

(No Model.)

F. H. LOVELESS.
EXTENSION CURTAIN ROD.

No. 584,380.

Patented June 15, 1897.

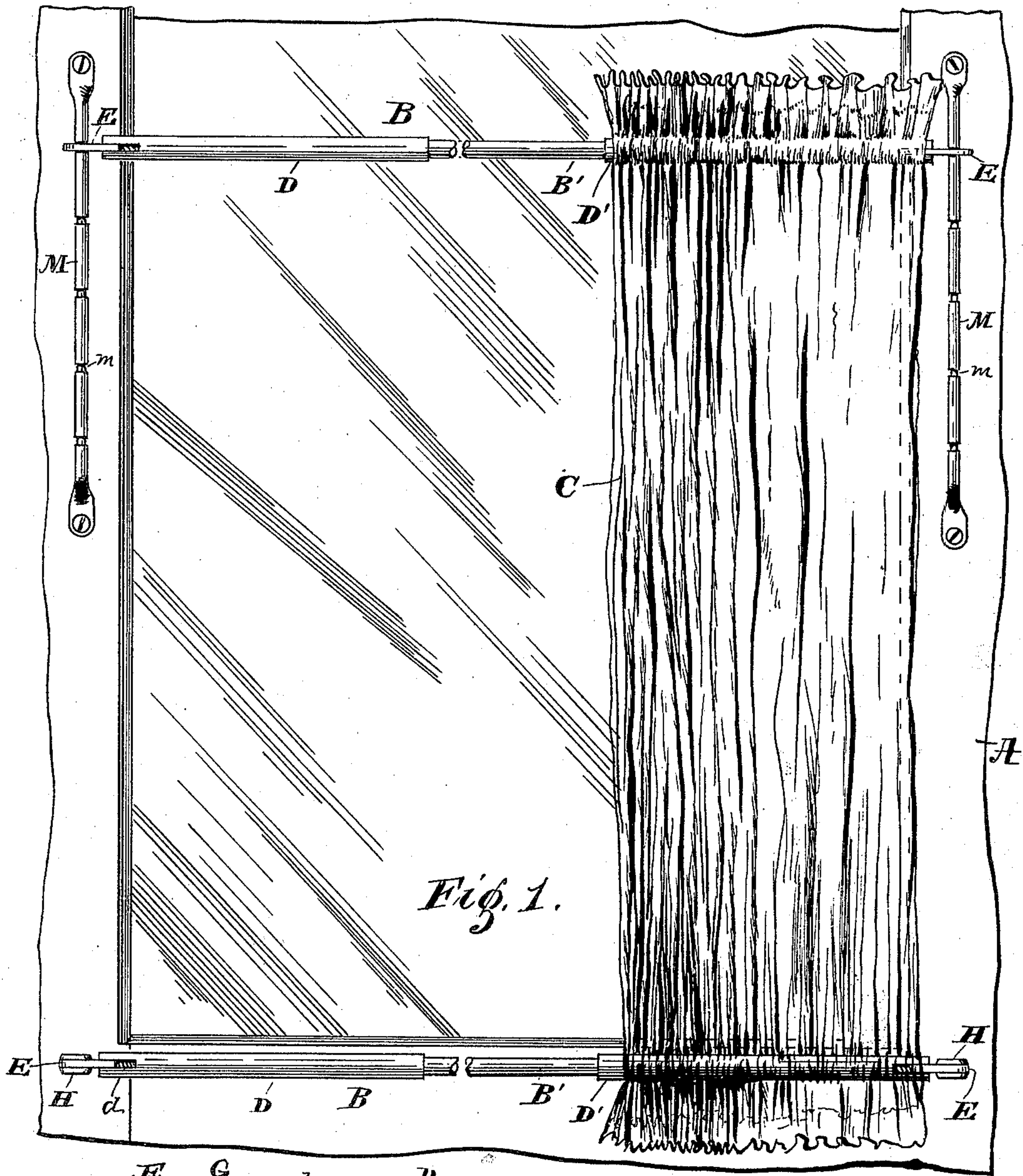


Fig. 1.

