

No. 832,535.

PATENTED OCT. 2, 1906.

J. T. COLLINS.  
MOWING MACHINE.

APPLICATION FILED MAY 12, 1905.

2 SHEETS—SHEET 1.

Fig-1-

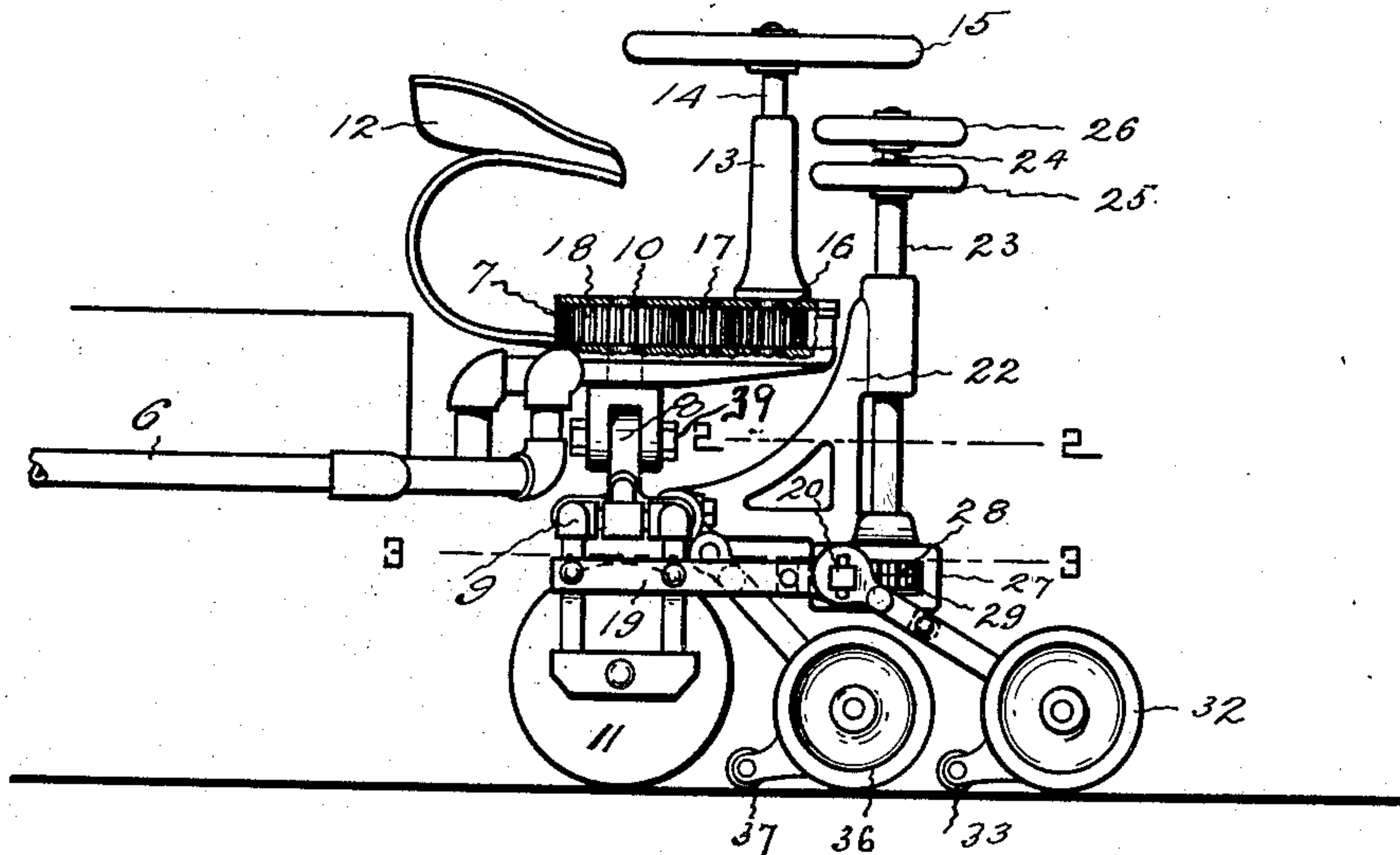
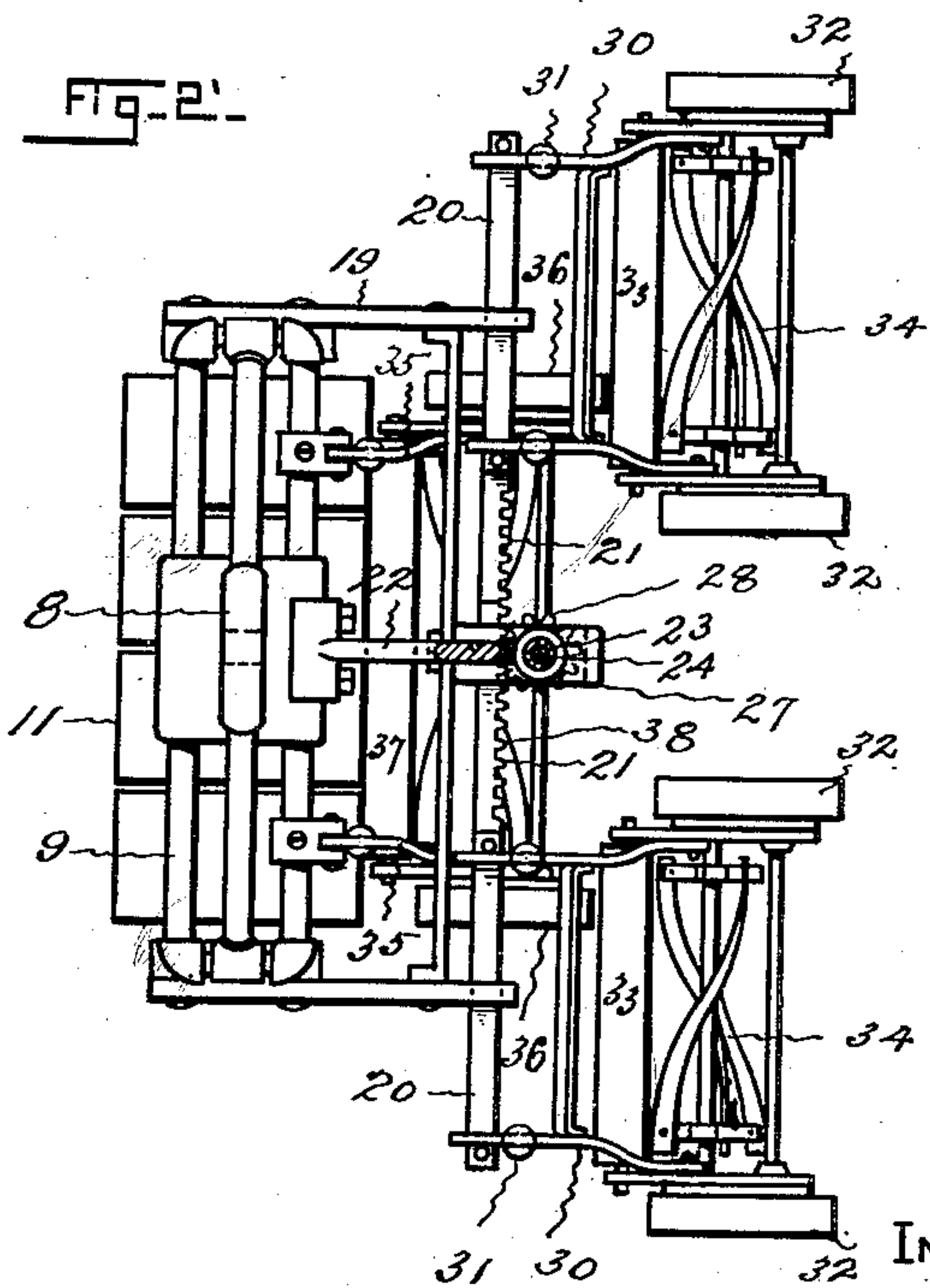


