No. 641,949. Patented Jan. 23, 1900.

W. FROST.

MECHANICAL MOVEMENT.

(Application filed Feb. 8, 1899.)

(No Model.)

Fig. 1

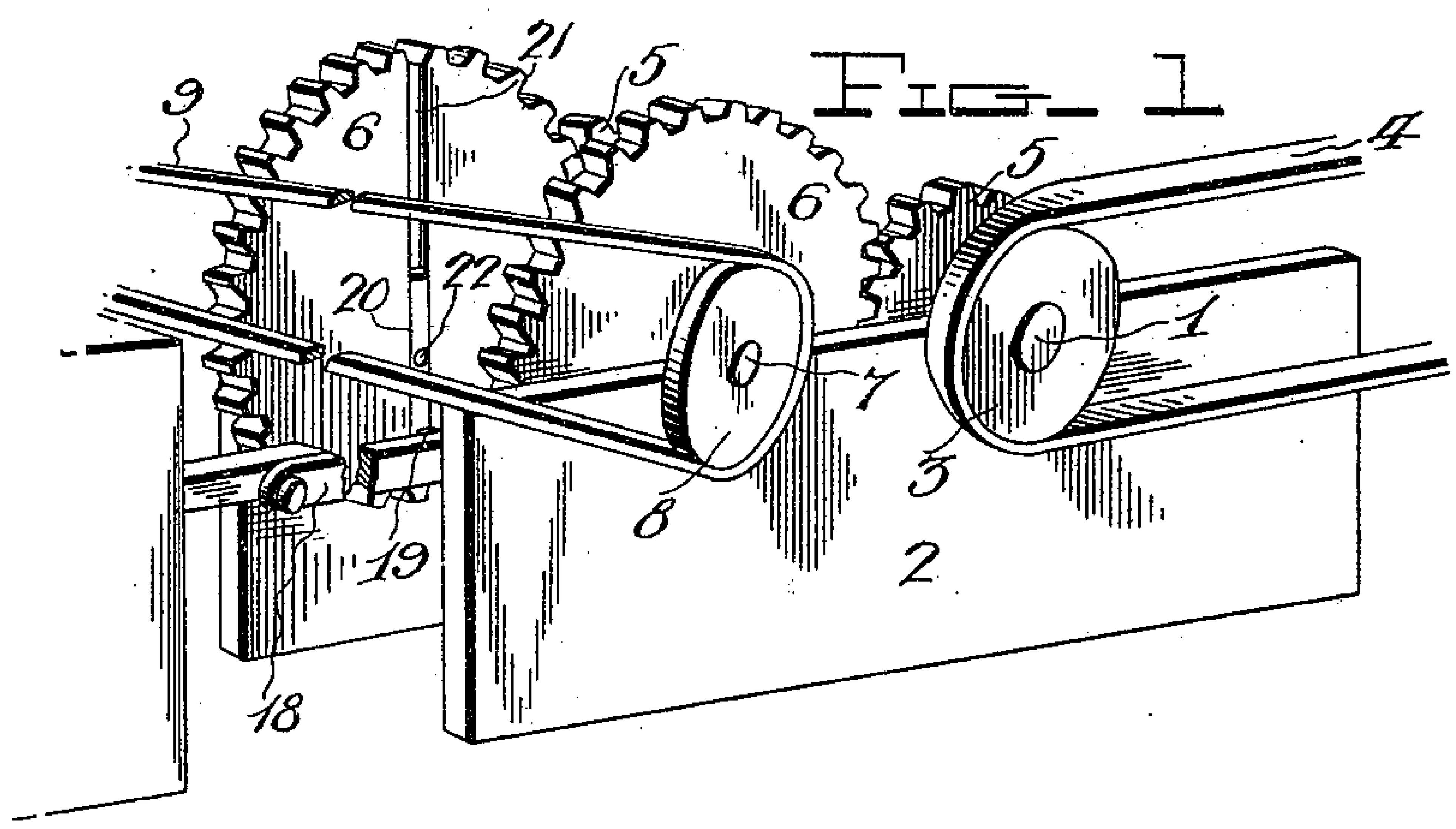


Fig. 2

