

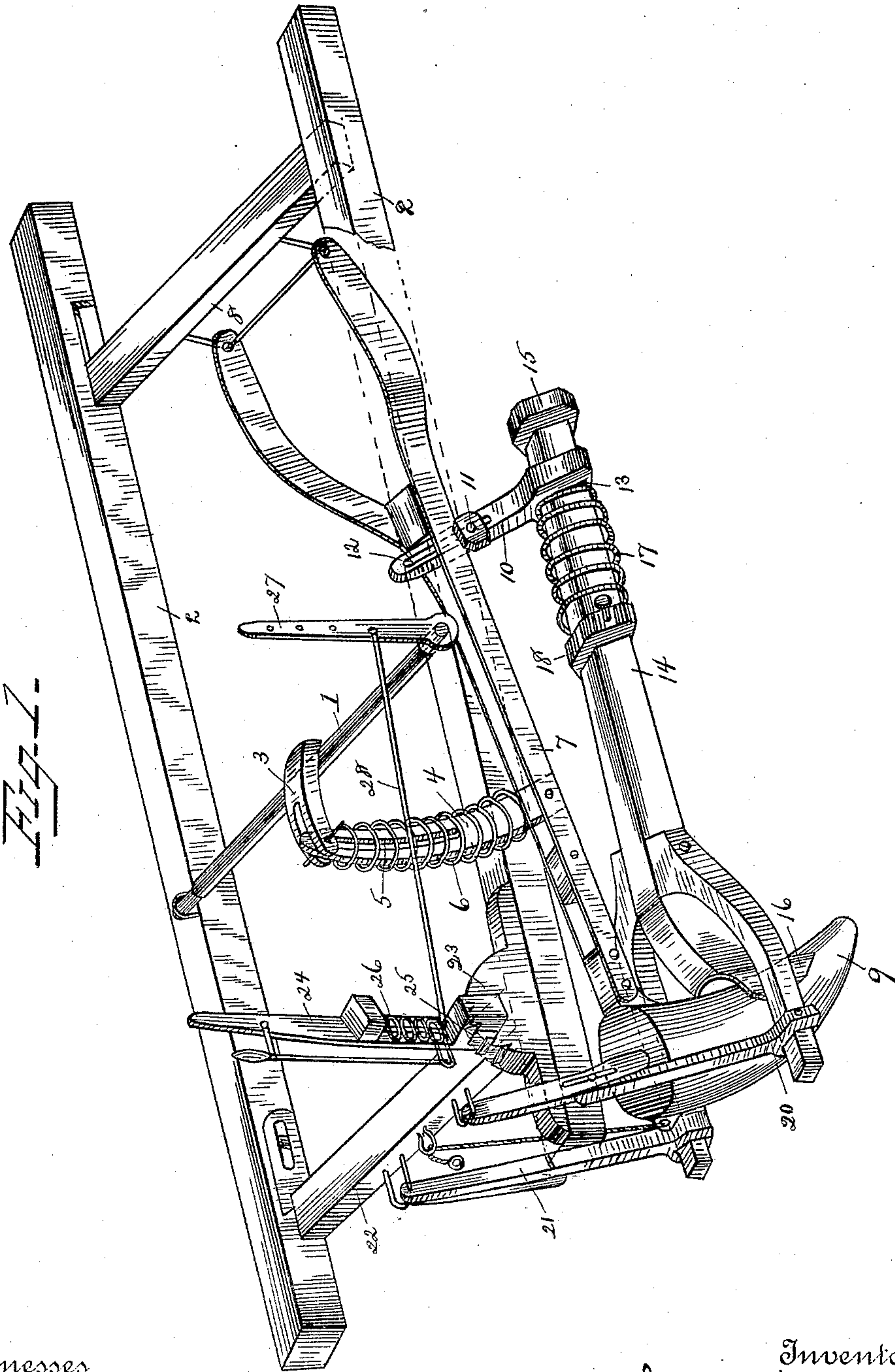
(No Model.)

2 Sheets—Sheet 1.

C. H. JOHNSON.  
GRAIN DRILL CLEANER.

No. 467,417.

Patented Jan. 19, 1892.



