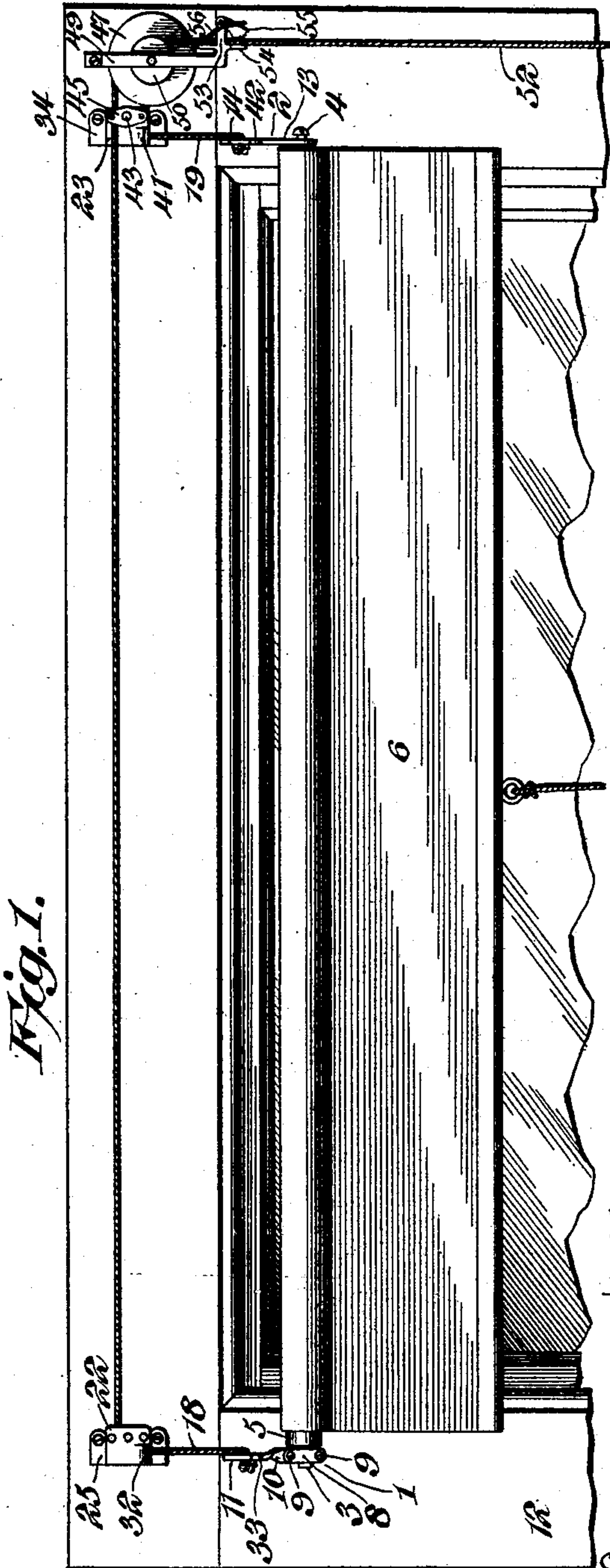


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ADJUSTABLE WINDOW SHADE FIXTURE.  
APPLICATION FILED MAY 18, 1907.

