

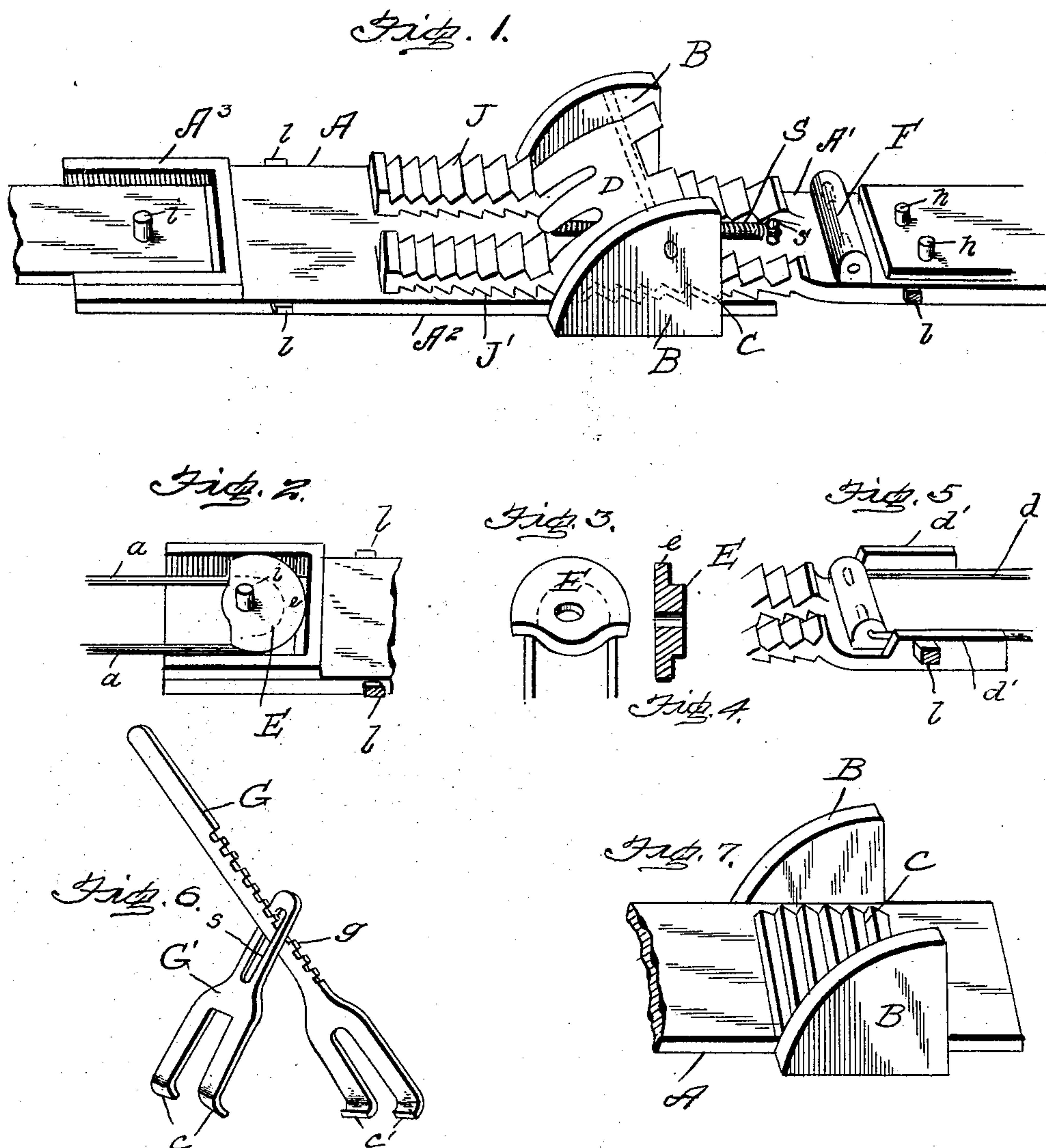
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PATENTED MAR. 3, 1903.

J. B. WILSON.  
MACHINE FOR STRETCHING WIRE.

APPLICATION FILED DEC. 14, 1901.

NO MODEL.



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Witnesses  
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# UNITED STATES PATENT OFFICE.

JEROME B. WILSON, OF LANSING, MICHIGAN.

## MACHINE FOR STRETCHING WIRE.

SPECIFICATION forming part of Letters Patent No. 721,849, dated March 3, 1903.

Application filed December 14, 1901. Serial No. 85,897. (No model.)