Fig-2-



WITNESSES

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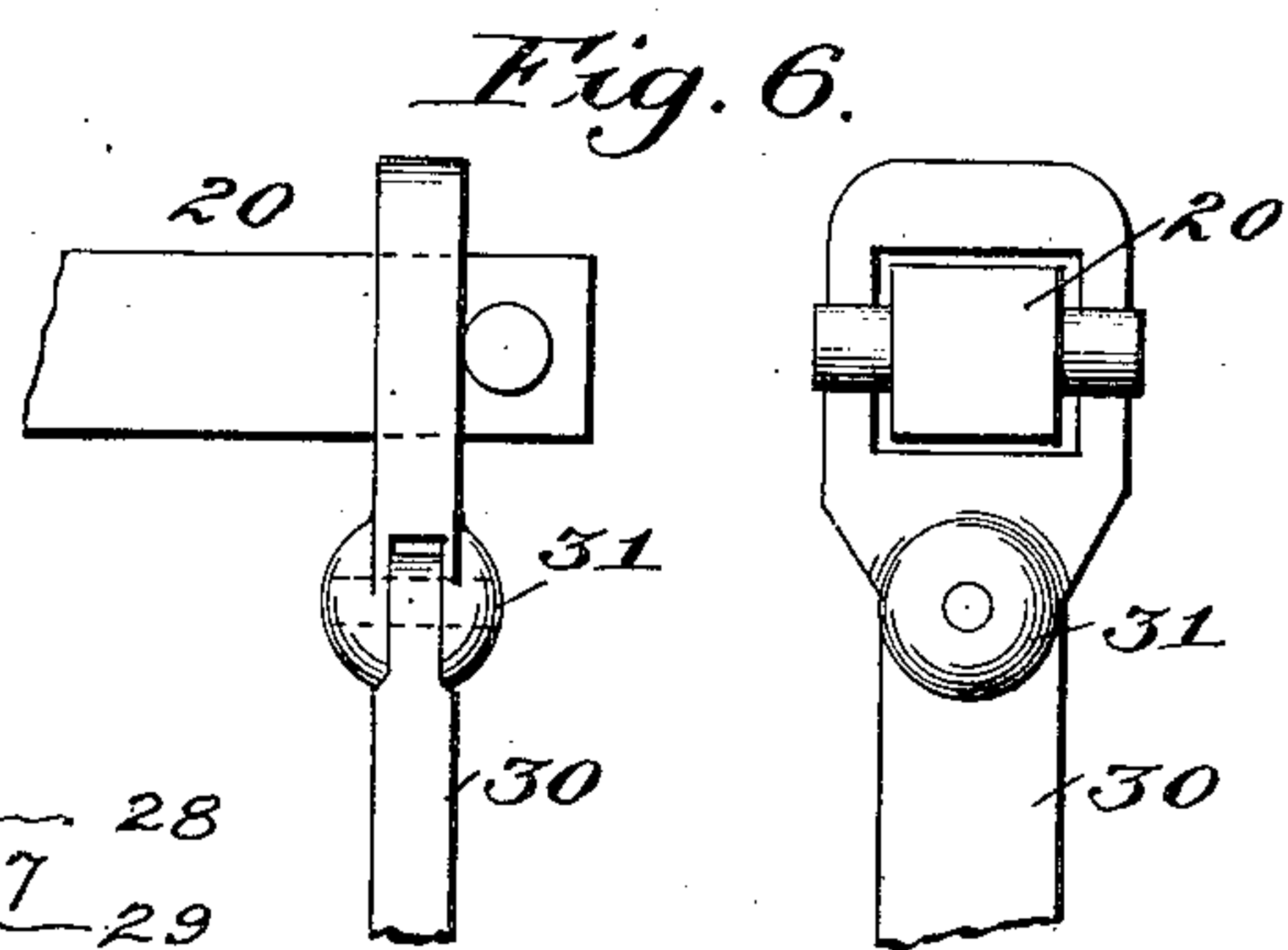