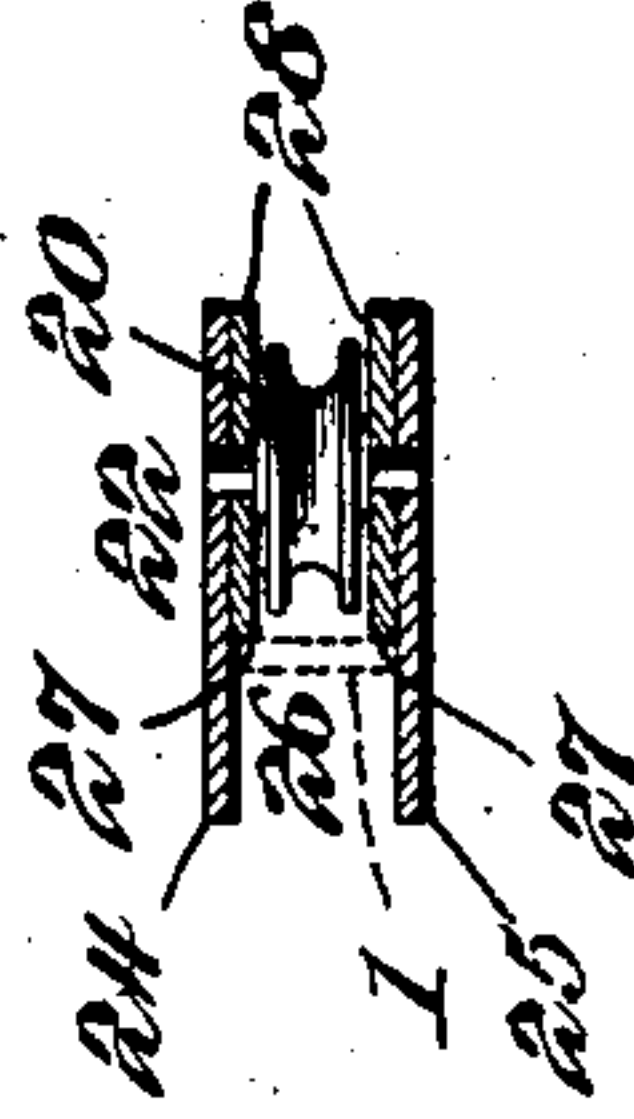
904,641.

Patented Nov. 24, 1908.

