

(No Model.)

W. N. BUCKLEY.

CURTAIN FIXTURE.

No. 275,580.

Patented Apr. 10, 1883.

fig. 1.

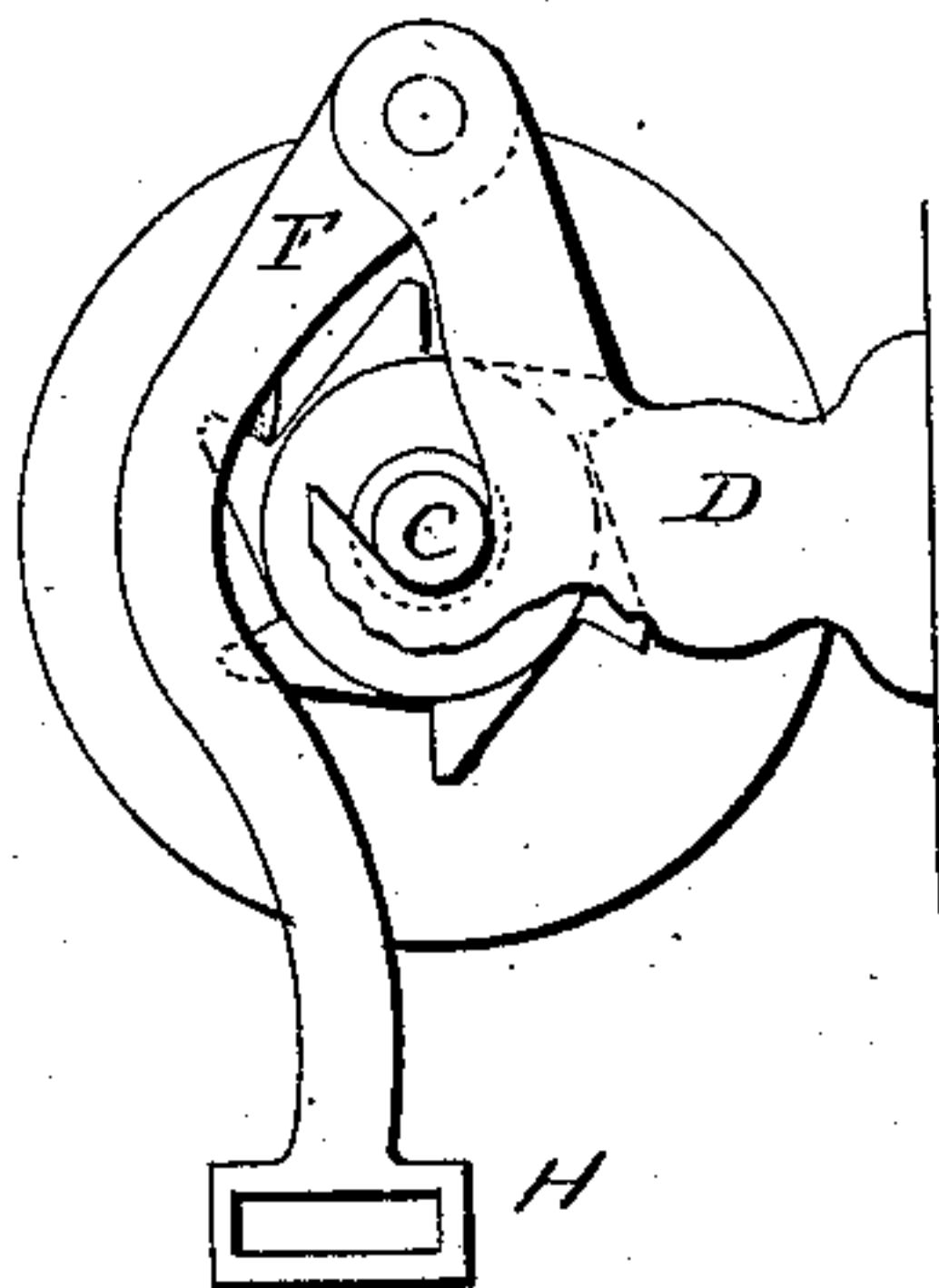


fig. 2

