

No. 622,605.

Patented Apr. 4, 1899.

L. COMPTON.
SPEED INDICATOR.

(Application filed Jan. 27, 1898.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

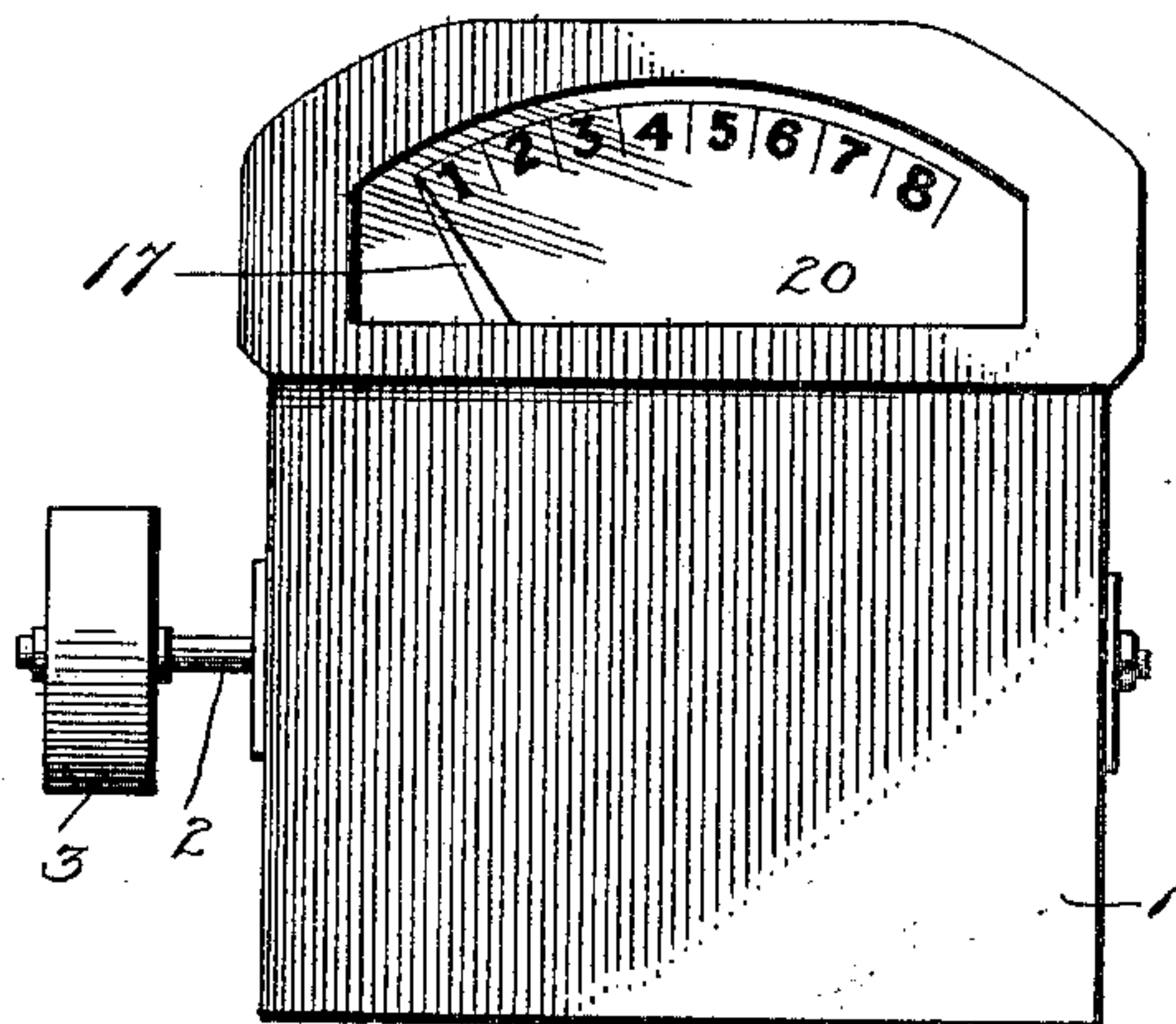
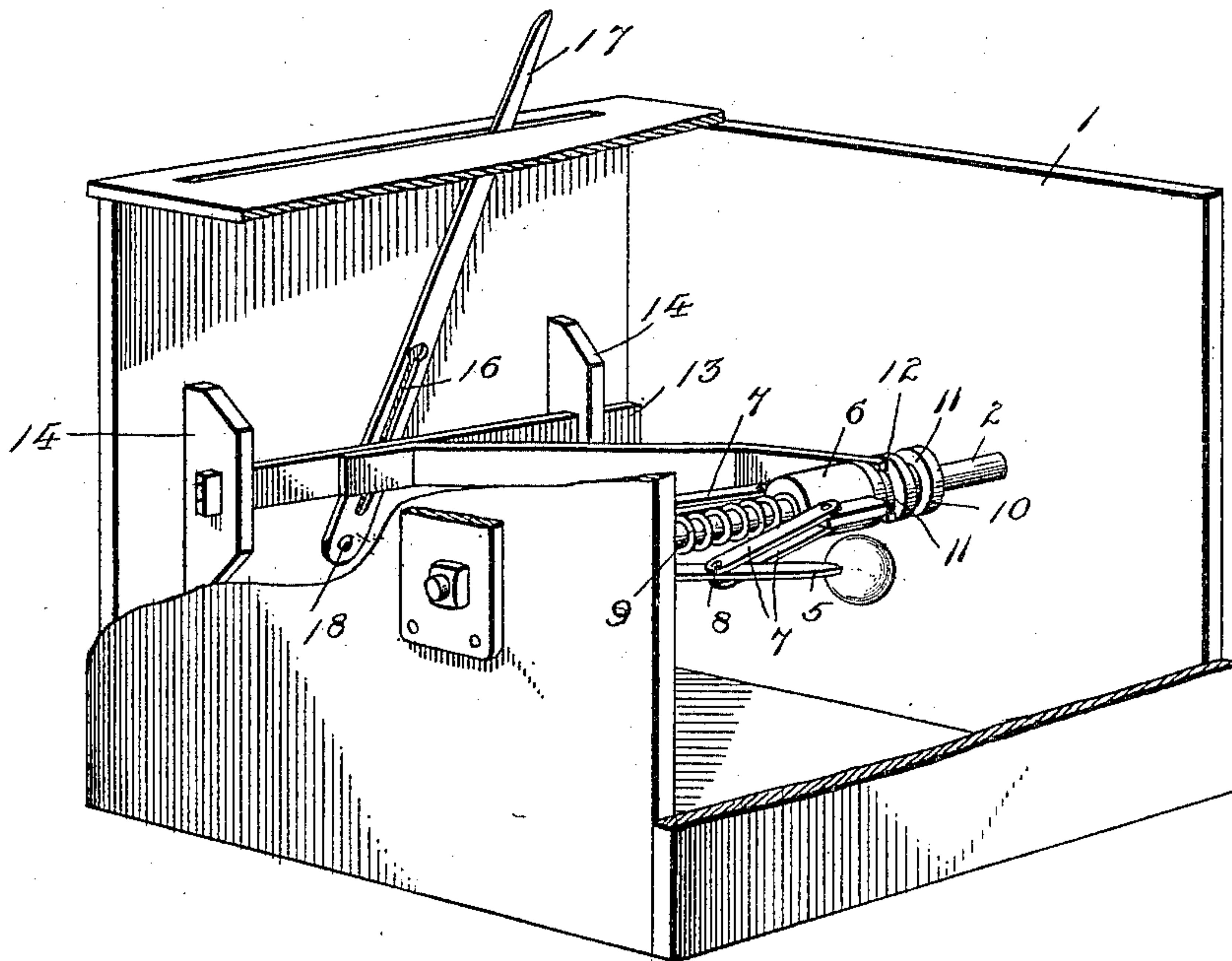