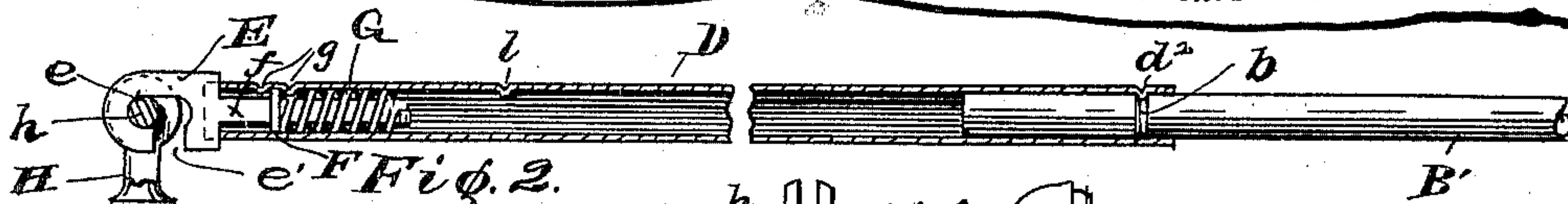


Fig. 2.

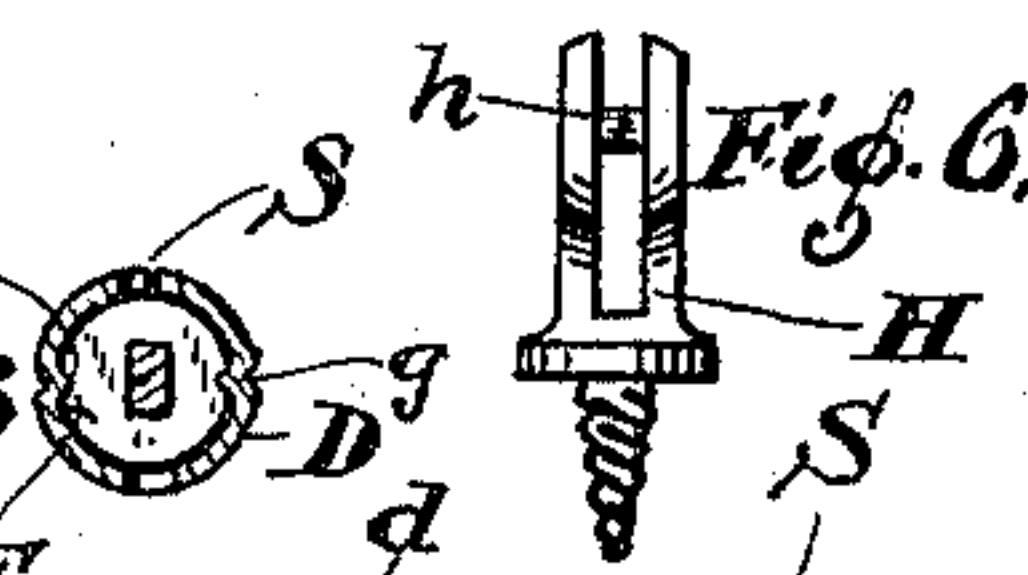
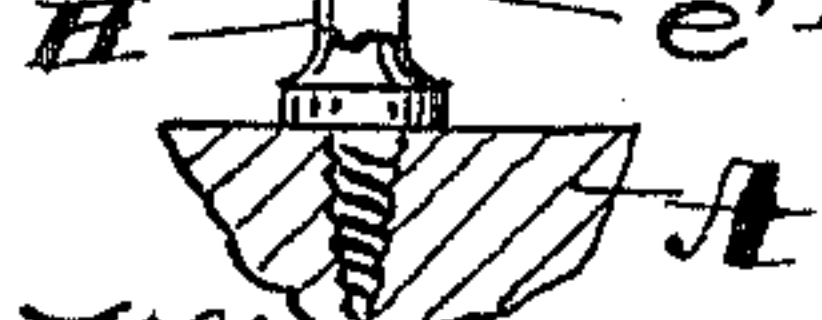


Fig. 4.

