(No Model.)

G. W. JOHNS.

VENETIAN BLIND.

No. 589,834. Patented Sept. 14, 1897.

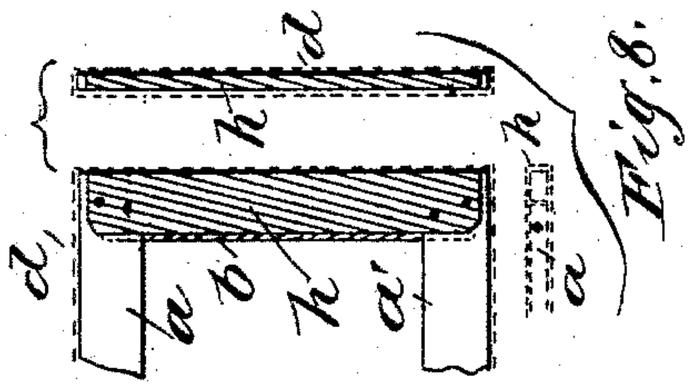

Fig. 8.

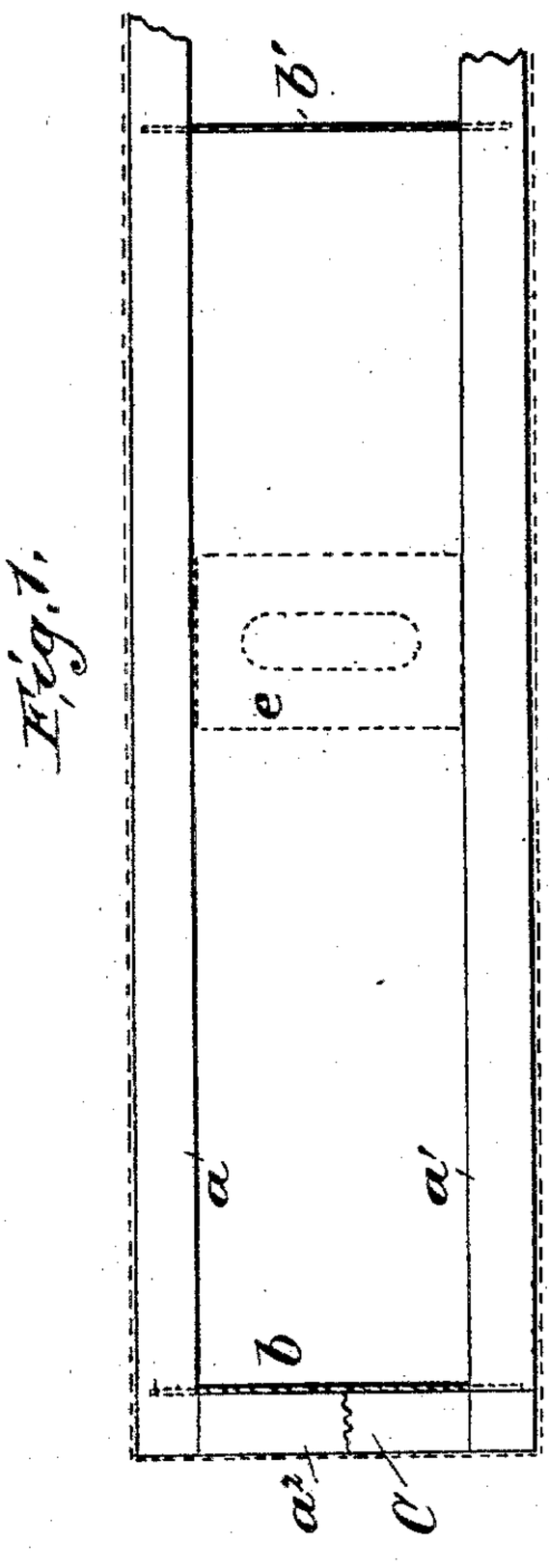

Fig. 1.

Fig. 5.

Fig. 6.

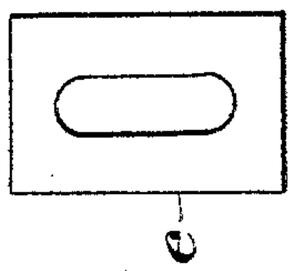

Fig. 7.

Fig. 2.

Fig 3

Fig. 4.

WITNESSES:

C. W. Benjamin

Chas. O. Griffith.

INVENTOR

Geo. W. Johns

BY

Edgar Tate & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

GEORGE WILLSHIRE JOHNS, OF LONDON, ENGLAND.

VENETIAN BLIND.

SPECIFICATION forming part of Letters Patent No. 589,834, dated September 14, 1897.

