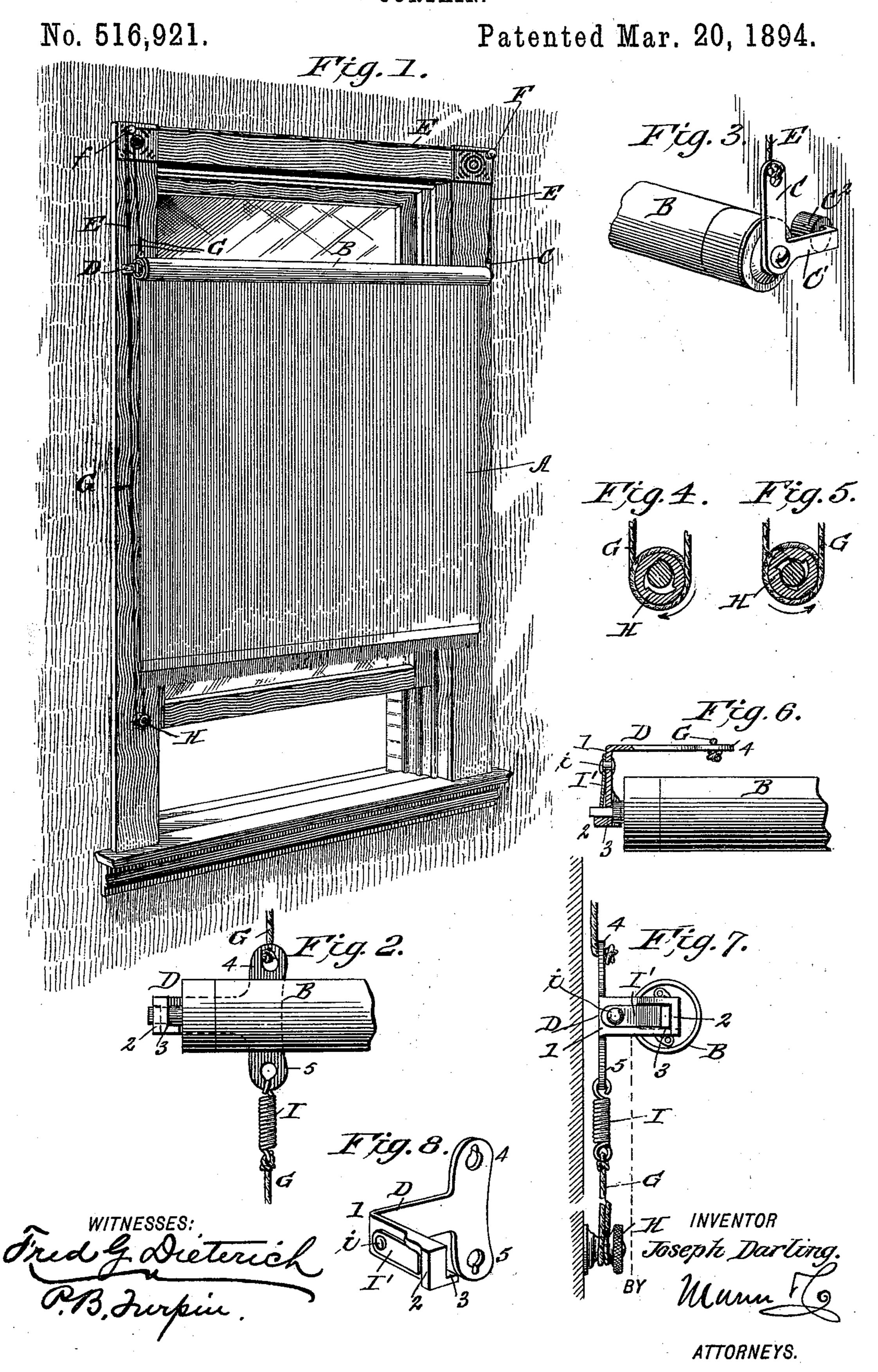
J. DARLING. CURTAIN.



United States Patent Office.

JOSEPH DARLING, OF BALDWIN, PENNSYLVANIA.

CURTAIN.

SPECIFICATION forming part of Letters Patent No. 516,921, dated March 20, 1894.

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To all whom it may concern:

Be it known that I, Joseph Darling, of Baldwin, in the county of Butler and State of Pennsylvania, have invented a new and useful Improvement in Curtains, of which the following is a specification.

My invention is an improvement in curtains and especially in the fixtures and the invention consists in the special construction, combinations and arrangements of parts as will be hereinafter described and pointed out in the claims.

In the drawings—Figure 1 is a perspective view of my curtain as in use. Figs. 2 and 3 are detail views of the opposite ends of the curtain and the brackets at such ends. Figs. 4 and 5 are detail sectional views illustrating the ratchet guide, and Figs. 6, 7 and 8 are details views.