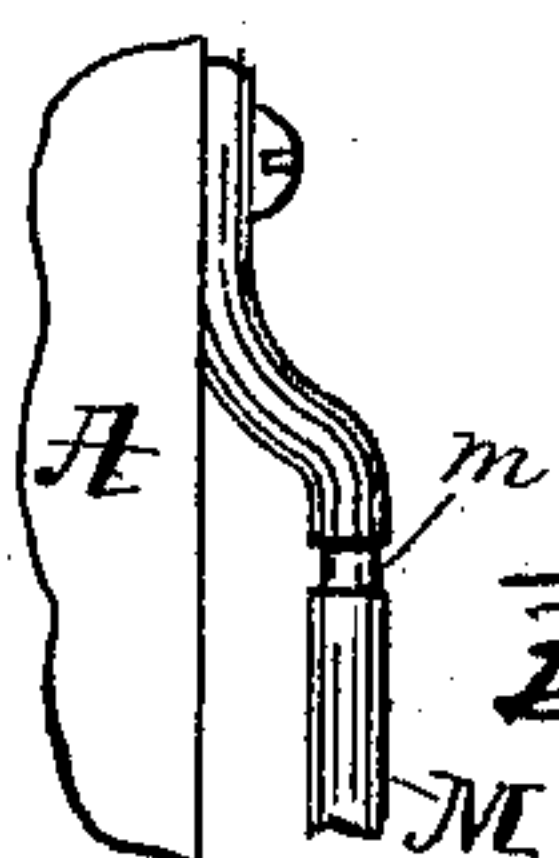


Fig. 5.

Witnesses; Fig. 3.
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Inventor,
Fred H. Loveless,
By Joseph A. Minturn
His Attorney

UNITED STATES PATENT OFFICE.

FRED H. LOVELESS, OF LAFAYETTE, INDIANA, ASSIGNOR OF TWO-THIRDS
TO LEONIDAS W. LOVELESS AND SYLVESTER C. LOVELESS, OF SAME
PLACE.

EXTENSION CURTAIN-ROD.

SPECIFICATION forming part of Letters Patent No. 584,380, dated June 15, 1897.

Application filed October 1, 1896. Serial No. 607,532. (No model.)

To all whom it may concern:

Be it known that I, FRED H. LOVELESS, a citizen of the United States, residing at Lafayette, in the county of Tippecanoe and State of Indiana, have invented certain new and useful Improvements in Extension Curtain-Rods; 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 appertains to make and use the same.

The object of this invention is to provide curtain-rods for windows and doors which can be adjusted in length to suit different sizes of openings and in distance apart to suit curtains of different lengths.

The object also is to provide means for securing the ends of the rods whereby the rods can be readily detached from their fastenings to allow the curtain to be applied or removed by slipping it on or off over the ends of the rods.

The object, further, is to provide a durable and inexpensive construction which will also be neat and attractive in appearance.

I accomplish the objects of this invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view in front elevation of a portion of a door, showing my improved rod applied thereto and showing the curtain drawn to one side to expose the rod. Fig. 2 is a detail in longitudinal section of my improved rod, showing the details of construction of the end hook. Fig. 3 is a view in cross-section on the line 3 3 of Fig. 2. Fig. 4 is a detail in perspective of one end of the curtain-rod with the fastening-hook drawn out and turned quartering to expose the mouth of the hook. Fig. 5 is a detail of the end of the notched bar to which the rod is fastened; and Fig. 6 is the post, which is also used as a fastening for the curtain-rod.

Similar letters of reference indicate like parts throughout the several views of the drawings.

A represents a door, window-frame, or other woodwork around an opening to be wholly or partially covered.

