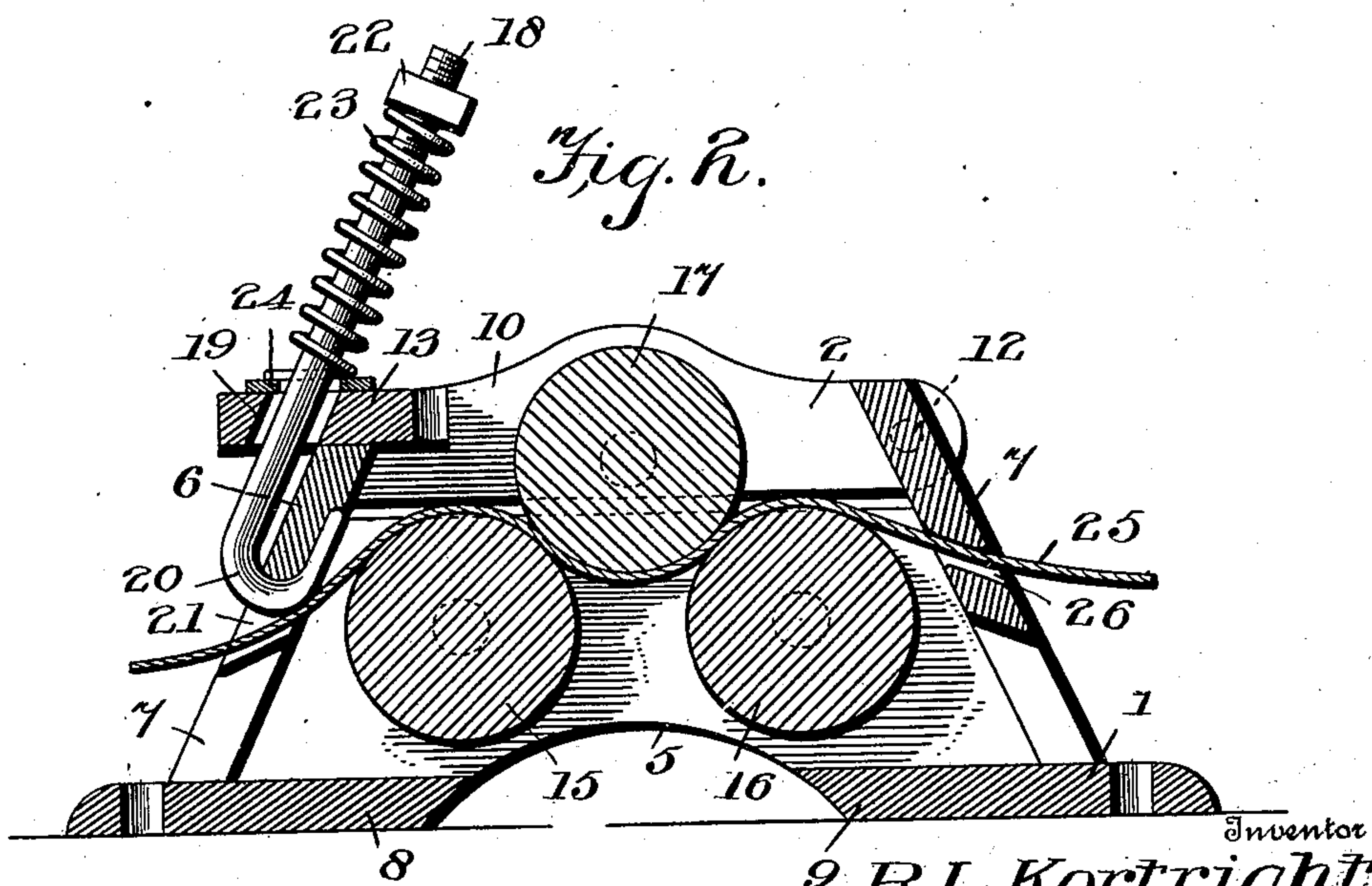
