J. C. LAKE.

Curtain-Fixture.

No. 200,314. Patented Feb. 12, 1878.

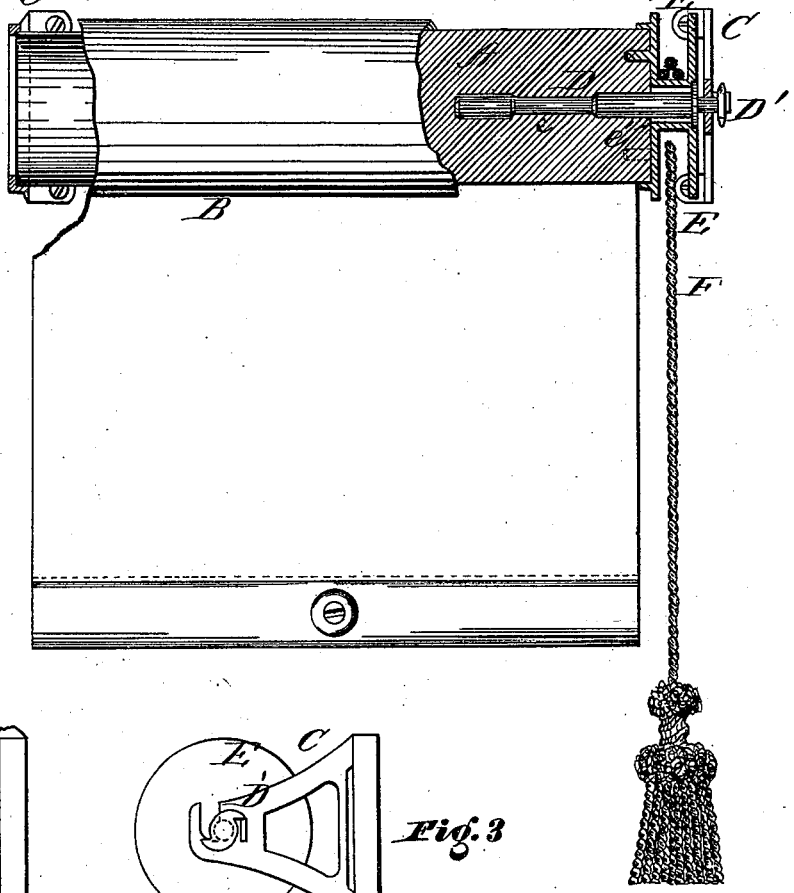


Fig. 1

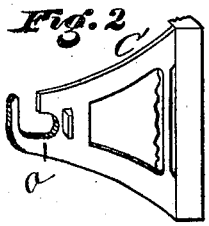


Fig. 2

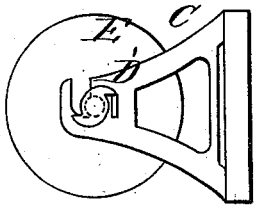


Fig. 3

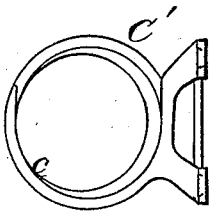
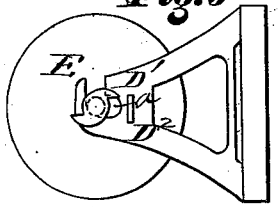


Fig. 4

Fig. 5



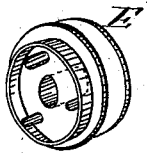


Fig. 6

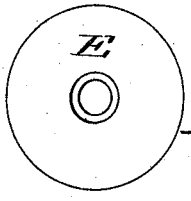


Fig. 7

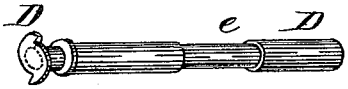


Fig. 8

Witnesses

Saml. Hay Stavorer

Jos. P. Connolly

Inventor

J. C. Lake

By Connolly Bro

Attorneys

UNITED STATES PATENT OFFICE.

J. CHRISTOPHER LAKE, OF CAMDEN, NEW JERSEY.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **200,314**, dated February 12, 1878; application filed June 11, 1877.

To all whom it may concern:

Be it known that I, J. CHRISTOPHER LAKE, of Camden, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Curtain-Fixtures; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a face view of the shade and fixtures, the latter being in section. Figs. 2, 3, 4, 5, 6, 7, and 8 are detail views of the fixtures.

This invention has relation to curtain-fixtures; and consists in the novel construction, combination, and arrangement of parts, whereby the curtain roller and shaft, adhering to each other by the binding of the fibers of the wood, are caused to turn together in the one direction when the curtain is being raised, while, when the curtain is being drawn down, the roller turns independently upon the shaft, which is then held stationary by a ratchet and stop or brake.

For the purposes of my invention the shaft is made cylindrical and smooth, and simply embedded in the end of the roller, where a socket is bored to receive it. The two surfaces impinge closely, and the binding or compression of the fibers of the wood is sufficient to hold the shaft in place, so that, when not otherwise held, it will turn in the same direction as and with the roller. The roller, however, may be turned upon the shaft when the motion of the latter is arrested.

A ratchet and stop or brake are employed to detain the shaft and prevent it from turning except in one direction. This brake is automatic, and comes into action when the curtain is being drawn down, the roller then turning upon, and independently of, the shaft.

When the curtain is being raised by means of its cord and pulley, the brake is released, and the roller and shaft turned together.

Referring to the drawings, A designates the curtain-roller; B, the curtain; C C′, the brackets; D, the shaft; E, the cord-pulley, and F the cord.

The shaft has a smooth cylindrical surface, and is formed with a circumferential groove, *e*, into which the wood of the roller is compressed when the shaft is driven into the socket *e′*, which socket is bored of a slightly less diameter than the thicker portions of the shaft. By this means the shaft is held firmly in the direction of its length, and prevented from displacement.

D^1 is a ratchet or dog, formed on or attached to the end of the shaft; and D^2 is a stop or catch on the outside of the bracket C, with which said ratchet engages when the curtain-cord is released.

The shaft passes through an elongated bearing or slot, *a*, in the bracket.

When the cord is pulled, the shaft and roller are drawn forward and the ratchet and stop disengaged. The reverse movement, consequent upon the release of the cord, and effected by the tendency of the curtain to turn the roller, causes the ratchet and stop to re-engage.

A coating of plumbago or its equivalent applied to the shaft or surface of the socket decreases the friction, and allows the roller to turn more easily upon the shaft.

Having described my invention, I claim—

In combination with mechanism, substantially as described, for raising the curtain and detaining the shaft, the roller A and shaft D, the latter being embedded in the former, and held, as set forth, by the binding action of the wood, whereby, when the shaft is released from its catch, both roller and shaft will turn together, while, when the shaft is detained, the roller will turn freely upon and independently of it, as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of May, 1877.

J. CHRISTOPHER LAKE.

Witnesses:

GEO. C. SHELMERDINE,

SAML. J. VAN STAVOREN.