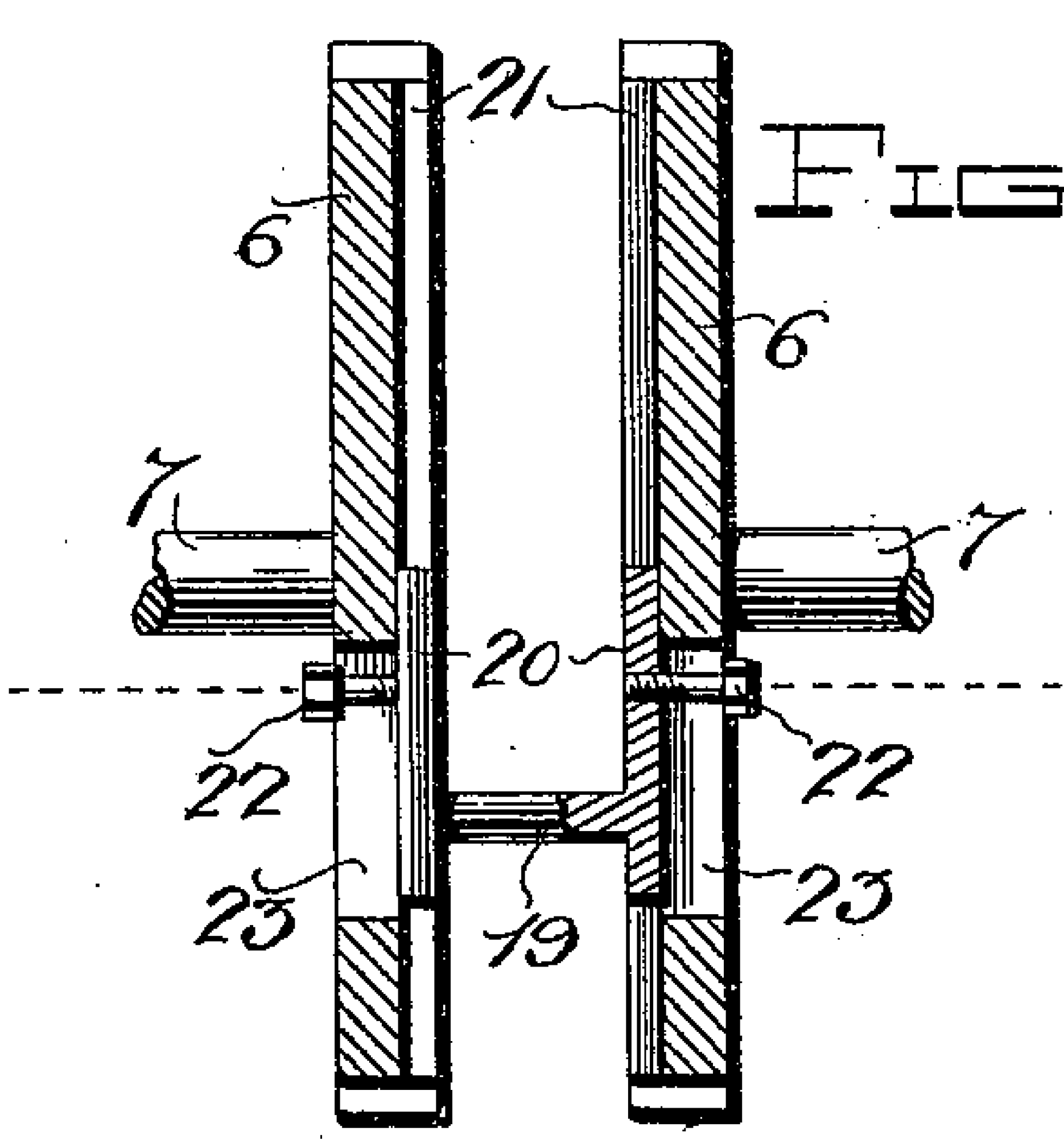


Fig. 3

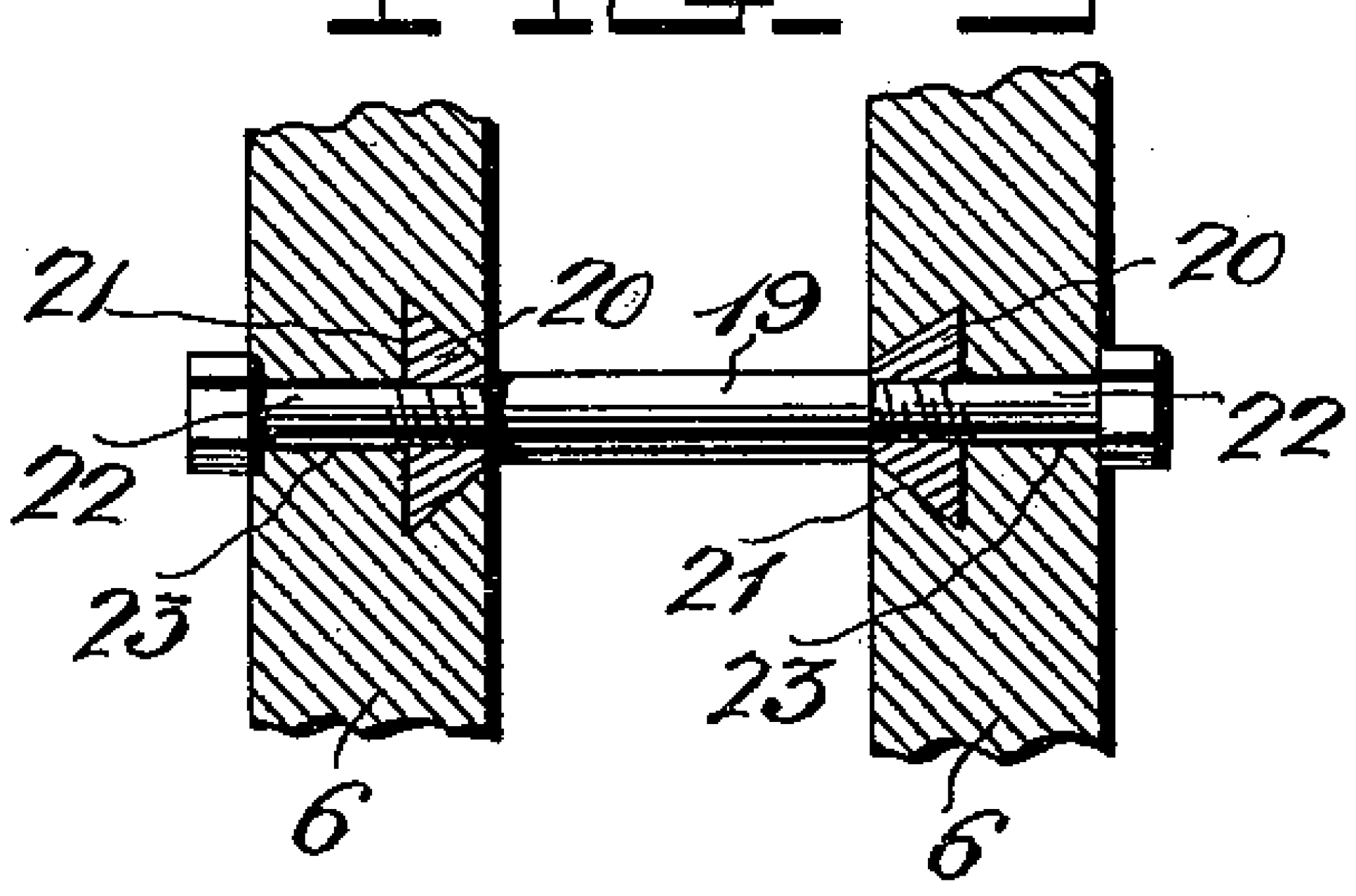


