

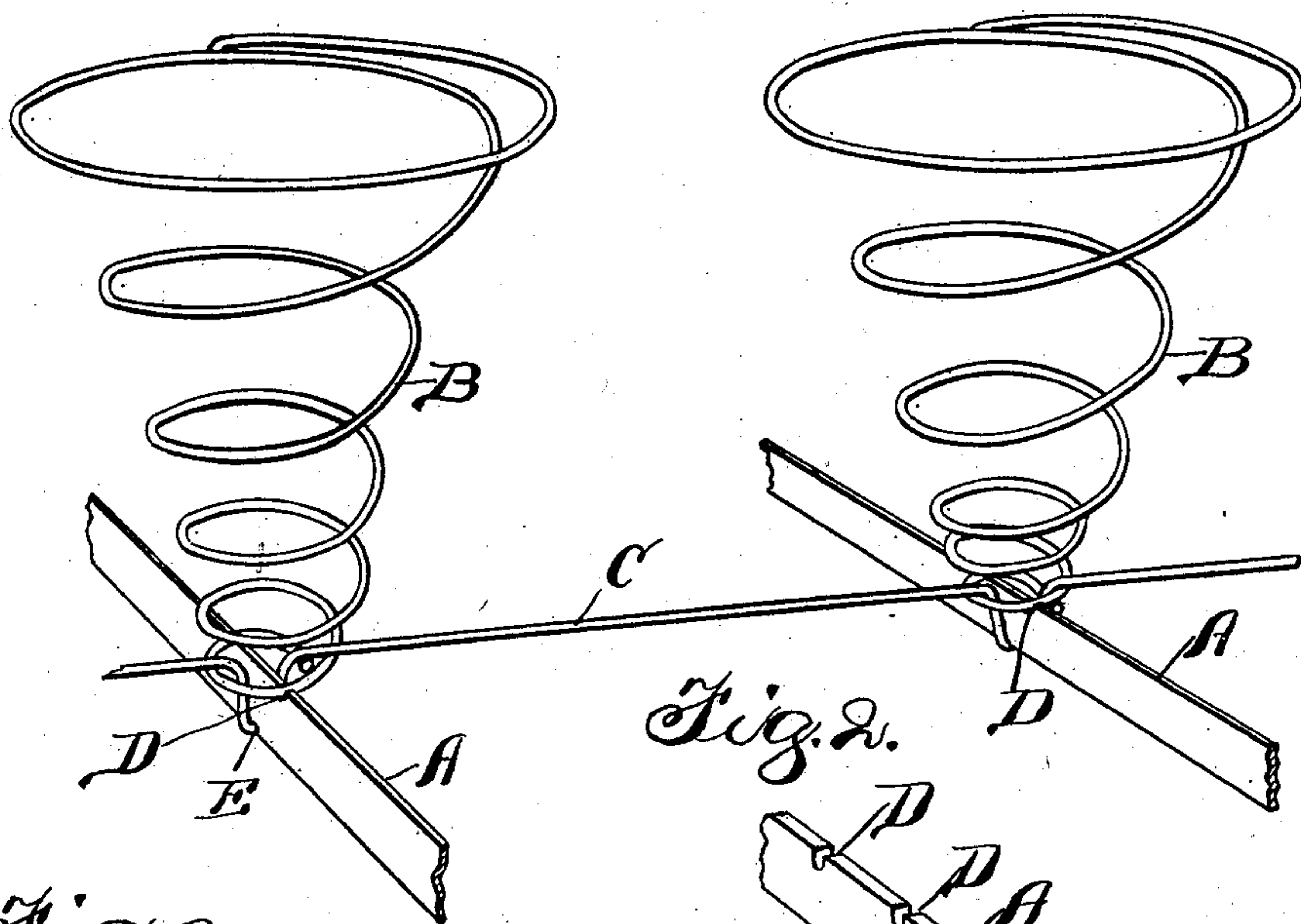
No. 720,715.

PATENTED FEB. 17, 1903.

