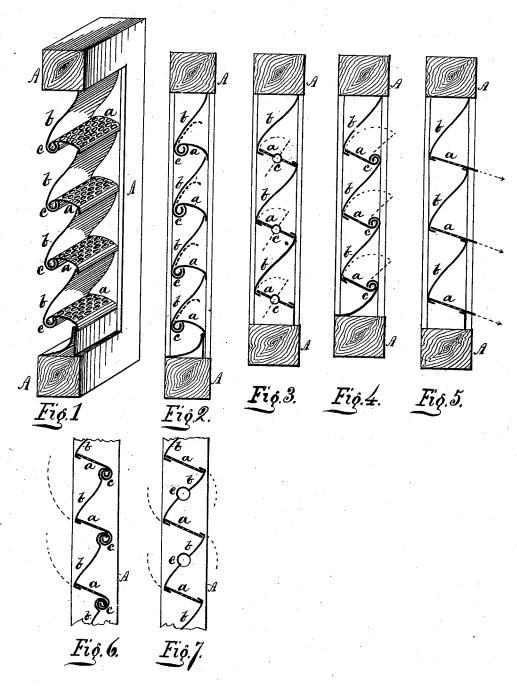
## G. HAYES.

## LOUVER AND BLIND.

No. 345,694.

Patented July 20, 1886.



WITNESSES ev. A. Trayer. GRONAYES.

## United States Patent Office.

GEORGE HAYES, OF NEW YORK, N. Y.

## LOUVER AND BLIND.

SPECIFICATION forming part of Letters Patent No. 345,694, dated July 20, 1886.

Application filed January 15, 1886. Serial No. 188,648. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HAYES, a resident of the city, county, and State of New York, have invented certain new and useful 5 Improvements in Louvers and Blinds, of which the following is a specification.

The invention relates to louvers and blinds, also ventilating-panels to doors; also ventilating-panels for window and other suitable openings in buildings, railway-cars, and marine vessels; and it consists in combining slats perforated (or otherwise apertured) with slats without apertures, of any suitable material, preferably sheet metal, the one apertured forming a ventilating-screen, and the other, unapertured, forming a protecting-shield, one being movable, to admit of opening when de-

sired, and the other immovable, the two serving in conjunction to form a panel of alternating screen and shield, so that screened ventilation may be had at all times, to the exclusion of insects, &c., also the direct rays of the sun, and yet admitting of opening to obtain more (yet protected) ventilation and freer vision.

In the accompanying drawings, Figure 1 represents in perspective, with near end in section, a frame containing a series of the slats. In this view the screen is movable and hinged or otherwise suitably hung to the shield. Fig. 30 2 represents the same in vertical section.

Dotted lines therein show the screen-slat when open. Fig. 3 is a vertical section showing a modification in the manner of hanging the screen, it being pivoted centrally and inde
35 pendently of the shield. Dotted lines show

screens open. Fig. 4 is a vertical section of another modification in hanging the screen, it being jointed or otherwise hinged to the top of the shield-slat next below. Dotted lines

40 show screens open. Fig. 5 is a vertical section showing another modification in the manner of moving the screen to obtain an opening when desired. In this case it is done by sliding the screens inward, as shown by the dot-

45 ted lines. In all the above figures the screen is the movable portion. Fig. 6 is a vertical section showing how the shield may be the moving portion. In this case it is shown as

jointed to the fixed portion or screen and made to move as shown by dotted lines. It may be 50 pivoted to the frame at the sides and not connected to the screen, if desired, and operate essentially the same. Fig. 7 is a vertical section showing a modification in hanging the shield, rendering it movable, it being here 55 shown as pivoted centrally and hung to the frame at the sides.

On the drawings, A represents the frame supporting the slats. It may be the frame of a blind or shutter, the "stiles" and "rails" 60 of a door, the posts of a turret, or jambs of any opening where screened ventilation is desirable.

a represents the ventilating-screen, and b represents the protector or shield, either of 65 which may be the movable one and the other fixed or stationary, and they may be made of any suitable material, as both may be made of sheet metal, or one may be made of wood and the other of sheet metal.

c represents the point or place at which the movable slat or portion is hinged or hung by pivots, pivot-roll, or any other suitable manner.

The moving part may be operated singly by 75 hand, or collectively by the addition of a rod or other suitable device.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A panel composed of strips or slats alter- 80 nately perforated (or otherwise apertured) and plain or without apertures, the two being separate, but in conjunction to form a protected ventilating screen, one portion or slat adapted for opening, essentially as shown and described. 85

2. In a ventilating-panel, the combination of a shield or protecting-slat, b, and a perforated (or otherwise apertured) screen, a, one of which is fixed and immovable and the other pivoted or otherwise adapted to be movable, 90 essentially as shown and described.

GEO. HAYES.

Witnesses:

JACOB J. KOCH, GEO. A. HAYES.