A. A. PERRIER.

LOUVER SHUTTER OR BLIND.

APPLICATION FILED SEPT. 11, 1906.

1,069,976. Patented Aug. 12, 1913.

FIG. 1.

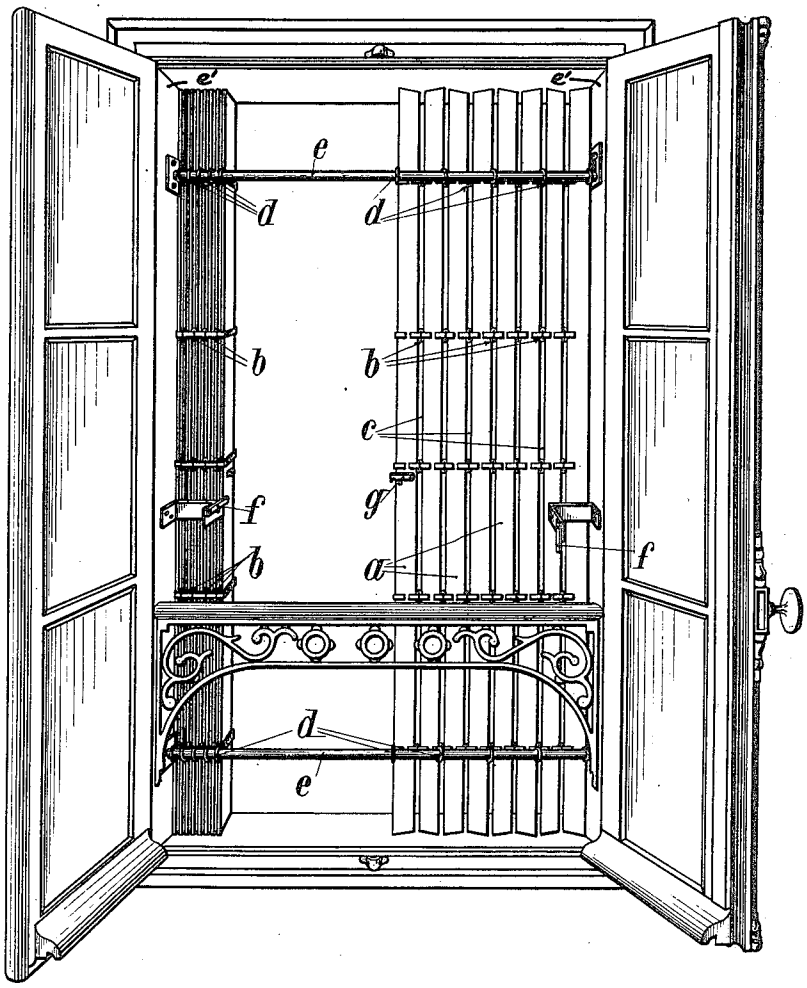


FIG. 2.

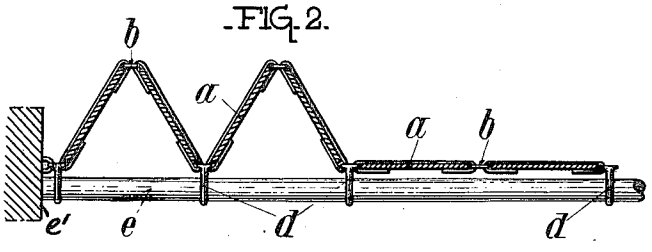
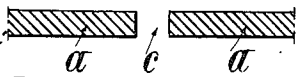


FIG. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

ANNET ANTOINE PERRIER, OF PARIS, FRANCE.

LOUVER SHUTTER OR BLIND.

1,069,976. Specification of Letters Patent. Patented Aug. 12, 1913.

Application filed September 11, 1906. Serial No. 334,201.

To all whom it may concern:

Be it known that I, ANNET ANTOINE PERRIER, a citizen of the Republic of France, and residing in Paris, France, have invented a new and useful Improved Louver Shutter or Blind, of which the following is a specification.

