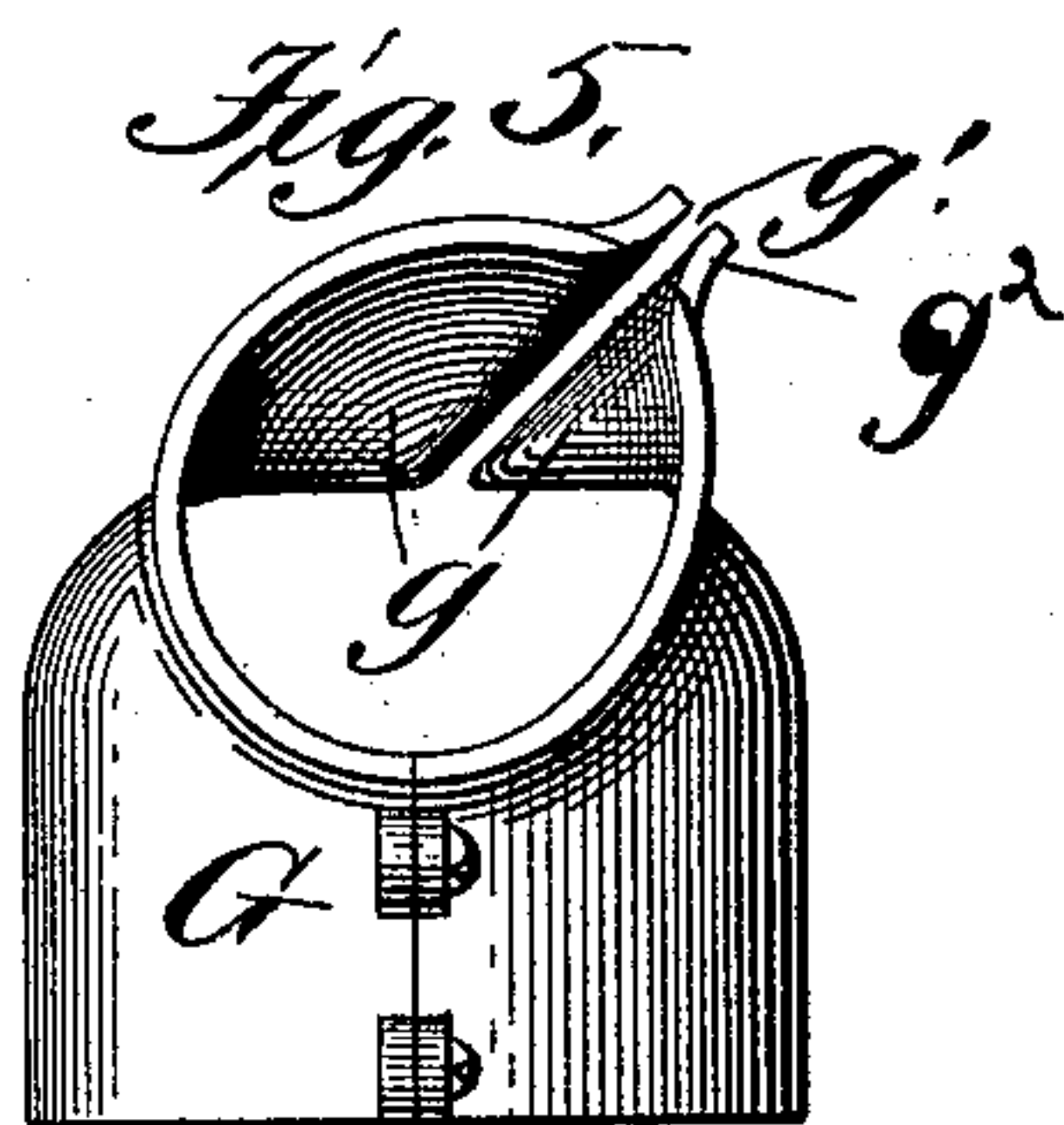
