

Aug. 24, 1937.

R. C. PRATT

2,091,012

VENETIAN BLIND SLAT

Filed June 13, 1936

FIG. 1.

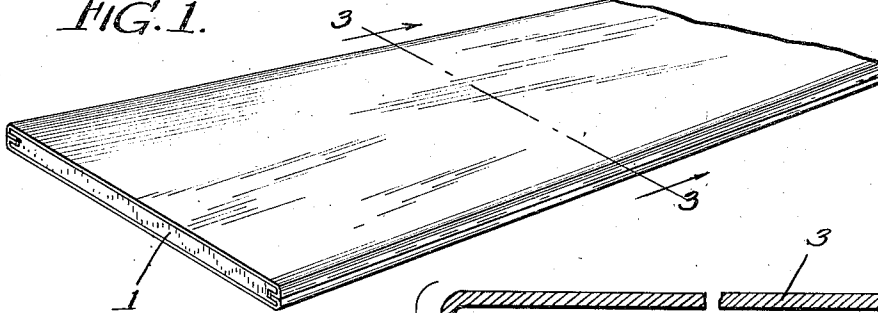


FIG. 2.

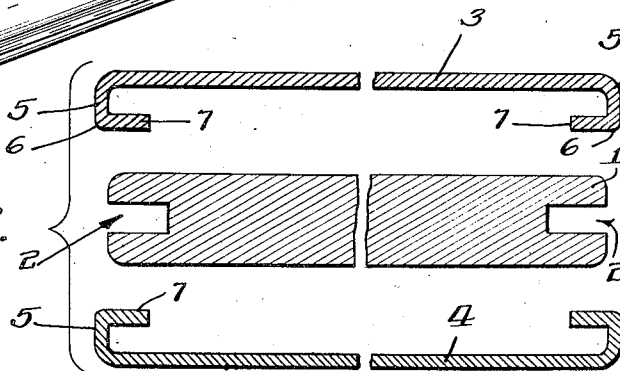


FIG. 3.

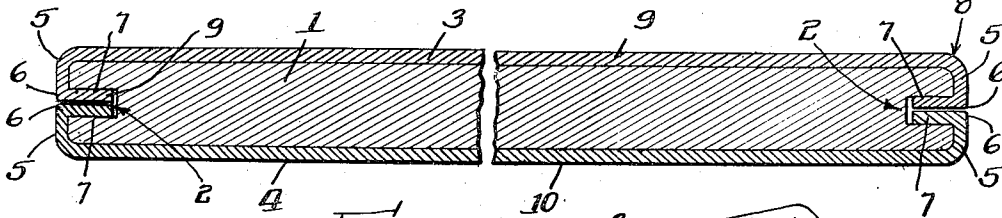


FIG. 4.

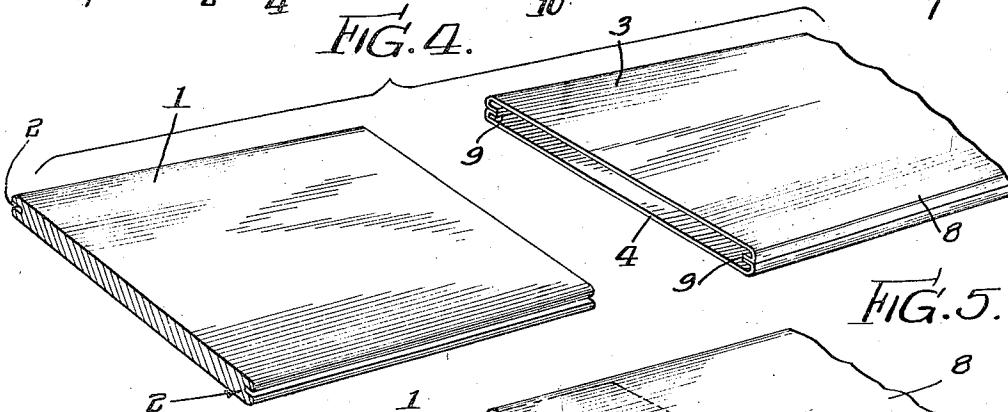


FIG. 5.

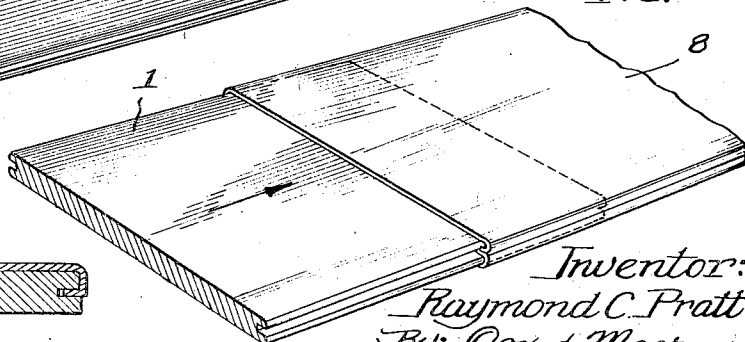
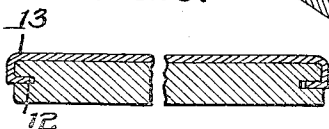


FIG. 6.