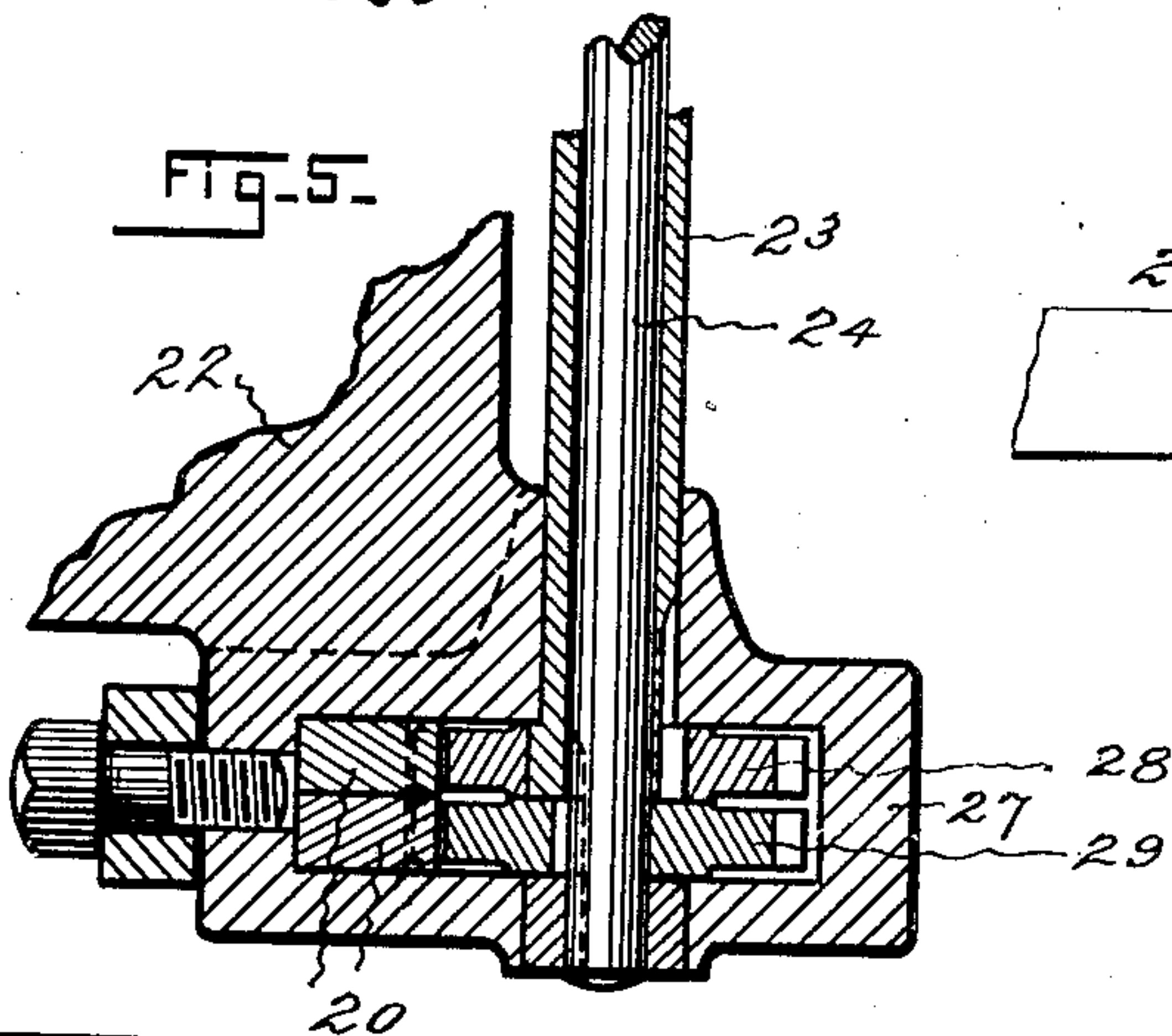
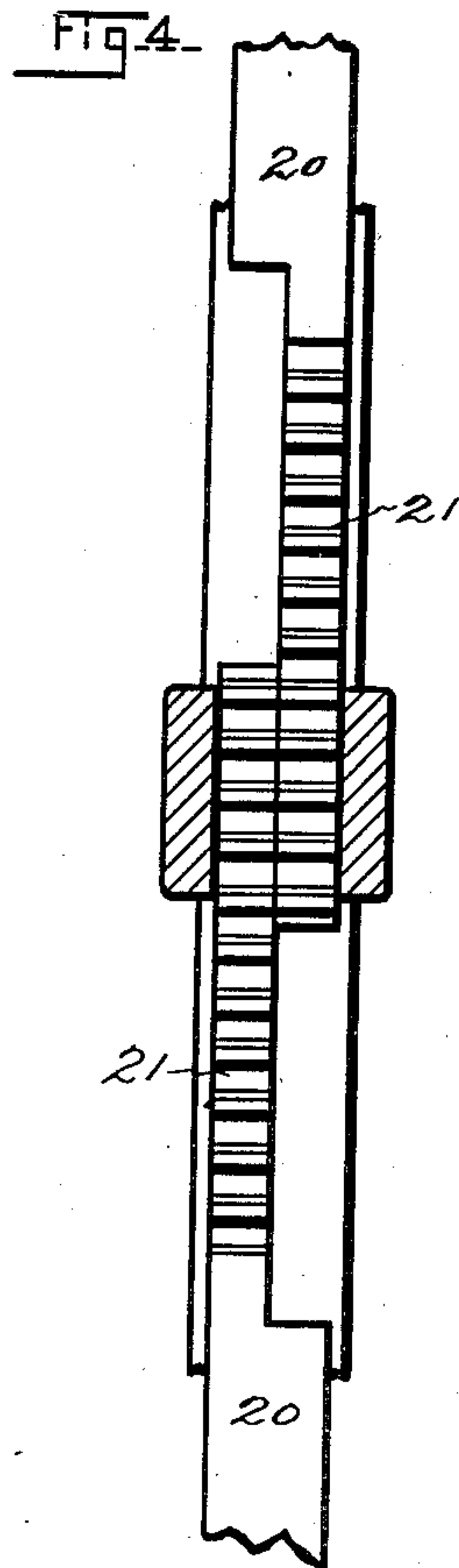
