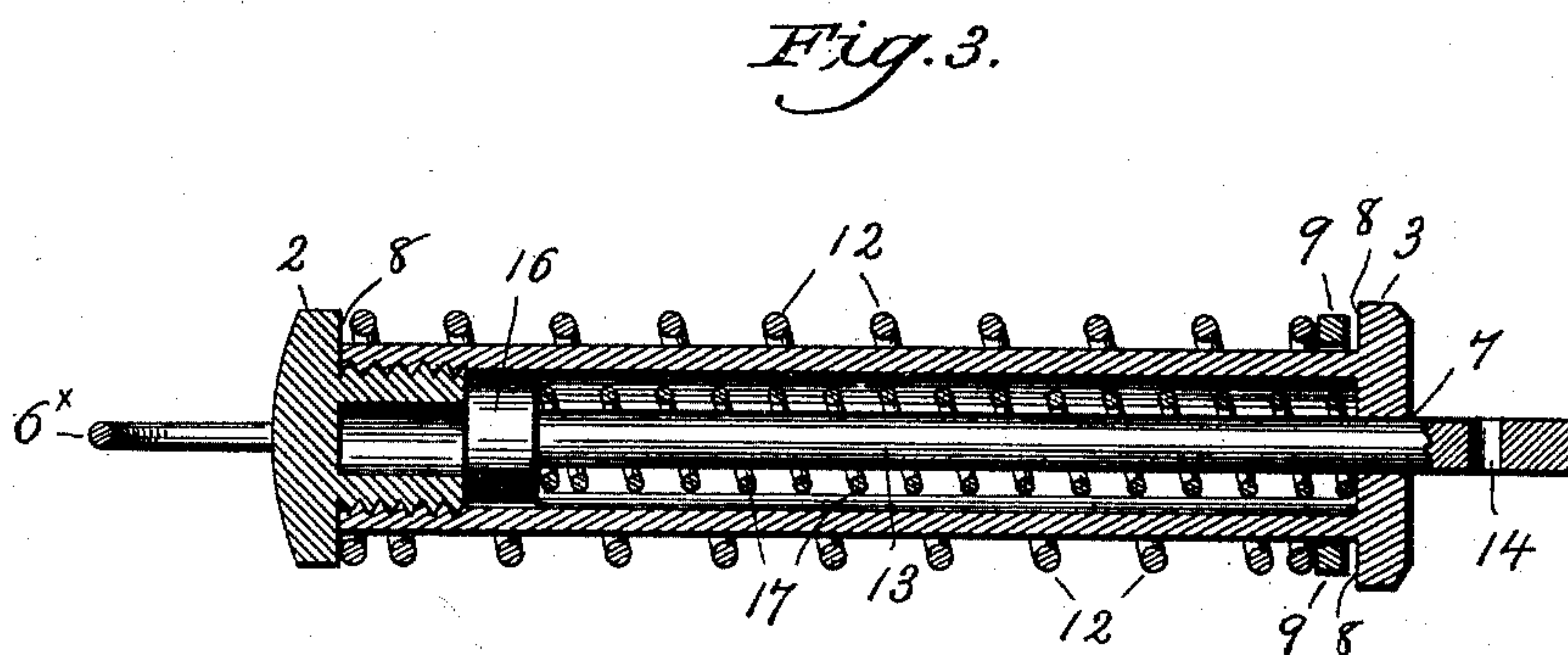