The curtain A is fixed to the roller B which may be of the Hartshorn or other self rolling type. At one end the roller B is journaled to | the bracket C while its other end is fixed to the bracket D. The bracket C is suspended 25 on a cord E and is formed with an inwardly projected arm C' having at its extremity a pad or cushion C² which bears against the window frame and prevents any denting or marring thereof. This is important as the 30 said bracket C is simply suspended by a cord and it with the connected end of the curtain will be blown away from the window by even a light breeze and will drop back and hammer against the window frame marring the 35 same considerably in a short time. This is avoided by furnishing the pad which cushions the blow and avoids injury to the window frame.

The cord E extends up from the bracket C

40 over a guide F at one side of the top of the frame thence across to the opposite side of the frame and over a guide f and thence down and connects with a cord G. This cord G is wound on or around a guide H is carried thence up over the guide f and thence down and connected with the bracket D. The other end of cord G extends up from guide H and is also connected with the bracket D the connection being preferably effected through the medium of the spring I which is shown as a coil spring and operates to give tension to the cord G at all times and thus enable

the certain operation of the curtain thereby. It will be understood that the curtain may be caused to ascend or descend by properly ma- 55 nipulating the cord. To facilitate the lifting of the curtain I make the guide H in the form of a ratchet drum with its ratchets so faced that when the cord is moved to raise the curtain said ratchets will slip while if 60 moved in the opposite direction, that is to lower the curtain it will lock the rachet from turning so that the downward movement of the curtain is retarded by the friction of the cord upon the guide H. This will be best under- 65 stood from Figs. 4 and 5. If moved in the direction indicated in Fig. 4 the ratchet will lock the guide from turning so the cord must be slipped along the guide, while if the cord be moved in the direction indicated in Fig. 5 73 it will be seen that the ratchet will slip, the guide thus rolling and permitting the curtain to be easily raised while the weight of the curtain and fixture aids in lowering the same.

The bracket D is of special construction 75 being formed with the main plate 1 having at its outer end the forwardly projected lug 2 having the seat 3 for the angular stud of the roller and having at its inner end the upper and lower arms 4 and 5 which project 80 up and down approximately at right angles to the plate 1 and the operating cord is connected with said arms 4 and 5 near their extremities.

This construction and arrangement is important for several reasons. It permits by reason of the plate 1 the extension of the curtain outwardly beyond the operating cords and permits it to be made to fully cover the window. Another advantage resulting from 90 this construction is that the arrangement of the plate 1 and arms 4 and 5 constitutes practically a double bell crank lever enabling the operating cord to exert leverage to sustain the bracket and curtain in position.

The curtain is secured rigidly in its seat in the bracket D by means of the spring pawl latch I' which is fixed at one end i to the bracket and projects at its other end partly over the outer end or side of the seat 3.

connection being preferably effected through the medium of the spring I which is shown as a coil spring and operates to give tension to the cord G at all times and thus enable It will be seen that if the square end of the curtain roller be inserted in said seat 3 from the inner side of the bracket it will be locked firmly by the point of the spring latch

operating like a pawl against the side of the stud as will be best understood from Figs. 6 and 7. The square stud can however be conveniently released by slipping the point of a screw driver or other suitable instrument under the free end of the pawl and pressing the same outward clear of engagement with the roller stud.

Having thus described my invention, what to I claim as new, and desire to secure by Letters

Patent, is—

1. An improvement in curtain hangers consisting of the curtain, the cords on which said curtain is suspended and a ratchet guide around which the operating cord is passed without being fixed to it and from which the cord extends whereby said guide will turn in one direction of movement of the cord but will lock during the opposite movement of the cord and require the cord to slide upon it during such movement all substantially as set forth and for the purposes specified.

2. A curtain bracket provided with a seat for the roller stud and having a pawl latch fixed at one end and projected at its opposite end adjacent to said seat whereby to engage the side of and lock the roller stud from endwise movement out of its seat all substantially as and for the purposes set forth.

30 3. A curtain bracket composed of the main plate having at its outer end a forwardly projecting lug provided with a seat for the roller stud and with devices for locking such stud in said seat, the main plate being provided at its opposite or inner end with arms projecting up and down at approximately right angles to the main plate and adapted for the

connection of the cord lengths all substantially

as and for the purposes set forth.

4. A curtain bracket consisting of the main 40 plate having at its inner end upwardly and downwardly projecting arms and provided at its outer end with a forwardly projected lug having a seat for the roller stud and a latch pawl fixed at one end and projecting at its 45 other or free end partly over the seat in the lug whereby to engage the side of the stud all substantially as set forth.

5. The combination with the roller the operating cords and the guides of the bracket 50 having a main plate provided at its innerend with upwardly and downwardly projecting arms, to which the operating cord is connected, and having at its outer end a forwardly projected lug having a seat for the roller stud 55 and devices for locking such stud in said seat

all substantially as set forth.

6. A curtain bracket substantially as described provided with a lug having an opening forming a seat for the roller stud and provided so along the outer side of said lug with a spring plate fixed at one end and having its other end free and arranged and adapted to engage the side of the stud, all substantially as described, whereby the stud may be inserted 65 through its bearing opening past the point of the spring plate but will be locked against detachment by the pawl action of said plate, as and for the purposes set forth.

JOSEPH DARLING.

Witnesses:

P. B. TURPIN, SOLON C. KEMON.