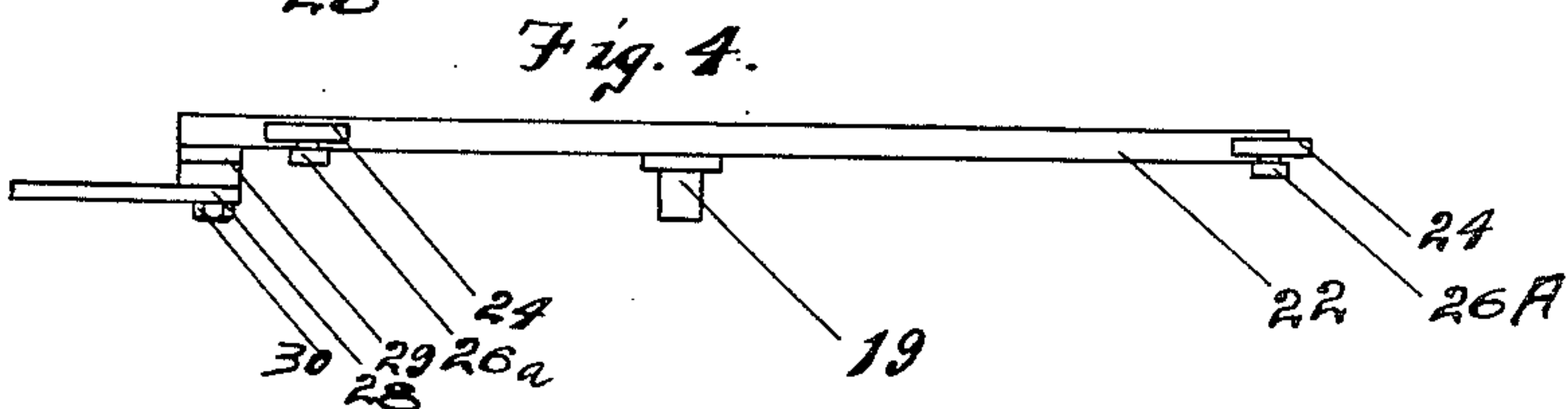
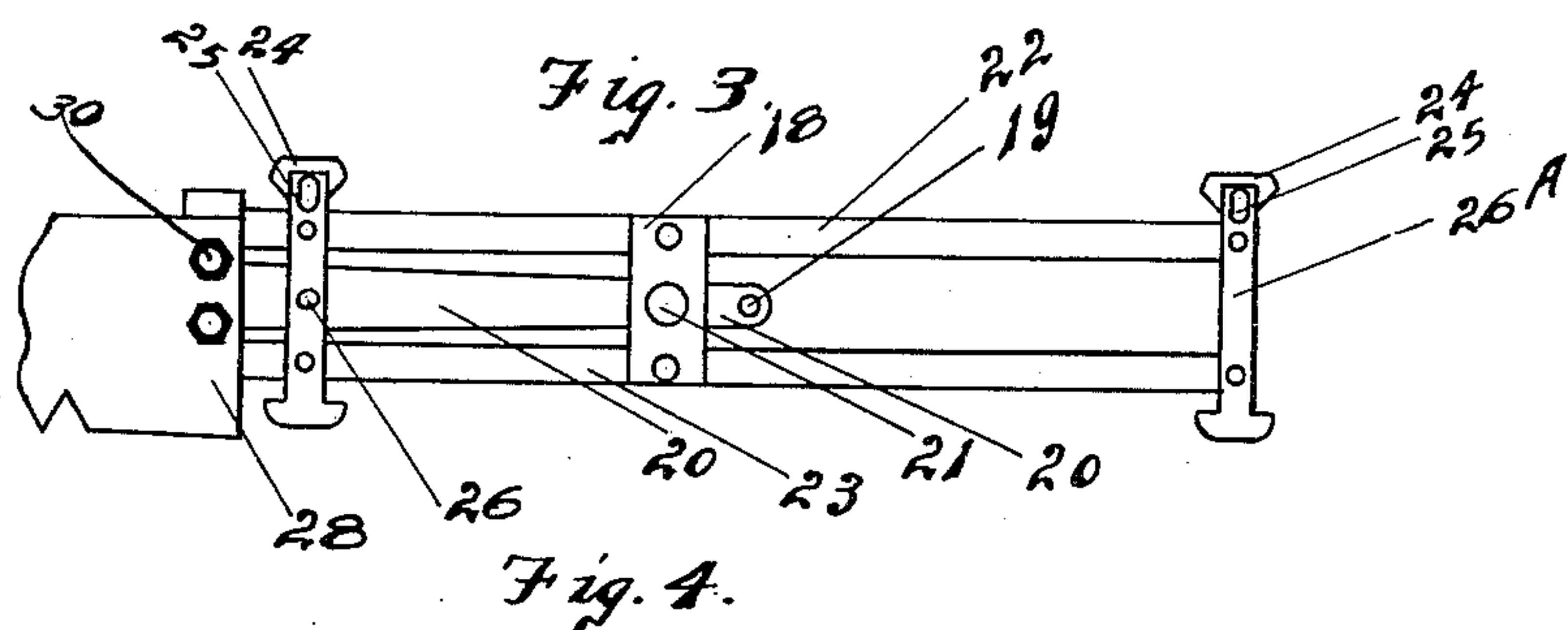