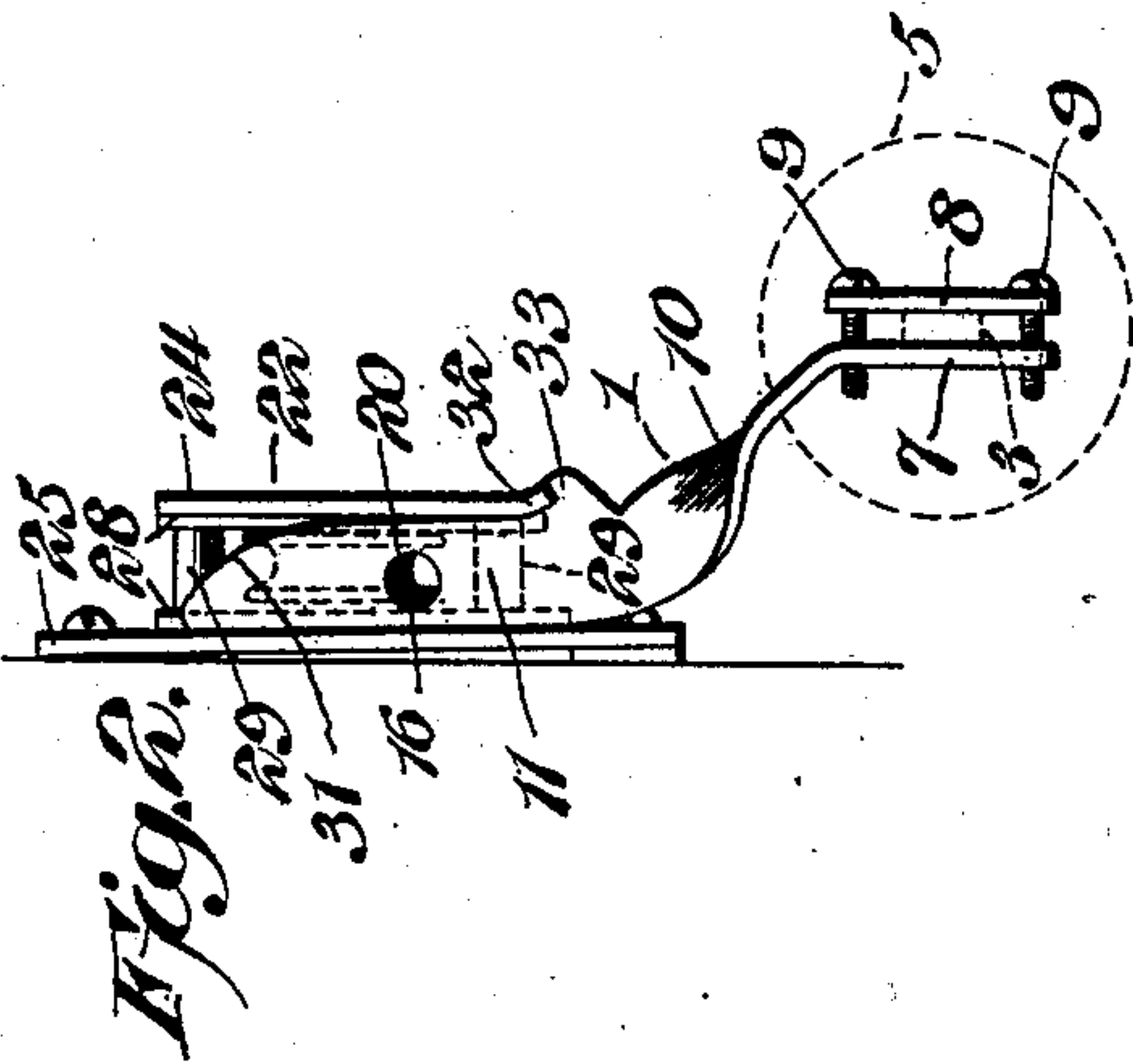
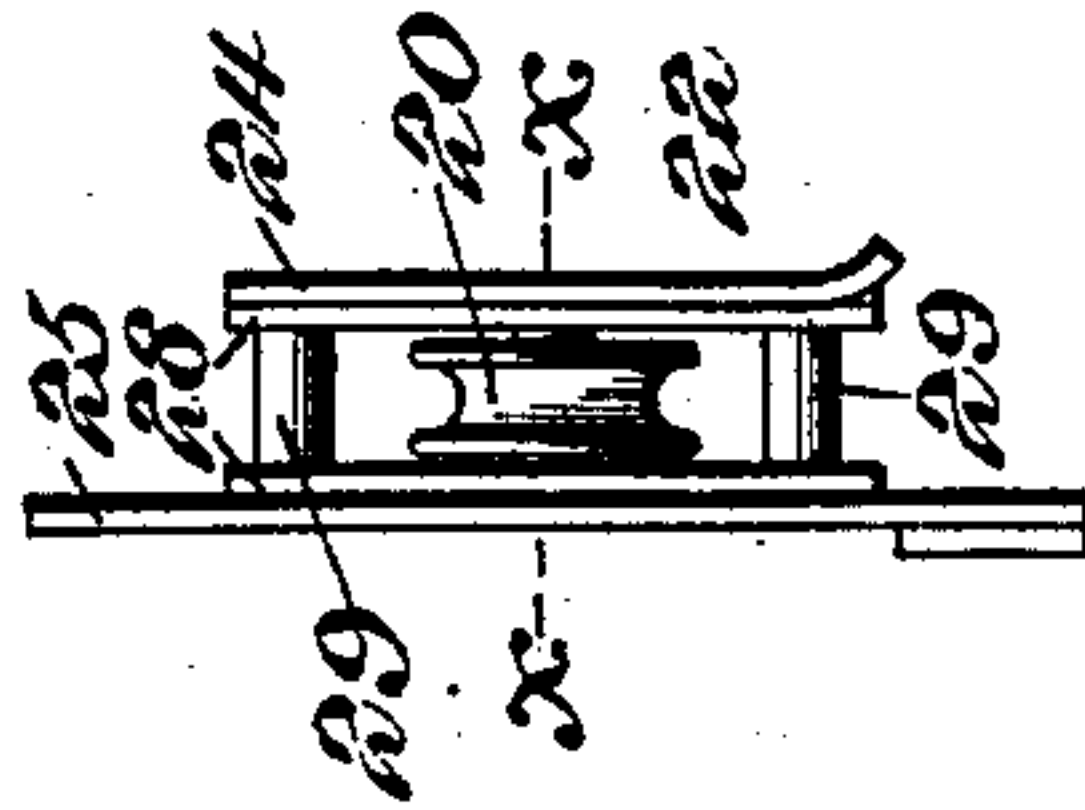
2 SHEETS—SHEET 1.