*To all whom it may concern:*

Be it known that I, JEROME B. WILSON, a citizen of the United States, residing at the city of Lansing, in the county of Ingham and State of Michigan, have invented a new and useful Machine for Stretching Wire and other Similar Articles, of which the following is a specification.

My invention relates to improvements in a new form of self-locking device, made in two parts, one working in the other, and used for tightening wire fences, metal rods, iron bands, and hoops by drawing the ends thereof together when used on silos, barrels, casks, boxes, water-tanks, or for any of the many purposes where rods, bands, hoops, or wires are used and required to be drawn, held, or permanently fastened together.

The object of my invention is to provide a simple and cheap contrivance which can be quickly and easily attached to the ends of wire fences, iron rods, wire or iron hoops, and bands, so that when said device is used as aforesaid it will readily draw the rods, band, or wire together. The device when so attached and used as aforesaid is self-locking at any and at all stages of the tightening. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the device, showing the parts of the stretcher connected together. Fig. 2 is a similar view, with parts broken away, of a modification of one end with the wire attaching and evening device. Fig. 3 is a detail view of the self-adjusting pulley with the wire bent around the same, the parts being broken away. Fig. 4 is a sectional view of Fig. 3. Fig. 5 represents one end of the device shown in Fig. 1, showing the hollow cylinder with attached wires. Fig. 6 represents the levers to be used in drawing the parts of the device together. Fig. 7 represents a bottom view of a part of the device.

Referring to the drawings, Fig. 1, A A' represent the two sections of the device, the former provided with a base-plate A<sup>2</sup>, having formed at one end thereof upwardly-projecting guideways B, between which and formed on the said plate are the teeth C. Journaled in the upper ends of the shouldered guide-

ways B is a shaft having mounted thereon a dog D, which operates between the flanged guideways for a purpose presently to be explained. The outer end of the base-plate A<sup>2</sup> is flanged, as shown at A<sup>3</sup>, with an open front portion having on its central portion a pin or stud *i*, on which is pivotally mounted a pulley E, having on its upper end a semi-circular flange *e*. The wire *a* is bent around the pulley E, as shown in Fig. 2, and is prevented from being displaced therefrom by means of the flange *e* thereon. The letter A' designates the other half or section of the device, having teeth J on its upper portion and teeth J' on its lower portion, the former of which are adapted to engage the dog D and the latter to engage the teeth C on the section A when the two plates are moved in opposite directions during the stretching of the wire. A spiral spring S, having one end secured to the dog, its opposite end being secured to a stud *s'*, serves to hold the dog to the teeth E. Formed on the section A' and in rear of the teeth E is a transverse sleeve F, having recesses extending part of the way within the same, in which is mounted the ends of a wire *d*, having its opposite body portion abutting against side walls *d' d'*, which prevents the wire from spreading apart while being tightened.

The letters G G' denote the levers, the former of which is provided on one side with a series of teeth *g*. The other lever G' is provided with an elongated slot *s*, adapted to fit over the arm of the lever G to engage the teeth *g* during the operation of stretching the wire. The levers are provided with claws *c c'*, which engage lugs *l l* on opposite side edges of the plates of the two sections A and A', whereby to operate the teeth of said two sections when the wire is being stretched.

In Fig. 1 I show a band or hoop *b* fastened to the outer ends of the sections on the pins *i h h*, the same being in position to be tightened.

The operation of the stretching is accomplished by connecting the claws of the levers G G' with the lugs *l l* on the opposite sides of the two sections, and by drawing the sections inward the teeth on the under surface of the section A' ride over the teeth between the shouldered guideways B and are held by



means of the dog D engaging the teeth on the upper portion of the section A'. This action is repeated until the desired result of the stretching is obtained. The teeth of the lever G register with the slot of the lever G' during the operation of the stretching.

Having described my invention, what I claim is—

1. The combination with the sections, one of which is provided with guideways rising therefrom, a series of teeth on the section between the guideways, and flanges at the outer end of the section, and a spring-actuated dog pivoted between the guideways of the other section having teeth on its upper and lower surfaces to coact with the dog and teeth between said flanges, and flanges on the outer end of the said section, substantially as specified.

2. The combination with the sections, one

of which is provided with guideways rising therefrom, a series of teeth on the section between the guideways, and flanges at the outer end of the section, a pin on the section between the flanges, means connected to said pin to hold the wire, and a spring-actuated dog pivoted between the guideways, of the other section having teeth on its upper and lower surfaces to coact with the dog and teeth between the guideways, and lugs at the sides of the sections, and means connected to said lugs to operate the sections so as to stretch the wire substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JEROME B. WILSON.

Witnesses:

ALBERT DE CAMP,  
ELMER S. AVERY.