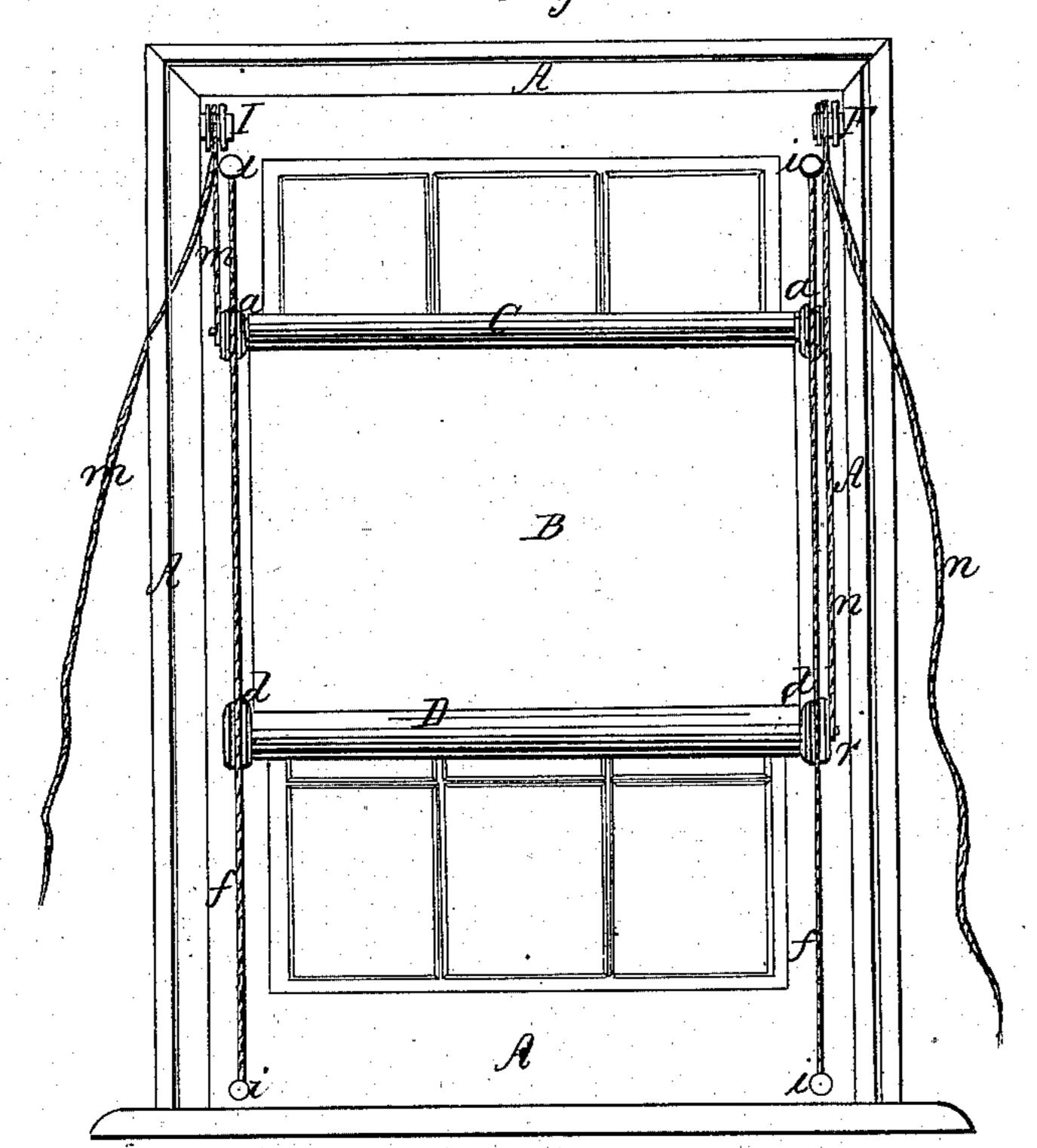
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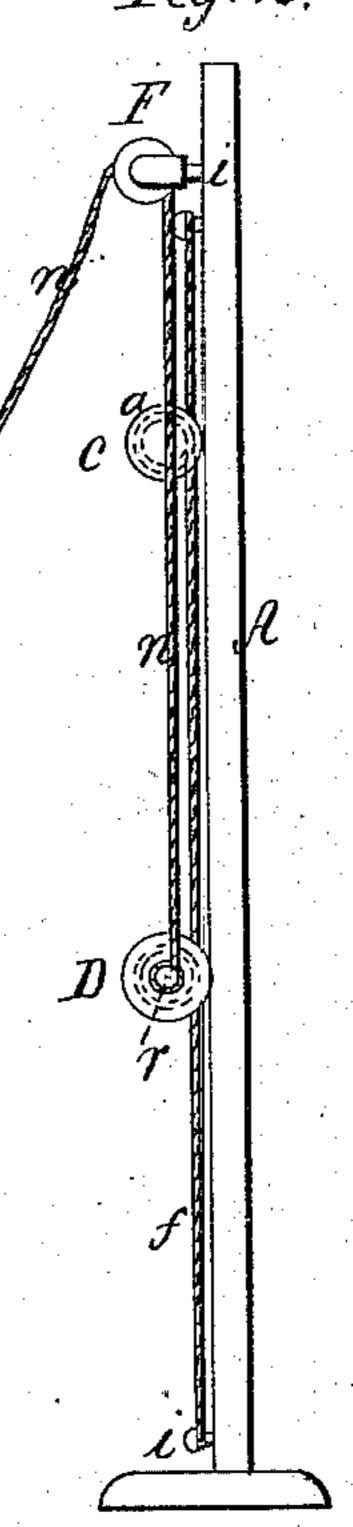
11:057,053.