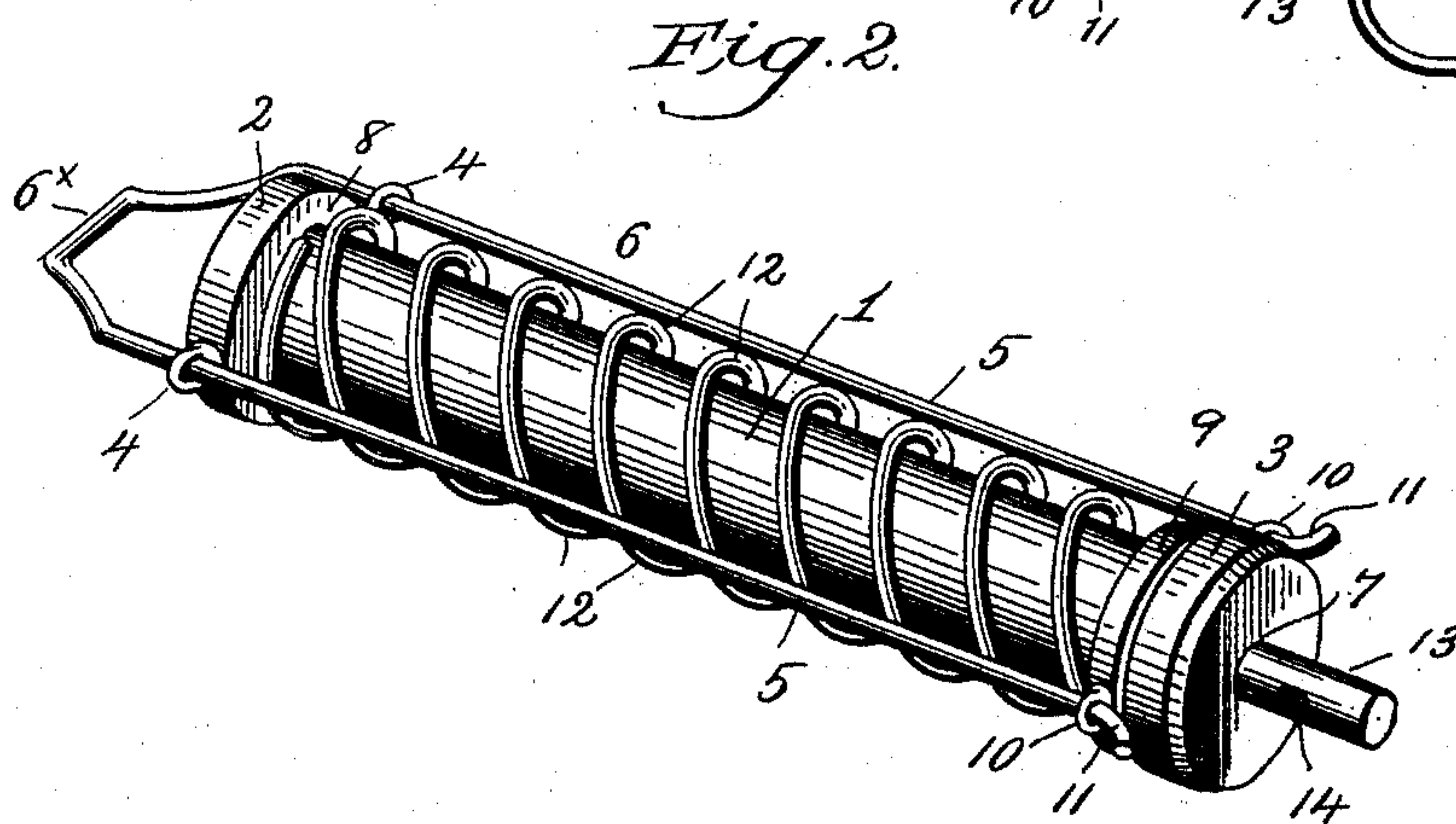