Application filed February 25, 1895. Serial No. 539,705. (No model.) Patented in England September 18, 1893, No. 17,527.

To all whom it may concern:

Be it known that I, GEORGE WILLSHIRE JOHNS, a subject of the Queen of Great Britain, and a resident of Islington, London, England, have invented certain new and useful Improvements in Venetian Blinds, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts in all the figures.

The said invention was patented in Great Britain on the 18th day of September, 1893, No. 17,527.

My invention consists of wooden frames covered with textile material for use in the construction of Venetian blinds in place of the solid wooden laths now in common use.

My plan is to use light narrow laths or slats of pine or other wood to form oblong frames to the required size. These frames are held rigid by steel pins being inserted at right angles into the inside edges of the oblong frames. The joints at the angles of the frames are glued, and strengthened by calico glued across them. The frames thus formed are covered with woven or other material and perforated through the covering material for the blind-cords, these perforations being sufficiently elongated to permit of the free running of the cords in all positions of the frames, and are protected from the running cords by eyelets of leather or other material. Thin iron or other metal plates or cups, to which the blind-cords are fastened, are fixed in the bottom frame of each blind inside the covering material.

The principal features in these improvements are the two following: first, lightness; second, artistic display, as the covering material can be selected, as in the case of fancy roller-blinds, to suit the decorations of a room. To give greater durability, most of the material used for covering the frames can be varnished.

Reference is to be had to the accompanying full-size drawings, forming part of this specification, wherein—

Figure 1 is a plan of a part of a frame. Fig. 2 is an end section through a frame. Fig. 3 is an end section through the covering material. Fig. 4 is a section through a frame longitudinally. Fig. 5 is a section, longitudinally, of covering material. Fig. 6 is a section through one of the metal plates or cups to which the ends of the running cord are fastened. Fig. 7 shows the shape of the perforations through the covering material for the running cord. Fig. 8 shows a metal clip which may be used to form the ends of the frames in place of the cross-piece a^2.

The same letters of reference indicate like parts in all the figures.

In Fig. 1, $a\ a'$ are the laths or slats forming the sides of the oblong frames into which the steel pins $b\ b'$ are inserted. a^2 is a cross-piece forming an end of a frame, which is glued to the side laths or slats $a\ a'$, a piece of calico or tape c being glued across the joints on both sides of the frames.

I wish it to be understood that I do not confine myself to the cross-piece a^2 to form an end of a frame, but may instead use a metal clip, as shown in Fig. 8.

The steel pins $b\ b'$ are inserted into the inside edges of $a\ a'$, forming the sides of the frame, to within an eighth of an inch of the outside edges, pin b being placed close to the cross-piece a^2 and the intermediate pins about eight inches apart.

In Fig. 2 the dotted line d is the covering material; b, a steel pin. Figs. 3, 4, and 5 are similar sections. The covering material d is first preferably made in a circular form, either woven throughout or made with a seam and then pressed flat. The frames are then placed inside the coverings. The seams are secured by stitching or by india-rubber solution, fish-glue, or other adhesive cement.

In Fig. 6, g is a lath or slat forming part of a bottom frame and similar to $a\ a'$ in the other figures. It is provided with strengthening cross-pieces to receive the metal plate or cup f, to which the running cord is attached. The perforations are not used in the covering of this frame, a small hole being made to allow the running cord to pass through from the metal cup. I may use in small blinds a covered solid lath or slat in place of this frame.

In Fig. 7 the eyelet-piece e is secured by

stitching or an adhesive cement preferably inside the covering material *d*. However, I may use a metal eyelet and clench the same.

In Fig. 8 the metal clip *h* may be fixed to the ends of the frames by indentations.

The frames made and covered as described may be mounted as in the ordinary Venetian blind.

By my improved method of forming a slat-frame for use in Venetian blinds I secure a frame of great strength and free from warp or twist, and this I accomplish by the use of the pins *b*, which are of great importance in giving strength, form, and durability to the frame, and which also enable me to make the frame of much lighter and thinner material.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim is—

A Venetian blind of the character described comprising frames rectangular in form, pins inserted therein at right angles to the sides thereof, said frames being covered with textile fabric, which is perforated centrally of each frame, said perforations being provided with eyelets; the lower slat of the lowermost frame being perforated and provided with a thin metal plate secured inside the said covering, said blind being provided with a cord which passes through the said eyelets and the said perforation in the lower slat, as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 6th day of October, 1894.

GEORGE WILLSHIRE JOHNS.

Witnesses:
GEORGE BRIGGS HOWARD,
JAMES MCCONNELL.