

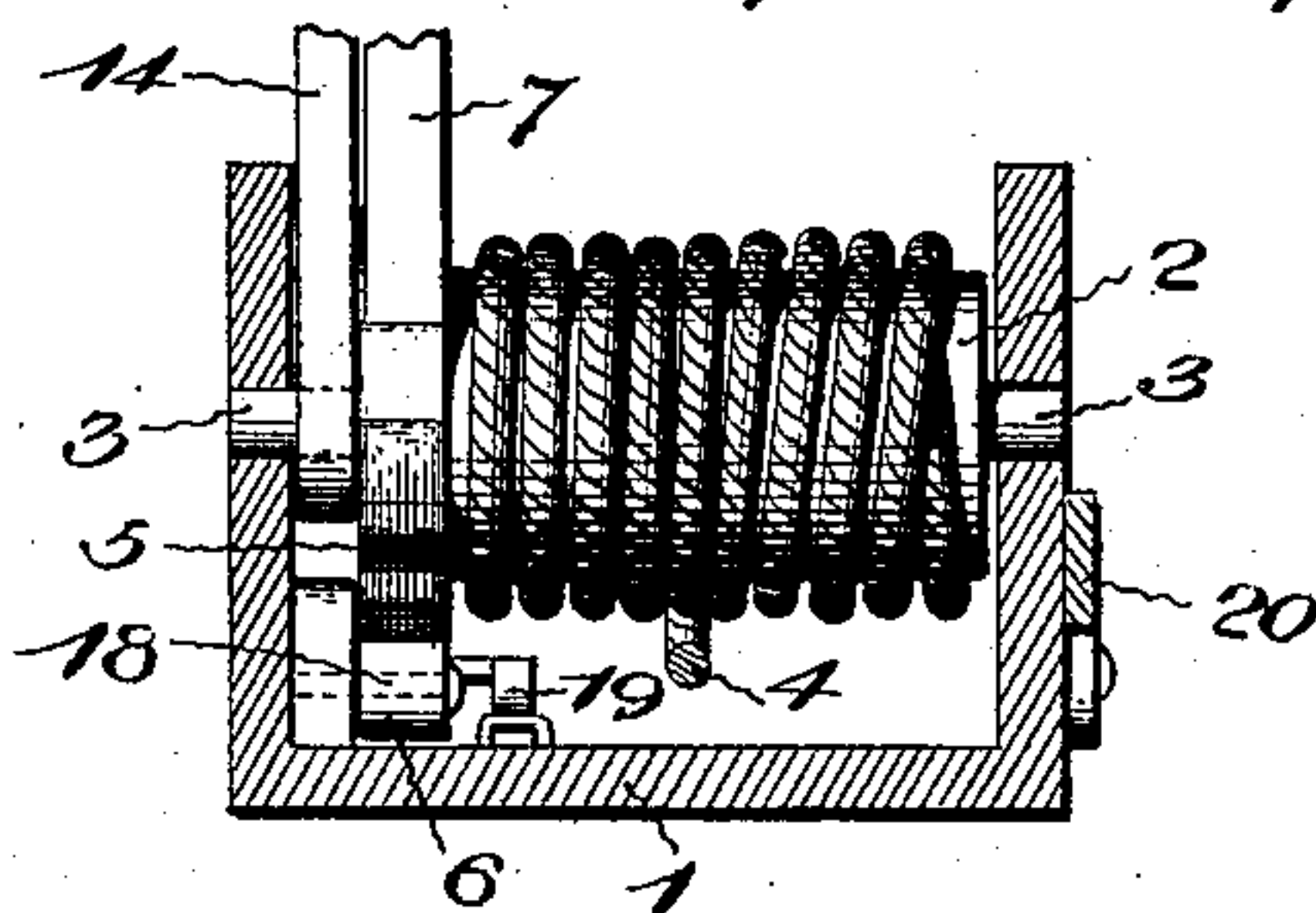
