E. REUKAUF, Sr.

CURTAIN ROLLER.

APPLICATION FILED MAY 15, 1909.

955,691. **Patented Apr. 19, 1910.**

Fig. 1.

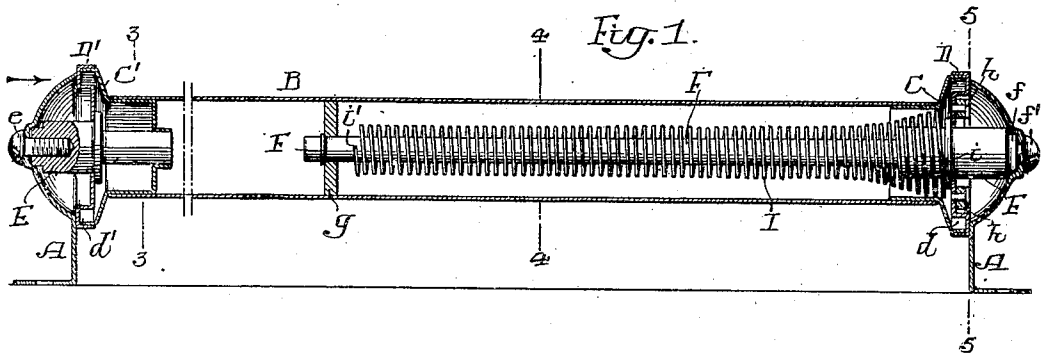


Fig. 2.

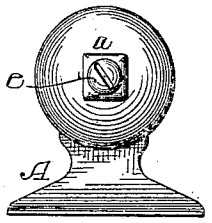


Fig. 3.

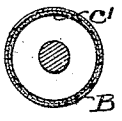


Fig. 4.

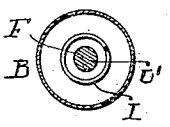


Fig. 5.

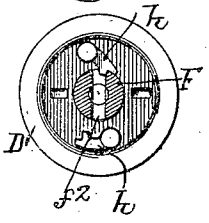


Fig. 6.

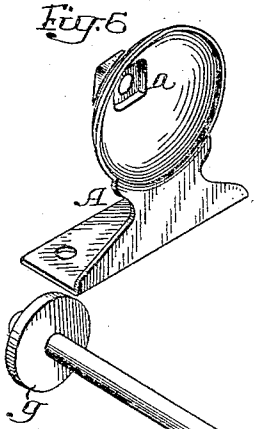


Fig. 8.

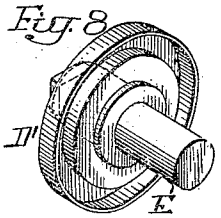


Fig. 9.

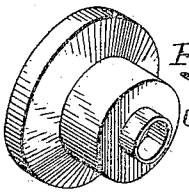


Fig. 10.

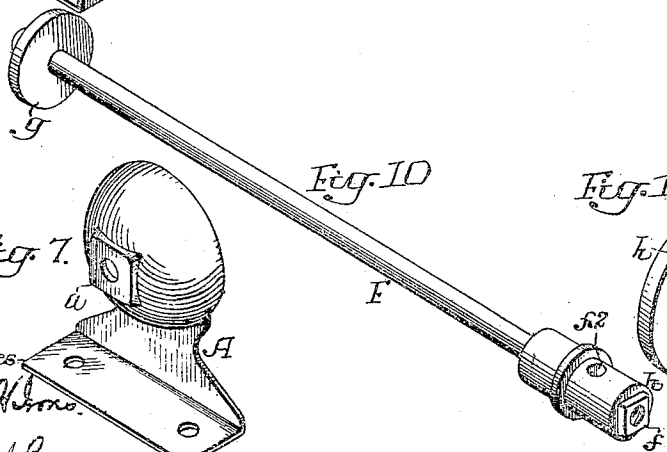
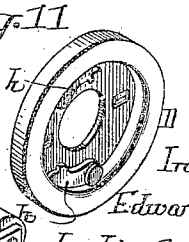


Fig. 7.

Fig. 11.



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Titus W. Sons.
Orville A. Burrows.

Inventor—
Edward Reukauf Sr.
by his Attorneys—
Howson & Howson

UNITED STATES PATENT OFFICE.

EDWARD REUKAUF, SR., OF PHILADELPHIA, PENNSYLVANIA.

CURTAIN-ROLLER.

955,691. Specification of Letters Patent. Patented Apr. 19, 1910.

Application filed May 15, 1909. Serial No. 496,199.

To all whom it may concern:

Be it known that I, EDWARD REUKAUF, Sr., a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Curtain-Rollers, of which the following is a specification.

The object of my invention is to improve the construction of curtain rollers used mainly in automobiles and carriages, in order that the curtain roller will not rattle nor readily become disengaged from its brackets due to the movement of the vehicle.