Fig. 4

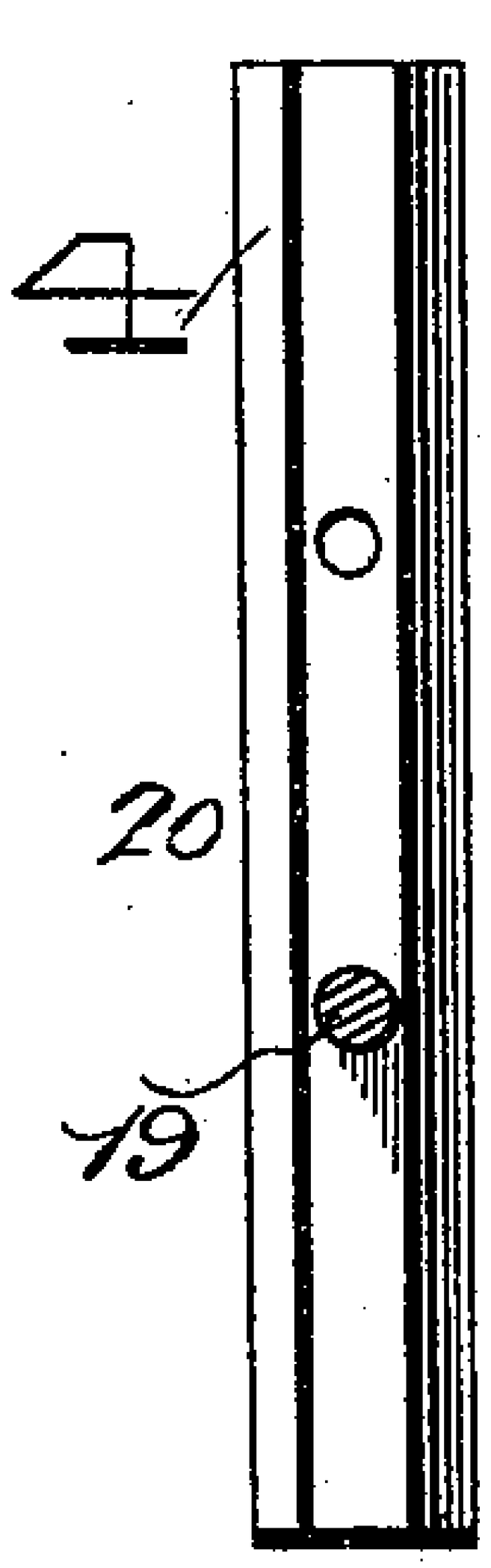
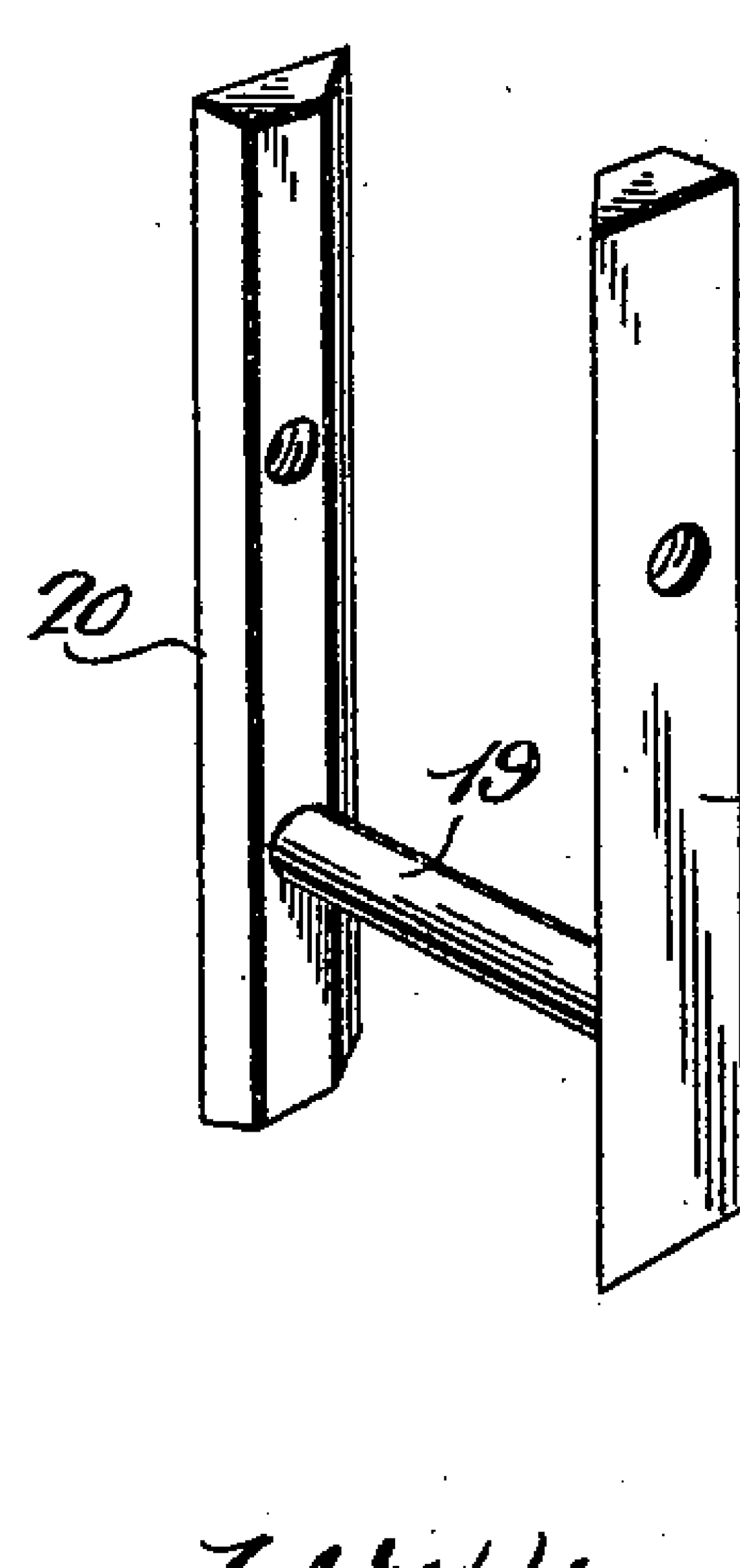


