July 5, 1938. L. I. KAHN 2,123,010

VENETIAN BLIND

Filed April 10, 1937 2 Sheets-Sheet 1

Fig. 1.

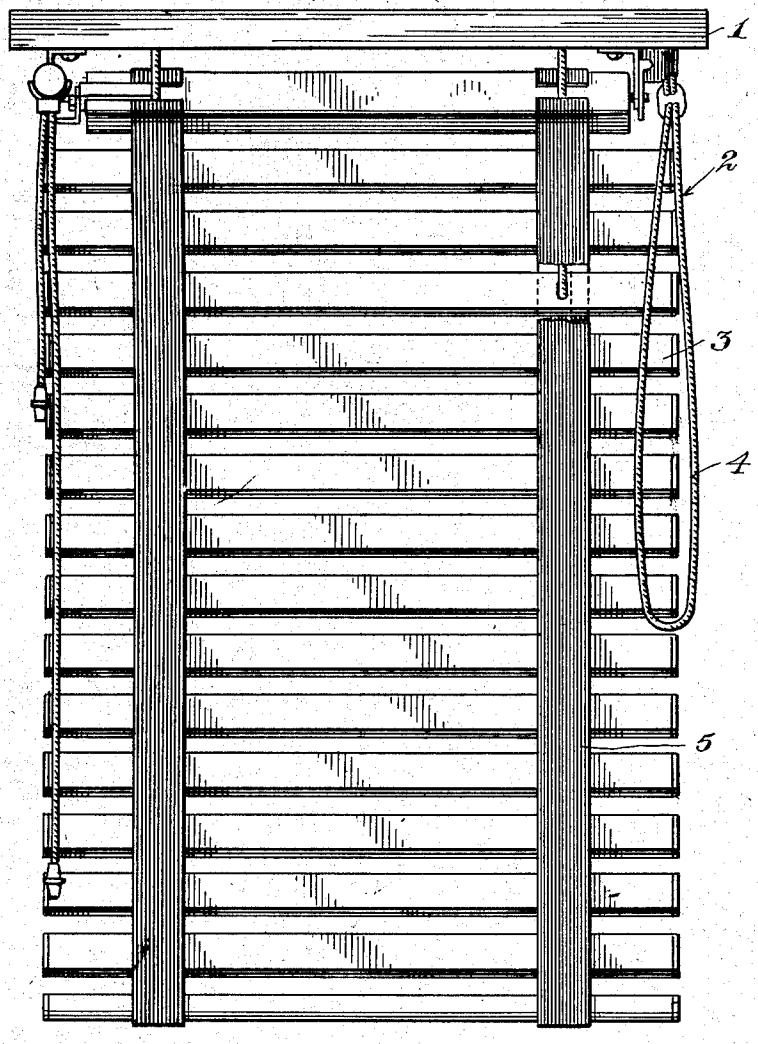


Fig. 2.

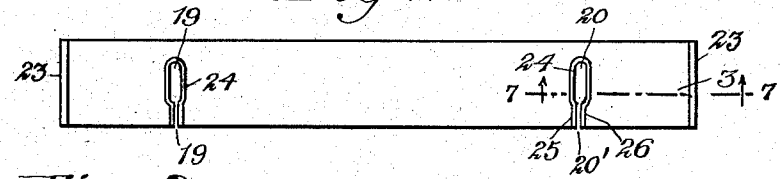
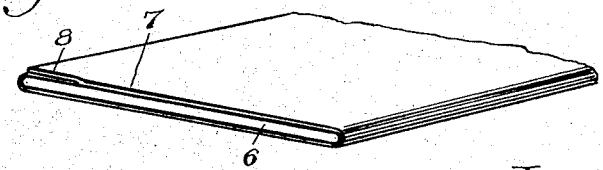


Fig. 3.



WITNESSES

Chris Feinle.

A. L. Kitchin.

INVENTOR

Lewis I. Kahn.

BY

Munn, Anderson & Liddy,

ATTORNEYS

July 5, 1938. L. I. KAHN 2,123,010

VENETIAN BLIND

Filed April 10, 1937 2 Sheets-Sheet 2

Fig. 4.