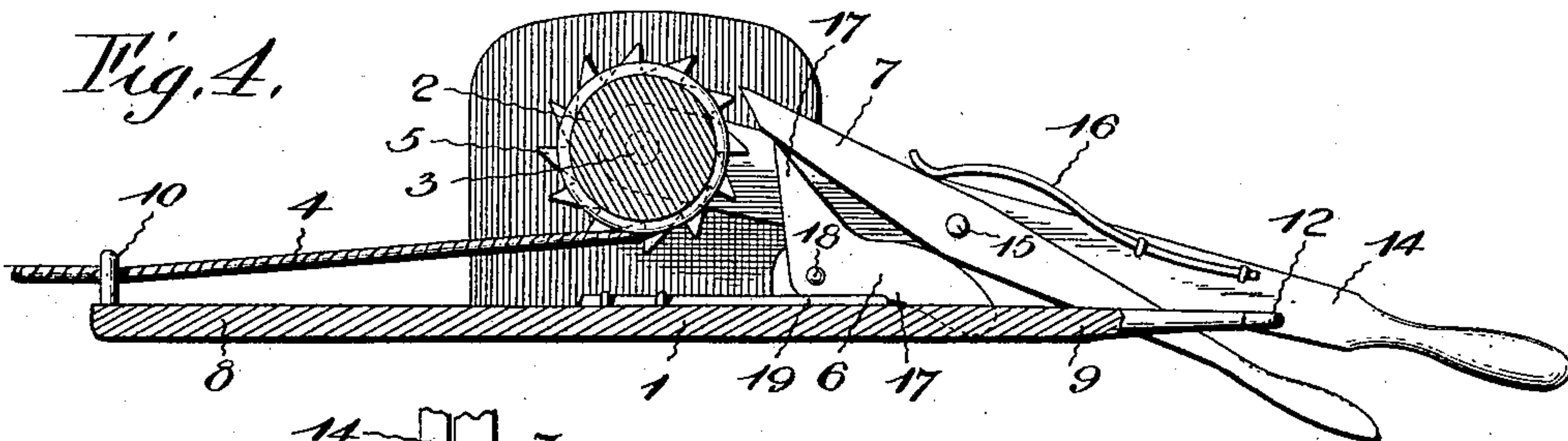
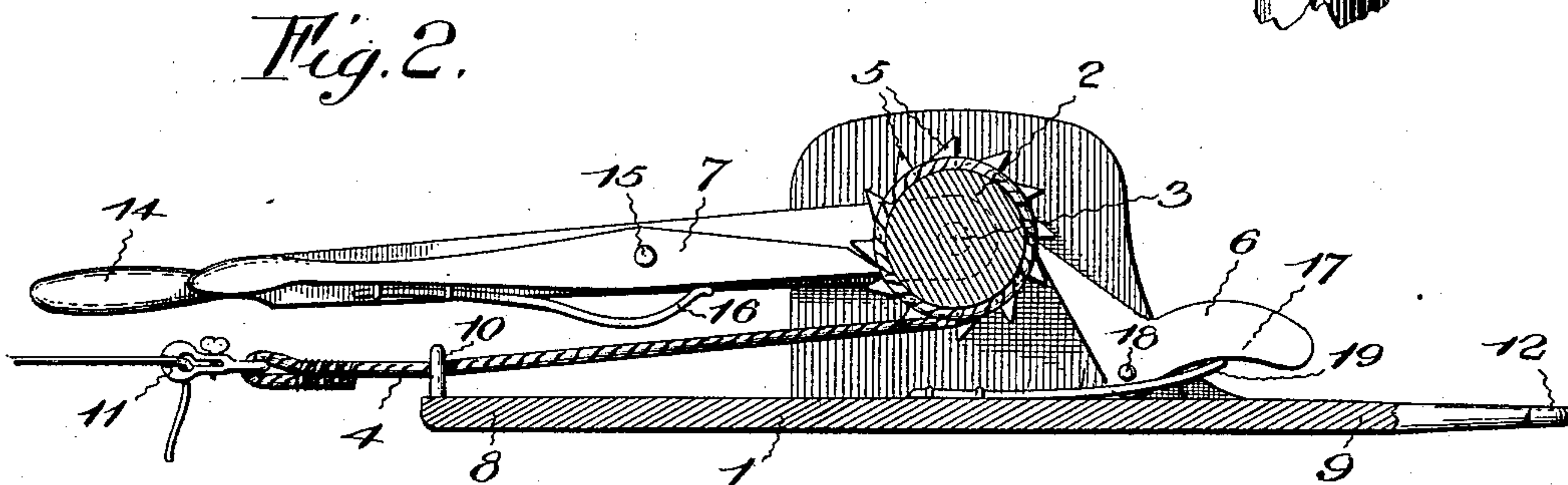