*Fig. 5.*



*Fig. 4.*



Witnesses

Howard D. Orr.  
J. F. Riley

J. D. Perrott,

By

E. G. Siggers

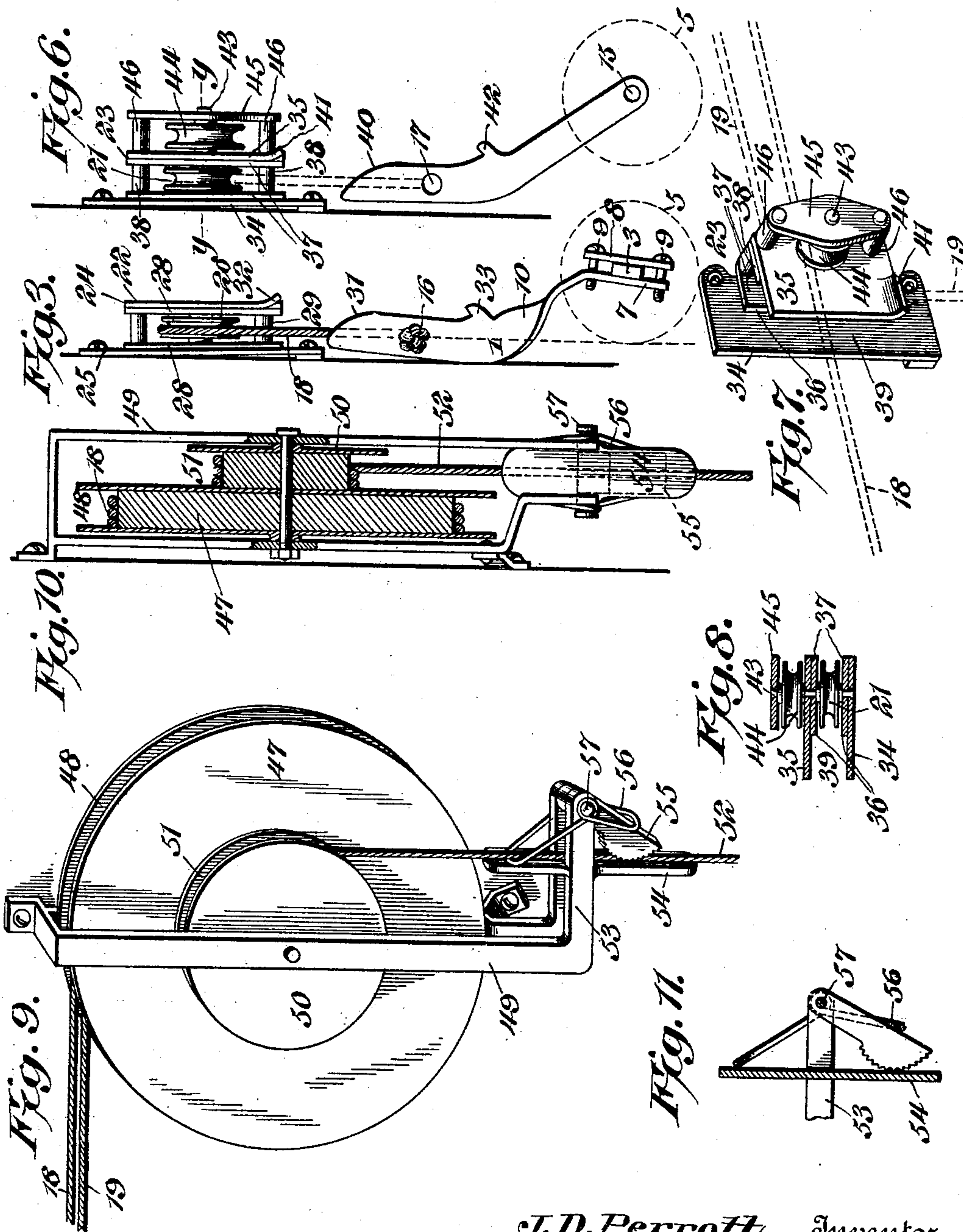
Attorney

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Witnesses

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# UNITED STATES PATENT OFFICE.

JAMES D. PERROTT, OF BEAVER FALLS, PENNSYLVANIA.

## ADJUSTABLE WINDOW-SHADE FIXTURE.

No. 904,641.

Specification of Letters Patent.

Patented Nov. 24, 1908.

Application filed May 18, 1907. Serial No. 374,327.

*To all whom it may concern:*

Be it known that I, JAMES D. PERROTT, a citizen of the United States, residing at Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented a new and useful Adjustable Window-Shade Fixture, of which the following is a specification.

The invention relates to improvements in adjustable window shade fixtures.