This invention relates to shutters or blinds in which the blades are arranged vertically; they close like a pair of bellows, and leave between them very narrow spaces, through which the rays of sun pass to a certain extent, it is true, but which nevertheless satisfy the requirements as regards ventilation and coolness.

Shutters with vertical blades are known in which the edges of the blades are beveled so that the spaces between the blades are at an angle to the surface of the latter when the shutter is opened out. The shutter according to this invention is composed of blades the edges of which are so formed that the spaces between the blades are at right angles to the surfaces of the latter when the shutter is opened out. By this means it is found that owing to the zones of light and the zones of shade which exist within the room provided with the shutter last mentioned, the equilibrium of the whole quantity of air behind the shutter is upset, the air in the shade zones falling while the air in the light zone rises and thus an efficient circulation is set up. This function of circulation, however, has not previously been considered in connection with shutters or blinds provided with vertical blades and cannot take place with those in which the slots between the blades form an angle with the surface of the latter.

A shutter according to this invention is illustrated by way of example, in the accompanying drawing, in which—

Figure 1 is a perspective view of such an arrangement taken from the interior of a window provided with such shutters. Fig. 2 is a horizontal cross-section on a larger scale along several connected blades of the same shutters, shown at the moment of their folding. Fig. 3 is a diagrammatic section showing a cross-section of the blades.

According to the present invention, the shutter consists of a series of blades *a* made of wood, metal or any other suitable material, connected together by means of hinges or rings *b*, so as to enable them to fold or close like a pair of bellows. When the blades *a* are opened out, they leave between them empty spaces constituting slots *c* through which air can freely pass. The vertical edges of the blades *a* are cut as shown in Fig. 3. It must be pointed out that sun rays passing vertically through the slots *c*, cannot be unpleasant to people or deteriorate the objects in the room, as the said rays enter the interior of the room in thin columns, the intensity of which is reduced by the shady columns combined with them due to the ribs of the vertical blade. In certain places such as hospital rooms, this state of things is very important from the sanitary point of view. The guiding of the blades *a*, is effected for the purpose of facilitating their folding and unfolding and of insuring their immobility in any position without the assistance of any drawing or stopping device by arranging in connection with the top and bottom hinges *b*, rings *d*, freely movable and provided with eyelets which take the place of the hinge-rings *b*, of the blades *a*. The rings *d*, project only on one side of the blind and are guided on rods *e*, arranged horizontally and secured to the sides of the window frame *e'*. Pivoted pins *f*, secured to the sides of the bay or window frame and constituting catches insure fixed position of the blades *a*, in their folded position.

It will be seen that owing to the vertical arrangement of the blades and owing to their rigid guiding rods, the said blades always remain in the plane in which they are guided, without being displaced by gusts of wind. It is unnecessary to provide any means such as cords for opening and shutting the blind.

A catch *g*, or any other lock enables the two parts constituting the shutters to be connected when they are brought against each other into their complete closing position. With this system of shutters with vertical blades, a window or other opening can be protected entirely or partly as is done with horizontal shutters.

What I claim as my invention and desire to secure by Letters Patent is:—

In a louver shutter or blind comprising a plurality of series of blades arranged vertically within the window frame, rings connecting eyelets on adjacent blades of a series to form a plurality of lines of horizontal hinges and arranged to leave openings between said blades at a right angle to the surfaces thereof when the blind is opened

out, rings arranged at intervals projecting on one side only of the blind, and a horizontally arranged rod carried within the frame and upon which rod said rings are slidably mounted, the combination of eyelets integral with the rings and connecting the eyelets of adjacent blades, said last mentioned rings alternating with the hinge rings of the blades, and catches carried by the sides of the frame and adapted to engage the blades when the latter are folded to hold the same in folded position.

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

ANNET ANTOINE PERRIER.

Witnesses:
JEAN ROBELET,
H. C. COXE.