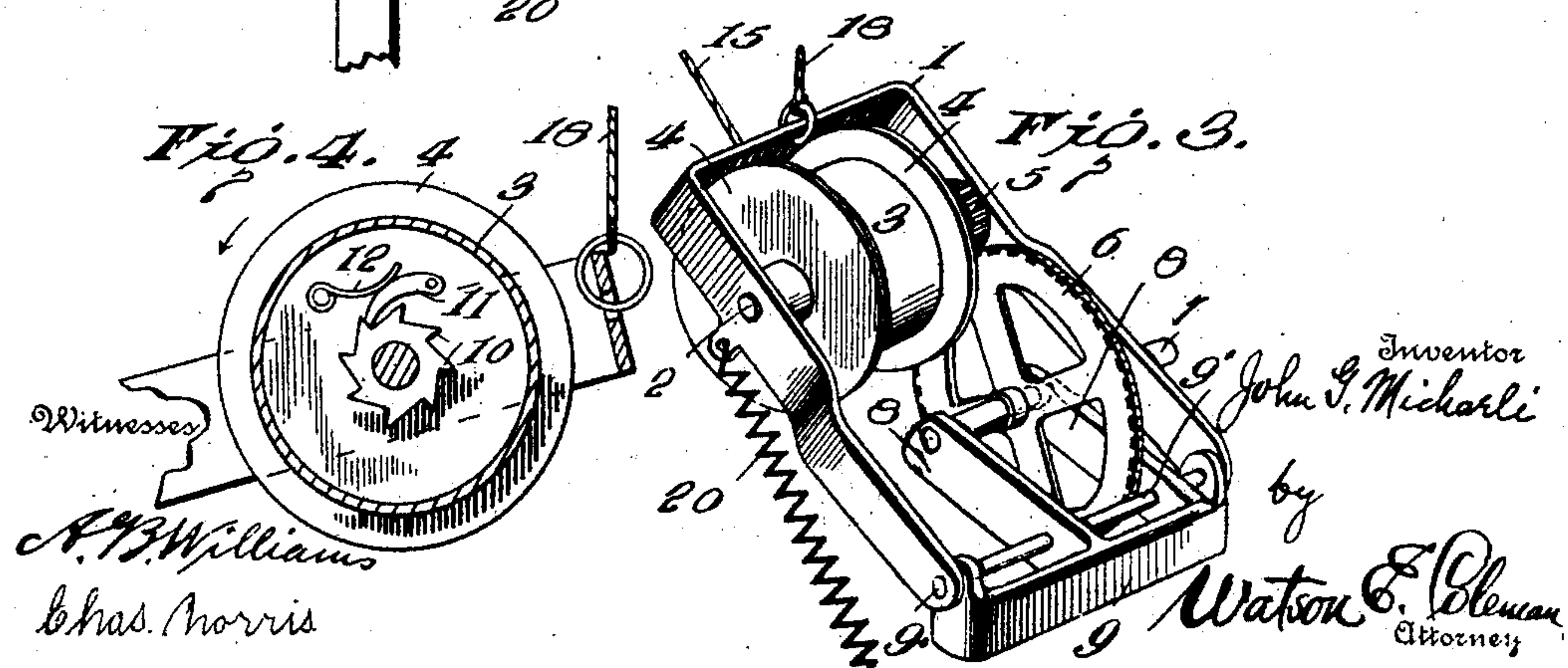
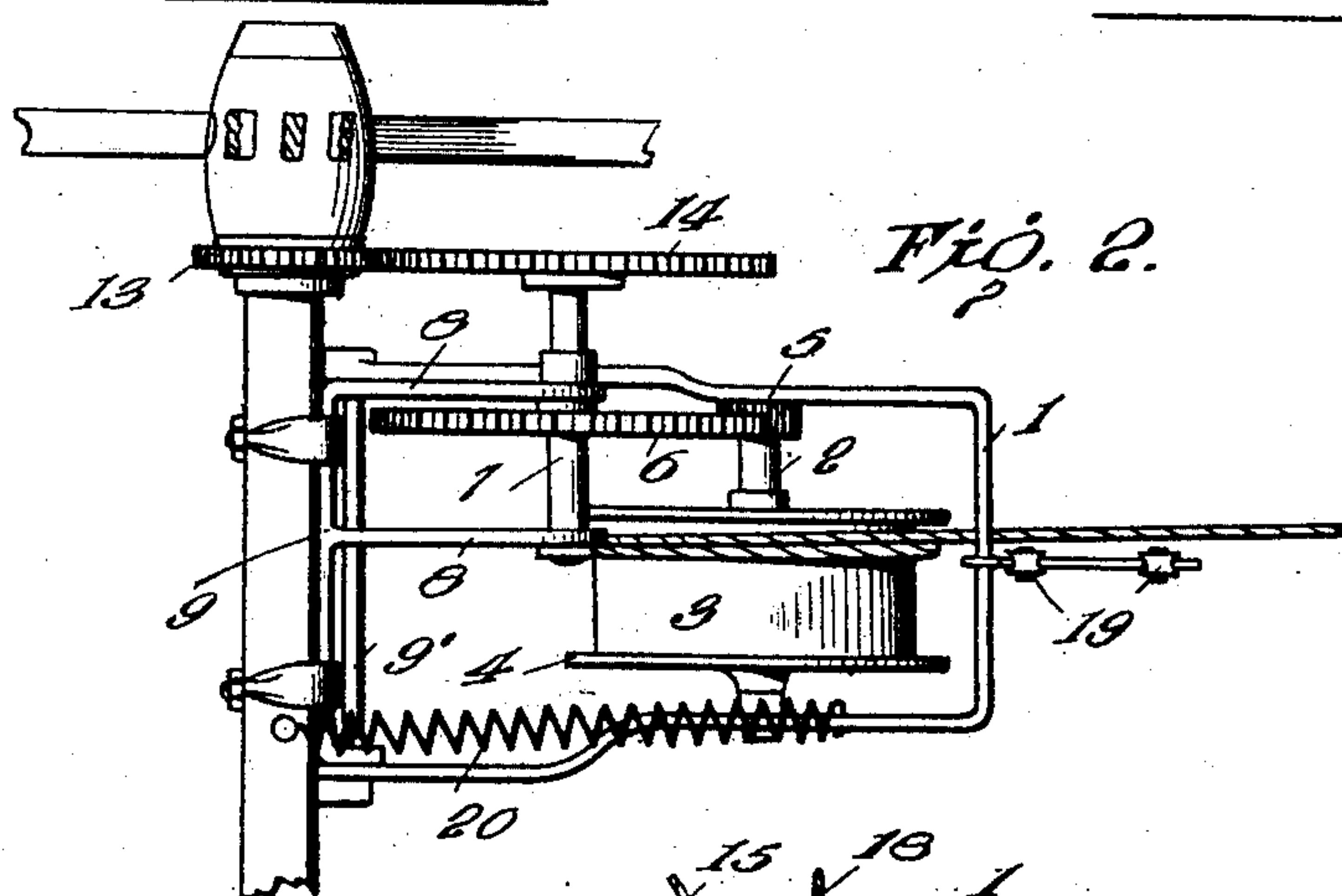
