

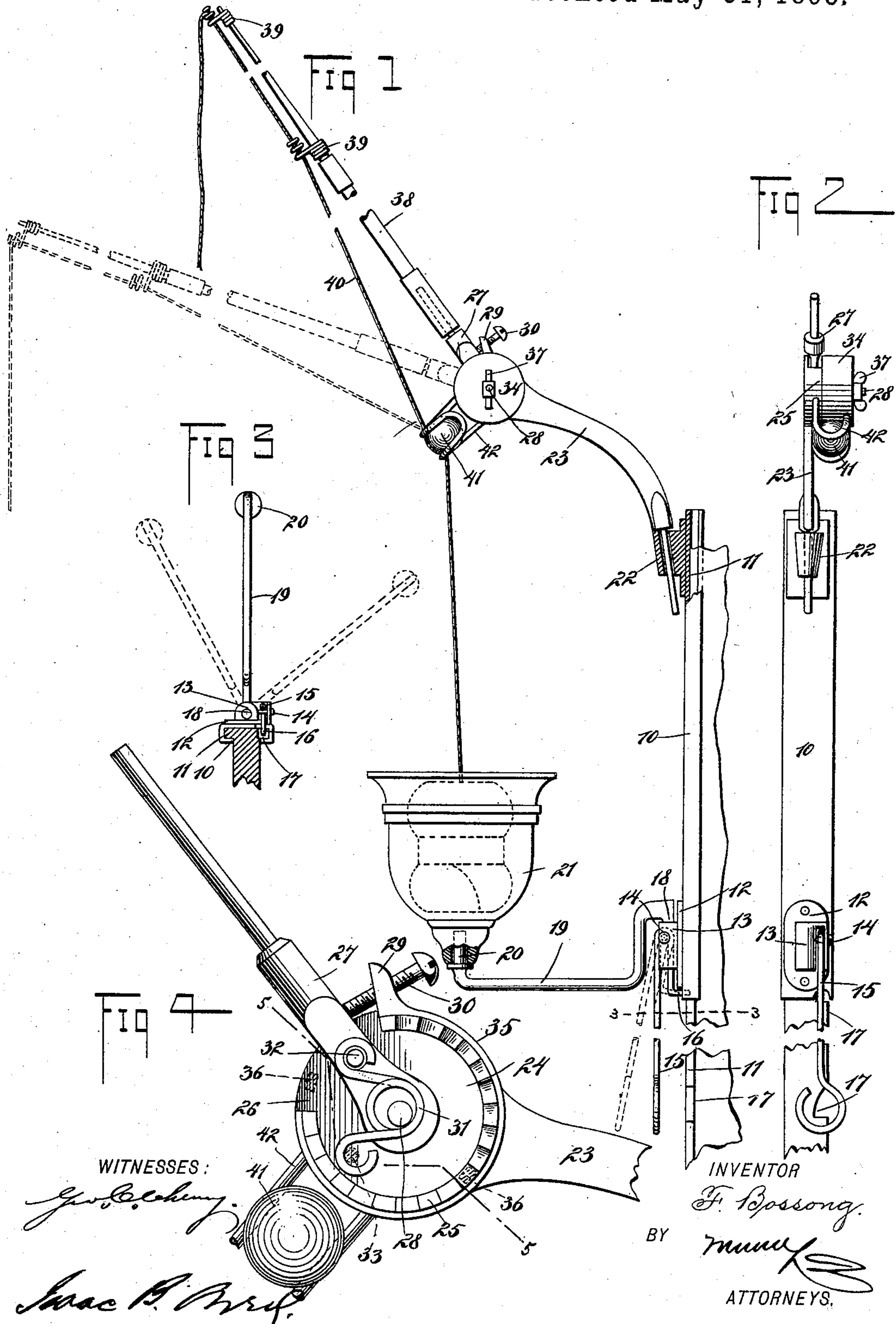
(No Model.)

2 Sheets—Sheet 1.

F. BOSSONG.
TWINE HOLDER.

No. 604,961.

Patented May 31, 1898.