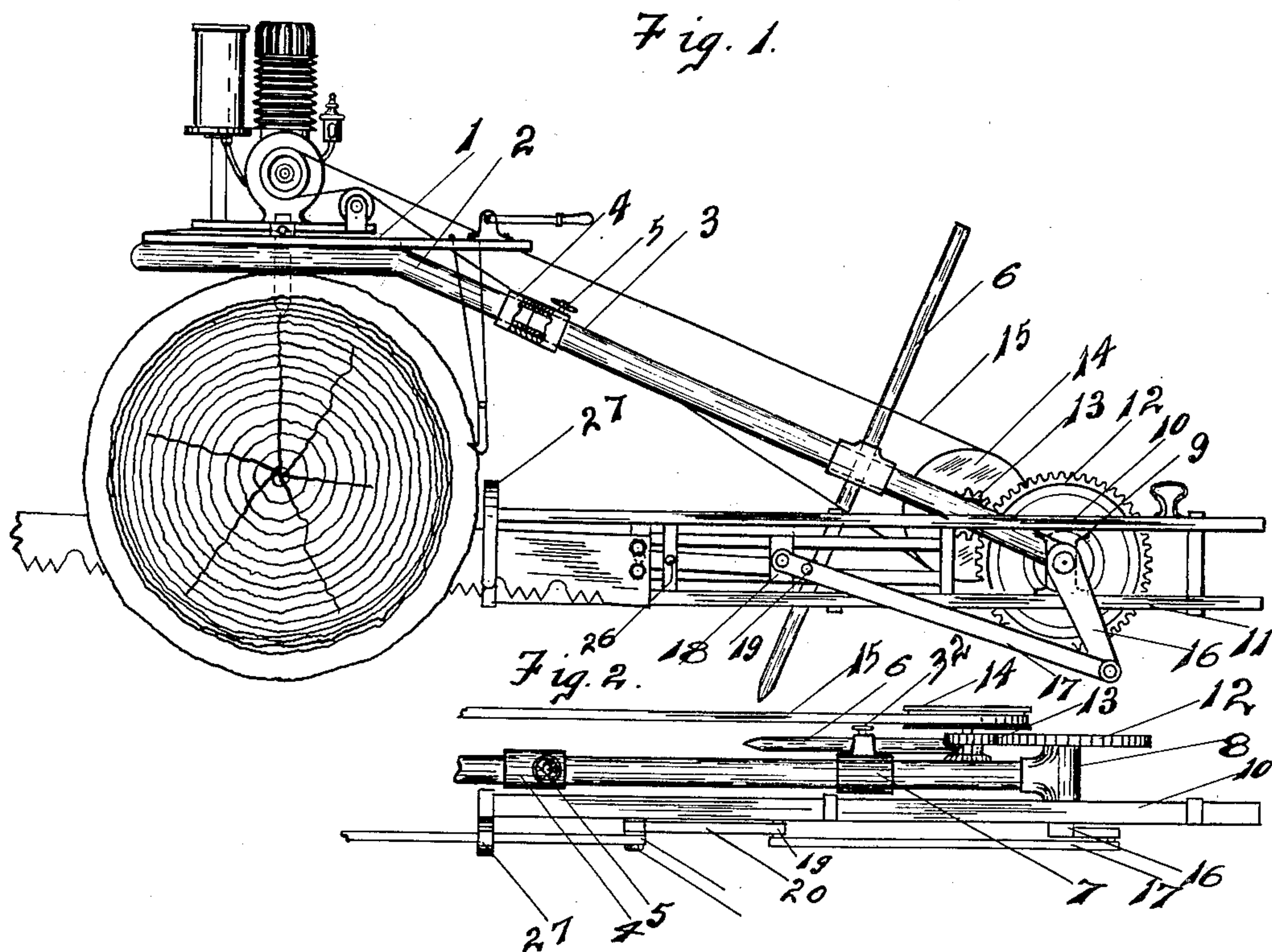