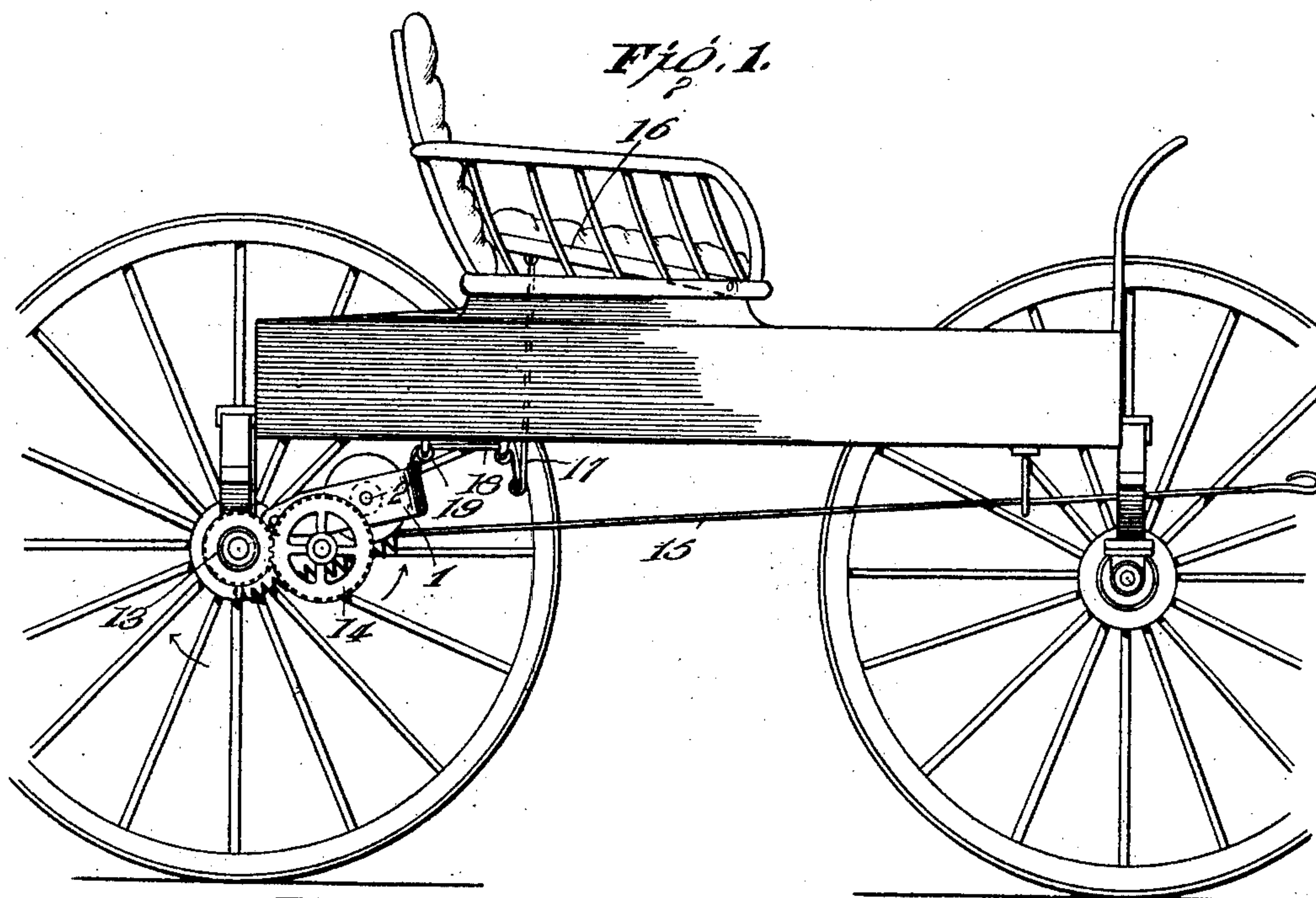


