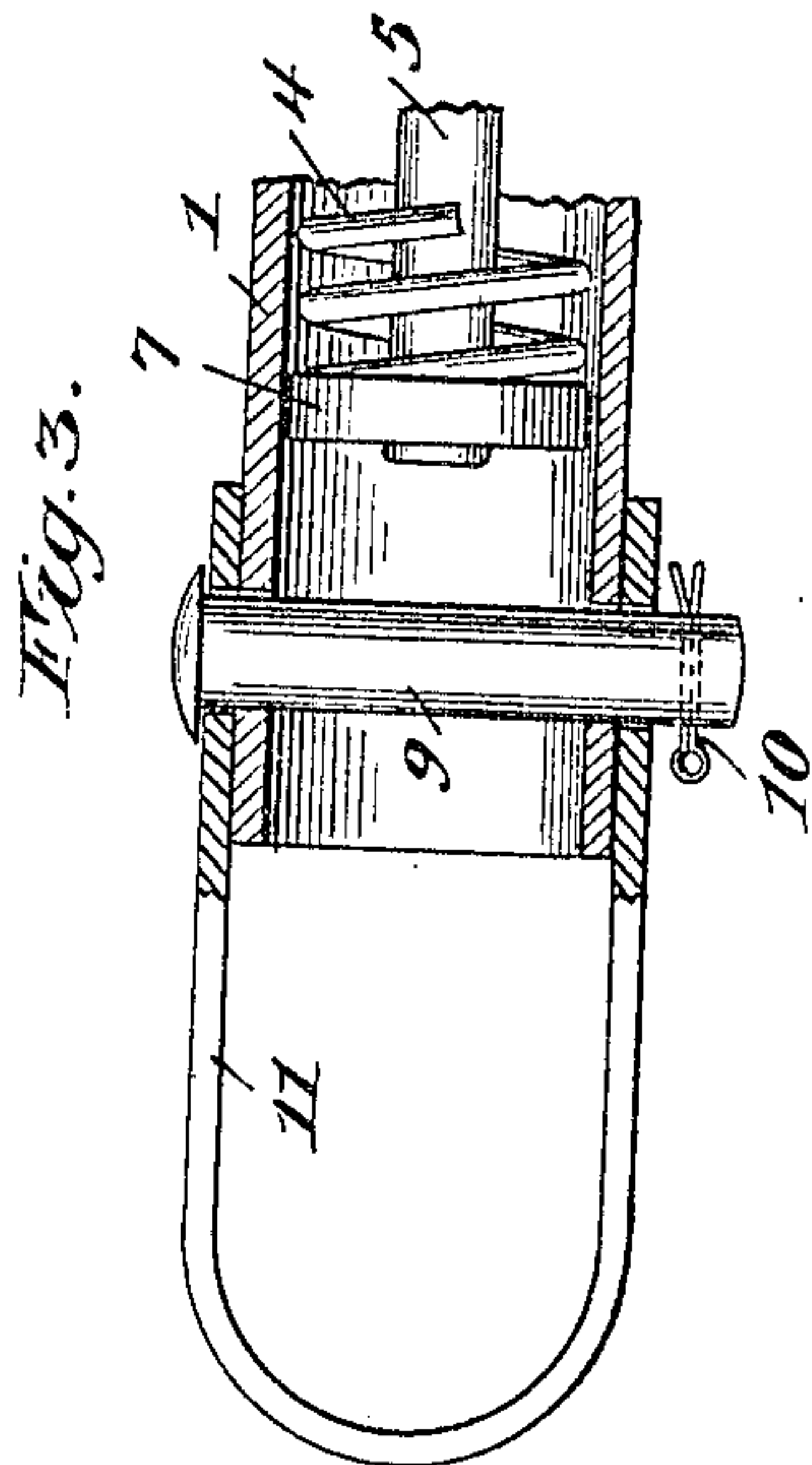
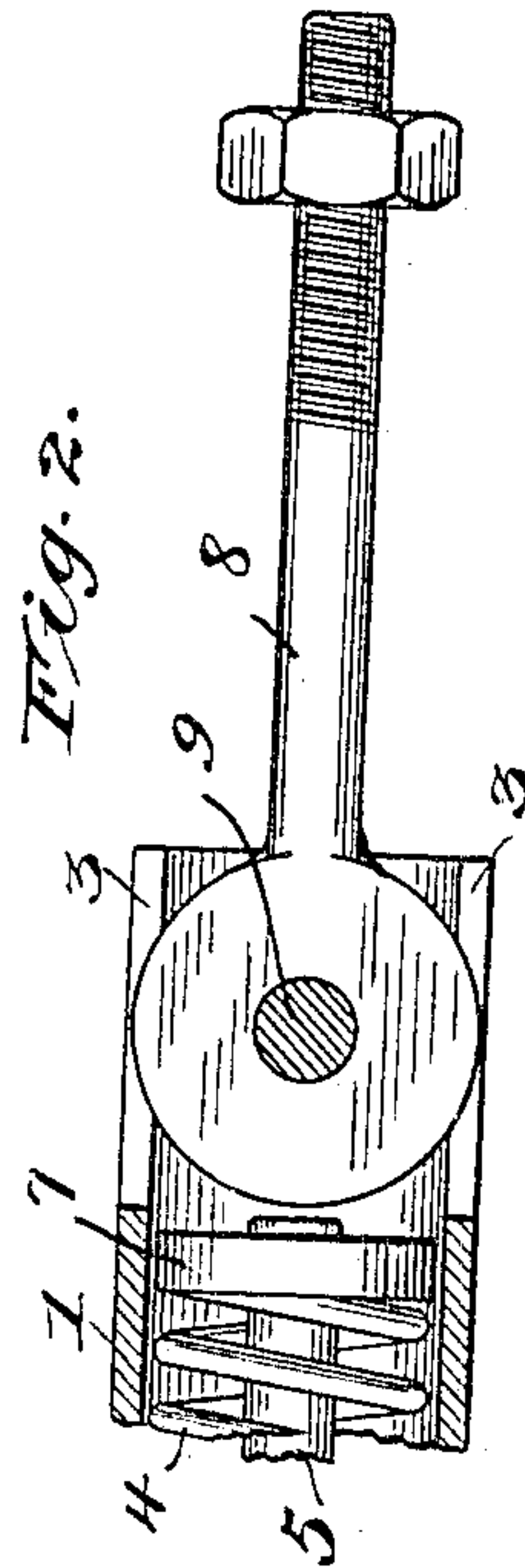