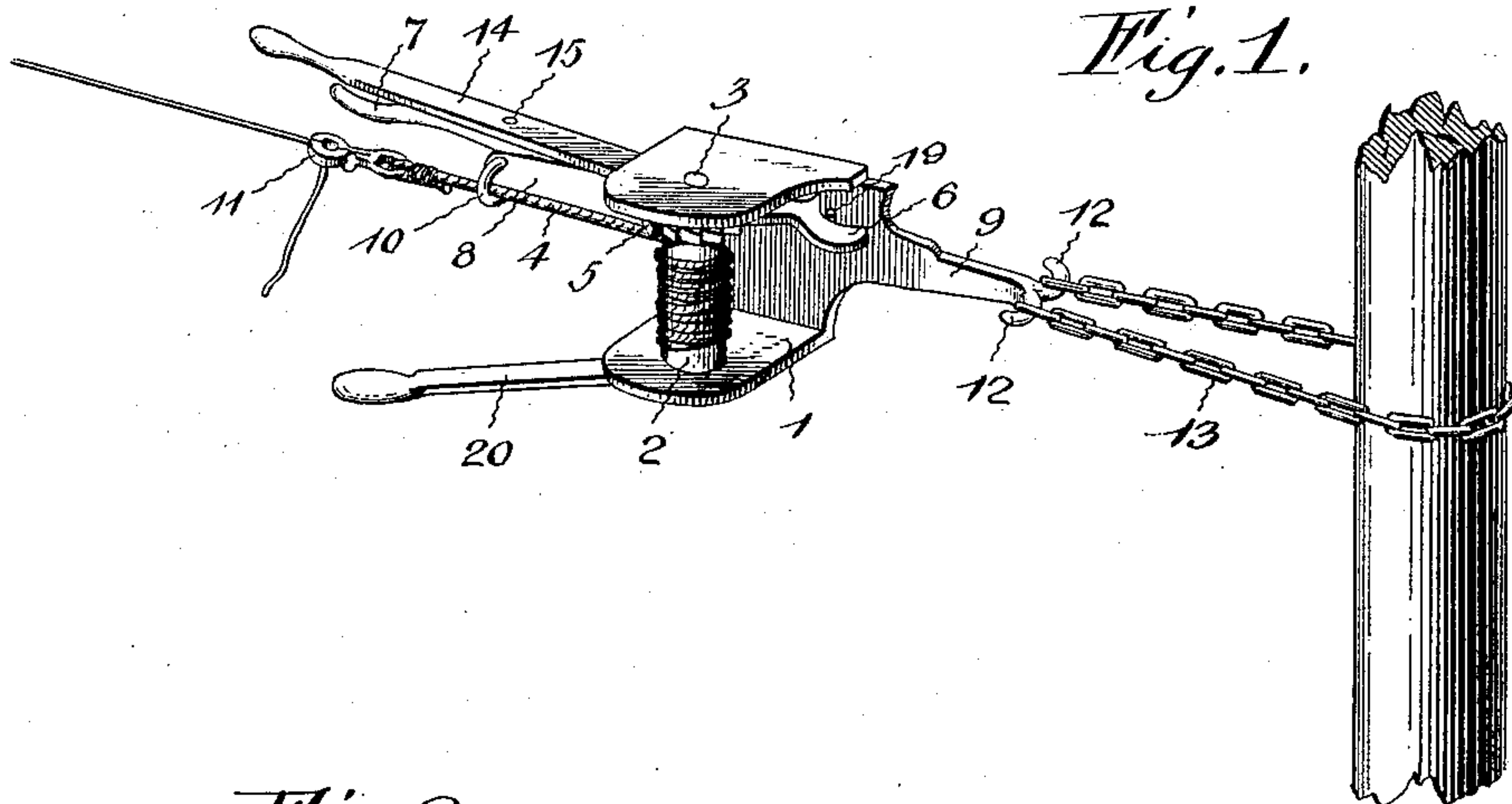
No. 606,760.