WITNESSES:

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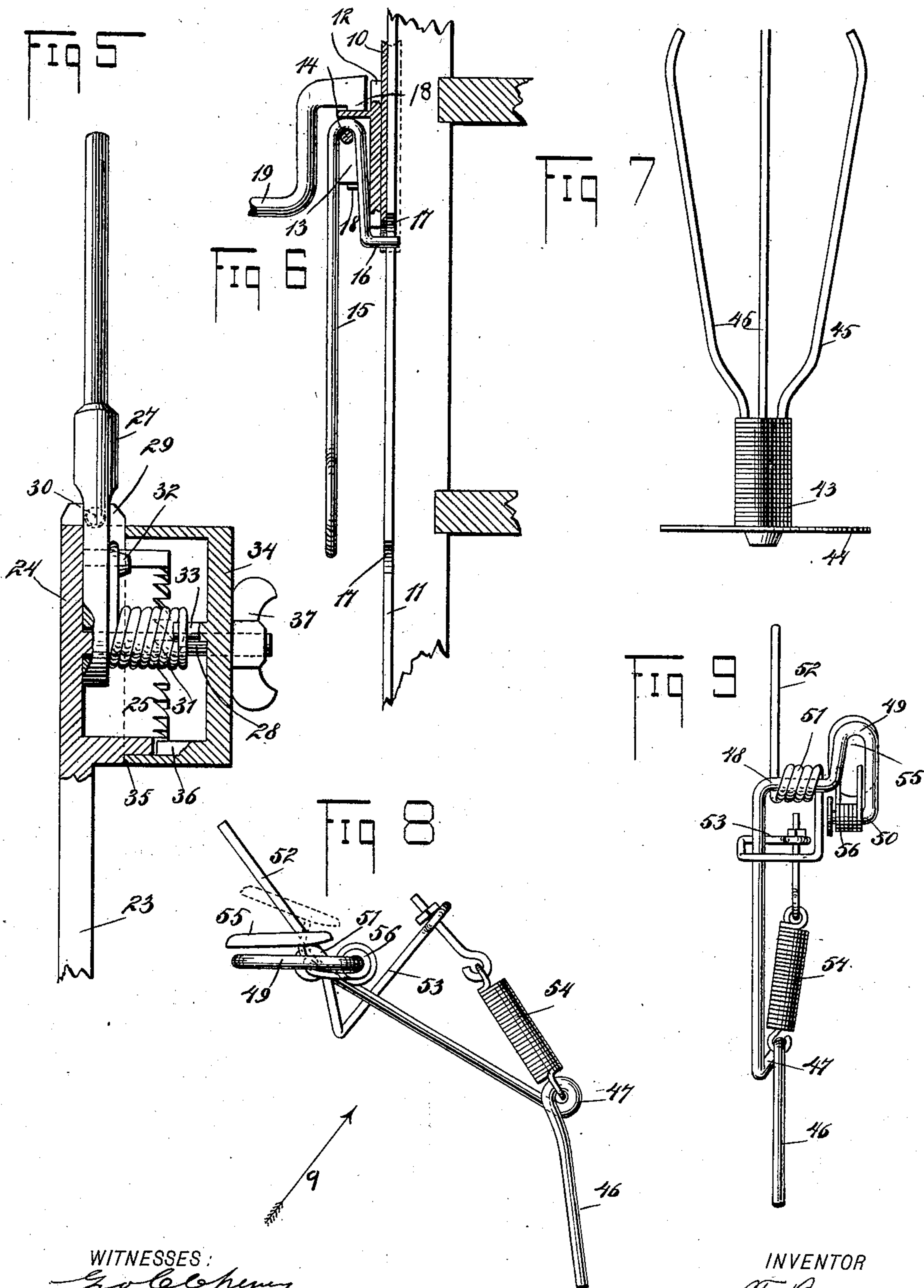
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2 Sheets—Sheet 2.

F. BOSSONG.
TWINE HOLDER.

No. 604,961.

Patented May 31, 1898.



WITNESSES:
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UNITED STATES PATENT OFFICE.

FRANK BOSSONG, OF ELLENSBURG, WASHINGTON.

TWINE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 604,961, dated May 31, 1898.

Application filed June 25, 1897. Serial No. 642,289. (No model.)

To all whom it may concern:

Be it known that I, FRANK BOSSONG, of Ellensburg, in the county of Kittitas and State of Washington, have invented a new and Improved Twine-Holder, of which the following is a full, clear, and exact description.