The object of the present invention is to improve the construction of adjustable window shade fixtures, and to provide a simple, inexpensive and efficient one, adapted to permit a window shade to be raised and lowered bodily to arrange it over any desired portion of a window, and to provide light and ventilation above the window shade.

A further object of the invention is to provide an adjustable window shade fixture, adapted to afford rigid supports for the window shade, when the same is arranged at the top of the window.

Another object of the invention is to provide an adjustable window shade fixture, adapted to permit the unrolled portion of the window shade to be arranged in practically the same plane as the supporting cords, without materially affecting the vertical position of the spring journal, whereby the latter will always be maintained in proper position to be engaged by the ratchet device for holding the shade roller stationary.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is an elevation of an adjustable window shade fixture, constructed in accordance with this invention and shown applied to a window. Fig. 2 is a side view, showing the supporting member of the spring journaled in engagement with the cooperating side casing. Fig. 3 is a similar view, showing the supporting member out of engagement with the side bracket. Fig. 4 is a detail view of the side

casing, which coöperates with the supporting member of the spring journal. Fig. 5 is a detail sectional view on the line  $x-x$  of Fig. 4. Fig. 6 is a side elevation of the other side pulley and the other supporting member. Fig. 7 is a perspective view of the side casing shown in Fig. 6. Fig. 8 is a detail sectional view on the line  $y-y$  of Fig. 6. Fig. 9 is a detail perspective view of the double pulley or sheave and the means for clamping the operating cord. Fig. 10 is a vertical sectional view of the same. Fig. 11 is a detail sectional view of the spring actuated cam for engaging the operating cord.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 and 2 designate supporting members, which receive journals 3 and 4 of a spring actuated shade roller 5 of a window curtain or shade 6. The supporting member 1, which consists of a narrow strip of metal, is provided at its lower end with a clamp, consisting of a vertical portion 7 of the supporting member and a clamping plate 8, which is connected with the supporting member by adjusting screws 9. The vertical lower portion 7 of the supporting member is arranged in parallelism with the clamping plate 8, and the two members of the clamp are adapted to receive between them the flattened portion of the spring journal 3, which is firmly held by the clamp. The supporting member is provided with an inclined intermediate portion 10 and has a quarter turn or bend thereat to arrange the upper portion 11 in a vertical plane at right angles to the vertical plane of the lower portion 7. The inclined portion 10 off-sets the lower portion 7 of the supporting member 1 from the window or casing 12, when the window shade or curtain is at the top of the window, as hereinafter more fully explained. The other supporting member 2, which is also constructed of a narrow strip or piece of metal, consists of an inclined lower portion 13 and a vertical upper portion 14. The lower end of the supporting member 2 is provided with a perforation 15, forming a bearing opening for the reception of the pivot or journal 4 of the shade roller. The pivot or journal 4 preferably consists of a screw, but any other suitable means may be employed for connecting one end of the shade roller to the member 2.

The upper portions are provided at inter-



mediate points with perforations 16 and 17 for the reception of adjusting cords 18 and 19, which pass over guide pulleys 20 and 21 of side casings 22 and 23. The side casing 22 is provided with front and rear side plates 24 and 25, and it is open at one side to form a recess 26 for the reception of the upper portion of the supporting member 1. It is provided within the recess with vertical shoulders 27, formed by plates or pieces 28 arranged within the casing, as clearly illustrated in Fig. 4 of the drawings, but the shoulders may be constructed in any other preferred manner. The front and rear plates or pieces are spaced apart by means of sleeves 29, arranged on rivets, or other suitable fastening devices, which connect the plates. The guide pulley 20 is mounted on a suitable pivot or spindle, arranged in bearing openings or perforations of the front and back of the side casing 22. The supporting member 1 is provided at the upper portion with a rounded edge 31 for guiding it into the recess 26, and the lower edge 32 of the front plate is bent outward at the bottom of the recess to form a flaring entrance to the same. The upward movement of the supporting member 1 in the recess is limited by a hook-shaped lug or projection 33, located at the outer edge of the supporting member 1 at the lower end of the upper vertical portion of the same. The adjusting cord, when drawn taut, is adapted to hold the supporting member 1 firmly interlocked with the side casing 22 in the position illustrated in Fig. 2 of the drawing. This will maintain the window shade in spaced relation with the window frame, and the window shade will then be supported as firmly as an ordinary window shade having fixed bearing brackets.