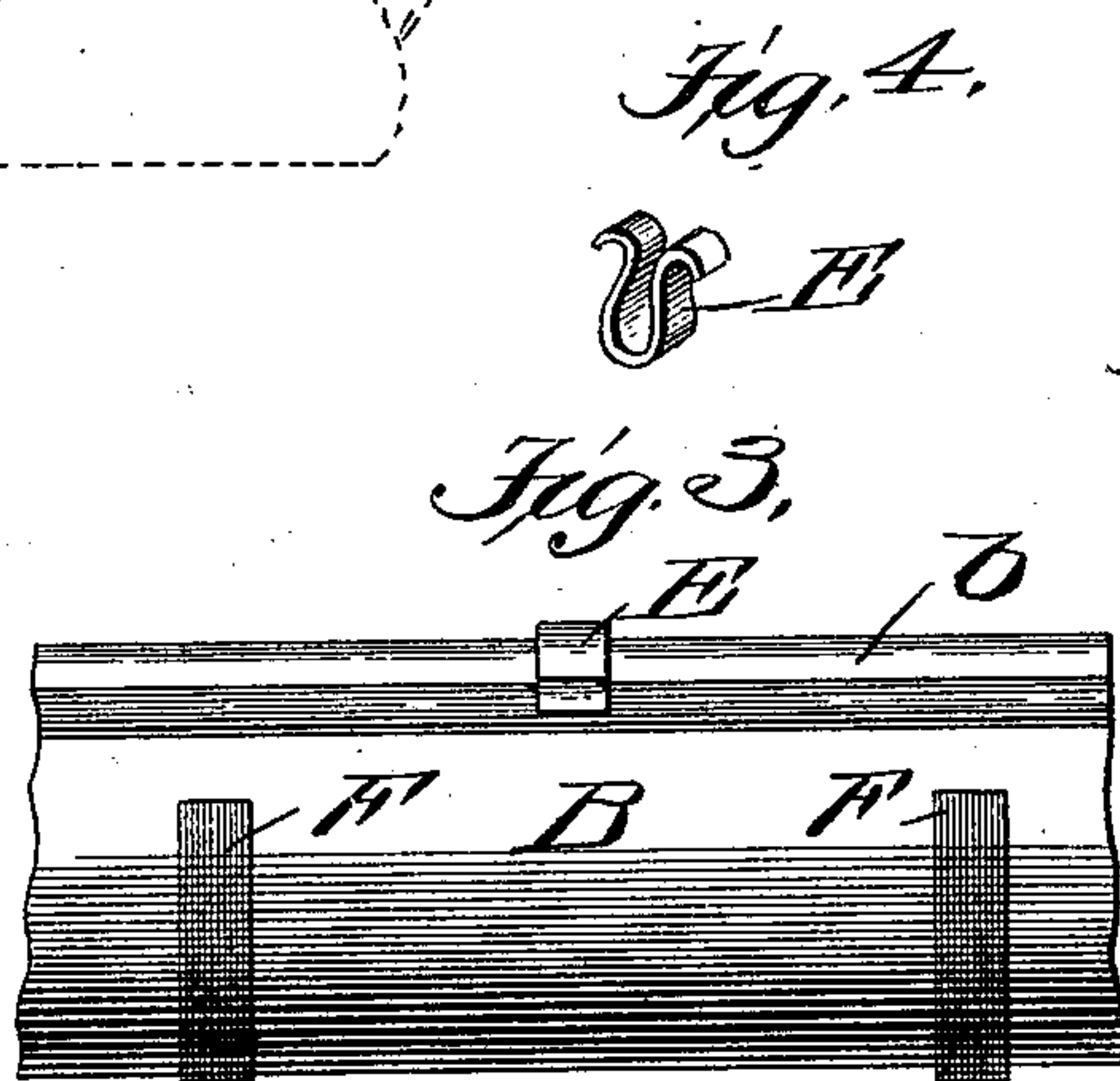
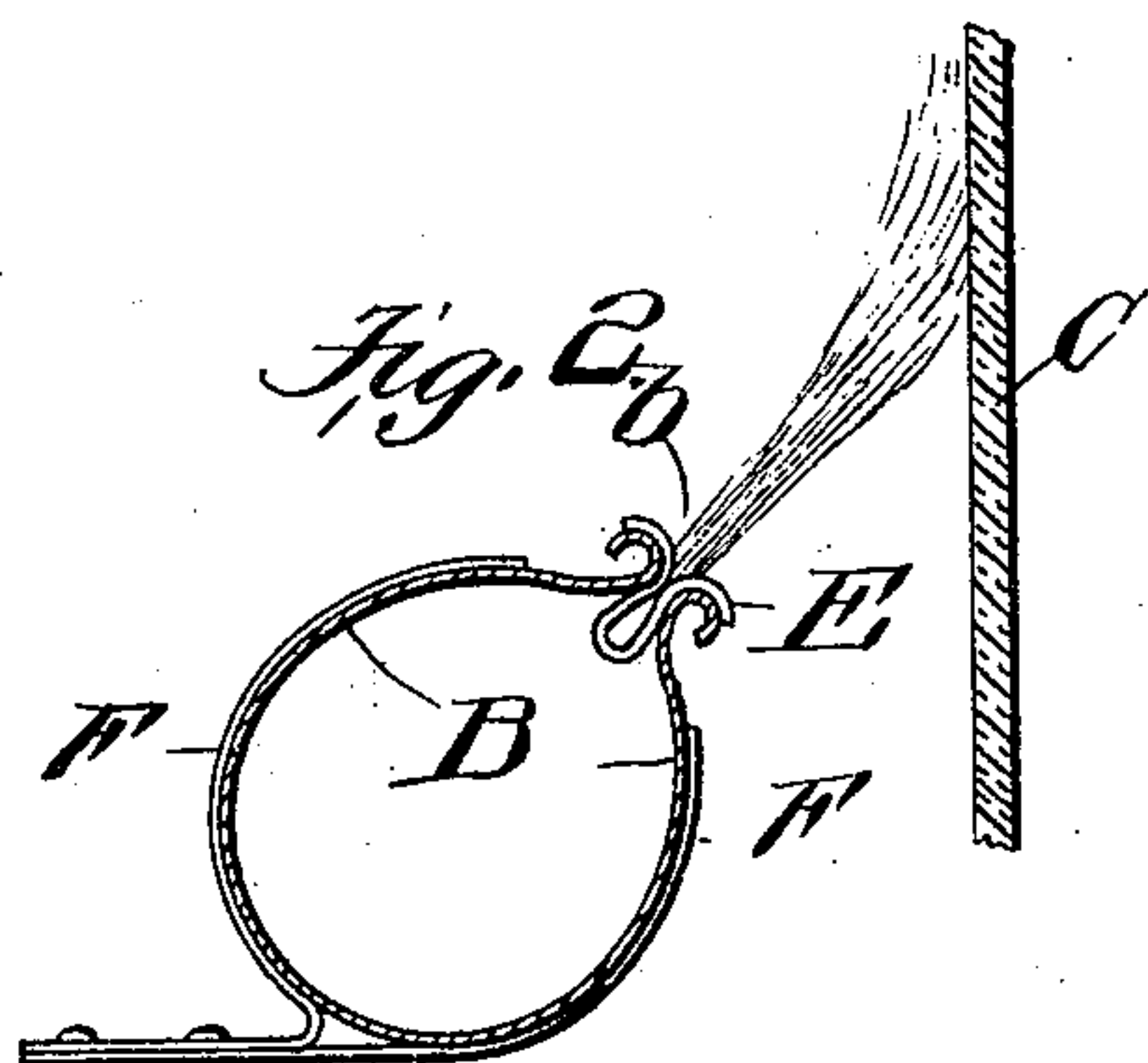