This invention is a twine-holder for use in mercantile establishments, and is in general characterized by a take-up rod yieldingly sustained in proximity to a twine support or receptacle, so that the twine is always lifted out of the way of persons passing beneath it and at the same time held in position to be readily grasped when it is desired to use the twine.

This specification is the disclosure of several forms of my invention, while the claims define the actual scope of the conception.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the invention with parts broken away. Fig. 2 is a front elevation thereof also with parts broken away. Fig. 3 is a sectional view looking up from the line 3 3 of Fig. 1. Fig. 4 is a view of one section of the tension device for the take-up rod. Fig. 5 is a sectional view on the line 5 5 of Fig. 4. Fig. 6 is a fragmentary vertical section taken through the lower portion of the carriage-plate. Fig. 7 is a view of a means for holding large balls of twine. Fig. 8 is a side elevation of a modified take-up device, and Fig. 9 is a view of said modified take-up device looking toward the same in the direction of the arrow 9 in Fig. 8.

The twine-holder is mounted on a vertically-adjustable carriage-plate 10, the side edges of which are turned rearward and inward to embrace a track-plate 11, secured rigidly to a wall or other convenient stationary object.

The lower portion of the carriage-plate 10 has a base-plate 12 secured thereto, and rigid on the base-plate 12 is a block 13, having a recess, across which a pin 14 passes, said pin serving as a fulcrum for a lever 15. The long arm of the said lever 15 projects downward to form a handle, and the short arm of the

lever 15 is turned rearward to make a locking-pin 16, designed to engage with notches 17, formed in the edge of the track-plate 11. By swinging the long arm of the lever 15 in and out the short arm of the lever may be moved to engage and disengage the track-plate, whereby the carriage-plate 10 may be held at any desired adjustment. The plate 10 has a socket therein, in which the downwardly-extended end 18 of an arm 19 is rev- olubly mounted, while the opposite end 20 of the arm 19 is turned upward, so as to carry a twine-cup 21. The arm 19 may swing to the various positions shown in Fig. 3.

The upper end of the carriage-plate 10 carries a socket 22, which is inclined outward from its lower end and receives the reduced lower portion of the arm 23, so that the tendency of said arm is always to return to a central position, owing to the action of gravity on the arm and to the disposition of the socket 22. The position to which the arm 23 is automatically returned is illustrated in Figs. 1 and 2. The arm 23 has a disk or circular plate 24 formed integral with its free end, and extending around the face of the plate, near its periphery, is a flange 25, the outer edge of which is formed with ratchet-teeth and one side of which is broken away to form a space 26, through which may swing an arm 27, mounted on a pin 28, rigidly secured to the center of the plate 24. A lug 29, projecting from the flange 25, carries a screw 30, whereby the upward movement of the arm 27 is limited. The arm 27 is thrown up to the position shown in Figs. 1 and 4 by means of a spring 31, coiled around the pin 28 and having one end engaged with a stud 33, projecting inward from a circular cap 34. The cap 34 has its edge held in a rabbet-groove 35, formed in the outer face of the flange 25. Rigid with the cap 34 and located within the same are two pawls 36, the relative positions of which are shown by dotted lines in Fig. 4, and one of which is shown by full lines in Fig. 5. By turning the cap 34 on the flange 25 the stud 33 will be moved circularly around the pin 28 and the spring 31 will be compressed, so as to apply its force to the arm 27. By these means the tension of the spring

31 may be regulated. When the parts are properly adjusted, both pawls or dogs 36 will engage with the ratchet-teeth of the flange 25. Fig. 4 shows by dotted lines one of the dogs within the space 26; but in operative adjustment this will not be the position of said parts. The cap 34 has the pin 28 passed through it, and the cap is held in place by a wing-nut 37, screwing on the pin 28.

The outer portion of the arm 27 is reduced to be received within a socket formed in the lower end of the take-up rod 38. The take-up rod 38 has two eyes 39, adapted to guide the twine 40 as the twine passes from the cup 21. The twine is kept taut by a weighted sphere 41, held in a yoke 42, rigidly secured to the plate 24.