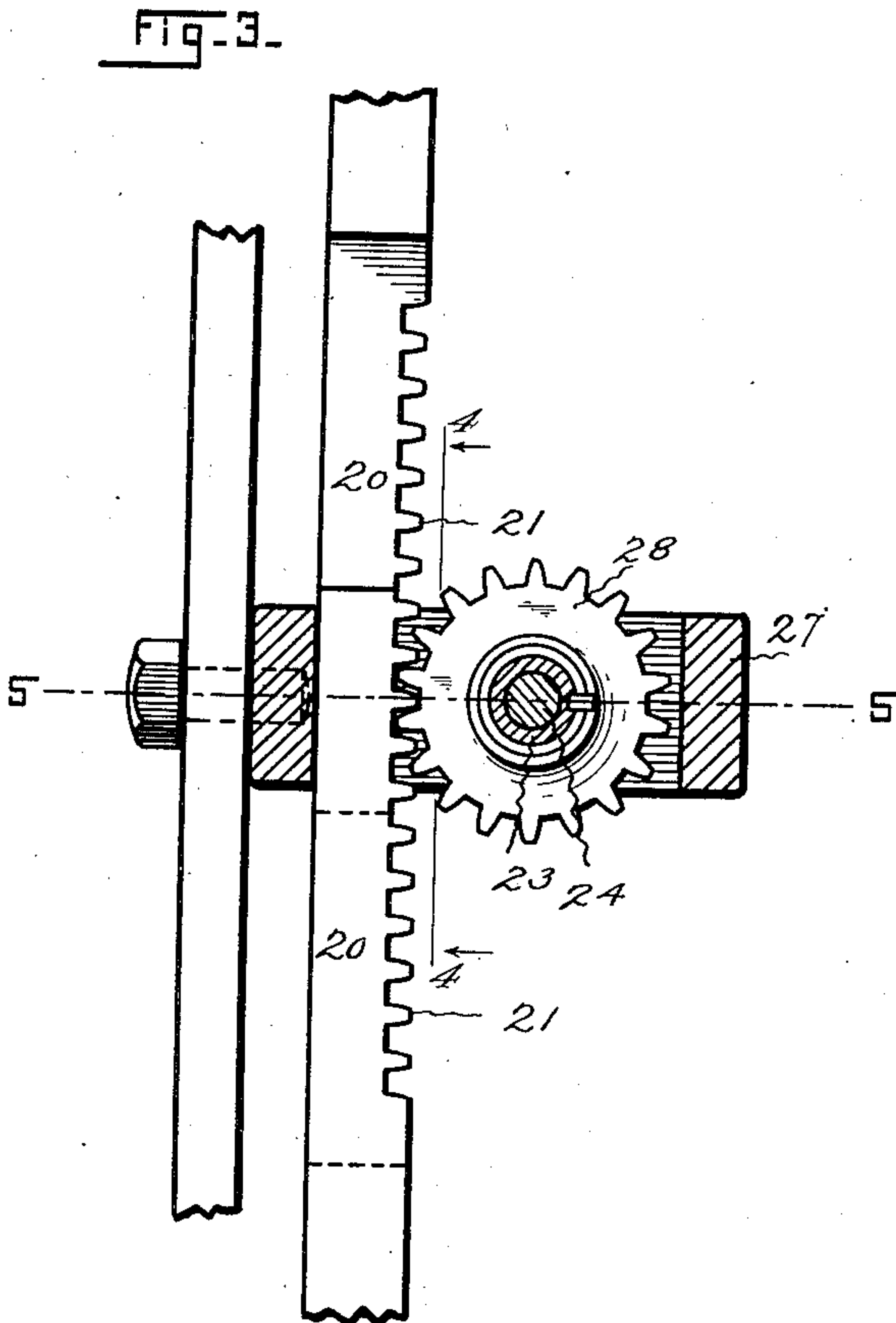
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WITNESSES.