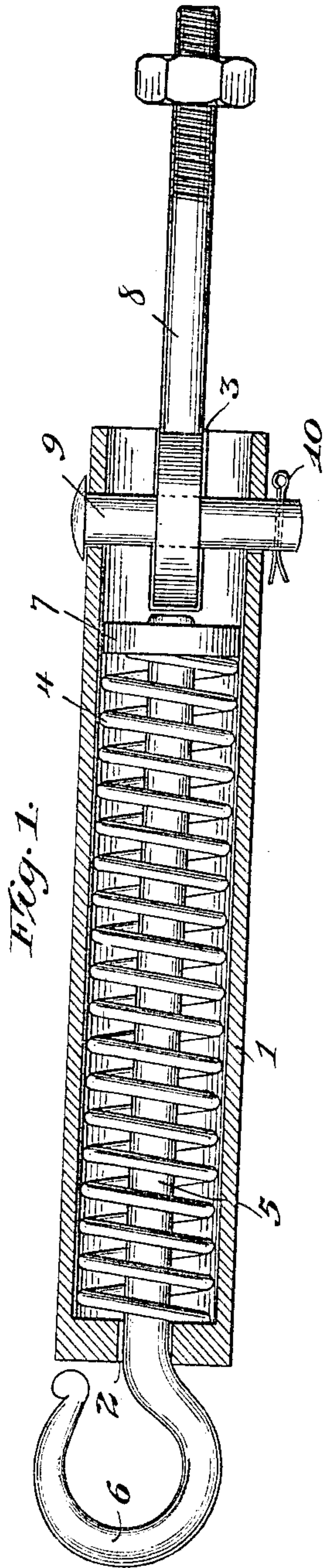