Fig. 2.



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Fig. 3.

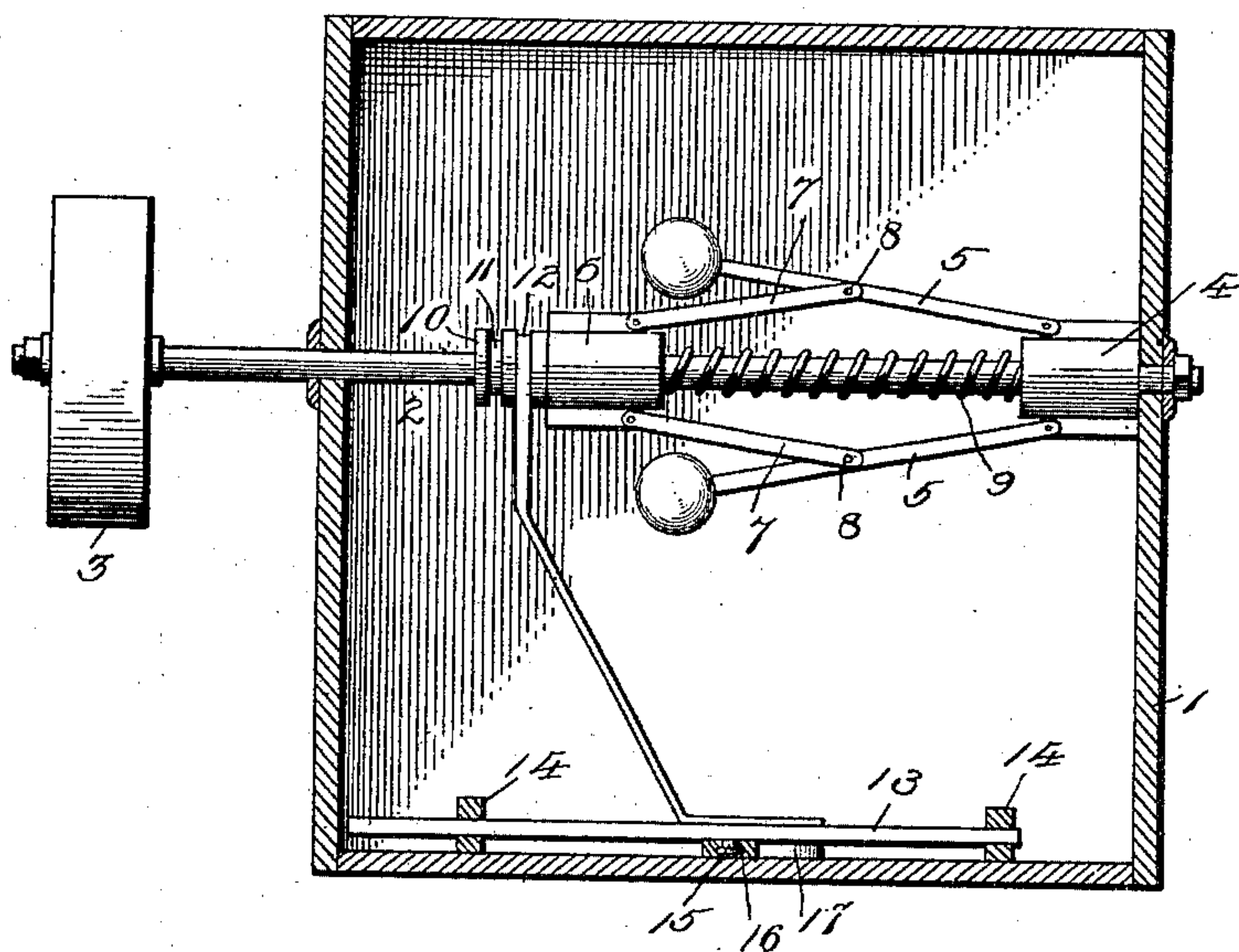


Fig. 4.