Witnesses  
Albert Popkins.  
W. A. Ruff

Inventor  
Carroll H. Johnson  
by  
Clark & Johns  
Attorneys

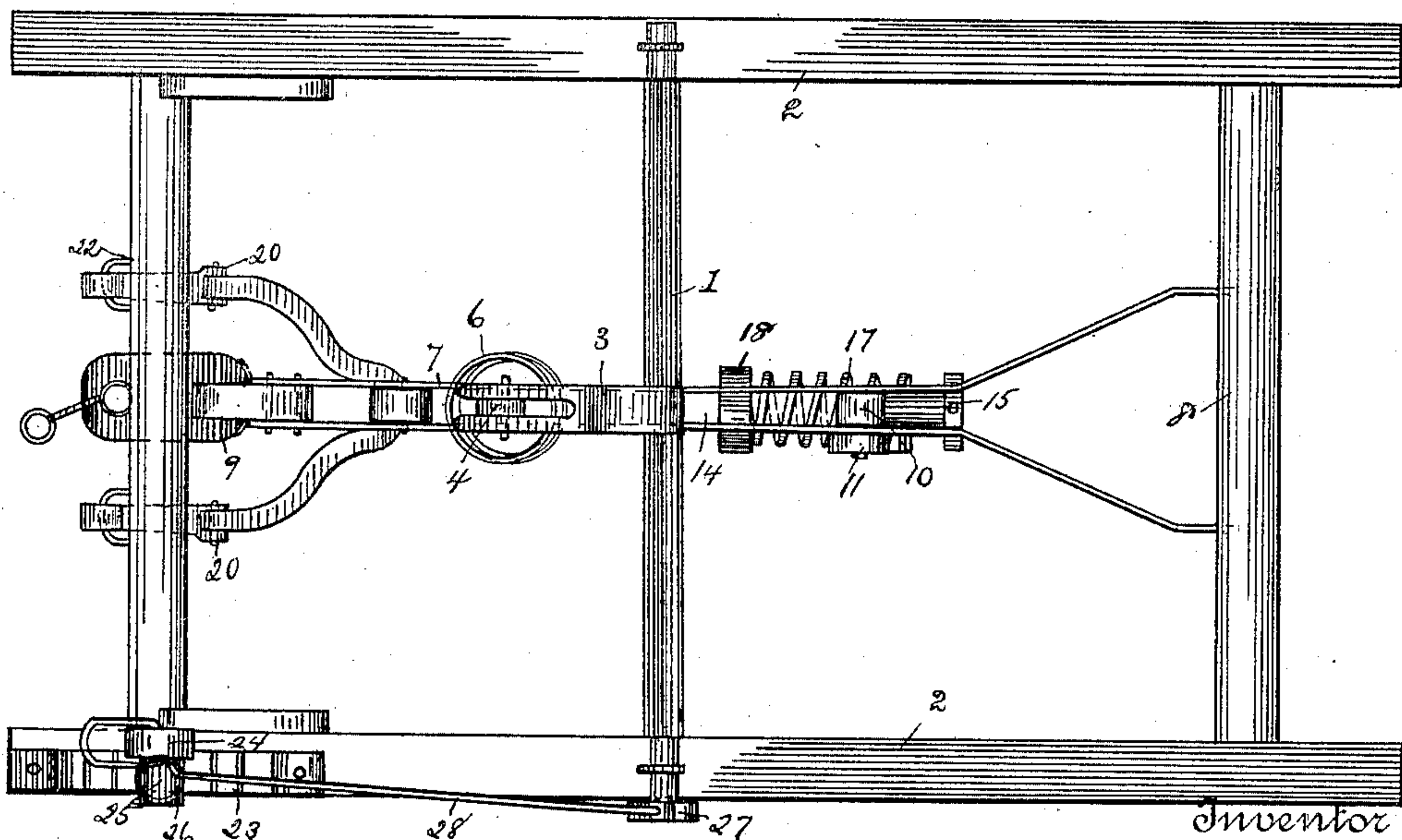
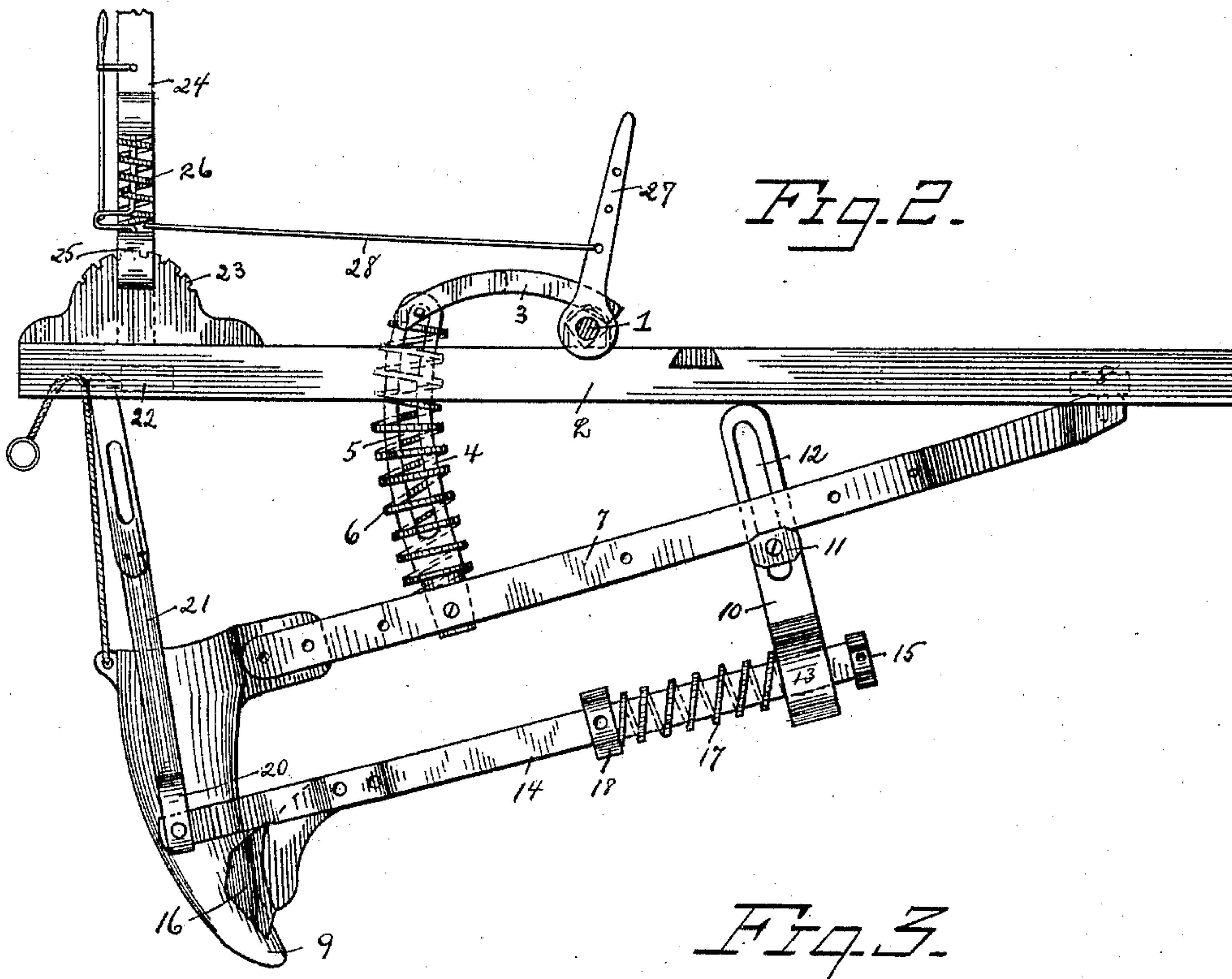
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# UNITED STATES PATENT OFFICE.