Patented July 5, 1898.

J. H. HEISEY.  
WIRE STRETCHER.

(Application filed Nov 18, 1897.)

(No Model.)



Inventor  
John H. Heisey.

Witnesses

J. Frank Culverwell, By His Attorneys,

J. F. Culverwell

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# UNITED STATES PATENT OFFICE.

JOHN H. HEISEY, OF MONTICELLO, IOWA.

## WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 606,760, dated July 5, 1898.

Application filed November 18, 1897. Serial No. 658,982. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. HEISEY, a citizen of the United States, residing at Monticello, in the county of Jones and State of Iowa, have invented a new and useful Wire-Stretcher, of which the following is a specification.

The invention relates to improvements in wire-stretchers.

10 The object of the present invention is to improve the construction of wire-stretchers and to provide a simple, inexpensive, and efficient one which will not twist or slip and which will securely hold a wire while the same is being stapled or otherwise fastened to a fence-post.

15 A further object of the invention is to provide a wire-stretcher which can be conveniently manipulated and in which the pawls can be readily thrown out of engagement with the ratchet, so that a rope or cable may be freely unwound from the shaft or drum.

20 The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

25 In the drawings, Figure 1 is a perspective view of a wire-stretcher constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a transverse sectional view. Fig. 4 is a sectional view similar to Fig. 2, showing the pawls out of engagement with the ratchet-teeth.

30 Like numerals of reference designate corresponding parts in all the figures of the drawings.

40 1 designates a supporting frame or casing having a flat back and parallel sides and receiving a transverse drum or shaft 2, which is provided with journals 3, arranged in bearing-openings of the sides of the frame or casing. The transverse shaft or drum, which is adapted to receive a rope or cable 4, is provided at one end with ratchet-teeth 5, adapted to be engaged by a check-pawl 6 and an actuating-pawl 7, and the frame or casing is provided with longitudinally-disposed arms 50 8 and 9, which may be formed integral with it or which may consist of the end portions of a bar secured between its ends to the frame

or casing. The arm 8 is provided at its outer end with a loop or eye 10, forming a guide for the rope or cable, which is provided at its outer end with a clamp 11, adapted to engage the wire to be stretched, and the other arm 9 is provided with oppositely-disposed hooks 12, adapted to engage links of an anchoring-chain 13, which passes around a post and is adapted to secure the wire-stretcher to the same. The arm 9 serves as a shank for the hooks 12, which are located at its outer extremities.

60 The ratchet-teeth, which are preferably formed integral with the shaft or drum, may be otherwise constructed, and the actuating-pawl 7 is fulcrumed between its ends on the inner face of an operating-lever 14 by means of a pivot 15. The inner end of the operating-lever is provided with a perforation to receive one of the journals of the shaft or drum, and it is fulcrumed on the same, being arranged at the inner face of one of the sides of the frame or casing between the same and the ratchet-teeth. The inner end of the actuating-pawl is maintained normally in engagement with the ratchet-teeth by a spring 16, secured to the inner face of the operating-lever 14 and having one end free and engaging the pawl 7.