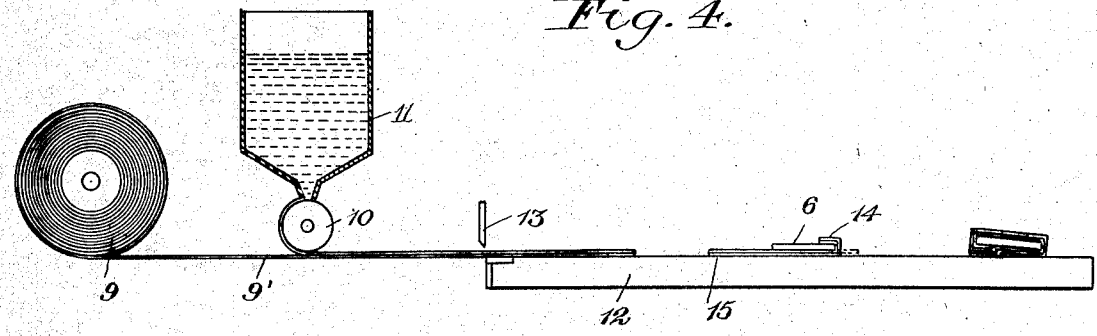


Fig. 5.

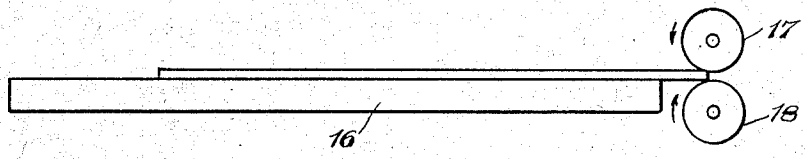


Fig. 6.

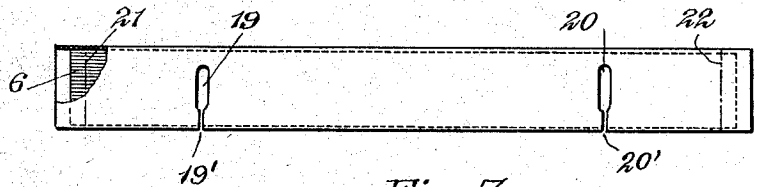
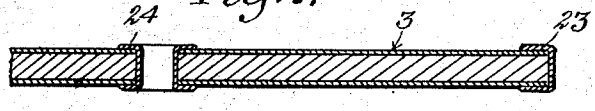


Fig. 7.



WITNESSES

Chris Feinle.

A. L. Kitchin

INVENTOR

Lewis I. Kahn.

BY

Munn, Anderson & Liddy

ATTORNEYS.

Patented July 5, 1938 2,123,010

UNITED STATES PATENT OFFICE

2,123,010

VENETIAN BLIND

Lewis I. Kahn, New York, N. Y.

Application April 10, 1937, Serial No. 136,221

3 Claims. (Cl. 156—17)

REISSUED MAY 13 1941

This invention relates to Venetian blinds and the method of manufacturing the same, the object being to provide a construction presenting a Venetian blind structure of substantially the usual type but with a special shutter.

Another object of the invention is to provide a shutter for Venetian blinds wherein a covering of cloth, paper, or the like is provided, and positioned on the base so as to present a substantially integral appearing article.

In the accompanying drawings:

Fig. 1 is an elevation of a Venetian blind constructed according to the present invention;

Fig. 2 is a plan view of one of the complete shutters shown in Fig. 1;

Fig. 3 is a perspective view on an enlarged scale of the shutter shown in Fig. 2;

Fig. 4 is a diagram partly in section illustrating part of the method of applying a covering to a shutter base;

Fig. 5 is a side view illustrating how the wrapped shutter base is passed through squeezing rollers;

Fig. 6 is a plan view with certain parts broken away of the finished shutter before the ends have been cut or trimmed;

Fig. 7 is an enlarged fragmentary sectional view through Fig. 2 approximately on the line 7—7.

Referring to the accompanying drawings by numerals, 1 indicates a head piece of the shutter structure 2. Carried by the head piece 1 are a number of shutters or slats 3 together with actuating cables 4 and supporting straps or bands 5. Each of the shutters 3 is formed with a base 6 which may be of wood, paper, fiber, or other material. However, most of the shutters are made from wood because they are light and yet sufficiently strong to perform the desired result. Heretofore shutters formed of wood or other material have been coated with paint or other coloring matter to present a certain design effect. However, by this method flowers and other configurations could not be provided, except at very great expense.

As shown in Fig. 3, the base 6 is covered with a textile fabric covering 7 which is overlapped at 8 adjacent one of the longitudinal edges of base 6. The covering 7, while preferably of fabric, may be made from paper or other flexible material, and consequently when the expression "textile fabric" is used it will be understood that these other elements are equivalent.