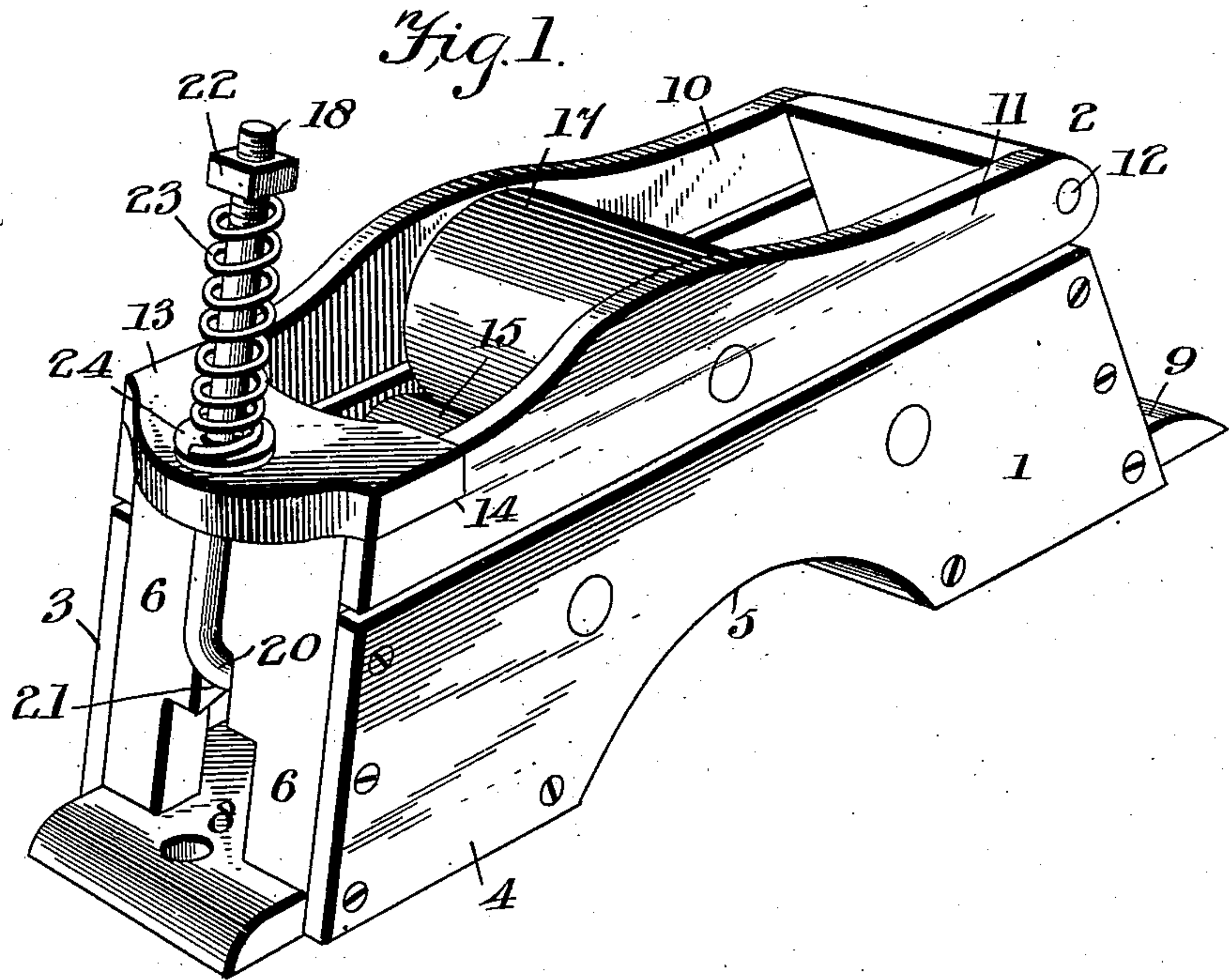