70 The check-pawl 6, which is provided with a substantially triangular tooth, has an angularly-disposed arm 17 and is fulcrumed or pivoted at its angle by a suitable fastening device 18, being arranged in the same longitudinal plane as the pawl 7. This pawl 6 is normally maintained in engagement with the ratchet-teeth by a spring 19, mounted on the frame or casing and having one end free and angularly bent and engaging the arm 17. The arm 17 is arranged to be engaged by the pawl 7 when the operating-lever is swung back, as illustrated in Fig. 4 of the accompanying drawings, whereby the tooth of the check-pawl is swung outward away from the ratchet-teeth and is caused to engage the inner portion of the pawl 7 and carry it out of engagement with the said teeth. This frees the shaft or drum and permits the rope or cable to be readily unwound therefrom.

95 The frame or casing is provided at the side opposite the operating-lever with a rigid handle or grip 20, consisting of a straight arm or



bar extending outward at an angle to the arms 8 and 9 and to the fence-wire to be stretched and enabling the wire-stretcher to be held perfectly steady during the operation of the same. The arm or bar 20, which extends in the same general direction as the lever 14, is provided at its outer end with a suitable grip. The invention has the following advantages: The wire-stretcher is simple and efficient, and it is adapted to tighten a wire to the desired tension without liability of twisting or slipping, and when the operating-lever is swung backward both pawls are disengaged from the ratchet-teeth to permit the rope or cable to be unwound freely.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. In a wire-stretcher, the combination of a frame or casing, a shaft or drum journaled therein and provided with ratchet-teeth, an operating-lever fulcrumed on the shaft or drum, an actuating-pawl carried by the operating-lever, and a check-pawl arranged in the path of the actuating-pawl and provided with an angularly-disposed arm adapted to be engaged by the same, whereby its tooth is swung outward and is adapted to carry the engaging end of the actuating-pawl away from the ratchet-teeth to permit the shaft or drum to rotate freely, substantially as described.

2. In a wire-stretcher, the combination of a frame or casing, a shaft or drum provided at its ends with journals arranged in suitable bearings of the sides of the frame or casing, said shaft or drum being provided with ratchet-teeth spaced from one of the sides of the frame or casing, an operating-lever fulcrumed on the shaft or drum in the space between the ratchet-teeth and the frame or casing, a spring-actuated pawl pivoted between its ends on the operating-lever and engaging the ratchet-teeth, and a check-pawl pivoted to the frame or casing, engaging the ratchet-teeth and provided with an angularly-disposed arm arranged in the path of the said pawl, whereby it is adapted to throw the same

out of engagement with the ratchet-teeth, substantially as described.

3. In a wire-stretcher, the combination of a frame or casing having sides, a shaft or drum journaled between the sides, an operating-lever mounted on one side of the frame or casing and provided with means for actuating the shaft or drum, said lever being disposed longitudinally of the wire-stretcher, and a rigid bar or handle mounted on the other side of the frame or casing and extending longitudinally of the same at an angle to the fence-wire to be stretched and in the same general direction as the operating-lever, said arm or bar being provided at its outer end with a grip, substantially as described.

4. In a wire-stretcher, the combination of a frame comprising a flat back, parallel sides, a longitudinal arm 8, extending from the back at one end of the frame and having a guide-eye, and the longitudinal arm 9, extending from the back at the other end of the frame and provided at its outer extremity with oppositely-disposed hooks 12 and serving as a shank for the same, a shaft or drum journaled in the frame, a rope or cable passing through the guide-eye and connected with the shaft or drum, and an anchoring-chain having its ends connected to the hooks, substantially as described.

5. In a wire-stretcher, the combination of a frame or casing, a shaft or drum journaled therein and provided with ratchet-teeth, an operating-lever provided with an actuating-pawl arranged to engage the ratchet-teeth, and a check-pawl engaging said teeth and arranged in the path of the operating-lever and adapted to be engaged by the same, whereby it is swung away from the ratchet-teeth to permit the shaft or drum to rotate freely, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN H. HEISEY.

Witnesses:

J. W. DONSEE,  
MARY LEYDEN.