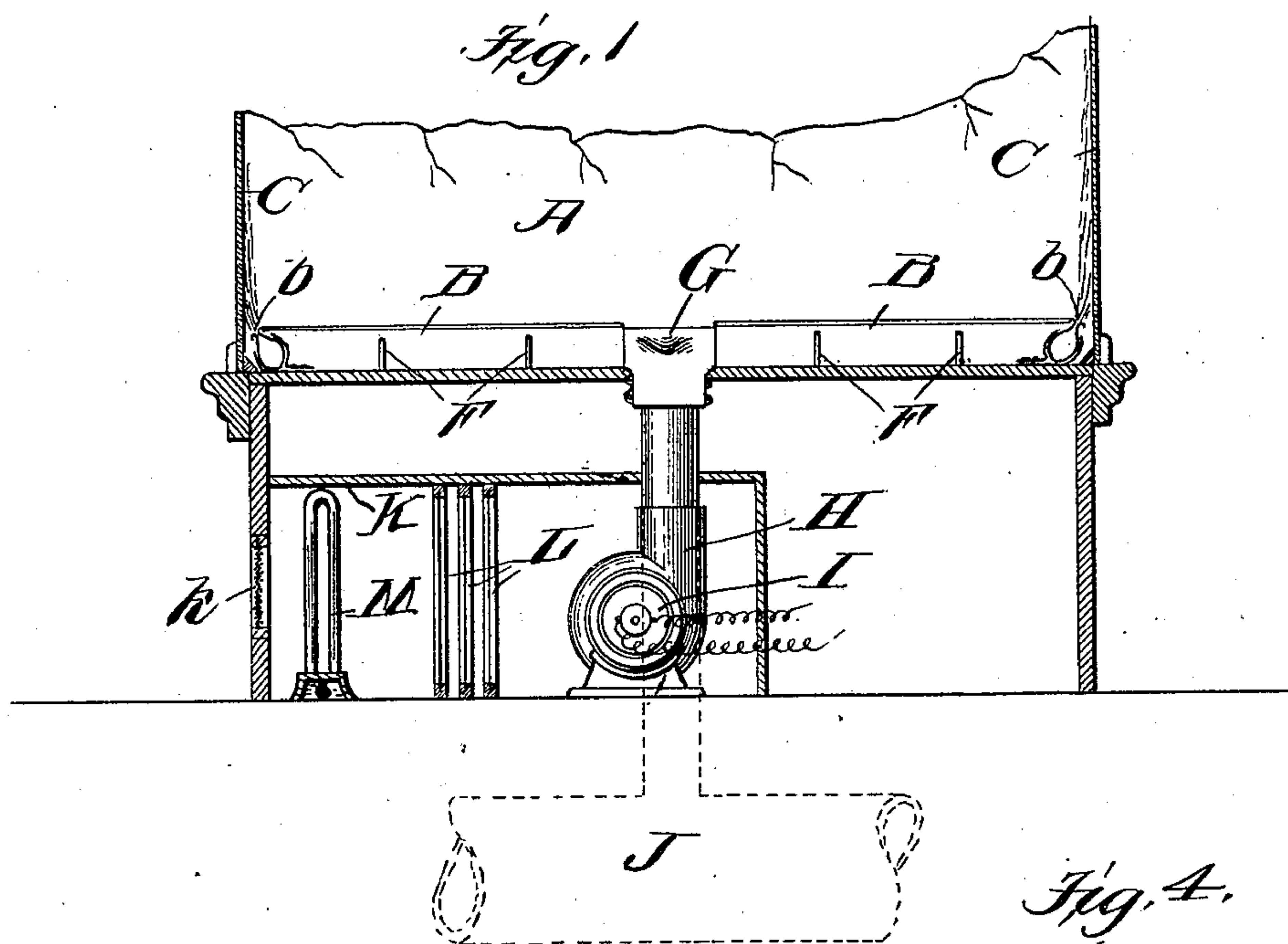