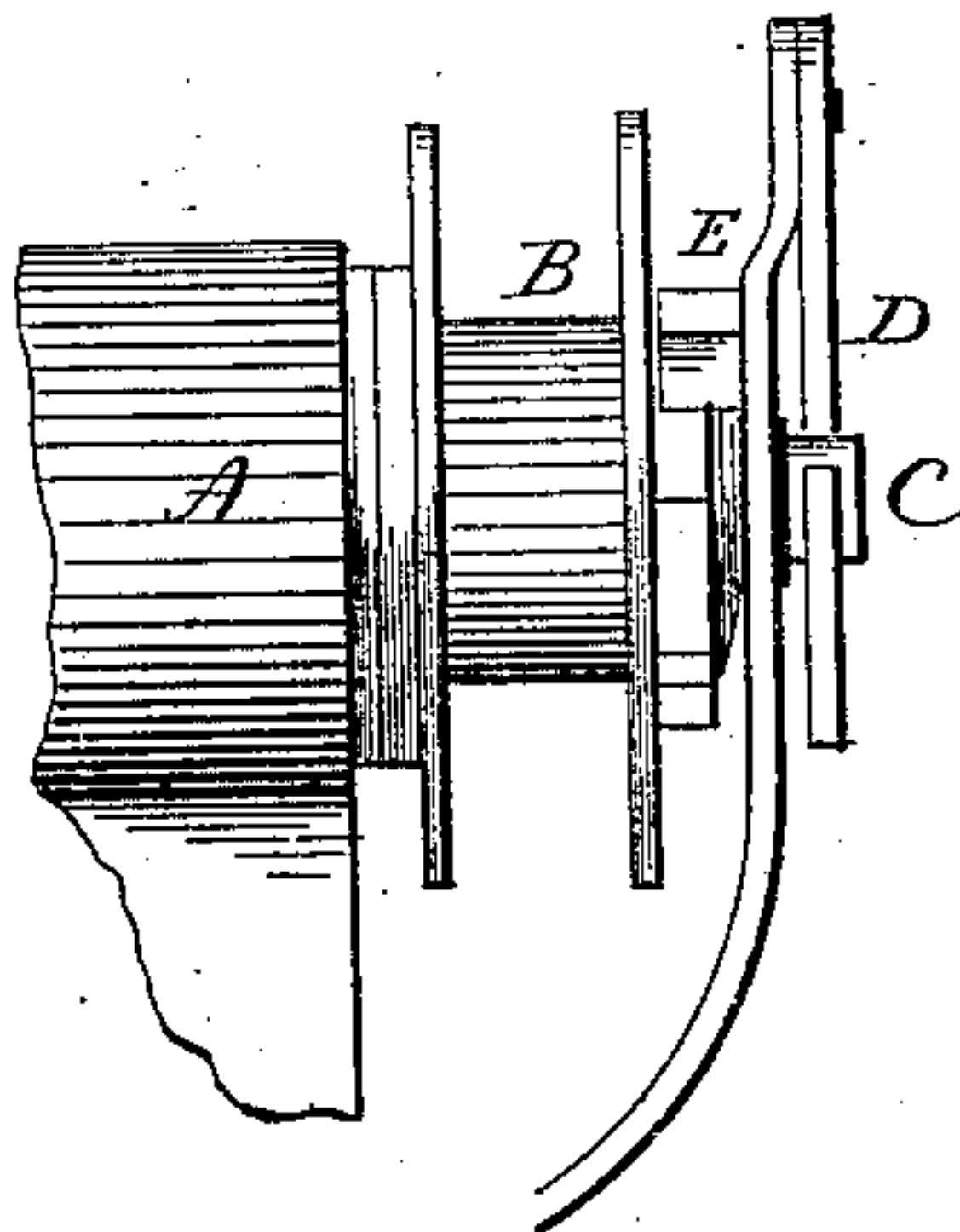
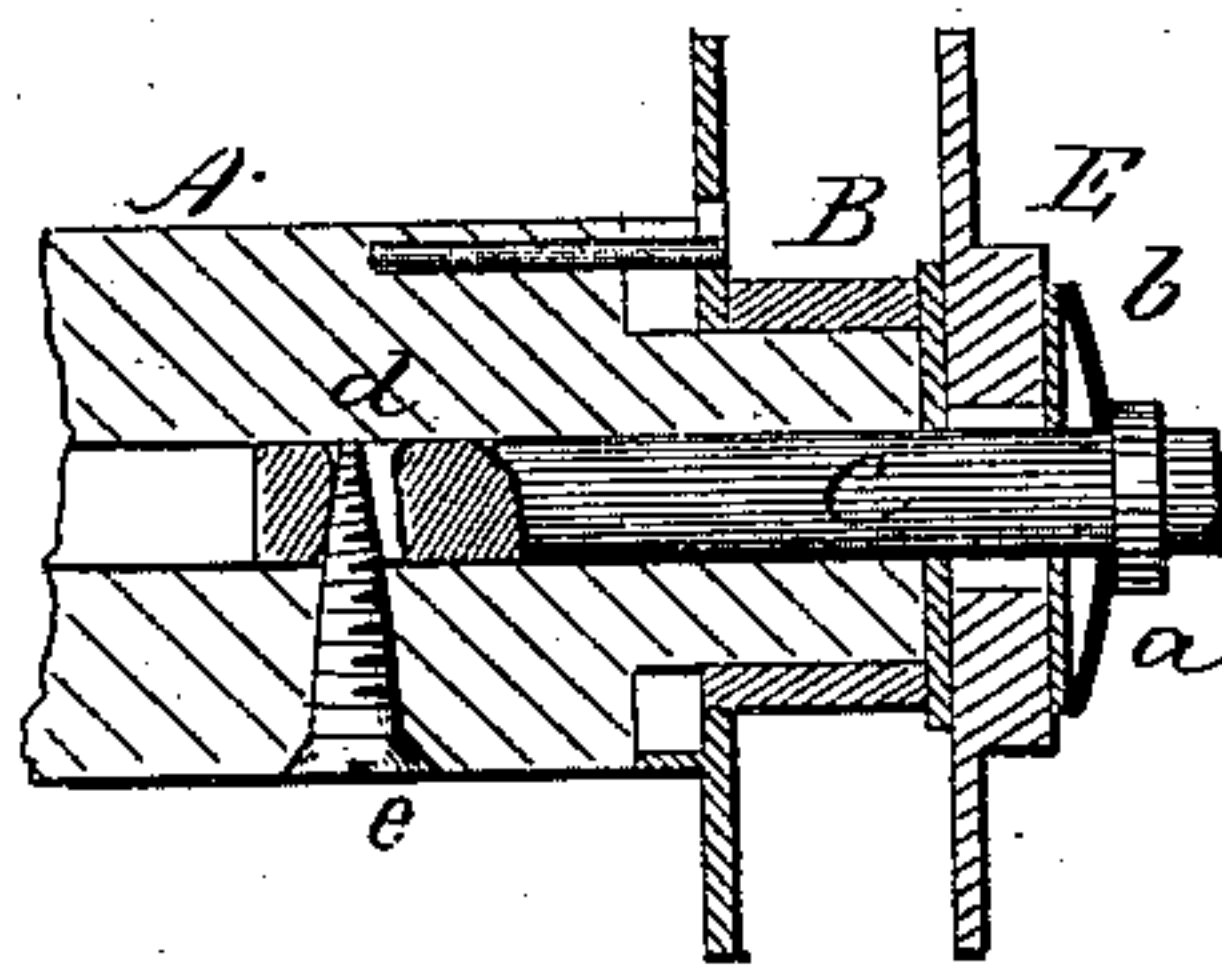