No. 819,092.

PATENTED MAY 1, 1906.

W. B. SMITH.
SPRING DRAFT DEVICE.
APPLICATION FILED APR. 14, 1905.



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UNITED STATES PATENT OFFICE.

WILLIAM B. SMITH, OF CHICAGO, ILLINOIS.

SPRING DRAFT DEVICE.

No. 819,092.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed April 14, 1905. Serial No. 255,576.

To all whom it may concern:

Be it known that I, WILLIAM B. SMITH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Spring Draft Devices, of which the following is a specification.

This invention relates to spring draft devices of that type commonly interposed between a load that is being moved and the source of power, whereby a yielding or elastic connection is had.

Among the salient objects of the invention are to provide a much simplified construction and arrangement as compared with the devices of this character heretofore proposed, to provide a device of the character referred to so pivoted and arranged that the direct line of draft will be in perfect alinement with the longitudinal axis of the device at all times, and to provide a device so simplified as to the construction and number of parts as to reduce the cost of manufacture to a minimum.

The invention will be readily understood from the following description, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view of the device. Fig. 2 is a fragmentary sectional view taken at right angles to that in Fig. 1, and Fig. 3 is a fragmentary view showing a slightly-modified form of attachment.

Referring to the drawings, 1 designates a tubular casing with a restricted opening 2 into one end thereof, the other end being open and provided through its sides with diametrically-disposed slots or openings 3 3.

4 designates a coiled spring located within the casing 1 upon a bolt 5, provided at its outer end with a hook 6 and at its opposite end with a nut 7, threaded thereupon, the spring 4 being disposed between said nut 7 and the end wall of the casing 1.

8 designates an eyebolt by means of which the device is pivotally attached to the end of a swingletree or other member interposed between the load and the device. The head or eye of the bolt 8 is disposed in the slots 3 in the casing 1 and is held in place by a through-bolt 9, which forms a pivot connection between the casing 1 and the swingletree or other member. The through-bolt 9 may be held in place by any well-known means, that used in the present instance being the common cotter-pin 10.

Instead of an eyebolt for attaching the de-

vice to the swingletree or other member a U-shaped member 11 may be used, as indicated clearly in Fig. 3, the arms of the U-shaped member resting on the outside of the casing 60 and the through-bolt passing through both arms and the casing 1 in the manner shown. It is obvious that the end of the casing might be so constructed that the arm members of the U-shaped member 11 would rest inside of 65 the end of the casing 1 and yet permit of sufficient pivotal movement of the device as to keep the line of draft at all times in perfect alinement with the longitudinal axis of the device, which is one of the important fea- 70 tures of the present invention. The tension of the spring 4 can be regulated to a certain degree by means of the nut 7 upon the end of the hooked bolt 5.

It will be obvious from the drawings and 75 the foregoing description that the device is reduced to a most simple and economical, as well as to a most practicable, construction; that it will always assume a direct line with the line of draft, and thus avoid any friction 80 or binding between the hooked bolt and casing and that the parts can be readily separated and replaced by others of the same or different strength.

The device is particularly intended for use 85 with draft-animals in order to act as a cushion to protect the shoulders under the collar and to ease the strain when the load which is being drawn is suddenly and unexpectedly obstructed or stopped. 90

While I have shown what I deem the preferred form of the invention, it is obvious that alterations can be made without departing from the spirit of the invention, and I do not, therefore, limit the invention to the de- 95 tails of construction and arrangement here shown and described except in so far as such details are made the subject-matter of specific claims.

I claim—

1. A spring draft device comprising a tubular body member provided at one end with a restricted opening, a hitching-bolt passing through said restricted opening and having sliding engagement with the interior of said 105 tubular member, a spring within said tubular member upon said hitching-bolt and engaging at its opposite ends said tubular member and said hitching-bolt, an attaching member pivotally connected to the opposite end of 110 said tubular body member for attaching the device to the load and guides on the tubular

body holding the attaching member and said body in substantial alinement as to one plane while permitting free lateral movement thereof in said plane.

- 5 2. A spring draft device comprising a tubular body member provided at one end with a restricted opening and at its opposite end with oppositely-disposed slots, a hitching-bolt sliding within said body member and
10 through said restricted opening, a spring

upon said hitching-bolt within said body member and acting upon the sliding movement thereof, and an eyebolt pivotally connected into the end of said body member with portions occupying said oppositely-disposed slots, substantially as described. 15

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