(No Model.)

A. ROELOFS.

CAR BLIND.

No. 275,712. Patented Apr. 10, 1883.

FIG. 1.

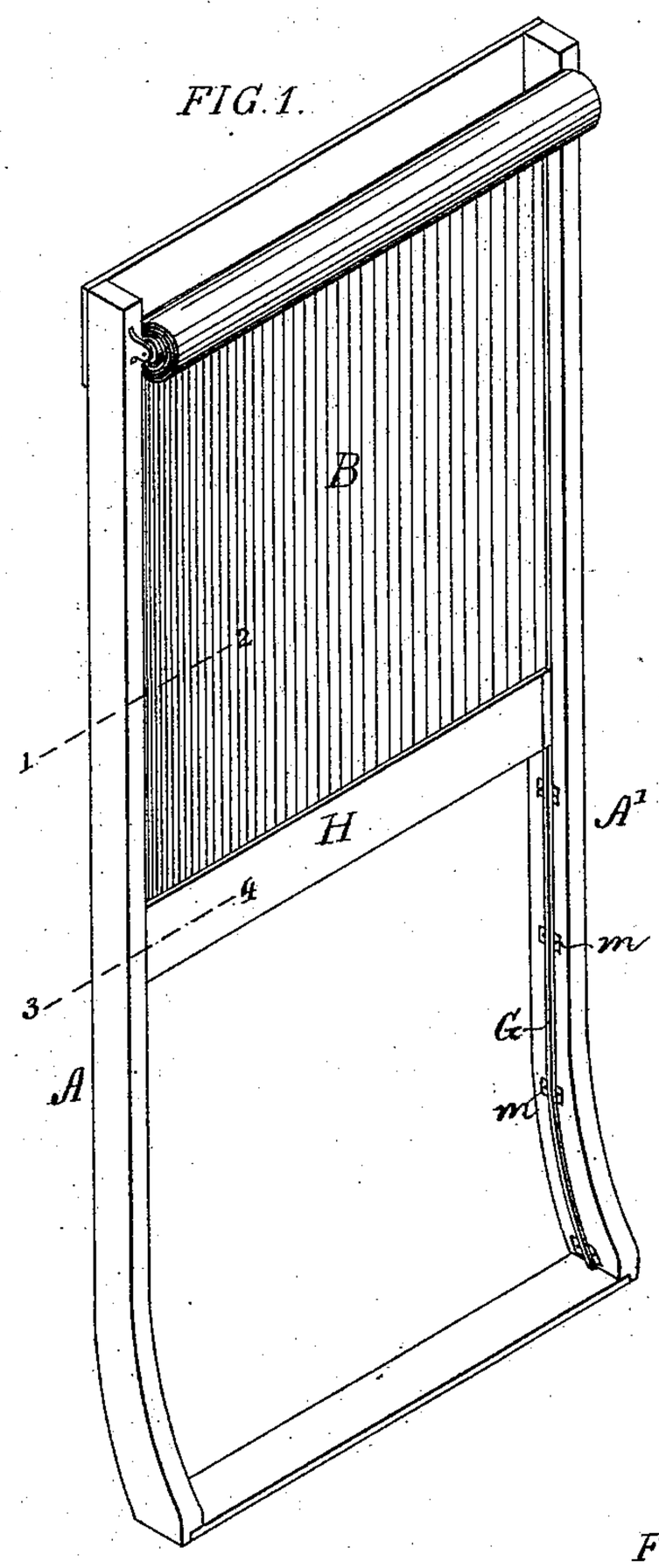


FIG. 5.