No. 840,079.

PATENTED JAN. 1, 1907.

J. G. MICHAELI.  
HORSE CONTROLLING DEVICE.

APPLICATION FILED APR. 28, 1905.





# UNITED STATES PATENT OFFICE.

JOHN G. MICHAELI, OF DENVER, COLORADO.

## HORSE-CONTROLLING DEVICE.

No. 840,079.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed April 28, 1905. Serial No. 257,936.

*To all whom it may concern:*

Be it known that I, JOHN G. MICHAELI, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Horse-Controlling Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to horse-controlling devices, and more particularly to that class which are attached to the vehicle, one of the objects being to provide a device of the character described that shall be thrown into and out of operation by means connected with a hinged vehicle-seat and which shall also be connected with the hub of one of the wheels in such manner as to tighten the checkrein when the device is in operative position and the vehicle in motion and also to provide means for blocking one of the wheels of the vehicle to prevent backing of the horse.

Other objects and advantages of my invention, as well as the structural features by means of which these objects are attained, will be made clear by an examination of the specification, taken in connection with the accompanying drawings, in which the same reference-numerals indicate corresponding portions throughout, and in which—

Figure 1 is the side elevation of a portion of a buggy, showing my device attached. Fig. 2 is a bottom plan. Fig. 3 is a perspective view of my device, and Fig. 4 is a section through the drum.

