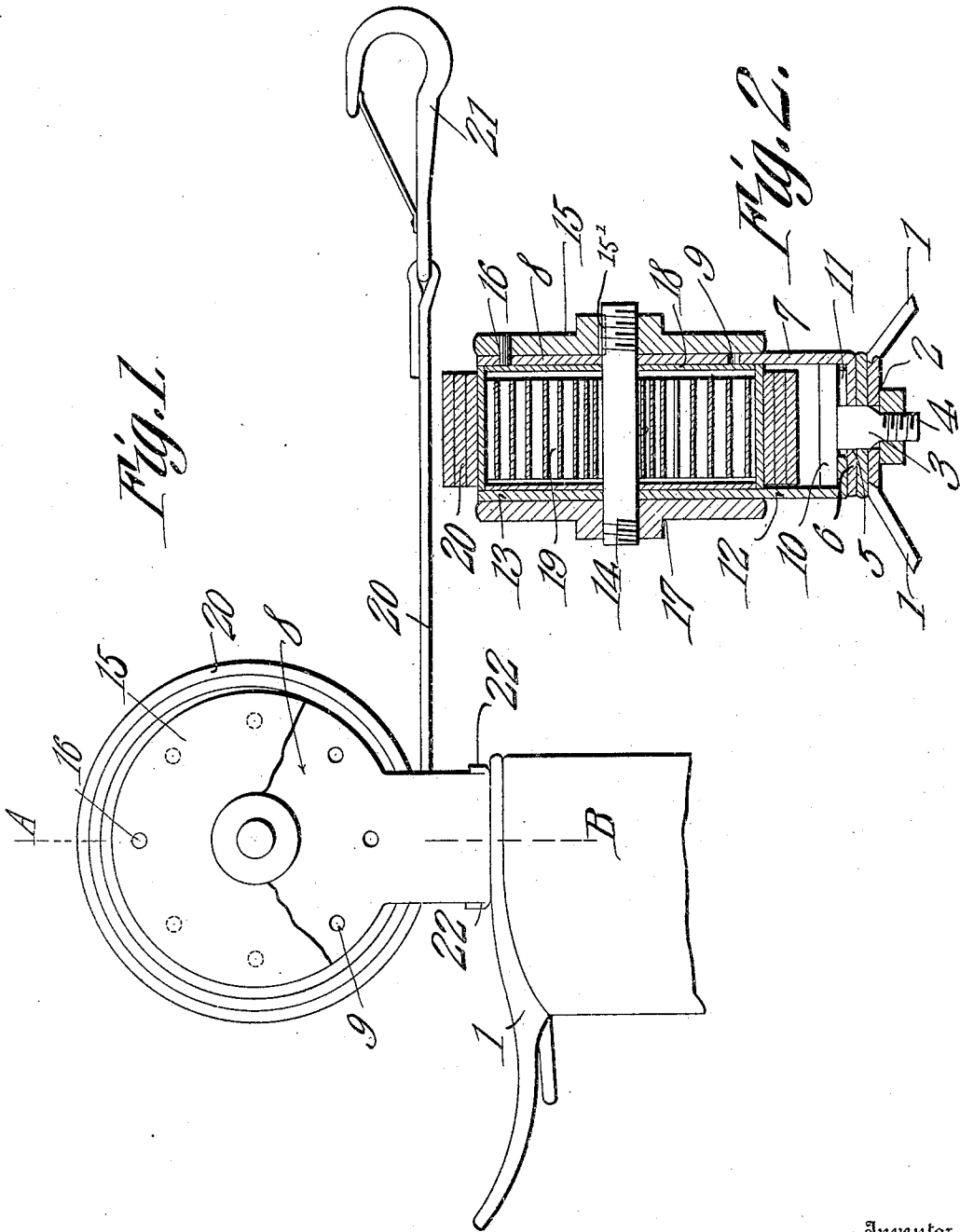


B. J. GRANT.
CHECKREIN.
APPLICATION FILED MAR. 19, 1909.

946,754.

Patented Jan. 18, 1910.



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Witnesses

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UNITED STATES PATENT OFFICE.

BENSON JONES GRANT, OF GALENA, KANSAS.

CHECKREIN.

946,754.

Specification of Letters Patent.

Patented Jan. 18, 1910.

Application filed March 19, 1909. Serial No. 484,517.

To all whom it may concern:

Be it known that I, BENSON J. GRANT, a citizen of the United States, residing at Galena, in the county of Cherokee and State of Kansas, have invented a new and useful Checkrein, of which the following is a specification.

This invention relates to check reins and is more particularly designed as an improvement upon the structure described and claimed in Patent No. 897,977, issued to Benson J. Grant on September 8th, 1908.