B are the rods, two in number, which are

placed so as to support the curtain C. These rods are each constructed from a middle rod B', which will preferably be solid to give maximum strength with minimum size. This rod telescopes into the open ends of the two tubes D and D', and the length of the complete rod is increased or diminished by sliding the tubes D and D' in or out on the rod B'. To provide a stop for the purpose of checking the movement of the tubes on the rod and to keep them from slipping off, I form a groove *b* around the rod close to each of its ends and punch the walls of the tube, so as to form an inside projection *d*² to enter the groove when the tube is drawn out that far.

I will prefer to use open-seam tubing for the ends D and D' for two reasons—first, because it is less expensive than the tubing with closed seams, and, second, because the open seam permits of an expansion in diameter to receive the rod B', thereby making practicable the use of smaller tubing than would otherwise be possible, and the elasticity of the walls of the tubes developed by such expansion insures a tight fit between the tubes and the rod and springs the indented walls of the tubes into the groove in the rod as soon as that point is reached by the indentation.

The outer ends of the tubes D and D' are slotted longitudinally on two opposite sides, as shown at *d*. The slots are wide enough to allow the heads E to enter. These heads have a longitudinal central slot *e*, with the outside communications *e'* at the inner end of the slot, the construction altogether forming a hook to engage a bar or pin attached to the frame or door. The head has the shank *f*, which is projected into the open end of the tube; but first it is provided with the washer F, which is slipped on loosely over the end of the shank, and a spiral spring G is placed on the shank against the washer and its removal prevented by splitting the end of the shank and bending the two tongues thus formed in opposite directions at right angles to the shank. The spring and washer go inside of the tube, where the washer will be held at a fixed point by punching the walls of the tube in on both sides of the washer in the manner as shown at *g* in Figs. 2 and 3. The construction is

such that the spring will keep the head drawn into the slot in the end of the tube. The head can be hooked or unhooked by exerting enough force to overcome the tension of the spring, so as to draw it out of its slot *d* and expose the opening into the slot *e*.

H represents the post such as I prefer to use in fastening the ends of one of the two rods used at each opening. It has a longitudinal central slot across which is the pin *h*, over which the hooked heads E are caught. The longitudinal slot affords engagement for the screw-driver in driving the screw-threaded shank of the post into the wood.

Other forms of pins might be provided to hold the ends of my rods without departing from the spirit of this invention.

The bars M, having the series of grooves *m*, will provide the supports for the remaining rod. The grooves *m* engage the hooked heads E and keep the rods from dropping, and the series of notches enable the rods to be raised and lowered to suit the requirements in length of the curtains.

In hooking and unhooking the rods B the heads E can be drawn out of their slots and given a quarter-turn, when they will remain locked till turned back into their slots.

The indentation *l* is to act as a stop to keep the rod B' from entering farther. The split in the end tubes is indicated at S.

Having thus fully described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

1. The combination, with a curtain-rod having hollow ends and longitudinal slots in said ends, of a flat head adapted to be inserted edgewise into the slot in the end of the curtain-rod, a hooked opening in the head, closed by the curtain-rod end when the head is in the slot but so it can be drawn out substantially as described and for the purposes specified.

2. The combination, with a curtain-rod having spring-actuated end hooks adjustable longitudinally of the curtain-rod, of the bars M with a series of grooves *m*, substantially as described and for the purposes specified.

3. In a curtain-fixture, the middle rod B' having the grooves *b* near each end, the tubes D and D' into which the rod B' telescopes and having inside projections *d*² to enter the grooves *b*, and having the end slots *d* as described, the heads E having the inside slots *e* and outside communication *e'*, the shank *f* to enter the ends of the tubes, the washers F and spring G threaded on the shank and held by bending the split end of the shank at right angles to the shank, indentations *g*, of the walls of the tubes to hold the washer in place and a post or bar to which the head is hooked, all substantially as described and specified.

In testimony whereof I affix my signature in presence of two witnesses.

FRED H. LOVELESS.

Witnesses:

JOSEPH A. MINTURN,
FRANK W. WOERNER.