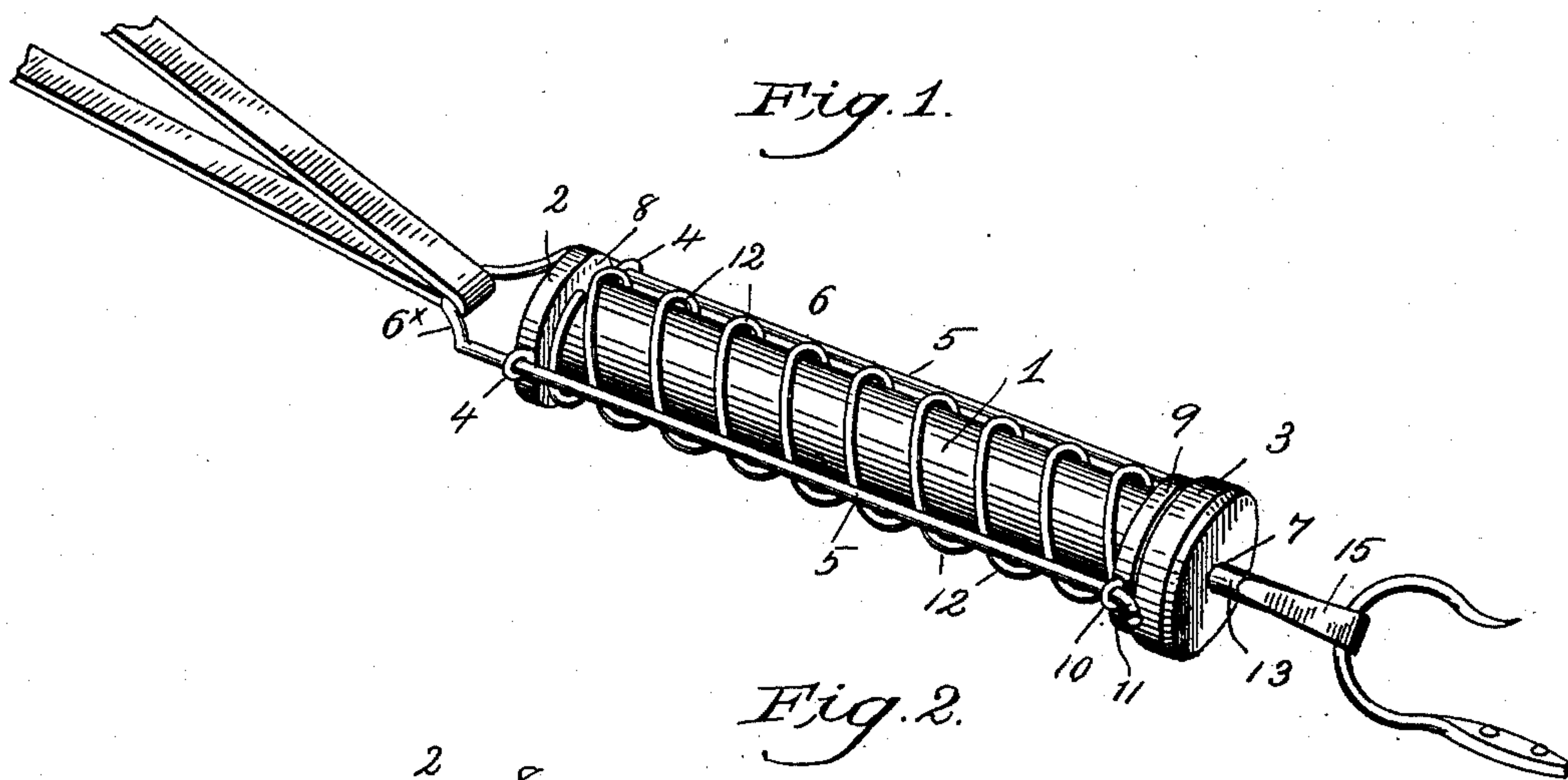