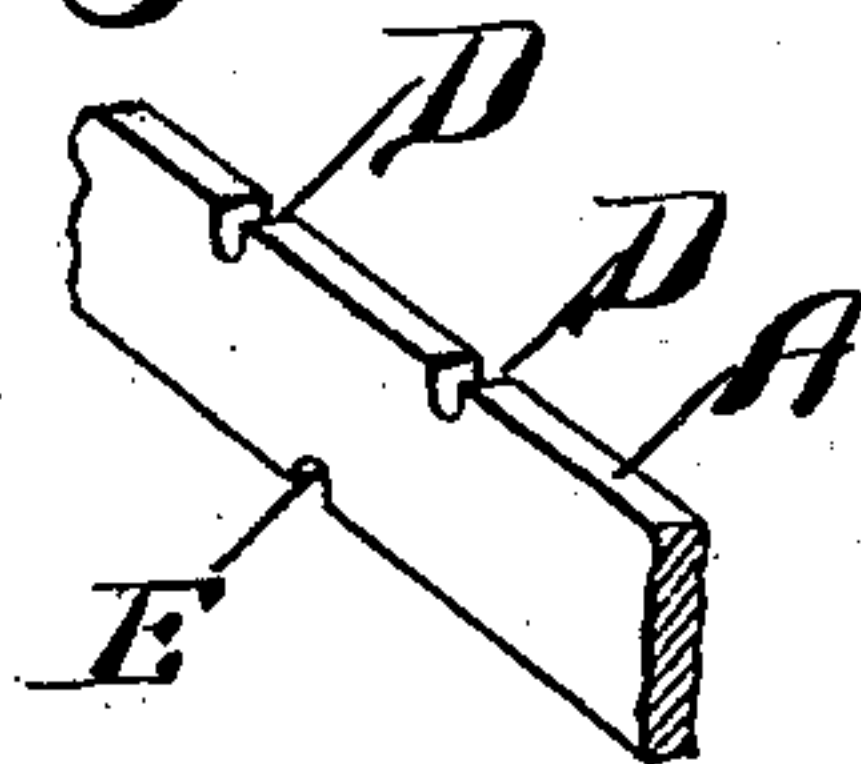
G. C. LOCKLIN.  
LOCKING DEVICE FOR SPRINGS.  
APPLICATION FILED FEB. 17, 1902.

NO MODEL.

*Fig. 1*



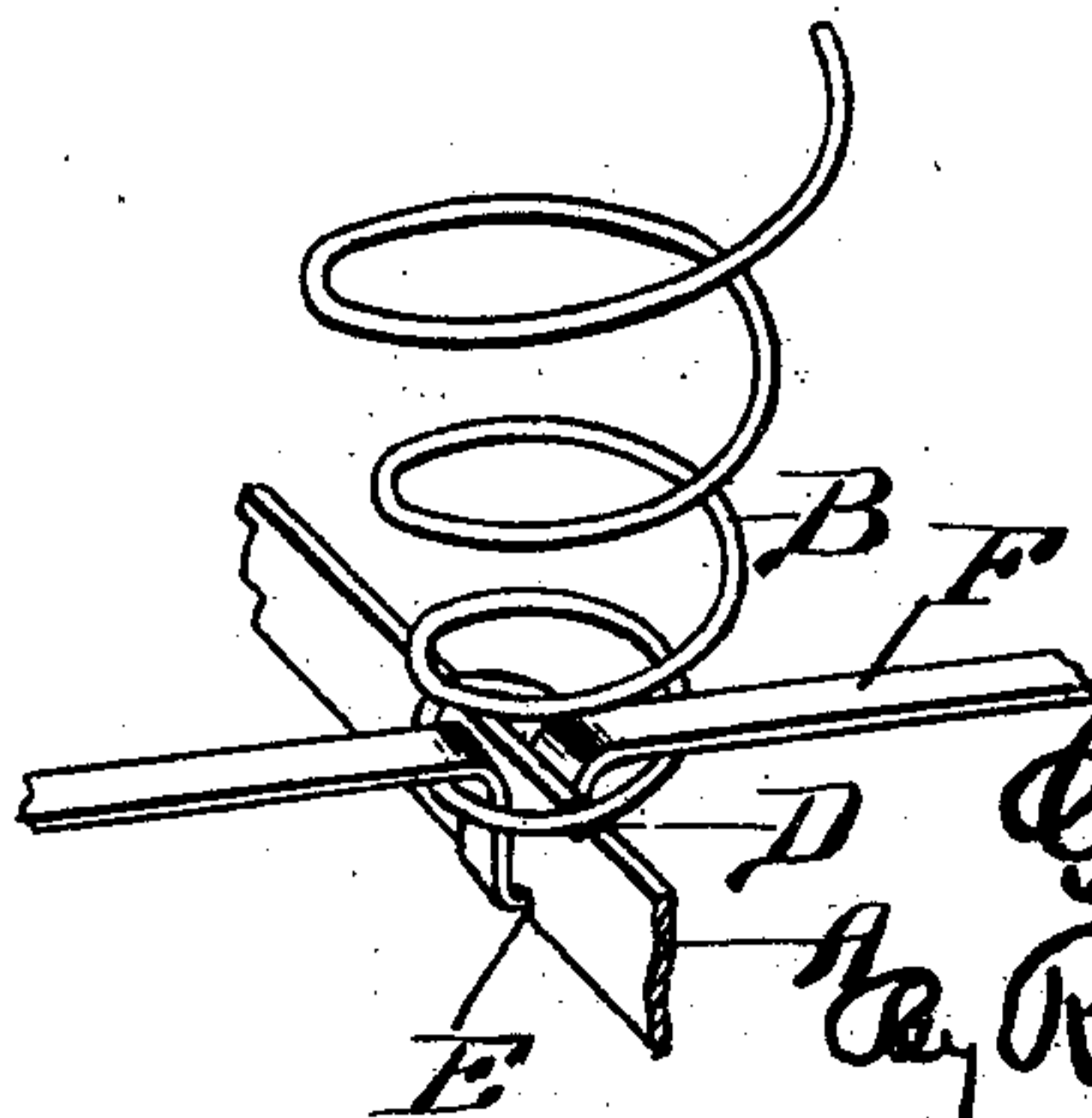
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses:  
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# UNITED STATES PATENT OFFICE.