1 designates an oblong frame in which is suitably journaled a shaft 2, bearing a drum 3, which is provided with the flanges 4, extending somewhat beyond the periphery of the drum. The shaft 2 also carries a pinion 5, meshing with a gear-wheel 6, mounted on a shaft 7, journaled in bearings in the projecting arms 8, carried by a frame 9, which is rigidly secured, by clips or clamps of a well-known construction or by any other suitable means, to an axle of the vehicle to which my said device may be applied.

9' designates a rod by means of which the frame 1 is pivotally connected with the frame 9. Mounted on the shaft 2 and inside of the drum 3 is a ratchet 10, which is engaged by a pawl 11, controlled by a spring 12, secured to one of the inner sides of the drum.

13 represents a pinion carried by one of the hubs of the vehicle and meshing with a gear-wheel 14, mounted on the outer end of the

shaft 7. To the drum 3 is secured a hitching strap or rein 15, which leads to and connects with one of the bit-rings. Connected with the pivotally mounted or hinged vehicle-seat 16 is a rod 17, (shown in dotted lines in Fig. 1,) which rod passes down through an opening in the bottom of the vehicle-box and is secured at its lower end to a cord or chain 18, supported by the pulleys 19, carried by downwardly-extending projections secured to the bottom of the vehicle-box and connected at the other end to the frame 1. Having one end secured to the axle is a spiral spring 20, connected at its other end with the frame 1.

In operation when the occupant of the vehicle sits upon the hinged seat 16 and depresses it the rod 17 is pushed downward, carrying with it the end of the cord or chain 18 secured thereto. This cord or chain running from the pulleys 19 and being connected with the outer end of the frame 1 has the effect of lifting said frame against the tension of the spring 20 and bringing the pinion 5 out of engagement with the gear-wheel 6, thus permitting said gear-wheel to operate freely, which it does by reason of its connection with the gearing heretofore described connected with the hub of one of the wheels. When the occupant of the vehicle arises from the seat 16, the force of the spring 20, which is connected to said frame 1 near its outer end, pulls that end of the frame downward and again brings the pinion 5 into mesh with the gear-wheel 6. When this occurs, it will be seen that a forward movement of the vehicle causes the gear-wheel 6 to rotate on account of the gear connection with one of the hubs, thus rotating the shaft 2 and rotating the drum 3 thereon. The hitching-strap 15 having one end secured to the drum is consequently wound up thereon and has the effect of pulling on the bit to which the other end is attached and stopping the horse. If when the pinion 5 is in mesh with the gear-wheel 6 the horse starts to back, the mechanism hereinbefore described is held from operation by means of the pawl 11 engaging with the ratchet 10, which is rigidly mounted on the shaft 2.

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

In a device of the character described, the combination with a vehicle, of a bracket secured upon the rear axle of the vehicle and



having forwardly-projecting, horizontal arms, a pivot-rod extending transversely through said arms, a vertically-swinging U-shaped frame extending forwardly from said bracket and having its ends mounted upon the projecting ends of said pivot-rod, a drum-shaft rotatably journaled in said swinging frame, a drum carried by said drum-shaft, a pawl-and-ratchet connection between said drum and its shaft whereby the drum is locked against rotation when a backward movement of the vehicle occurs, a transverse shaft rotatably journaled in the projecting arms of said bracket and having an extended end, a gear fixed upon said transverse shaft between said arms, a pinion fixed upon said drum-shaft and adapted to mesh with said gear, a coil-spring connecting said axle and the front end of said swinging frame for swinging the latter downwardly to move said pinion into mesh with said gear, a gear fixed upon the extended end of said transverse shaft, a gear fixed upon one of the wheels on said axle and in mesh with the last-mentioned

gear, a pivotally-mounted seat in said vehicle, a vertical rod pivotally connected to said seat and extending downwardly through the body of said vehicle, guide-pulleys upon the body of said vehicle, a flexible connection engaged with said pulleys and having one end attached to the front of said swinging frame and its other end attached to the lower end of said vertical rod whereby when said seat is raised and lowered said swinging frame will be moved vertically to throw said pinion into and out of mesh with its gear, and a checking-rein for connection with the animal attached to the vehicle, said rein having one of its ends secured to said drum whereby it will be wound thereon and drawn taut when a forward movement of the vehicle occurs, substantially as shown and described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOHN G. MICHAELI.

Witnesses:

ROBERT A. MCKAY,  
OTTO BUEGER.