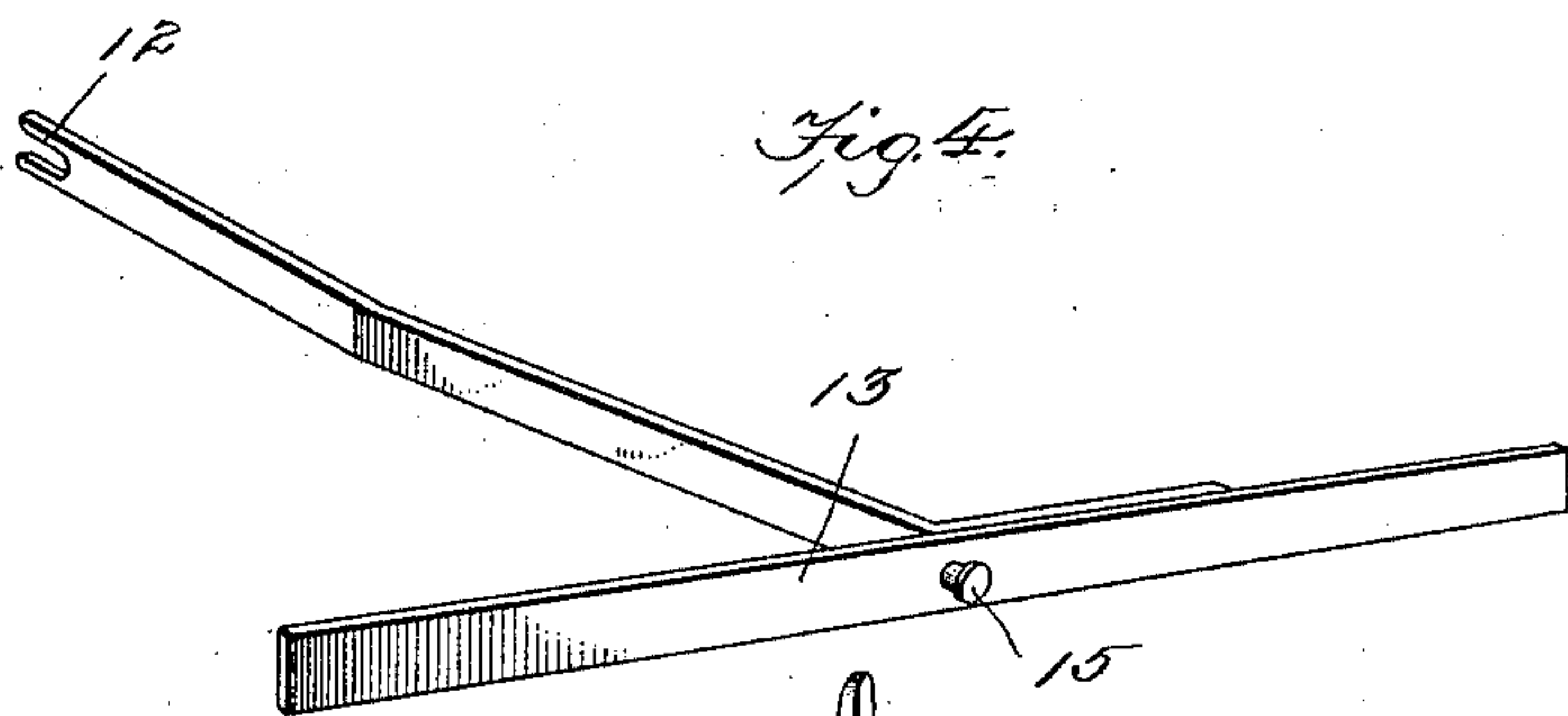
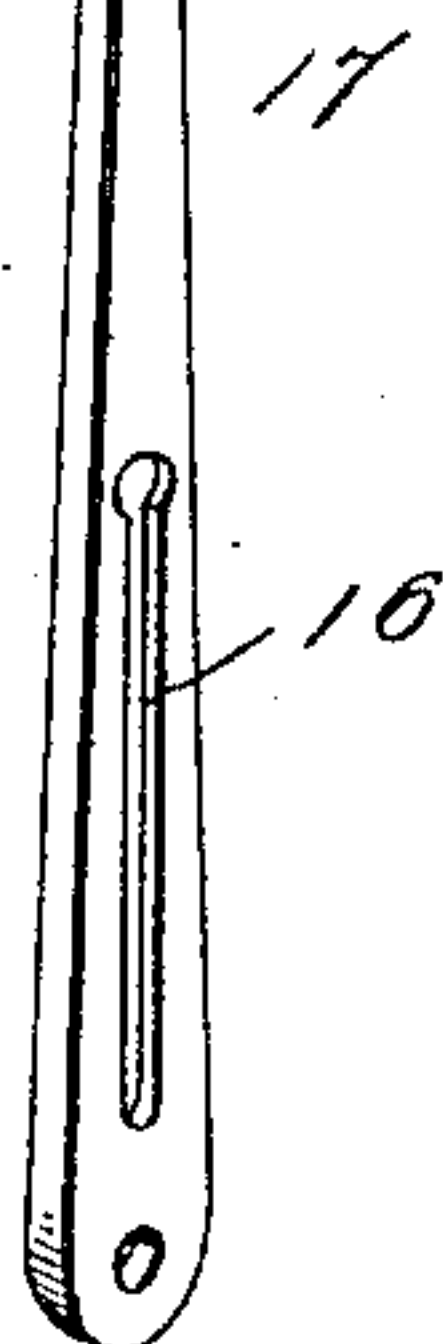


Fig. 5.



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UNITED STATES PATENT OFFICE.

LINN COMPTON, OF STAPLES, MINNESOTA.

SPEED-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 622,605, dated April 4, 1899.

Application filed January 27, 1898. Serial No. 668,195. (No model.)