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# UNITED STATES PATENT OFFICE.

JOHN T. COLLINS, OF HARTFORD, CONNECTICUT.

## MOWING-MACHINE.

No. 832,535.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed May 12, 1905. Serial No. 260,093.

*To all whom it may concern:*

Be it known that I, JOHN T. COLLINS, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Mowing-Machine, of which the following is a specification.

This invention relates to a machine which is designed for mowing park and residence lawns of the motor-propelled type.

The object of this invention is to provide a mower of this class with simple steering and adjusting means whereby the driver can easily and quickly without stopping the machine change the direction of the cut, the width of the cut, and the relation of the cut to the path of travel of the machine.

The accompanying drawings illustrate only the steering and cutting mechanisms of a machine of this type.

Figure 1 shows a side elevation of these mechanisms. Fig. 2 shows a plan of the front truck with the cutters and roller, the section being taken on the plane indicated by the line 2 2 on Fig. 1. Fig. 3 shows on larger scale a plan of a portion of the cutter-adjusting pinions and racks, the section being taken on the plane indicated by the line 3 3 on Fig. 1. Fig. 4 shows an edge view of the cutter-adjusting racks, the section being taken on the plane indicated by the line 4 4 on Fig. 3. Fig. 5 shows a vertical section on the plane indicated by the line 5 5 of Fig. 3, and Fig. 6 shows side and top views of a hinged joint that may be used in the connection between cutters and the cutter-adjusting bars.

Any suitable form of motor may be employed for driving this machine. At the front end of the tubular frame 6, which supports the motor, is a platform 7. The ear 8, projecting upwardly from the top of the tubular truck-frame 9, is hinged to the forked lower end of the king-bolt 10, that extends through the platform. The king-bolt is arranged so that the truck may be oscillated on a vertical axis, and the hinge-bolt 39 is arranged so that the truck may oscillate on a horizontal axis. The truck is supported by a roller 11, that is formed in sections and extends transversely of the machine.

Fastened to the platform is a seat 12 for the driver, and in front of the seat is a steering-post 13, through which extends the steering-shaft 14, that has a steering-wheel 15 within convenient reach of the driver occupying the seat. In a casing on the platform

and keyed to the lower end of the steering-shaft is a pinion 16, that meshes with a pinion 17, which is in mesh with the gear 18, that is keyed to the upper end of the king-bolt, so that by turning the hand-wheel the truck can be turned in either direction for guiding the machine.

Fastened to the sides of and extending forwardly from the truck is a frame 19. This frame holds two bars 20. These bars are capable of movement horizontally in the frame, and their inner ends, which overlap, one lying above the other, on their front edges, have rack-teeth 21.

