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Patented Feb. 11, 1902.

W. M. PIPER.
DRAFT RIGGING.

(Application filed Nov. 26, 1900. Renewed Aug. 17, 1901.)

(No Model.)

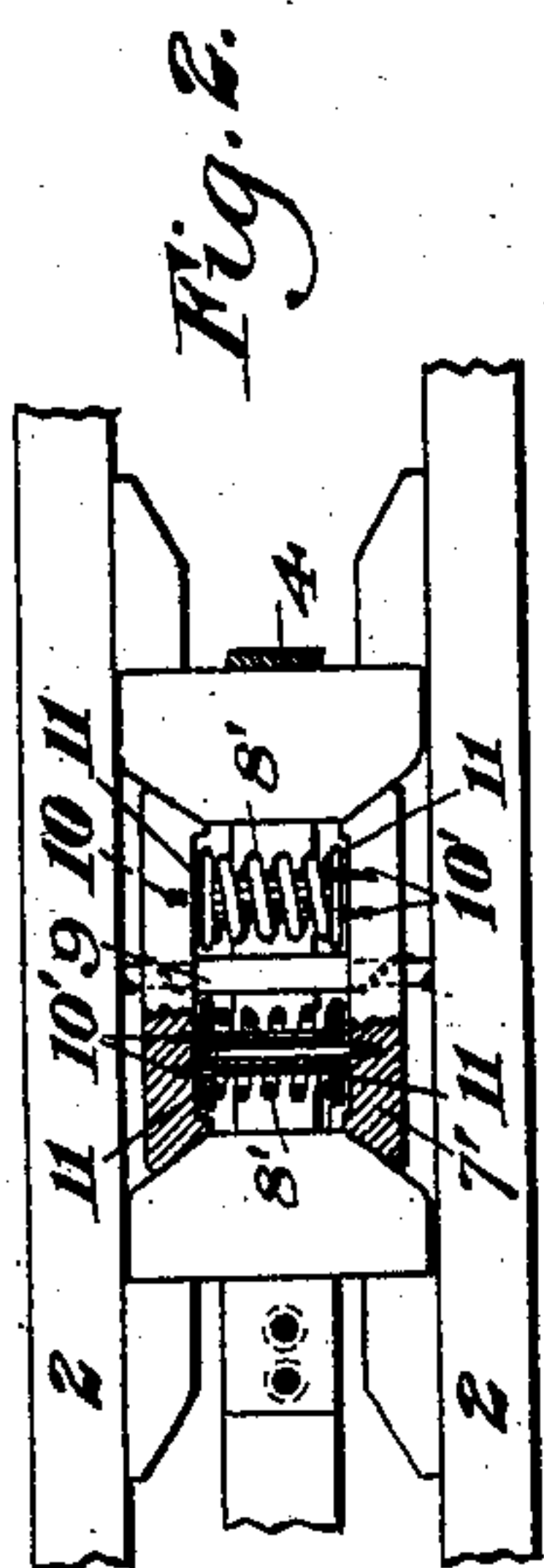
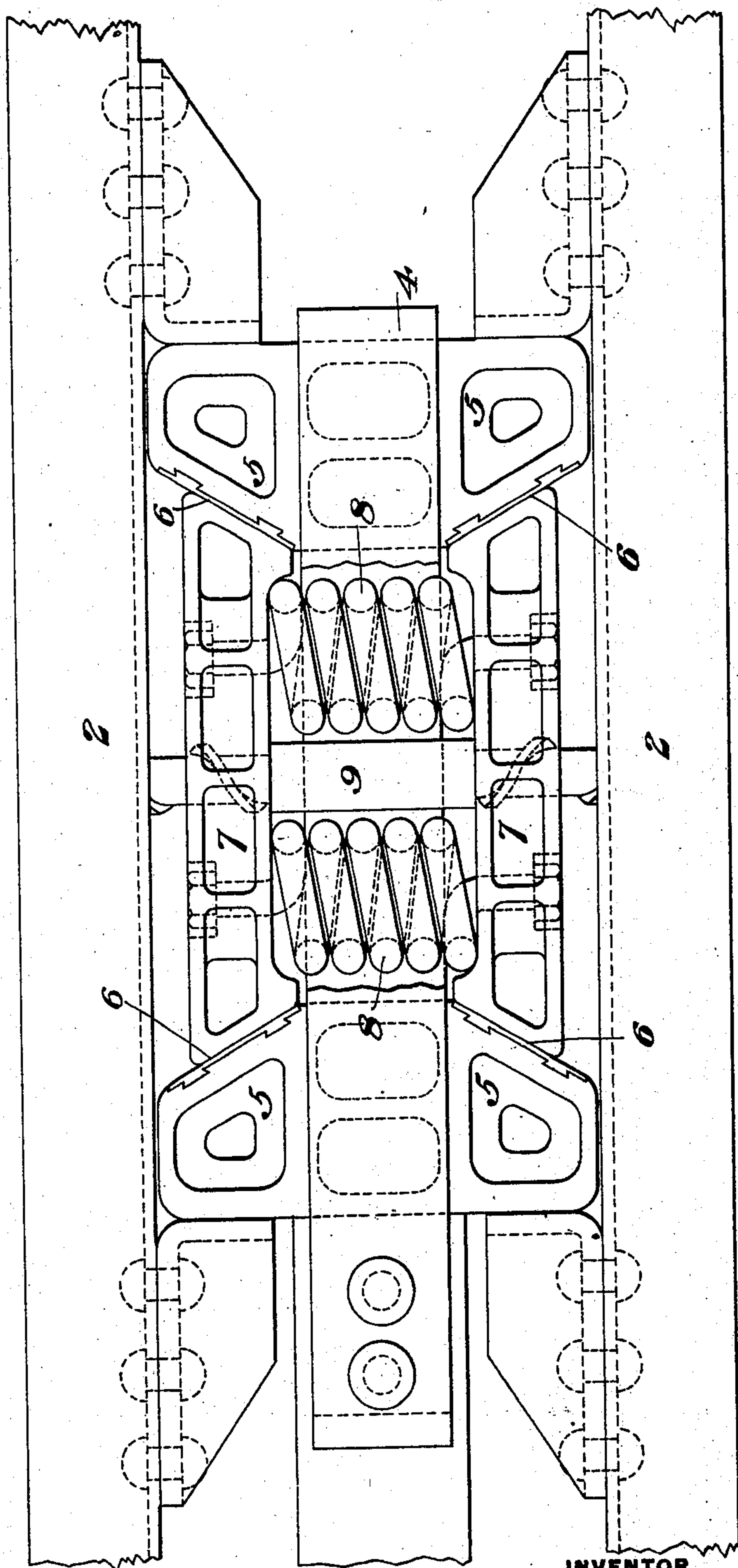