Inventor:
Raymond C. Pratt
By: Cox & Moore attys

UNITED STATES PATENT OFFICE

2,091,012

VENETIAN BLIND SLAT

Raymond C. Pratt, Chicago, Ill., assignor to
H. B. Dodge and Company, Chicago, Ill., a corporation of Illinois

Application June 13, 1936, Serial No. 85,009

7 Claims. (Cl. 156—17)

This invention relates to a Venetian blind slat and the method of making the same.

The primary object of the present invention is to provide a new and novel Venetian blind slat having a central fibrous core, such as wood, surrounded by a metal covering which may be readily and easily applied to the core and attached thereto.

A further object of the invention is the provision of an ornamental metal-covered slat whereby the covering is preferably fastened to the slat by having the ends of the metal covering intumed and received in a longitudinal groove provided in the slat body or core.

A more specific object of the invention is the provision of a Venetian blind slat whereby a metal covering is applied about an internal fibrous or wood core, there being grooves provided in the longitudinal side edges of the core or filler member which receive complementary turned edges of upper and lower metal pieces, whereby the metal covering is attached to the interior core or filler.

Numerous other objects and advantages will be apparent throughout the scope of the following specification.

The accompanying drawing illustrates a selected embodiment of the invention, and the views therein are as follows:

Fig. 1 is a detail perspective view of the improved slat;

Fig. 2 is a detail end or cross sectional view of the slat, showing the various parts constituting the completed slat;

Fig. 3 is a detail sectional view of the improved slat, showing the parts in assembled relationship;

Fig. 4 is a detail perspective view showing the central core or filler member and the surrounding or enclosing metal members;

Fig. 5 is a detail perspective view showing the manner in which the metal members are applied to the central filler member or core; and

Fig. 6 is a detail sectional view of a slat having only one surface covered with metal.

The particular slat herein shown for the purpose of illustration comprises a central filler member or core 1 which may be of any fibrous material, such as wood, cardboard, or the like. The core 1 is provided along its longitudinal side edges with oppositely disposed longitudinal grooves 2. Upper and lower metal members 3 and 4, respectively, are provided with side edges 5 which are bent from the main body of the metal members, and these side edges are bent

or turned over at 6 to provide inwardly extending flanges or legs 7. The lower member 4 is made exactly in the same manner as the upper member 3 and includes the same sides 5 and the intumed flanges or legs 7. The upper and lower members 3 and 4 are arranged in contacting relationship, as shown in Fig. 4, with the outer surfaces of the legs 7 contacting. When the two members 3 and 4 are placed together, a hollow metal shell, designated generally by the numeral 8, is provided and this metal shell includes an inwardly extending flange 9, the inwardly extending flange 9 including both of the intumed legs or flanges 7. The inner fibrous core 1 is slipped into the hollow tubular member 8 so that the flange member 9, the two contacting legs 7, will be received in the grooves 2 in the side edges of the slat. The construction is such that the fibrous core will slip into the tubular member 8, which tubular member 8 is formed by arranging the two members 3 and 4 in contacting relationship, as clearly indicated in Figs. 3, 4, and 5. The metal members 3 and 4, however, when they are applied onto the central filler or core 1 are maintained in relatively rigid position, that is, the metal members will not slide freely of their own accord from the slat during normal operation of a Venetian blind. However, in any instances where the metal covering should tend to free itself from its central core, it may be remedied by applying a little glue to the filler, by pinching or squeezing the metal edges, or by upsetting the metal into the wood. Another way of fastening the metal pieces to the core is to attach end members (not shown) at the ends of the slat.

In carrying out the invention it has been found very desirable to make the Venetian blind slats in a continuous process of operation. This may be done by taking strips of metal from which the members 3 and 4 are to be made and passing them through forming rollers. It is preferable that upper and lower spaced forming rolling apparatus be provided so that both members 3 and 4 may be made simultaneously. The metal used is preferably in the form of strip materials delivered in rolls, the width of the strip material being substantially the overall width of the slat, comprising the distance from the inner ends of the flanges 7. The forming rolling apparatus is so positioned that the completed members 3 and 4 will leave the forming apparatus in contacting relationship, as shown in Fig. 4. The filler member or core is run through a suitable machine having opposed rotary saw elements so that a

slat may be pushed through the machine quickly to have the longitudinal opposed grooves 2 sawed in one operation. It is preferable that the sawing apparatus be so positioned that the grooved core 5 will be located immediately adjacent the forming rollers so that the grooved core will occupy the position near the formed tube 8 (Fig. 4) whereby the core may be quickly and readily slipped in position within the tube, as clearly shown in Fig. 5.