(No Model.)

I. W. CRIPPEN.  
CHECK REIN SPRING.

No. 483,762.

Patented Oct. 4, 1892.



Witnesses

Wm. A. Schornborn.

Chas. B. Hyer.

Inventor

Ira W. Crippen.

By his Attorneys,

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# UNITED STATES PATENT OFFICE.

IRA W. CRIPPEN, OF YPSILANTI, MICHIGAN.

## CHECKREIN-SPRING.

SPECIFICATION forming part of Letters Patent No. 483,762, dated October 4, 1892.

Application filed June 23, 1892. Serial No. 437,771. (No model.)

*To all whom it may concern:*

Be it known that I, IRA W. CRIPPEN, a citizen of the United States, residing at Ypsilanti, in the county of Washtenaw and State of Michigan, have invented a new and useful Check-Spring, of which the following is a specification.

This invention relates to certain new and useful improvements in check-springs adapted for attaching the rear portion of the overdraw checkrein of harness to the check-hook; and it consists of the construction and arrangement of the parts thereof, as will be more fully hereinafter described and claimed.

The object of this invention is to provide a yielding connection between the overdraw-check and the check-hook, the parts thereof being simple and effective in their construction and operation, strong and durable, and comparatively inexpensive in manufacture and sale.

In the drawings, Figure 1 is a perspective view of the improved device shown applied. Fig. 2 is a similar view of the device, shown on a larger scale, detached. Fig. 3 is a central longitudinal section thereof.

Similar numerals of reference are employed to indicate corresponding parts in the several figures.

Referring to the drawings, the numeral 1 designates a barrel or cylinder having heads 2 and 3, the head 2 being provided with a screw-threaded shank adapted to be removably fitted into the one end of the said cylinder. The said front head 2 is closed and formed with or has connected thereto diametrically-opposed eyes 4, through which are freely passed the legs 5 of a wire yoke 6, which partially embraces the said cylinder, and has an engaging loop 6<sup>x</sup> formed at its front end. The rear head 3 is formed with a central opening or aperture 7, and both heads are formed with flanges 8, which provide limitations or stops for the parts mounted on the said barrel or cylinder.

On the barrel or cylinder is movably mounted a ring 9, having diametrically-opposed eyes 10, through which the legs 5 of the yoke are also passed and inseparably connected by having the lower ends thereof bent, as at 11, to prevent disengagement thereof from the

said ring. Between the ring 9 and the flanges 8 of the head 2 and surrounding the barrel or cylinder 1 is a coiled spring 12 of considerable stiffness and stout enough to resist all strain brought to bear thereon. Inside of the barrel or cylinder 1 is freely mounted a rod 13, whose rear end normally projects through the opening or aperture 7 of the rear head and is preferably formed with a transverse eye 14 at the said free projecting end of the same, in which is secured a strap 15, or said strap may be connected in any other well-known manner. The front end of the said rod 13 is formed with a head 16, and surrounding said rod is a coiled spring 17 of less strength and resistance than the spring 12 and is held between the said head 16 and the inner surface of the shank of the head 3.

In applying the device the rear part of the overdraw-check is secured to the loop 6<sup>x</sup> of the yoke 6, and the strap 15 is attached to the check-hook on the harness-saddle, and by means of said device the animal is permitted to freely move his head; but the normal tendency of the improved device is to draw or force the head of the animal upward. This avoids the strain and tiresome position usually caused by a rigid connection of the overdraw-check directly to the check-hook, and at the same time assists and trains an animal to keep his head elevated.

Many other advantages incident to the employment of a device of the character set forth will be readily appreciated by those skilled in the art.

It will be understood that the device may be suitably ornamented or embellished with unique designs, as may be found desirable and best adapted for the purpose.

Having thus described the invention, what is claimed as new is—

1. In a check-spring, the combination of a barrel or cylinder, a spring surrounding the same, a spring-actuated rod located in said barrel or cylinder and partially projecting therefrom, and a yoke embracing the said barrel or cylinder and controlled by the spring surrounding the same, substantially as described.

2. In a check-spring, the combination of a barrel or cylinder, a spring surrounding the

same, a spring-actuated rod located in said barrel or cylinder and partially projecting therefrom, a ring mounted on said barrel, and a yoke engaging said ring, substantially as described.

3. In a check-spring, the combination of a barrel or cylinder, a spring surrounding the same, heads connected to said barrel or cylinder, one of which has eyes, a ring movably surrounding said barrel or cylinder, a yoke having legs embracing the barrel or cylinder, movably connected to said ring and having an engaging loop, a spring surrounding said

barrel or cylinder between said ring and the front head, a spring-actuated rod movably located in the barrel or cylinder, and a strap connected to the rear end of said rod, 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.

IRA W. CRIPPEN.

Witnesses:

D. E. WILBER,  
FRED P. WILBER.