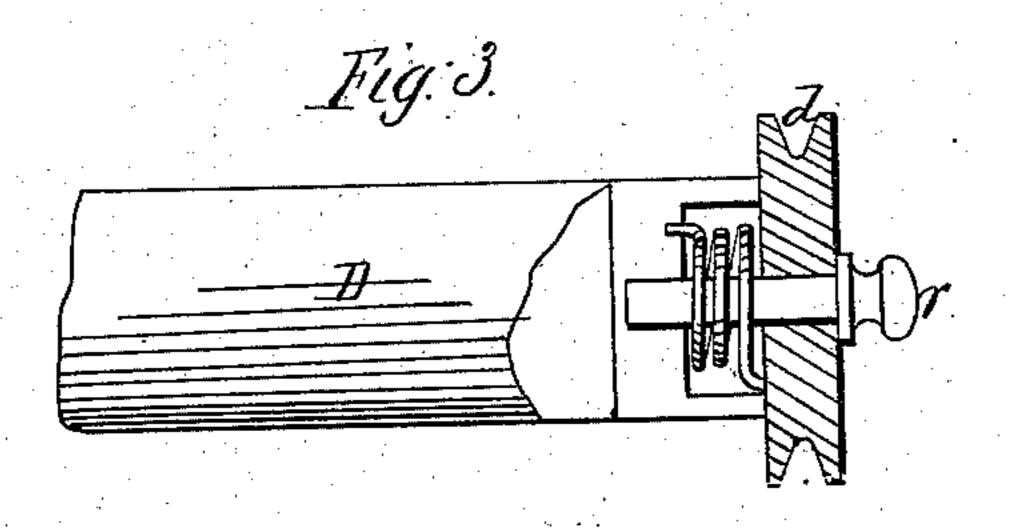
Curtain Fixture,

Patented Aug. 7, 1866.

Fig. 2.







Witnesses;

United States Patent Office.

GEORGE M. WHITE, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO HIM-SELF AND T. B. CARPENTER.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. 57,053, dated August 7, 1866.

To all whom it may concern:

Be it known that I, GEORGE M. WHITE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Curtain-Fixtures; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a front view, Fig. 2 an edge view, and in Fig. 3 a sectional view of one of the rollers.

My invention is designed to roll the curtain either from the top down or from the bottom up; and it consists in the peculiar mechanism whereby this object is attained; and that others may be enabled to construct and arrange my improved fixture, I will proceed to describe the same as illustrated in the accompanying drawings.

A A is the frame of a common window; B, the curtain; C, the upper roll, and D the lower roll. Upon each end of the upper roll are fixed two grooved pulleys, a, and upon the lower roll two similar grooved pulleys, d. On each side of the frame I fix a non-elastic cord, f, secured at the top and bottom by any convenient arrangement, i, by which the said cord may be tightened, if required. The said cord f passes around each of the pulleys on the upper and lower roll, as denoted in red, Fig. 2.

Upon one side—say the right—I fix upon the frame a pulley, F, over which I pass a cord, n, thence down and fix to a pivot, r, on the lower roll, so that when the cord n is drawn so as to raise the lower roll the pivot r will turn freely in the attachment to the cord n thereto. By thus drawing the cord n the lower roll is raised, and in being so raised the cord f causes the roll to revolve as fast as it is drawn up.

Upon the opposite side of the frame a simi-

lar pulley, I, is fixed, having a similar cord, m, attached in like manner to the opposite end of the upper roll, as seen in Fig. 1, so that as this said cord m is drawn up the upper roll will in like manner be caused to revolve and unroll the curtain; or, when permitted, the upper roll will of its own weight fall and wind the curtain from the top downward; thus, accordingly as either cord n or m is drawn the curtain will be raised from the top or bottom, or when released both rolls will descend.

In winding up the rolls, or either one of them, the velocity with which the roll is revolved is always the same, whereas the curtain is being wound faster in proportion to the increasing size of the roll. In order to make allowance for this increasing size of the roll I attach the pulleys to one or both of the rolls by means of a spring, as seen in Fig. 3, so that the pulley acts upon the roll through the said spring, the said spring yielding to the increase of the roll winding, or decrease in unwinding. This spring may be attached in various ways to accomplish the object.

It is not necessary that two rolls always be used, as the curtain may be secured to the frame either at the top or bottom, and a single roll arranged in the manner described, either to roll the curtain from the bottom or top, as the case may be; but in either case the compensation of the spring described is required.

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

The combination of the two cords f, with one or more rolls provided with pulleys corresponding to the said cords f, and arranged with a compensating spring, and so as to be operated substantially in the manner and for the purpose set forth.

GEO. M. WHITE.

Witnesses:

JOHN E. EARLE, ALTSIE J. TIBBITS.