W. S. OVERLIN.
SAWING MACHINE.

APPLICATION FILED AUG. 25, 1908.

915,210.

Patented Mar. 16, 1909.



Witnesses

R. B. Good
W. E. Hines

Inventor

William S. Overlin

By Attorney

Thomas D. Lyman

UNITED STATES PATENT OFFICE.

WILLIAM S. OVERLIN, OF FULTON, OREGON.

SAWING-MACHINE.

No. 915,210.

Specification of Letters Patent.

Patented March 16, 1909.

Application filed August 25, 1908. Serial No. 450,236.

To all whom it may concern:

Be it known that I, WILLIAM S. OVERLIN, a citizen of the United States, residing at Fulton, in the county of Multnomah and State of Oregon, have invented a new and useful Sawing-Machine, of which the following is a specification.

My invention relates to sawing machines in which the saw is attached to a reciprocating sliding head. The sliding head is caused to reciprocate, between guides, back and forth by a connecting rod, the connecting rod being so attached to the sliding head that the saw does not move across the log in a horizontal plane, but oscillates, thus clearing the cut from sawdust which greatly facilitates the operation of the saw. The saw will also feed into the cut made as fast as desired. It is also arranged so that if the log to be sawed should not touch the ground at the place to be sawed, the entire machine may be fastened to the log without further support. I attain these objects by the mechanisms illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the entire machine, showing it in position on the log. Fig. 2 is a top elevation of the mechanism. Fig. 3 is an enlarged view of the sliding head illustrating the take-up for the shoes and the connecting arm that causes the saw to oscillate. Fig. 4 is the top elevation of the same.

Similar numerals refer to similar parts throughout the several views.

1 is the base which is fastened to the frame and upon which the power generator is placed.

2 is that part of the frame to which the base 1 is attached. 3 is a remaining part of the frame. Connecting frame 2 with frame 3 is a swivel joint 4 which is rigidly fastened to 2. 3 slides within 4. When turned into the desired position it may be held there by set screw 5.

6 is a support for the driven end of the machine and is fastened to frame 3 by 7. The driven end of the machine may be held in any desired position by clamping 6 at such position by means of a set screw where it passes through 7. 3 terminates by being fastened to a tee shaped support 8. On the side next the saw of tee 8 is a casting 9

which extends through tee 8 to the outer end of which the guides 10 and 11 are fastened; this secures the frame of the machine to the guides for the sliding head. To the end of casting 9, which passes through tee 8, gear 12 is keyed.

15 is the belt which delivers power from the generator to the pulley 14. Attached to 14 is a spur pinion 13 which meshes with 12. As 12 revolves the shaft to which it is keyed, or otherwise fastened, also revolves; this in turn causes crank 16 to rotate. Pitman 17 being secured to 16 and 18 causes the sliding head, to which the saw is attached, to oscillate two strokes. Connecting rod 17 is attached to 18 which is fastened to each side of the sliding head 22 and 23. Arm 20 is also fastened to 17 at 19. The saw end of 20 is pivoted at a point 31 to a cross bar fastened to 22 and 23. To the other end of 20 the saw is indirectly fastened as stated. Since the driving end of 17 moves in circle, and since it is held in place at 18, it may be seen that a point 19 on arm 20 is caused to move up and down on an arc about 26 as a center, but since the saw is fastened to the other end of 20, a similar motion is transmitted to it. This is necessary for if the saw is drawn back and forth across the log in a horizontal plane the sawdust will be left in the log. Secured to cross bars 26^a are adjustable shoes 24; as they wear they may be taken up by means of a slot 25. To hold the saw in alignment and to prevent wobbling, or buckling, a guide 27 is used.

28 is a saw and 30 are set screws to secure the saw to the driving mechanism.

I am aware that prior to my invention sawing machines have been made, but I do claim the machine, as herewith illustrated, does contain new and useful mechanisms and I therefore claim:

1. A sawing machine comprising a frame, driving mechanism mounted thereon, a guide, a driving head slidably mounted in the guide, a saw pivotally connected with said head, a pitman pivoted to the head and having pivotal connection with the saw, and means connecting the pitman and driving mechanism.

2. A sawing machine comprising a frame, driving mechanism thereon including a

guide, a driving head slidable in the guide,
a saw, an arm connected rigidly at one end
with the saw and pivotally connected be-
tween its ends to the driving head, and a pit-
5 man connected with the head for reciprocating the same and having pivotal connection between its ends with the opposite end of the

saw arm for oscillating the saw as it is reciprocated by the head.

WILLIAM S. OVERLIN.

Witnesses:

R. B. GOODE,
T. W. EMOS.