CARROLL H. JOHNSON, OF GRAIN VALLEY, MISSOURI.

## GRAIN-DRILL CLEANER.

SPECIFICATION forming part of Letters Patent No. 467,417, dated January 19, 1892.

Application filed November 7, 1891. Serial No. 411,201. (No model.)

*To all whom it may concern:*

Be it known that I, CARROLL H. JOHNSON, of Grain Valley, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Grain-Drill Cleaners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in grain-drill cleaners, the object of the same being to provide improvements over my patent granted June 2, 1891, numbered 453,356.

With the above ends in view my invention consists in the certain features of construction and combinations of parts, as will be hereinafter fully described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of the device. Fig. 2 is a view in side elevation, and Fig. 3 is a top plan view.

1 represents a rock-shaft journaled on the frame-bars 2. To the shaft 1 is rigidly secured the bifurcated arm 3, in which is loosely secured the curved rod 4, which is provided with the closed slot 5. A coil-spring 6 is located on the rod 4, the lower portion thereof bearing on the arms 7, in which the rod 4 is pivoted. The front ends of the arms 7 are pivoted to a cross-bar 8, as shown. To the free ends of the arms 7 is rigidly secured the drill-tooth 9. The depending rod 10 is adjustably secured in the arms 7 by means of the bolt 11, and is provided with the slot 12 to admit of suitable adjustment. The lower end of the rod 10 is provided with the elongated hole 13, through which passes one end of the shaft 14, the free end of which is provided with a head 15 to keep the same in place. The opposite end of the shaft 14 is provided with the scraper 16, adapted to engage the drill-tooth 9.

A coil-spring 17 is placed on the shaft 14, bearing against the rod 10 and the collar 18. The rod 28 is secured to the shaft 14 in the form of a yoke, and to the ends of which are pivoted the supports 20, which are adjustably secured in the rods 21, which are hinged or pivoted to the beam 22. To one of the frame-bars 2 is secured the ratcheted segment 23, to which is pivoted the operating-lever 24, which is provided with the dog 25 to engage said ratchets. The dog 25 is operated by means of a coil-spring 26, which serves to keep the same in engagement with the ratchets. The lever 24 is connected with a lever 27 on the rock-shaft 1 by means of the rod 28.

In operation it will be seen that the spring 6 serves to keep the tooth in the ground and the spring 17 serves to press the scraper 16 against the tooth. When it is desired to clean the tooth, it is accomplished by pushing the lever 27 forward, which will turn the rock-shaft 1 and raise the tooth 9 in contact with the scraper 16.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a grain-drill cleaner, the combination, with a rock-shaft, an arm secured to said shaft, a rod having a spring thereon attached to said arm, and arms 7, carrying a drill-tooth, of a rod secured to the shaft 7, a shaft movably secured in said rod, a spring on said shaft, a scraper secured to said shaft, and levers for operating the rock-shaft 1 and the shaft 14, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CARROLL H. JOHNSON.

Witnesses:

CHAS. N. TIFFANY,  
A. N. BOSTWICK.