The object of the invention is to provide a device of this character having a spring whereby the check rein may be maintained taut under all conditions, simple and efficient means being employed whereby the pull exerted by the spring can be varied as desired.

Another object is to provide a device of this character which is compact in construction and which will not readily get out of order because constructed of but few parts.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a side elevation of the check rein embodying the present improvements, one of the side disks being broken away to show the notched holding bracket in elevation. Fig. 2 is a section on line A—B Fig. 1.

Referring to the figures by characters of reference 1 designates an ordinary saddle-tree having an opening 2 in the top thereof for the reception of the angular portion 3 of a screw 4, said angular portion being disposed in a correspondingly shaped opening 5 in a base-plate 6 which rests upon the saddle-tree and has a standard 7 terminating in a disk 8 in which is arranged an annular series of apertures 9. Interposed between the base-plate 6 and the angular head 10 of the screw 4 is a forked plate 11 formed at the lower end of the standard 12 which terminates at its upper end in a disk 13 corresponding with the disk 8 but which is not provided with a series of apertures. A spindle 14 extends through the centers of the two disks 13 and 8, and keyed or other-

wise secured to one end of this spindle by means of a key 15 or the like is a revoluble head 15 having a stud 16 extending inwardly from its inner face and designed to be seated in any one of the openings 9 referred to. The other end of the spindle 14 is screw-threaded and is engaged by a head 17 which acts as a nut and is designed, when screwed upon the spindle, to clamp the two disks 8 and 13 between the heads 15 and 17.

Revolubly mounted on the spindle 14 and between the disks 8 and 13 is a drum 18 within which is arranged a spiral spring 19, one end of which is secured to the spindle 14, while the other end is secured to the drum. A check-strap 20 is secured at one end to the outer face of the drum and this strap is provided with the usual snap hook 21, as shown in Fig. 1.

As shown especially in Fig. 1, the base plate 6 is preferably provided with up-turned flanges 22 designed to lap the side edges of the forked plate 11, and thus prevent the two plates from swinging laterally with relation to each other. It will of course be understood that when the strap 20 is unwound from the drum 18 the stress of the spring 19 will be increased, because the spindle 14 is held against rotation by the stud 16, which projects from the head 15 and into one of the openings 9 in the disk 8. Should it be desired to reduce or increase the resistance offered by the spring to the movement of the check-strap 20 the head 17 can be unscrewed from the spindle 14 and said spindle shifted a short distance longitudinally within the disks 8 and 13 so as to disengage the stud 16 from the notch in which it is seated. Said head 15 and the spindle 14 can then be turned in a desired direction, and after the proper adjustment has been obtained, the stud 16 can be replaced in one of the openings 9 and held therein by tightening the head 17 upon the spindle. It will be seen that the means for securing this adjustment of the spring is very simple and can be conveniently manipulated. There is no danger of the parts slipping out of place after they are once adjusted, because it is first necessary to loosen the head 17, and this cannot be accomplished accidentally, because said head 17 normally contacts throughout the extent of its inner face with the adjoining disk 13, and this frictional engagement is sufficient to prevent any inadvertent turning of the head.

It is of course to be understood that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing the advantages of the invention.

What is claimed is:—

1. A device of the class described including separable standards having integral disks, means for detachably securing the standards against independent movement, one of the disks having a series of apertures therein, a spindle mounted for rotation within the disks, a drum revolubly mounted upon the spindle and between the disks, a coiled spring within the drum and secured at its ends to the drum and spindle respectively, a head secured to and revoluble with one end of the spindle, said head having a projecting portion normally seated within one of the apertures to hold the spindle and head against rotation in either direction, means engaging the other end of the spindle for holding the spindle and head in locked position, and a flexible element secured to and normally wrapped around the drum.

2. A device of the class described including an apertured base plate having opposed upstanding flanges, a forked plate slidably

mounted upon the base plate and between the flanges, means within the fork and the apertures for binding the plates together, standards upstanding from the respective plates, each standard having an integral disk, one of the disks being provided with a series of apertures, a spindle mounted for rotation within the disks, a head secured to and movable with one end of the spindle, a projection upon the head and normally seated within one of the apertures to hold the spindle and head against rotation in either direction, means upon the other end of the spindle and bearing against the adjoining disk to hold the said projection in engagement with the apertured disk, a drum mounted for rotation upon the spindle, a coiled spring within the drum and secured at its ends to the drum and the spindle respectively, and a flexible element secured to and normally wrapped around the drum.

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

BENSON JONES GRANT.

Witnesses:

R. A. COLES,
H. E. MOORE.