The side casing 23 is provided with plates 34 and 35 and it has interiorly arranged shoulders 36, formed by inner plates 37. The plates are spaced apart by sleeves 38, and the bracket 23 is provided at one side with a recess 39 to receive the upper portion of the supporting member 2. The upper end of the supporting member 2 is provided with a rounded or curved edge 40, and the lower edge 41 of the plate 35 is curved outward to provide a flaring entrance to the recess of the side bracket 23. The side member 2 is also provided at the lower end of the upper portion with a projecting substantially hook-shaped lug 42 to interlock with the outwardly curved edge of the plate 35, whereby the supporting member 2 is firmly held in engagement with the casing 23, when the adjusting cords are placed under tension with the supporting member 2 in engagement with the casing. The guide pulley 21 is mounted on a pivot 43 and is arranged on the plates 34 and 35, and a second guide pulley 44, which receives the adjusting cord

18, is mounted on the pivot 43 between the plate 35 and a plate 45. The plate 45 is spaced from the plate 35 by suitable sleeves 46, disposed on the rivets or fastening devices, which also connect the plates 34 and 35.

When the adjusting cords are operated to lower the window shade or curtain, the supporting members 1 and 2 drop out of engagement with the side casings 22 and 23, and the unrolled portion of the window shade will then lie in substantially the same plane as the supporting cords, and this inward or backward movement of the lower portion of the supporting member 1 does not materially affect the arrangement of the spring journal with relation to the ratchet device of the spring actuated roller, so that the spring journal will always be in proper position to be engaged by the ratchet mechanism of the roller. The intermediate portions of the supporting members form a fulcrum on which the members are adapted to rock, and when the members are lowered out of engagement with the casing, the lower portions swing inwardly and the upper portions swing outwardly, as clearly illustrated in Fig. 3 of the drawings.

The adjusting cords 18 and 19 extend from the side casing 23 to a pulley or sheave 47, having a peripheral groove 48 and mounted within a supporting frame 49. A smaller pulley 50 having a peripheral groove 51 is suitably fixed to the pulley 47, and the pulleys 47 and 50 are mounted on a horizontal spindle, which is preferably in the form of a bolt, as illustrated in Fig. 9 of the drawings. An operating cord 52 is arranged on the smaller pulley 50 in position to wind up the adjusting cords 18 and 19 on the pulley 47, as it is unwound from the smaller pulley 50. The weight of the window shade is sufficient to unwind the adjusting cords 18 and 19 from the large pulley 47, when the operating cord is slackened for this purpose. As the small pulley 50 is approximately one half the diameter of the large pulley 47, the operating cord will move one half the distance of the adjusting cords.

The supporting frame 49, which may be mounted on the window frame or casing at any suitable point, is preferably located at the top thereof and is provided at the bottom with a horizontal extension 53, carrying a vertical plate or jaw 54, against which the operating cord 52 is clamped by a spring actuated cam or lever 55. The lever 55, which is arranged at an inclination, extends downwardly from the outer end of the extension 53 of the supporting frame, and it is provided at its lower end with a substantially semi-circular head, having a notch or serrated edge and forming a cam for engaging the operating cord 52. The locking lever 55 is maintained normally in engagement with the operating cord by means of a spring



56, consisting of upper and lower loops and intermediate spring coils, which are mounted on the pivot 57 of the locking lever 55. The operating cord is adapted to be drawn outward away from the plate or jaw 54, and the weight of the window shade is sufficient to overcome the force of the spring 56, so that when the operating cord is held outward in such position, it may be released slowly to lower the window shade to the desired elevation. Any other form of locking device may be employed for holding the operating cord.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a curtain fixture, the combination with adjusting cords, of guiding means for the cords, supporting members connected with the cords, one of the supporting members having a bearing to receive one of the pivots of a shade roller, and the other supporting member being provided with a clamp to engage the spring journal of the shade roller, said clamp having a plate spaced from the supporting member, and adjusting screws connecting the plate with the supporting member.

2. In a curtain fixture, the combination with adjusting cords, of casings having guiding means for the cords, and supporting members connected with the adjusting cords and detachably interlocked with the casings, said supporting members being provided with downwardly and outwardly inclined lower portions arranged to receive the journals of a shade roller and adapted to hold the same away from a window frame.