Fig. 1.



WITNESSES

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DRAFT-RIGGING.

SPECIFICATION forming part of Letters Patent No. 693,333, dated February 11, 1902.

Application filed November 26, 1900. Renewed August 17, 1901. Serial No. 72,418. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM MORGAN PIPER, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Draft-Riggings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

10 Figure 1 is a top plan view of a rigging constructed in accordance with my invention; and Fig. 2 is a similar view on a smaller scale, showing a modified form.

My invention relates to that class of draft-riggings wherein a resistance is provided by means of spring-pressed blocks having coacting inclined surfaces, as in my Patent No. 566,935, dated September 1, 1896; and it is designed to provide an improved form of such device wherein a pair of blocks with springs between them will be forced apart under either a buffing or pulling strain.

In the drawings, 2 2 represent the draft timbers or irons, and 3 the draw-bar, having a strap 4, through which extend the transverse end blocks 5 5. Each of these blocks is provided with opposite inclines 6 6, the inclination being outward instead of inward, as in my previous forms. A pair of oppositely-located blocks 7 7 are provided with end faces, fitting upon and coacting with the faces 6 6, and these blocks 7 7 are normally held in their inner position by means of intermediate tension-springs 8 8, having their end portions secured in the blocks.

To increase the resisting power of the device, I may provide the pin 9, which is centrally located in a transverse position and has oppositely-screw-threaded end portions engaging correspondingly-screw-threaded holes in the blocks 7 7. The screw-threads are made with a quick pitch, and as they extend in opposite directions any movement of the blocks 7 7 toward or from each other will rotate the shaft, which will exert a certain resistance dependent on the pitch of the thread.

The operation is apparent. Under either buffing or pulling strains one of the blocks 5 will be moved toward the other, and the inclined or wedge faces will force the blocks 7 7 apart against the tension of the springs and the resistance of the screw. Upon the re-

moval of the strain the springs will return the parts to normal position.

In the form of Fig. 2 the blocks 7' 7' are moved outwardly under the strains in the same way as the first form; but instead of securing the springs to the blocks I use the oppositely-extending bolts 10 10', two of which have their outer ends secured in one of the blocks 7', while the other is secured to the other block, while its inner end is secured to a bar or plate 11, against which the spring 8' bears. This spring 8' is held between the plates 11, and whenever a buffing or pulling strain is exerted upon the draw-bar the blocks 7 7 will be moved outwardly, and the springs in this case will be compressed instead of put into tension, as in the form of Fig. 1. The operation of this form is similar to that of the first form as regards the movements of the blocks, and the screw-threaded shaft or pin may or may not be used, as desired.

The advantages of my invention result from the arranging of the blocks so that the opposite blocks will be moved apart under the strains against the resistance of the intermediate springs. The device is compact and of great power, while taking up small space.

Many changes may be made in the form and arrangement of the springs, the blocks, and the inclined faces without departing from my invention.

I claim—

1. The combination with a longitudinally-movable bar, of oppositely-located blocks arranged to move toward and from each other on opposite sides of the draw-bar axis, a tension-spring between the blocks arranged to hold them in place, and mechanism connected with the bar and arranged to force the blocks apart under strains exerted through the bar; substantially as described.

2. In a draft device, a draw-bar having transversely-extending blocks with inclined faces, and oppositely-located blocks on either side of the draw-bar axis having springs between them, and arranged to move from each other against the resistance of the said intermediate springs, the transverse blocks being arranged to force apart the spring-pressed blocks under buffing or pulling strain; substantially as described.

3. In a draft-rigging, a draw-bar having

transversely - extending blocks with oppositely - inclined faces, oppositely - located spring-pressed blocks arranged to be moved apart under strain upon the draw-bar, and a
5 screw-threaded shaft connecting the latter blocks; substantially as described.

4. The combination with a longitudinally-movable bar, of blocks located on opposite
10 sides thereof and arranged to move toward and from the draw-bar axis, a spring interposed between said blocks and normally hold-

ing them in their inner position, and mechanism connected with the bar arranged to force the blocks apart on their buffing or pulling strain; substantially as described. 15

In testimony whereof I have hereunto set my hand.

WILLIAM MORGAN PIPER.

Witnesses:

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