To all whom it may concern:

Be it known that I, LINN COMPTON, residing at Staples, in the county of Todd and State of Minnesota, have invented certain new and useful Improvements in Speed-Indicators; 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.

This invention relates to speed-indicators; and the object in view is to provide a simple device of the character referred to which may be applied to threshing-machines and machines of various classes for the purpose of accurately indicating the speed at which the operative parts of the machine are driven, so as to enable the feeder or operator to accurately gage the time at which to deliver the bundles or other material to the machine.

The detailed objects and advantages of the invention will appear in the course of the subjoined description.

The invention consists in an improved speed-indicator embodying certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims.

In the accompanying drawings, Figure 1 is a front elevation of the indicator. Fig. 2 is an interior perspective view with a portion of the casing broken away, showing the operative parts in their proper relation. Fig. 3 is a detail horizontal section taken in line with the slide-bar. Fig. 4 is a detail perspective view of the indicator-arm. Fig. 5 is a similar view of the slide-bar and fork.

Similar numerals of reference designate corresponding parts in all the views.

The speed-indicator contemplated in this invention embodies, essentially, a suitable casing 1 in the form of a box of suitable size, adapted to be applied at a convenient point on the machine and preferably of rectangular shape. Journaled in the opposite sides or ends of the casing 1 is a rotary shaft 2, upon the outer end of which is mounted a pulley 3, adapted to receive a driving-belt from any convenient shaft of the machine. Upon the shaft 2 is mounted a ball-governor embodying a stationary collar 4, having laterally-project-

ing wings, to which are pivoted a pair of weighted arms 5, adapted to be thrown out by centrifugal action. Mounted slidably upon the shaft 2 is a runner 6, having pivotally connected thereto links 7, which connect pivotally at their opposite ends to the weighted arms 5 at intermediate points, as shown at 8, so that as the arms are thrown outward the runner is moved longitudinally of the shaft. Interposed between the runner 6 and collar 4 is a spiral spring 9, the tension of which must be overcome as the weighted arms are thrown out. The runner 6 is provided with a rigidly-attached or integrally-formed collar 10, provided with one or more annular grooves 11 to receive the fork 12 of a slide-bar 13, mounted at or near its opposite ends in brackets or guides 14, secured to the inner wall of the casing. The slide-bar 13 carries a laterally-projecting and headed stud 15, which is received in a slot or groove 16, extending longitudinally of an indicator-arm 17, pivotally mounted at one end, as at 18, and adapted to swing at its free end in front of a dial 20 in the upper portion of the casing 1, the said dial being graduated and having numerals represented thereon, so as to indicate, in connection with the arm 17, the exact speed at which the machine is driven.

From the foregoing description it will be seen that as the shaft 2 is revolved the arms 5 are thrown outward by centrifugal action and the spring 9 compressed as the runner 6 is moved toward the collar 4. In this movement of the runner the fork 12 is correspondingly moved, thereby sliding the bar 13 in its brackets. The stud 15 effects a vibration of the indicator-arm 17 and causes the latter to move across the indicating-dial. It will thus be seen that the operator may at all times observe the speed at which the machine is driven and may correspondingly regulate the rapidity at which the bundles or other material are fed to the machine.

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

1. In a speed-indicator, the combination with a rotating shaft, of a collar fast thereon, weighted arms pivotally connected to said collar, a sliding runner on said shaft having a linked connection with the weighted arms

- and provided with a grooved collar, a spiral spring extending around said shaft and interposed between the stationary collar and movable runner, a slide-bar having a rigidly-attached and laterally-projecting fork engaging the grooved collar, a dial, and a pivoted indicator-arm moving across said dial and having a pin-and-slot connection with said slide-bar, substantially as described.
2. In a speed-indicator, in combination, a casing, a rotating shaft journaled therein, a stationary collar, a runner slidingly mounted on said shaft and having a grooved collar, links connecting said runner and weighted arms, a spiral spring surrounding said shaft between the stationary collar and runner, a slide-bar mounted within the casing and having a rigidly-attached fork which engages the grooved collar of the runner, a dial, a pivoted indicator-arm operating before the dial and provided with a longitudinal groove or slot and a stud on the slide-bar engaging and working in the groove in the indicator-arm, all arranged for joint operation, substantially as described.
- In testimony whereof I have signed this specification in the presence of two subscribing witnesses.
- 25

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Witnesses:

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H. C. MILLER.