3. In a curtain fixture, the combination with adjusting cords, of casings having guiding means for the cords and provided with recesses, and supporting members connected at an intermediate point with the cords and provided with upper portions to fit in the recesses of the casings when the supporting members are raised to the limit of their upward movement, whereby they are interlocked with the casing, said supporting members being also provided with downwardly and outwardly extending lower portions arranged to receive the journals of a shade roller and adapted to hold the same away from the window frame when the supporting members are interlocked with the casings, the intermediate portions of the connecting members forming fulcrums on which the members rock to swing their upper portions outward when the members are lowered out of engagement with the casing.

4. In a curtain fixture, the combination with an adjusting cord, of a casing having guiding means for the cord and provided with a recess, and a supporting member having angularly related upper and lower portions and connected at an intermediate point

with the adjusting cord and provided at the lower portion with means for supporting a shade roller, whereby the weight of the latter will throw the upper portion of the supporting member outwardly to guide the same into the recess of the casing.

5. In a curtain fixture, the combination of a casing provided with a recess open at the outer side and having vertical shoulders at the inner side, and a cooperating member adapted to support one end of a shade roller and provided with an upper portion arranged to extend within the recess of the casing and adapted to fit against the said shoulders and provided with a lug arranged to engage the bottom of the casing to limit the upward movement of the supporting member.

6. In a curtain fixture, the combination with a shade roller of a casing having a recess, a cooperating member carrying the shade roller and having upper and lower portions arranged at an angle to each other, the upper portion being beveled for guiding it into the said recess when the supporting member is raised to the limit of its upward movement, whereby it is interlocked with the casing, the lower portion of the said supporting member being downwardly and outwardly inclined to hold the shade roller away from the window frame when the supporting member is interlocked with the casing, the intermediate portion of the said member forming a fulcrum on which the member rocks to swing the upper portion outward when the member is lowered out of engagement with the casing, and means for raising and lowering the said member.

7. In a curtain fixture, the combination of a casing having a recess, and a cooperating member adapted to support one end of a shade roller and having upper and lower portions arranged at an angle to each other, the upper portion being beveled for guiding it into the said recess and the lower portion being downwardly and outwardly inclined for holding the shade roller away from a window frame, said member being provided at the angle formed by the upper and lower portions with a projecting lug arranged to engage the bottom of the casing.

8. In a curtain fixture, the combination of a casing having a recess and provided with interior vertical shoulders, said casing being also provided at the bottom of the recess with an outwardly extending edge forming a flaring entrance, and a cooperating member adapted to support one end of a shade roller and provided with an upper portion to fit in the said recess and having a hook-shaped projection to interlock with the outwardly extending edge at the bottom of the recess.

9. In a curtain fixture, the combination with a casing having a recess, of a cooperating



ing supporting member provided with an upper portion fitting in and detachably engaging the recess, said supporting member being also provided at an intermediate point  
5 with a quarter bend and having a lower straight portion forming a jaw, a clamping plate cooperating with the jaw, and adjusting screws connecting the ends of the clamping plate with the jaw.

10 10. In a curtain fixture, the combination of a casing, and a cooperating supporting member detachably engaging the casing and having a lower straight portion forming a jaw, a clamping plate cooperating with the  
15 jaw, and adjusting screws connecting the ends of the clamping plate with the jaw.

11. In a curtain fixture, the combination with a casing, of a cooperating supporting member having an upper portion detachably  
20 fitting in the casing, said supporting member being also provided at its lower portion with a projecting clamp arranged to hold a shade roller away from a window frame.

12. In a curtain fixture, the combination

of an adjusting cord, guiding means there- 25  
for, a supporting member consisting of a narrow strip of metal having angularly related upper and lower portions and provided at an intermediate point with a quarter bend to arrange the faces of the upper 30  
and lower portions in planes at right angles to each other, the upper portion of the supporting member being connected with the adjusting cord, a clamping plate adjustably connected with the lower portion of the 35  
supporting member and cooperating with the same to form a clamp for engaging the spring journal of the shade roller, and means for engaging the adjusting cord to secure the supporting member in its adjustment. 40

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JAMES D. PERROTT.

Witnesses:

ROLAND CHAS. KERLL,  
EARL R. LEYDA.