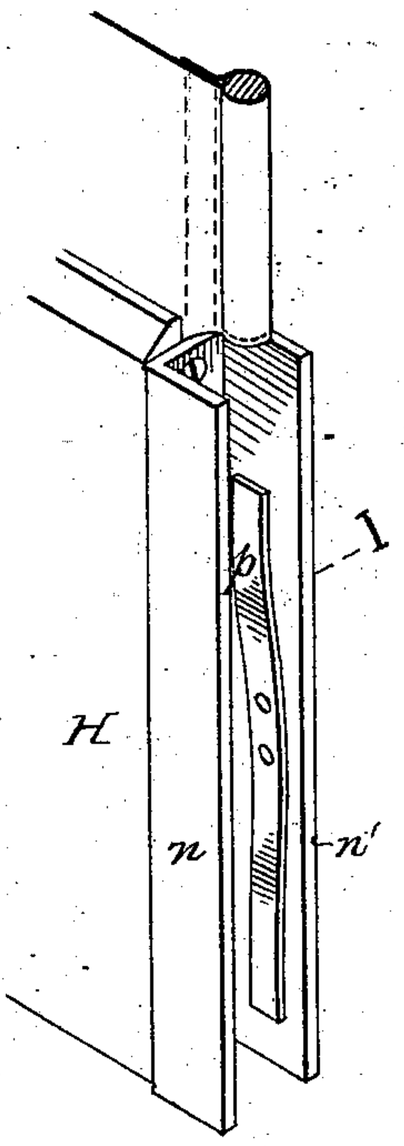


FIG. 7.

FIG. 6.

FIG. 8.

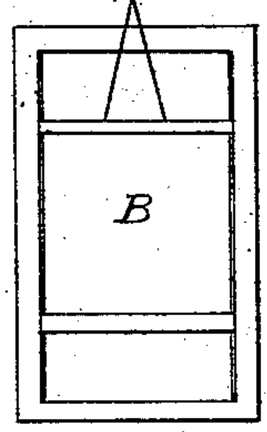


FIG. 3.

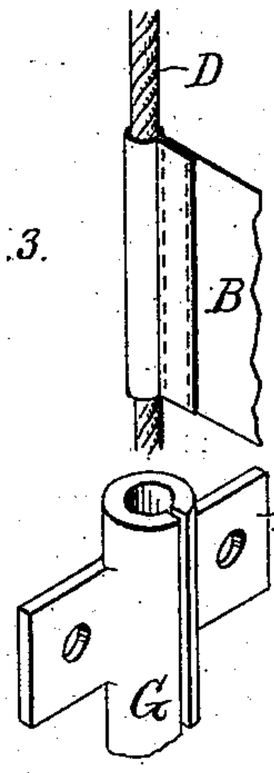


FIG. 9.

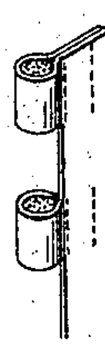


FIG. 2.

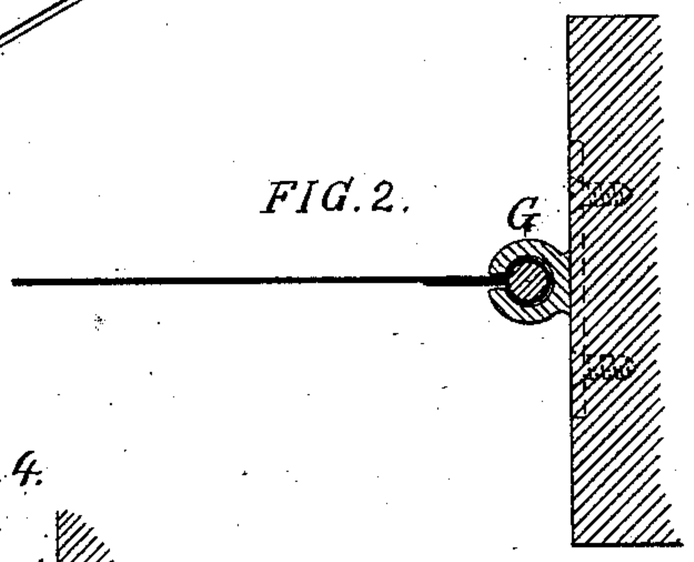
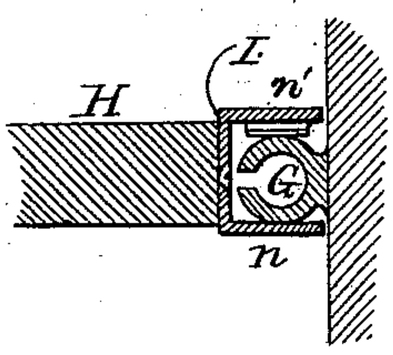


FIG. 4.



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UNITED STATES PATENT OFFICE.

ANTHONY ROELOFS, OF PHILADELPHIA, PENNSYLVANIA.

CAR-BLIND.

SPECIFICATION forming part of Letters Patent No. 275,712, dated April 10, 1883.

Application filed September 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY ROELOFS, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Blinds or Screens for Cars, Carriages, &c., of which the following is a specification.