Fig. 5



Inventor

William Frost,

Witnesses

[illegible]

by H. B. Willson & Co.

Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM FROST, OF ATHENS, ILLINOIS.

MECHANICAL MOVEMENT.

SPECIFICATION forming part of Letters Patent No. 641,949, dated January 23, 1900.

Application filed February 8, 1899. Serial No. 704,906. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM FROST, a citizen of the United States, residing at Athens, in the county of Menard and State of Illinois, have invented certain new and useful Improvements in Mechanical Movements; and I do 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 mechanical movements, and more particularly to that class which is employed as a connecting-link between a steam-engine or other prime motor and a baling-press, whereby the stroke of the press-plunger may be increased or diminished at will without affecting the stroke of the engine; and the object is to provide a simple, convenient, and effective device for this purpose.

To this end the invention consists in the construction, combination, and arrangement of the several elements of the device, as will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a mechanical movement embodying my invention. Fig. 2 is a transverse detail section. Fig. 3 is a similar view taken at a right angle to that shown in Fig. 2. Fig. 4 is a plan view of one of the slide-bars with the crank-pin shown in section. Fig. 5 is a detail perspective view of both slide-bars and the crank-pin connecting them.

In the drawings the same reference characters indicate the same parts of the invention.

1 denotes the driven shaft journaled in the frame 2, and on one end is fixed a pulley 3, driven by the belt 4 from the prime motor. This shaft 1 also carries two pinions 5 5, which mesh with two spur gear-wheels 6 6, each of which is fixed on a short shaft 7, journaled in the frame 2, and on the outer end of one of these shafts 7 is fixed a band-pulley 8, from which a belt 9 extends to the baling-press. (Not shown.) The inner face of each of the gear-wheels 6 6 is formed with a diametrical dovetailed groove 21 and with a coinciding slot 23.

19 denotes the crank-pin fixed in the parallel slides 20 20, which are dovetailed in cross-section and have a sliding engagement with the grooves 21 21 in the gear-wheels 6 6, the slides being rigidly secured in their adjusted positions by the screw-bolts 22, which pass through the alined slots 23 23 in the gears 6 6.

18 denotes the connecting-rod extending from the crank-pin 19 to the plunger-rod of the baling-press, and the travel or throw of this plunger-rod may be increased or diminished by the corresponding adjustment of the crank-pin to or from the axis of the gear-wheels 6 6.

It will of course be understood that various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

In a baling-press, the combination with the parallel gears 6 6 formed with the dovetail grooves 21 and coinciding slots 23 of the parallel dovetail arms 20 20, having a sliding adjustment in said grooves 21, the crank-pin 19 connecting said arms and means for adjustably securing said arms in place in said grooves, substantially as shown and described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM FROST.

Witnesses:
H. D. TRENT,
LEE WADE.