Attached to the truck and supported by the projecting frame is a bracket 22. This bracket supports a tubular shaft 23, through which extends a solid shaft 24. The former has a hand-wheel 25 and the latter a hand-wheel 26 within reach of the driver. On the lower end of the shaft 23 in a case 27 is a pinion 28, the teeth of which mesh with the rack-teeth of the upper bar 20, and on the lower end of the shaft 24 in the same case is a pinion 29, the teeth of which mesh with the rack-teeth of the lower bar 20. By turning one wheel one bar can be moved in or out transversely of the machine, and by turning the other wheel the other bar can be moved in or out transversely of the machine.

Secured to the outer ends of the adjustable bars are yokes 30. These yokes are so secured that they move in and out with the bars, but they are jointed, preferably, as at 31; in order that either side may oscillate up and down, so that the yokes may rise and fall and tilt. Attached to the forward end of each of these yokes is a mower, which preferably has side driving-wheels 32, a roller 33, and a spiral revoluble cutter 34, arranged to coact with a fixed blade for cutting.

Fastened to the truck, so as to project forwardly at the middle, is a yoke 35. This yoke is preferably jointed, so that it may rise and fall and tilt, the same as the others. Supported by the forward ends of this yoke between and back of the other mowers is a mower having driving-wheels 36, a roller 37, and a spiral revoluble cutter 38, arranged to coact with a fixed blade for cutting.

When this machine is running, the driver sitting on the seat by means of the handle 15 turns the truck, together with the frame and fixed rear and adjustable forward mowers, in any direction which he desires to go. The driver determines the width of the swath to



be cut by turning the hand-wheels 25 and 26 and causing the forward outside mowers to be drawn in or pushed out, as desired. If the swath is to be cut on one side of the machine, but one of the mowers is moved out, the other being left in. Either of the mowers may be moved out and the other left in for the purpose of cutting on one side or the other of the machine, or of course both may be moved out for cutting a wide swath or in for cutting a narrow swath. The rear middle mower cuts the swath between the two outside mowers and the roller back of the mowers which supports the truck rolls the ground after the cut. The truck as a whole oscillates, so as to accommodate itself to pitches and unevennesses, and each side of each mower can rise and fall independently of the other.

The invention claimed is—

1. A self-propelled mower having a roller, a truck supported by the roller, a platform swiveled to the truck, a seat mounted on the platform, steering mechanism carried by the platform adjacent to the seat, transversely-movable bars carried by the truck, revoluble cutters connected with the bars, racks on the bars, pinions meshing with the racks, and hand-wheels carried by the truck adjacent to the seat for turning the pinions, substantially as specified.

2. A self-propelled mower having a roller, a truck supported by the roller, a platform swiveled to the truck, a seat mounted on the platform, steering mechanism carried by the platform adjacent to the seat, a revoluble cutter connected with the truck in front of the roller, transversely-movable bars carried by the truck, revoluble cutters connected

with the bars, racks on the bars, pinions meshing with the racks, and hand-wheels carried by the truck adjacent to the seat for turning the pinions, substantially as specified.

3. A self-propelled mower having a roller, a truck supported by the roller, a platform swiveled to the truck, a seat mounted on the platform, steering mechanism carried by the platform, a revoluble cutter hinged to the truck in front of the center of the roller, revoluble cutters hinged to the truck on each side of and in front of the central cutter, and means for moving either one or the other of the forward cutters transversely with relation to the line of travel of the roller, substantially as specified.

4. A self-propelled mower having a roller, a truck supported by the roller, a platform swiveled to the truck, a seat mounted on the platform, a steering mechanism carried by the platform, two bars provided with racks carried by the truck, a pinion meshing with each rack, a hand-wheel carried by the truck for turning each pinion, a revoluble cutter hinged to each rack-bar, and a revoluble cutter hinged to the truck, substantially as specified.

5. A self-propelled mower having a truck, two bars provided with racks carried by the truck, a revoluble cutter hinged to each rack-bar, a pinion meshing with each rack, a shaft connected with each pinion, one shaft extending through the other, and a hand-wheel connected with each shaft, substantially as specified.

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Witnesses:

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