GEORGE C. LOCKLIN, OF CHICAGO, ILLINOIS.

## LOCKING DEVICE FOR SPRINGS.

SPECIFICATION forming part of Letters Patent No. 720,715, dated February 17, 1903.

Application filed February 17, 1902. Serial No. 94,448. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE C. LOCKLIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Locking Devices for Springs, of which the following is a specification.

The object of my invention is to provide a simple and effective means for securely locking a spring to the frame of a spring-bottom, so as to prevent the displacement of the spring lengthwise of its supporting-bar. This and such other objects as may hereinafter appear are attained by the devices illustrated in the accompanying drawings, in which—

Figure 1 shows a section of a spring-bottom with a pair of coil-springs secured to the bottom frame thereof with my improved device. Fig. 2 is an enlarged detail showing a section of a cross-bar of the spring-bottom provided with locking-notches. Fig. 3 is a detail showing the relative positions of a cross-bar and a spring-locking member when assembled, the cross-bar being shown in section; and Fig. 4 is a detail showing the manner of attaching a spring to a cross-bar when a locking tie-strip is used instead of a locking tie-wire, as shown in Fig. 1.

Like letters of reference indicate the same parts in the several figures of the drawings.

Referring by letter to the accompanying drawings, A represents sections of cross-bars of a spring-bottom, upon which are mounted coil-springs B, which are attached thereto by means of a locking-wire C, which may also constitute a tie-wire to connect adjacent cross-bars A to each other. The cross-bar A is provided at the edge upon which the spring bears with notches D, which are preferably semicircular in form and are spaced apart a distance equal to the diameter of that coil of the spring which rests upon the bar A. The bar A may also be provided upon its opposite edge with a notch E, located opposite to a point approximately midway between the notches D. The size and shape of the notch E will depend upon the size and shape of the locking member, which, as shown in the drawings, may either be a round wire C or a flat strip F or may be of any other suitable or convenient size or shape.

In using my device the locking member,

which consists, primarily, of a V-shaped portion, with laterally and oppositely extending wings, is applied to the cross-bar A, the cross-bar fitting within the V-shaped portion and the bottom of the V-shaped portion being seated within the notch or recess E. As so assembled, the lateral wings of the locking member will extend oppositely from each side of the bar A, with the under surfaces thereof approximately in or slightly below the same plane as that occupied by the upper edge of the bar A. The free end of the coil-spring B is next inserted under one of the laterally-extending portions of the locking member C, and the coil-spring being rotated or screwed into position this free end next passes over the adjacent upper edge of the bar A, then under the opposite wing of the locking member C, and thence upwardly over the edge of the bar A, the portions of the spring in contact with the bar A being at the same time seated in the notches D D. The parts will then occupy the relative positions shown in Fig. 1. Owing to the fact that the wing portions of the locking member C are in the same plane with or slightly below the plane of the upper edge of the bar A, the bottom coil of the spring B has necessarily been put under considerable tension in assembling the parts in the manner described, so that not only is the spring seated in the notches D D and the V-shaped portion of the locking member C seated in the notch E, but because of such tension of the spring the parts are securely and rigidly held in the respective notches or seats provided for them, and so the springs are simply and removably attached to the bar A in such a manner as to prevent any possibility of their displacement lengthwise of said bar.

I have found that very satisfactory results may be attained by merely providing the seats D D, which receive the spring B and prevent its lateral displacement; but I prefer the double lock, secured by providing a seat for the spring and a seat for the locking member. Where the locking member consists of the strip F, of course the seat therefor is of a corresponding formation. So, also, in providing a seat for the spring, if desired as a matter of convenience or expediency, the upper edge of the bar A may be cut away between the notches D D, so as to provide a single seat,



the essential idea being to afford shoulders or stops which shall abut against opposite sides of a coil of the spring which is in immediate contact with the bar A, so as to positively prevent the sliding of the spring along the bar A.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

- 10 1. The combination with a cross-bar, of a coil-spring, means for locking said spring against said bar, said bar being provided with oppositely-disposed shoulders, upon one edge thereof, arranged to abut against said spring,  
15 and being also provided with shoulders upon the opposite edge thereof, arranged to en-

gage said locking means, substantially as described.

2. The combination with a coil-spring, of a supporting-bar arranged to be in contact with a coil of said spring, said bar being provided with notches in one edge thereof for receiving said coil at opposite sides thereof, and with a third notch formed in its edge opposite to a point between said first-mentioned notches, and means seated within said third notch for locking said coil into said first-mentioned notches, substantially as described.

GEORGE C. LOCKLIN.

Witnesses:

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