My invention relates to that class of blinds for windows, summer street-cars, carriages, &c., in which the edges of the blind are adapted to slotted guides, the object of my invention being to provide an efficient guide and retainer for the lower edge of such a blind.

In the accompanying drawings, Figure 1 is perspective view of part of a street-car frame, illustrating the application thereto of my improved blind attachment; Fig. 2, a sectional plan (drawn to an enlarged scale) of part of Fig. 1 on the line 1 2; Fig. 3, a perspective view of part of the blind-cord and slotted guiding-tube; Fig. 4, a sectional plan on the line 3 4, Fig. 1; Fig. 5, a perspective view, illustrating part of the lower portion of the blind; and Figs. 6, 7, 8, and 9, views representing modifications of my invention.

My improved blind or screen admits of many different applications, as will be readily understood hereinafter. In the drawings I have selected part of the frame of an open street-car to illustrate the adaptation of the blind thereto.

A and A′ are two of the bars or posts of a car-body, these bars being secured to the sill and roof of the car in the usual manner.

The blind B may consist of canvas or other available substantial fabric, and is attached at its upper end to a roller having journals adapted to brackets on the bars A A′, the ordinary spring-rollers similar to those used in connection with ordinary window-shades being preferred. Part of the blind near each edge is wrapped round a cord, D, as shown in Fig. 3, and so stitched or otherwise secured that the cord is essentially part of the blind. The two cords thus united with the fabric form with the same a rib on each edge of the blind.

To each of the bars A A′ is secured a slotted tube, G, the two tubes forming guides for the ribbed edges of the blind, and these guides being of such extent that when the blind is lowered its edges will throughout be under the control of the guides. Hence there can be no displacement of the blind from the guides at any point. The slotted tube may be constructed and secured to the posts in different ways. In Figs. 1, 2, and 3, for instance, a tube slotted throughout its entire length has plates *m* soldered to it at intervals, and the plates are screwed to the bars A A′; or the slotted guides may be made by securing two bent strips of metal to each bar, as shown in Fig. 6, or guides may be formed by wooden strips, as shown in Fig. 7. The lower edge of the blind is attached to a substantial slat, H, provided at each end with the metal plate I, having flanges *n n′*, one on one side and the other on the opposite side of the guiding-tube. The ends of the slat can thus slide freely on the tubular guides. A spring, *p*, Fig. 5, is preferably secured to one of the flanges of each plate I, so as to cause the other flange to bear against the guide, thereby creating sufficient friction to resist the action of the roller-spring and retain the blind in any position to which it may be adjusted.

While the most economical way of forming the edge-ribs on the blind is by means of a cord, in the manner described, a leather or other flexible band may be used in place of the cord; or the rib may be formed without the cord or its equivalent by simply rolling up a portion of each edge of the fabric and securing the folds by stitching or otherwise.

My invention may be applied to a variety of different objects. It may, for instance, be adapted to carriages, in which case the blinds may be of leather or of oil-cloth, or other water-proof material, or the invention may be used in constructing mosquito-nets, screens for summer-houses, outbuildings, &c., the frames for the blinds being modified in construction as different applications of the invention may suggest; but whatever the construction of the frame may be in other respects, there must always be bars to which the opposite tubular guides are attached, and the lower edge of the blind must have a slat, H, the opposite ends of which are provided with flanges adapted to bear externally upon said guides.

It is not essential in all cases that rollers should be combined with the blind. The latter, for instance, may be adapted to guides on a frame, as shown in Fig. 8, a cord being attached to the upper slat of the blind, and passing over a pulley to any convenient point where it may be fastened, and the lower slat of the

blind may be heavy enough to draw the same down when the retaining-cord is released. The combination of the blind with a roller is, however, to be preferred for obvious reasons.

While continuous ribs on the blind are the most desirable, each rib may be made in sections, as shown in Fig. 9, thereby forming on each edge a series of projections at frequent intervals, the projections being adapted to the guides.

I claim as my invention—

1. The combination of the tubular slotted guides, the flexible blind having ribs adapted to the guides, and the slat H, secured to the lower edge of the blind, and having at each end flanges *n n'*, adapted to bear externally upon the guides, and free to slide thereon, as set forth.

2. The combination of the flexible ribbed blind, the slotted tubular guides, and the slat H, adapted to slide on the guides, and having springs acting thereon, as set forth.

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

ANTHONY ROELOFS.

Witnesses:
HARRY DRURY,
HENRY HOWSON, Jr.