In cases where it is desirable not to have the opposed surfaces metal, that is, by completely covering the core, but instead having only one side covered with metal, the groove 2 may be narrower, as indicated at 12 (Fig. 6) and only one metal member may be applied. This construction may be desirable to carry out certain ornamental effects. It is usually preferable, however, that the metal be applied to the top of the slat, as indicated at 13 (Fig. 6) because this is the part of the slat upon which most of the dust accumulates.

The invention provides a highly ornamental, relatively rigid and very durable Venetian blind slat which can be readily and economically manufactured and assembled. The surrounding metal parts constitute in effect a single core when they are arranged in contacting position to permit the grooved metal filler to be readily and instantly received within the tube. An advantage in making the slat with the two pieces turned in is that the opposed surfaces 9 and 10 may be flush and smooth. Furthermore, one of the surfaces may be left in its natural metal state 35 while the opposing surface may be painted or colored. In practice it may be found that very thin metal can be used, such as copper, aluminum, and the like. Also, in cases where the slats are subjected to places where salt water is present, such as on ships or in buildings along the coast, it has been found that stainless steel or other similar metal may be used to cover the slats. The longitudinal side edges of the slats produce an ornamental appearance because when the blind is in its up or out-of-the-way position the slats in bundled condition have the appearance of being half their normal thickness. Many desirable and ornamental effects can be obtained by having contrasting metals with various finishes. For instance, one side of the slat can be chromium plated while the other side of the slat can be left in its natural metal state or provided with a dull, satin, or painted finish, as desired or required.

Changes may be made in the form, construction and arrangement of the parts without departing from the spirit of the invention or sacrificing any of its advantages, and the right is hereby reserved to make all such changes as fairly fall within the scope of the following claims.

The invention is hereby claimed as follows:

1. In a Venetian blind, a slat comprising a fibrous core having opposed flat upper and lower surfaces, elongated grooves formed in the side edges of said core, a sheet metal member arranged over the core and flanges formed on the sheet

metal member and extending into the grooves, the said flanges being of sufficient rigidity to maintain the metal sheet in said position with respect to the core.

2. In a Venetian blind, a slat comprising a fibrous core having opposed flat upper and lower parallel surfaces, longitudinally extending grooves extending into opposite side edges of said core, a sheet metal member arranged over at least one of said surfaces of the core and having flanges formed thereon and extending into the grooves, the said flanges being of sufficient rigidity to maintain the sheet metal member in position with respect to the core.

3. In a Venetian blind, a slat comprising a core or body member having opposed flat upper and lower surfaces, elongated grooves formed in the side edges of said core, a sheet of metal adapted to engage and enclose one of said surfaces and having free side edges bent reversely to form inwardly extending flanges, said flanges extending into said grooves, and being of sufficient rigidity to maintain the metal sheet in position with respect to the core.

4. In a Venetian blind, a slat comprising a core member having opposed flat upper and lower parallel surfaces, longitudinally extending grooves formed in the outer longitudinal side edges of said core, a tubular sheet metal member arranged over the core and conforming substantially with the contours thereof, said sheet metal member having oppositely disposed intumed flanges formed thereon and extending into the grooves, said flanges being of sufficient rigidity to maintain the sheet metal member in position with respect to the core.

5. In a Venetian blind, a slat comprising a fibrous core having opposed flat upper and lower surfaces, a sheet metal cover over one of said surfaces and having free side edges bent to form inwardly extending flanges, and opposed grooves in the side edges of said core snugly engaging said flanges, the said metal being of sufficient rigidity to maintain the metal sheet in said position with respect to the core.

6. In a Venetian blind, a slat comprising a fibrous core having opposed flat upper and lower surfaces, a sheet metal cover over one of said surfaces and a second sheet metal cover over the other of said surfaces, both of said sheets having free side edges extending to the edges of said core and being bent to form inwardly extending flanges, and opposed longitudinally extending grooves in the side edges of said core snugly engaging said flanges, the said metal being of sufficient rigidity to maintain the metal sheet in said position with respect to the core.

7. The method of making a Venetian blind slat which comprises providing a flat core member, forming opposed grooves in said core member, forming a metal sheet adapted to cover said core member and having inwardly extending flanges corresponding to said grooves, and sliding said sheets longitudinally endwise over the core member with the flanges extending into the grooves.

RAYMOND C. PRATT.