fig. 3.



Witnesses.

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WILLIAM N. BUCKLEY, OF MERIDEN, CONNECTICUT.

CURTAIN-FIXTURE.

SPECIFICATION forming part of Letters Patent No. 275,580, dated April 10, 1883.

Application filed September 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, WM. N. BUCKLEY, of Meriden, in the county of New Haven and State of Connecticut, have invented new Improvements in Curtain-Fixtures; and I do hereby declare the following, when taken in connection with 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, an end view, parts broken away; Fig. 2, front view; Fig. 3, longitudinal section.

This invention relates to an improvement in that class of curtain-fixtures in which a cord is wound upon a drum at one end of the roll when the curtain is drawn from the roll, and so that by pulling upon the cord to draw it from the drum the drum, with the roll, will be revolved and wind the curtain upon the roll, such as commonly called "cord-fixtures." To hold the roll at any desired elevation of the curtain, a ratchet is fixed at the drum end of the roll, with which a pawl engages, permitting the roll to turn freely when the cord is pulled to roll up the curtain, but making engagement to resist the turning of the roll in the opposite direction. The cord passes down through an arm of the pawl, so that a person, by means of the cord, may easily throw the pawl out of engagement, so as to permit the curtain to fall or unwind from the roll. If the ratchet be fast or rigidly attached to the roll or drum, then the curtain could only be dropped by disengaging the pawl; but as the most natural way to drop a curtain is to take directly hold of it, it has become necessary to apply a device which will permit the roll to turn when the curtain is pulled upon, independent of the ratchet, but yet retain sufficient connection with the ratchet that the curtain may not fall of its own weight. The best means known for doing this is to apply friction between the ratchet and drum or roll. Curtains vary so much in weight that if the applied friction be sufficient for the heaviest curtain it will be far too great for the lighter ones; hence the devices for applying the friction are made adjustable; but as heretofore constructed these devices for applying friction have been complicated and difficult to adjust while the roll rests in its seats in the bracket.

The object of my invention is to afford a simple, convenient, and durable means of adjustment; and it consists in a spindle introduced longitudinally through the ratchet into the end of the roll, and so as to bear with spring-pressure upon the ratchet, combined with a conical screw or pin inserted transversely into the roll, and so as to take a bearing in a recess in the spindle, and by its conical shape draw the spindle inward, according to the extent to which the pin or screw may be driven inwardly, as more fully hereinafter described.

A represents the roll; B, the drum; C, the spindle, which also forms the gudgeon at that end to rest in the bracket D; E, the ratchet, which is made a part of the outer head of the drum, but is not rigidly attached to the drum or spindle—that is, the roll, drum, and spindle may be revolved independently of the ratchet.

F is the pawl, which engages the ratchet, and is constructed with an eye, H, at its lower end, through which the cord passes, all of substantially common arrangement.

To apply the friction I construct the spindle C with a collar, *a*, near its outer end, and between that collar and the ratchet I place an elastic disk, *b*, so that the collar *a* bears thereon. The spindle extends into the roll, and is constructed near its inner end with a recess, *d*. Into the side of the roll, transversely, I insert a conical screw, *e*, so as to enter the recess *d* in the spindle and bear upon the inner side of the recess, as seen in Fig. 3, the conical shape of the screw tending to draw the spindle inward as it is turned farther into the recess. This drawing inward of the spindle forces the disk *b* with greater pressure against the ratchet and the ratchet against the end of the drum, according as the screw is driven inward; or by turning the screw outward the pressure will be relaxed. The pressure of the disk upon the ratchet, or "friction-plate," as it may be called, produces the required friction upon the roll. Instead of a screw, it may be a conical or wedge-like pin; but I prefer a screw, as it is more readily adjusted than the pin.

By this construction the friction may be adjusted after the roll and curtain are in place, as it is only necessary to draw the curtain from the roll to expose the head of the screw. Then a

slight turn of the screw outward or inward will increase or reduce the pressure accordingly.

I claim—

1. In a curtain-fixture having the spindle
5 C, arranged to apply friction to the roll, the combination therewith of the conical screw *e* through the roll, taking a bearing in a corresponding transverse seat in the spindle, substantially as described.

10 2. The combination of the roll A, drum B,

ratchet E, pawl F, and spindle C, arranged through the disk and ratchet into the roll and so as to bear upon the disk, with the conical adjuster *e*, inserted transversely into the roll and into a corresponding bearing or recess, *d*, 15 in the spindle, substantially as described.

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Witnesses:

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JOS. C. EARLE.