(No Model.)

H. L. PARKER & C. R. MESTON.  
WINDOW BLOWER.

No. 587,373.

Patented Aug. 3, 1897.



Witnesses:  
J. R. Cornwall,  
Hugh K. Wagner.

Inventors  
Herbert L. Parker  
Charles R. Meston  
by Paul Bakewell  
their atty.



# UNITED STATES PATENT OFFICE.

HERBERT L. PARKER AND CHARLES R. MESTON, OF ST. LOUIS, MISSOURI,  
ASSIGNORS TO THE EMERSON ELECTRIC MANUFACTURING COMPANY, OF  
SAME PLACE.

## WINDOW-BLOWER.

SPECIFICATION forming part of Letters Patent No. 587,373, dated August 3, 1897.

Application filed November 25, 1895. Serial No. 570,054. (No model.)

*To all whom it may concern:*

Be it known that we, HERBERT L. PARKER and CHARLES R. MESTON, citizens of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Window-Blowers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a sectional view of a window, looking from the inside, showing our improved apparatus in position. Fig. 2 is a cross-sectional view through the air-blast pipe which is arranged within the window. Fig. 3 is a side elevational view of the same. Fig. 4 is a detail view of a spacer-clip for the air-pipe. Fig. 5 is a side elevational view of an improved form of T connection for our air-blast pipe. Fig. 6 is a top plan view of the same.