In the accompanying drawing:—Figure 1, is a longitudinal sectional view of my improved curtain roller; Fig. 2, is a view looking in the direction of the arrow, Fig. 1; Fig. 3, is a transverse sectional view on the line 3—3, Fig. 1; Fig. 4, is a transverse sectional view on the line 4—4, Fig. 1; Fig. 5, is a transverse sectional view on the line 5—5, Fig. 1; Figs. 6 and 7, are perspective views of one of the brackets; Figs. 8 and 9, are views of two parts of the bearing; Fig. 10, is a perspective view of the rod; and Fig. 11, is a perspective view of the pawl carrier.

A, A are two brackets which support the roller and which are secured in any suitable manner to the frame of the vehicle.

B is the roller to which the curtain is secured in any suitable manner; this roller is open at both ends, as shown, and fitting in the open ends of the roller are shells C, C′, the shell C′ being made as clearly illustrated in Fig. 9, and the shell C being similar to the shell C′ with the exception that the end is open to allow for the spring.

D, D′ are the bearings; the bearing D′ being carried by a stem E and the bearing D being mounted loosely on the rod F. The stem E has a squared end in the present instance adapted to a squared recess *a* in the bracket A and a screw *e* passes through the bracket into the stem and secures the stem rigidly to the bracket, the squared recess preventing the stem from turning. The bearing D′ has an annular recess *d*′ and the flange of the shell C′ extends into the recess, as shown. By this arrangement the curtain roller B is supported on the stem E which projects from the bracket A through the medium of the shell and bearing.

The rod F is secured to its bracket A in substantially the same manner as the stem. The squared projection *f* is adapted to the recess *a* in the bracket A and a screw *f*′ secures the rod to the bracket A so that it will not turn with the roller. The rod is supported at its inner end by a disk *g* which fits loosely in the roller B and this disk is preferably made of wood or fiber so that it will be noiseless if it should vibrate due to the motion of the vehicle.

A spring I is mounted on the rod F and is secured at one end *i* to the bearing or pawl carrier D and at its opposite end *i*′ to the rod F. On the bearing D are two pawls *h*, *h* which engage notches in the rod F. In the present instance these notches are formed by drilling a hole entirely through the rod, as indicated in Fig. 5.

The shell C has a flange adapted to an annular recess in the bearing D and extends into the roller, as indicated, so that by this construction the roller cannot become detached from its brackets.

It will be noticed that the rod F in this instance only extends part way into the roller, so that the roller can be made of any length desired; the roller being simply cut off to proper lengths to accommodate the window frame, one set of brackets, shells and bearings answering for all lengths of rollers.

I claim:—

1. The combination in a curtain roller, of a roller open at each end, shells extending into each end of the roller, bearings carrying the shells, a bracket at one end having a stem upon which the bearing is mounted, a rod extending into the opposite end of the roller, a bracket carrying the rod, said rod supporting the bearing at that end of the roller, a spring on the rod, one end of said spring being attached to the rod and the other end to the bearing, and a pawl on the bearing.

2. The combination in a curtain roller, of a tubular roller, shells at each end, brackets supporting the shells, a notched rod carried by one bracket and extending into the roller a limited distance, a spring on said rod, a pawl on one shell engaging the notched rod, and a support for the inner end of the rod.

3. The combination in a curtain roller, of a tubular roller, brackets therefor, a notched rod extending into the roller from one end and carried by one of the brackets, a spring on the rod, a pawl carried by the roller and engaging the notched rod, and a disk of wood or fiber at the inner end of the rod fitting snugly within the roller.

4. The combination in a curtain roller, of

a tubular roller, shells, each shell having at one end an extension projecting into the roller and each having a flange at the opposite end, bearings having annular recesses to receive the flanges of the shells, two brackets, one bracket carrying a stem supporting one bearing, the other bracket carrying a notched rod supporting the other bearing, the said rod extending into the tubular roller, a spring on the rod, said spring attached at one end to the rod and at the opposite end to the bearing, and pawls on the bearing engaging the notched rod.

5. The combination in a curtain roller, of a tubular roller, shells on each end of the roller, bearings carrying the shells, brackets having squared recesses, a stem having a squared end adapted to the squared recess in the bracket, a screw securing the stem to the bracket, said stem supporting the bearing, a notched rod having a squared end adapted to a squared recess in the other bracket, a screw securing said rod to the bracket, a spring having one end attached to the rod and the other end attached to a bearing, and pawls on said bearing engaging notches in the rod.

6. The combination in a curtain roller, of a tubular roller, brackets for supporting said roller, a stem on one bracket and a rod on the other bracket, bearing shells carried by the rod and stem and supporting the roller, and pawls on one of said bearings, said rod having a perforation forming notches with which the pawls engage.

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

EDWARD REUKAUF, Sr.

Witnesses:

Wm. E. Shupe,

Wm. A. Barr.