The cup 21 is designed to receive small balls of twine. When the balls of twine are too large to be conveniently placed within the cup 21, they are held on a mandrel, such as is shown in Fig. 7. This mandrel consists in a socket 43, designed to receive the upwardly-bent end 20 of the arm 19 and having at its lower portion a base-plate 44, whereon the ball of twine is rested. Projecting upwardly from the socket 43 are a series of spring-arms 45. The upper end of the arms 45 are turned inward slightly, so that the arms may pass into the core of the ball and by pressing against the walls thereof hold the ball of twine firmly in place. The whole structure may turn freely on the arm 19.

Figs. 8 and 9 illustrate a modification of the take-up device, in which a rigid wire or rod is bent so that one end 46 will form a pivot adapted to be fitted within the socket 22. Above this end 46 the rod is formed with an eye 47. The rod is then bent upward and forward and then transversely to form a pivot 48. From the pivot 48 the wire is bent to form a guide-loop 49. The other end of the rod is bent transversely to form a pivot 50. A second rigid wire or rod has a portion 51 coiled around the pivot 48, and one end 52 of this rod or wire is extended upward and outward, so as to carry the take-up rod 38. From the coil 51 the said second rod or wire is bent downward, thence transversely, and finally upward to form an arm 53, wherewith is connected a retractile spiral spring 54. The spiral spring 54 is attached to the eye 47, so as to normally hold the arm 52 in the position shown in Fig. 8. The tension-weight 55 normally turns on the loop 49, such positions being assumed by the gravity of the weight 55, which is mounted to swing around the pivot 50 by an inflexible wire 56, the ends of which are secured to the weight 55, an intermediate portion of which wire is coiled around the pivot 50. The twine passes up through the loop 49 and beneath the weight 55, thence upward to the take-up rod, which will be carried on the arm or terminal 52. When the twine is slack, it permits the weight 55 to lie in the position shown in Fig. 8; but when the

twine is drawn taut it assumes a vertical inclination and lifts the weight 55, as shown by dotted lines in Fig. 8.

With either of the take-up devices when the twine is drawn down the take-up rods will be moved downward on their pivots, whereupon the twine may be drawn easily through the take-up device. When tension is released on the twine, the take-up-rod-actuating springs lift the take-up rods, and the tension-weights fall back upon their sustaining devices, whereby the clamp is engaged and prevented from slipping. The twine is always held conveniently for use and yet is raised out of the way of persons passing below it.

Various changes in the form, proportion, and minor details of my invention may be resorted to without departing from the spirit and scope thereof. Hence I do not consider myself limited to the precise construction herein shown, but believe that I am entitled to all such variations as come within the terms of my claims.

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

1. The combination of a disk having a ratcheted side flange with a break therein, a rod passed and movable through the break in the flange, a pin carried by the disk and pivotally mounting the rod on the disk, a cap having a projection capable of engaging with the ratchet-teeth of the flange on the disk whereby to adjustably hold the cap on the disk, and a spring coiled around the pin of the disk and connected with the cap and with the rod.

2. The combination of a carriage-plate, capable of sliding vertically to adjust the position thereof, a lever mounted on the carriage-plate and movable to lock and release the carriage-plate, the carriage-plate having two sockets therein, the sockets being located respectively at the upper and lower portions of the carriage-plate, an arm mounted to swing in the lower socket, a twine-cup carried on the arm, and a tension device mounted to swing in the upper socket and overhanging the twine-cup.

3. The combination of a carriage-plate, a tension device supported by the upper portion of the carriage-plate, a block attached to the lower portion of the carriage-plate and having a recess therein, and a lever fulcrumed within the recess and supported by the carriage-plate, the lever having a long arm and a short arm, such arms running parallel with each other, and the short arm forming a locking-pin capable of holding the carriage-plate stationary.

4. A tension device having a plate provided with a ratcheted peripheral flange, one side of which flange is broken away, a pin rigidly secured to the plate and centrally with reference to the flange, an arm mounted to swing on the pin, a cap engaging the flange of the

plate and held from turning by the ratchet-teeth thereof, the cap also having connection with the pin, and a spring coiled around the pin and having connection with the swinging
5 arm and with the cap.

5. The combination of a plate having a circular flange, and having a pin central with reference to the flange, the flange having a break therein, an arm mounted to swing on

the pin and extended to the break in the 10 flange, a cap engaging the flange to inclose the pin, and a spring inclosed between the cap and plate, the spring having connection with the arm whereby to actuate the same.

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Witnesses:

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