It is well known that in winter show-windows and other windows exposed to a low temperature on one side will collect moisture from the interior in the form of mist or frost. This moisture when it strikes the cold glass will condense, rendering the glass non-transparent either in its misty form or by freezing. The object of this present invention is to prevent this condensation on the glass, and in this manner the glass is transparent at all times and its usefulness as a show-window is not destroyed during cold weather.

The invention consists in the construction, combination, and arrangement of the various parts, as will be more fully hereinafter described, and afterward pointed out in the claim.

Other features of invention reside in the construction, arrangement, and combination of the several parts, all as will hereinafter be described, and afterward pointed out in the claim.

In the drawings, A indicates a show-window of any ordinary or approved construction, access to which from the store-room is preferably closed by glazed doors or in any other common and well-known manner.

B indicates the blast-pipe, which is formed with a slot *b* along its entire length, said pipe being arranged at an angle, so that the air

issuing therefrom will strike the glass at an angle and in a continuous sheet. This pipe B is preferably arranged in the window, as shown in Figs. 1 and 2—that is, on the floor of the window and in juxtaposition to the sheet of glass C which the blast is to keep clean of obscurities.

The edges of the slot *b* are turned over, as shown in Fig. 2, and to regulate the thickness of the sheet of air which issues between these lips we arrange spacer-clips E, which are adapted to be inserted in the slot, as shown. These clips are preferably made of soft metal, so that if it is desired to widen the slot a wedge or other instrument is inserted between the jaws of the clip to separate them permanently.

The blast-pipe is held in its tilted position by strap-braces F, which are secured to the floor of the window, as shown.

The dry air is forced into pipe B as near the center as possible, and this necessitates the use of a T-joint G, which forms the connection between the source of supply and the branching blast-pipes. To prevent too great an escape of air immediately in line with the supply-pipe, we form said T with indentations *g*, which divides the current of dry air and directs it into the branches. This T-joint is, however, provided with a slot *g'*, formed by the outwardly-turned lips *g*<sup>2</sup>, in line with the slot *b*, and the air is thus permitted to strike the glass the entire length of the pipes and joint in a continuous sheet. In the drawings the lips are shown as not extending entirely across the upper portion of the T, thus leaving the end portions *g*<sup>3</sup>, which form means of connection with the pipe B.

As shown in Fig. 1, the dry air is supplied by a blower H, which is preferably run by an electric motor I. This manner of supplying the air, however, is immaterial, as a main pipe J (shown in dotted lines) could extend from window to window, supplying each with a sufficient quantity of air to keep the air within the windows in circulation and constantly dry. If a main was used, a larger blower would of course be required, whose motive power could be furnished by a steam-engine or other source of power. In this in-



stance the air would be dried by being passed through a heated steam-coil M or in any other well-known or desirable manner.

The blower shown is located in a box K, 5 which receives dry air through an opening *k*, preferably leading from the exterior, so that the air on both sides of the glass will be of the same dryness. The air, before entering the blower and being forced into the supply- 10 pipe, passes through screens L and may also be passed over or through suitable drying material placed between the opening *k* and the blower, whereby the air is relieved of all dust and dirt before being forced into the 15 window.

It is desirable to blow the air against the glass, as shown, because the blast will not disturb any articles for show in the window; but it is obvious that a circulation of dry air 20 will accomplish the same result no matter in which direction the blast is directed.

In most cases the blower will need to be operated only a very small part of the time, as it will change the entire air in the window 25 in a very few minutes.

We are aware that many minor changes in the construction, arrangement, and combination of the several parts of our device may be

made and substituted for those herein shown and described without in the least departing 30 from the nature and principle of our invention.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is— 35

In a window-blower, the combination with the horizontal distributing-pipes having longitudinal slots in their upper sides, of an air-supply pipe, a T-coupling between the distributing-pipes and supply-pipe formed with 40 an inwardly-extending deflecting-section in line with the supply-pipe and having a continuous air-distributing slot extending through the walls and deflecting-section thereof in line with and forming a continuation of the 45 slots in the distributing-pipes, and means for supplying air to the supply-pipe, substantially as described.

In testimony whereof we hereunto affix our signatures, in presence of two witnesses, this 50 20th day of November, 1895.

HERBERT L. PARKER.  
CHARLES R. MESTON.

Witnesses:

F. R. CORNWALL,  
HUGH K. WAGNER.