No. 723,682.

PATENTED MAR. 24, 1903.

R. L. KORTRIGHT.
TENSION DEVICE FOR BINDERS.
APPLICATION FILED MAY 19, 1902.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

REUBEN L. KORTRIGHT, OF MANCHESTER, IOWA.

TENSION DEVICE FOR BINDERS.

SPECIFICATION forming part of Letters Patent No. 723,682, dated March 24, 1903.

Application filed May 19, 1902. Serial No. 108,089. (No model.)

To all whom it may concern:

Be it known that I, REUBEN L. KORTRIGHT, a citizen of the United States, residing at Manchester, in the county of Delaware and State of Iowa, have invented certain new and useful Improvements in Tension Devices for Binders; 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.

My invention relates to improvements in tension devices for binding-machines, and has for its object certain features of novelty that will hereinafter more fully appear.

In order that my said invention may be more fully understood, reference will be had to the accompanying drawings, wherein—

Figure 1 is a perspective view showing a device embodying my said invention, and Fig. 2 is a central vertical section of the same.

The lower member 1 comprises, essentially, an inclosing casing for the lower set of rollers having the side walls 3 4 preferably recessed, as at 5, held together by the end pieces 6 and 7, which project upwardly beyond the side walls. The casing is also provided with the perforated base-pieces 8 9, secured to the side walls and by means of which the device can be secured in the desired position on a suitable support.

The upper member comprises a frame formed from a pair of side pieces 10 11, hinged at one end to the projecting portion of the wall or end piece 7 by means of the pin 12 passing through said pieces. The opposite ends of said side pieces 10 11 are held together by the end piece 13, set in recesses 14 in the ends thereof.

15 16 are a pair of smooth-surfaced rollers rotatably journaled in the lower side pieces 3 4, said rollers being mounted on the same level, but spaced some distance apart.

Mounted in the frame 2 is a roller 17, this roller being centrally mounted in the side pieces 10 11 of said frame and so located as to rest upon both rollers 15 16.

18 is a bolt passing through an aperture 19 in the end piece 13 of the frame 2. This bolt 18 carries at its lower end a hook 20, adapted to rest in the recess 21 of the end piece 6. The upper end of this bolt is screw-threaded

for some distance, upon which is carried a nut 22. Beneath this nut 22 is a coiled compression-spring 23, having its lower end resting upon the washer 24 upon the end piece 13 of the upper member or frame, the tendency of this spring 23 being to press the roller 17, mounted in the upper member or frame, upon and between the paired rollers 15 16 in the stationary casing.

25 represents the cord or twine passing through the opening 26 in the end piece 7, passing over the lower roller 16, beneath the roller 17, and over the lower roller 15, the upper roller 17, acting under the tension of the spring 23, continually exerting a pressure upon the cord or twine 25. This pressure may be varied to suit different conditions through the nut 22 upon the upper end of the bolt 18, said nut being tightened or loosened to increase or decrease the compression of the spring 23.

While I have embodied my invention in but one form, it will be understood that I do not limit myself to such form, as many changes and modifications might be made in said invention, which changes and modifications could be made without departing from the spirit of my said invention.

Having thus described my said invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a tension device for self-binding harvesters, the combination with the stationary casing having end walls projecting upwardly above the same, of a pair of spaced rollers journaled in said casing, a superposed member pivoted to one of said projecting end walls and comprising side pieces so disposed relatively to said casing as to form a continuation of the side walls thereof, a centrally-disposed roller carried by said superposed member, and means for regulating the pressure between said upper and lower rollers.

2. In a tension device for self-binding harvesters, the combination with the stationary casing having a pair of spaced rollers journaled therein, of a superposed swinging member, a centrally-mounted roller carried thereby, and means for regulating the pressure between said upper and lower rollers, comprising a rod carried by said swinging member and having a hook on the lower end thereof

for engaging said stationary casing, a spring engaging said rod and swinging member, and means for varying the compression of said spring.

5 3. In a tension device for self-binding harvesters, the combination with the stationary casing having end walls projecting upwardly above the same, of a pair of spaced rollers journaled in said casing, a superposed member pivoted to one of said projecting end walls and comprising side pieces so disposed relatively to said casing as to form a continuation of the side walls thereof, a centrally-disposed roller carried by said superposed member, and means for regulating the pressure between said upper and lower rollers, comprising a rod carried by said superposed member and having a hook on the lower end thereof for engaging said stationary casing, 15 a spring engaging said rod and superposed member, and means for varying the compression of said spring.

4. In a tension device for self-binding har-

vesters, the combination with a stationary casing, and a pair of rollers journaled at spaced distances therein; of an upper frame 25 hinged at one end to one end of said casing, a roller journaled midway of the length of said upper frame, and adapted to bear between both of said rollers, an extension carried upon the opposite end of said upper frame adapted to bear upon said casing, a bolt passing through an aperture in said extension, a hook upon the lower end of said bolt adapted to engage said casing, a coiled 35 spring surrounding the upper portion of said bolt, and bearing upon said extension carried by the upper frame, and means for varying the compression upon said spring.

In testimony whereof I affix my signature 40 in presence of two witnesses.

REUBEN L. KORTRIGHT.

Witnesses:

JOHN M. COOLEDGE,
B. W. GREMS.