In Figs. 4 to 6 diagrams have been presented illustrating the method of manufacturing or producing the complete shutter as shown in Fig. 3. As illustrated in Fig. 4, there is provided a supply 9 of fabric which is preferably slightly wider than the base 6 is long. This fabric is passed beneath an adhesive applying roller 10 which receives adhesive from the container 11 and applies the same to one surface of the fabric 9'. After the fabric passes the adhesive applying roller 10 it moves on to a table 12 and when a desired length or section is on the table 12 the knife 13 functions to sever the fabric. The severing section is then moved forwardly a short distance and a base 6 applied thereto near one edge. The edge 14 is then turned over and then the base, edge 14, and adjacent portions are turned over as illustrated at the extreme right in Fig. 4. This will cause the edge portion 15 to overlap the edge or end portion 14.

The work on table 12 is done by hand, and after the base 6 has been completely wrapped, as just described, it is placed on a table 16 and then fed between squeezing rollers 17 and 18 which press the coated fabric tightly against the base and also press the overlapped edges 8 together. Rollers 17 and 18 are preferably formed of rubber or other resilient material. After the wrapped base has passed the squeezing rollers 17 and 18, it is set aside until the adhesive has completely dried. The unfinished shutter is then taken to a suitable machine for cutting the cable slots 19 and 20. It will be noted that the cutter, in forming the slots 19 and 20, cuts through the fabric as well as the base 6. After this has been done the ends are trimmed off so that the finished shutter, as shown in Fig. 2, will be of the desired length. Preferably the ends are cut off by a suitable saw along the respective lines 21 and 22.

As illustrated particularly in Fig. 7, each of the shutters 3 is provided with a metal cap 23 at each end. This cap may be of the same color as the covering fabric or paper or of a different color, as for instance chromium or silver plated metal. The use of the caps 23 is important in that it not only presents a pleasing appearance but it finishes the ends of the shutters. In cutting the ends along the lines 21 and 22 as shown in Fig. 6 it sometimes occurs that the cutting is more or less irregular and therefore would be objectionable if left uncovered. The caps 23 not only cover the irregular end formation but are squeezed to pinch the shutter and thereby stiffen and strengthen the same.

In addition, the apertures 19 and 20 are provided with slots 19' and 20' extending to the edge of the shutter. A hollow rivet or eyelet 24 is arranged in each of the slots 19 and 20. These eyelets have extensions 25 and 26 that protect the edges of the radiating slots 19' and 20'. It

is to be noted that the members 25 and 26 extend only to the edge of the shutter but not across the edge. One end of the rivet or eyelet 24 is completed usually before it is applied to the shutter and then the other end is bent over as illustrated in Figs. 2 and 7 so as to grip the shutter and not only protect the raw edges around the slots but act as reinforcing means for the slots. The slots 19' and 20' are desirable in that they will permit a shutter to be completely applied and removed by pulling the cable through the slot. For instance, if a shutter should become broken at some point intermediate the ends of the blind, it could be quickly removed and a new one substituted without dismantling or without even taking the blind from its supports. Also all of the shutters could be removed and sent back to the factory to have new coverings placed thereon whenever desired. It will be understood that the slots 19' and 20' are slightly less in width than the normal diameter of the supporting cables so that the cables must be compressed slightly in order to be moved through the slots. In this way the shutters are properly held in position until positively moved to a disengaged position.

I claim:

1. A Venetian blind including a plurality of slats, each slat comprising a solid base, a one-piece complete covering of flexible material intimately engaging said base and extending from one end of the base to the other and entirely around the base with the edges of the covering overlapping near one longitudinal edge of the base, adhesive for securing said covering to said base, and a metal protecting cap for each end of the slat, said caps covering and pinching the end portions of said covering tightly against the base.

2. A Venetian blind including a plurality of slats, each slat comprising a solid base, a coating of adhesive and a one-piece complete covering of textile fabric held on said base by said adhesive, said textile covering extending from one end of said base to the other and entirely around the base with the edges overlapped near one longitudinal edge of the base.

3. A Venetian blind slat comprising a base solid throughout, a flexible covering for said base secured to the base in intimate contact therewith, said flexible covering extending from one end of said base to the other end and entirely around the base with the edges overlapped near one longitudinal edge of the base, said base having cord receiving slots merging into radiating slots extending to the edge of the slat, metal eyelets lining all of said slots, the edges of said eyelets pinching said covering to said base, and a metal cap for each end of the slat, said metal caps pinching the end portions of the covering and slat.

LEWIS I. KAHN.