

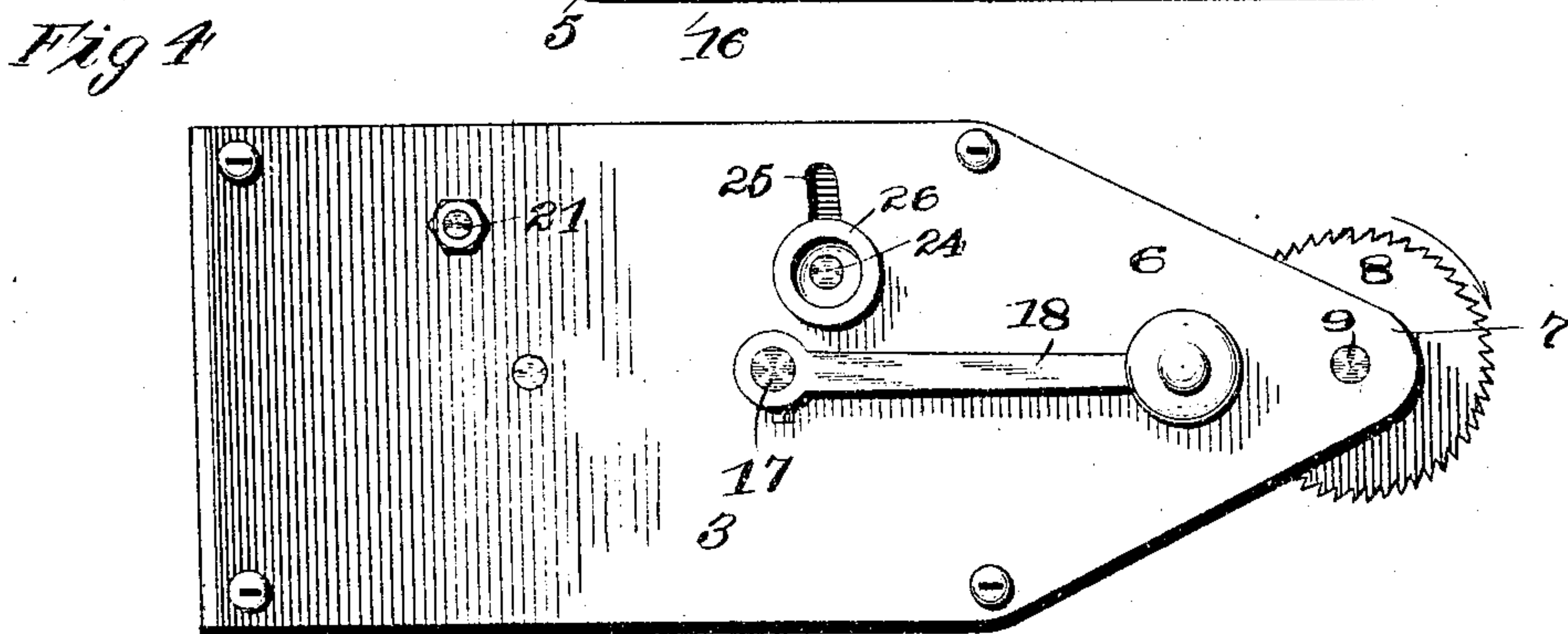
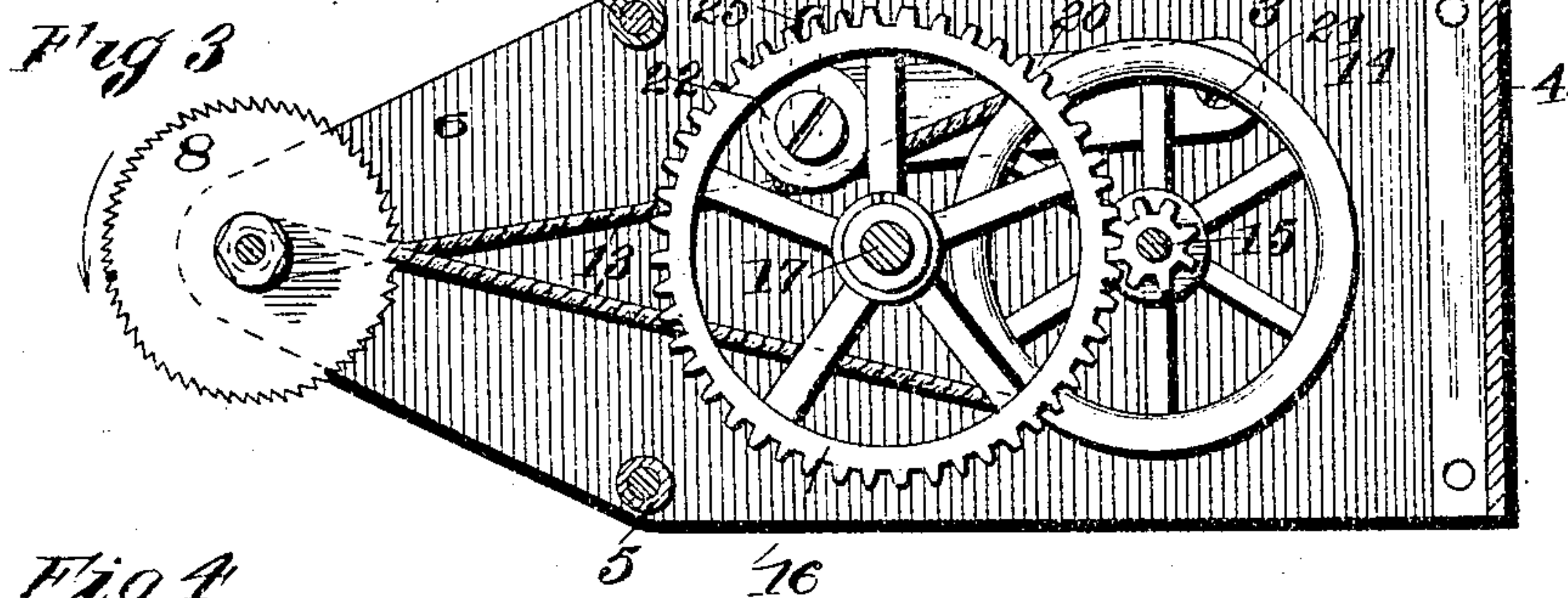
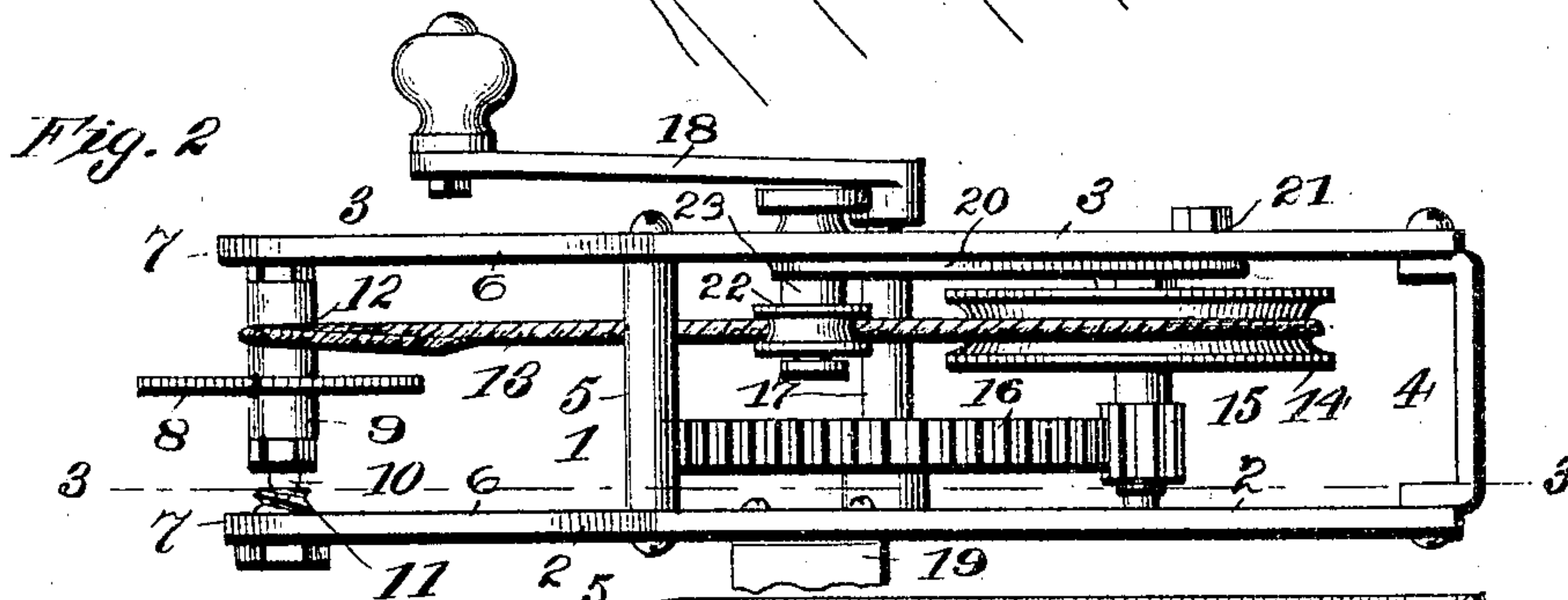
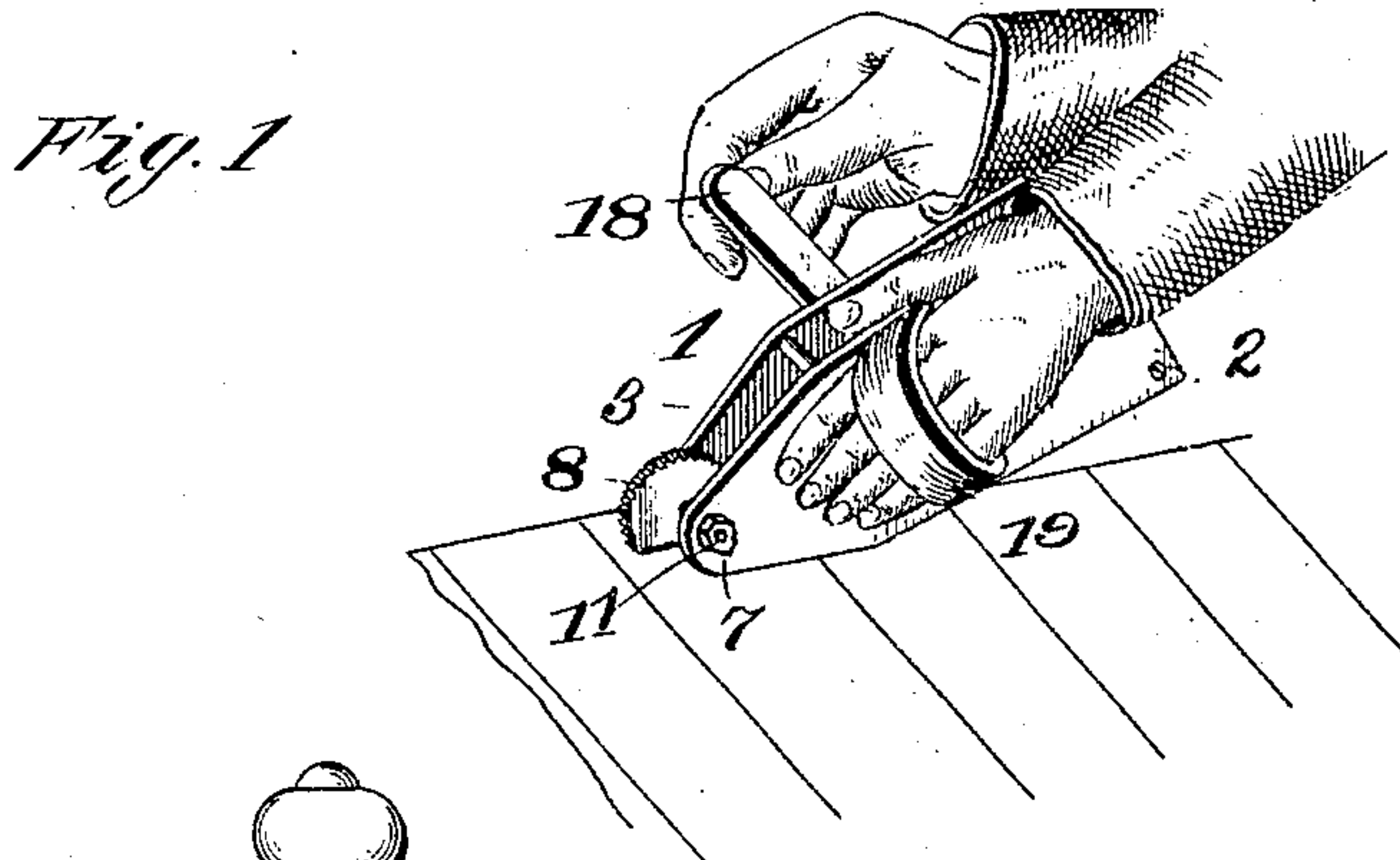
No. 773,397.

PATENTED OCT. 25, 1904.

M. KNAPP.  
SHINGLE CUTTER.

APPLICATION FILED AUG. 2, 1904.

NO MODEL.



WITNESSES:

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## UNITED STATES PATENT OFFICE.

MATTHIAS KNAPP, OF ENID, OKLAHOMA TERRITORY.

## SHINGLE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 773,397, dated October 25, 1904.

Application filed August 2, 1904. Serial No. 219,167. (No model.)

*To all whom it may concern:*

Be it known that I, MATTHIAS KNAPP, a citizen of the United States, and a resident of Enid, in the county of Garfield and Territory of Oklahoma, have made certain new and useful Improvements in Shingle-Cutters, of which the following is a specification.

My invention relates to shingle-cutters, and is intended especially for the purpose of trimming or cutting the course of shingles on the comb of a roof.

The object of the invention is to produce a device which will be efficient, rapid in its operation, and easily applied.

The invention consists in the construction and combination of parts to be more fully described hereinafter and definitely set forth in the claims.

In the drawings, which fully illustrate my invention, Figure 1 is a perspective of the device, illustrating how it will be applied to a portion of a roof. Fig. 2 is a plan. Fig. 3 is a longitudinal vertical section taken substantially on the line 3 3 of Fig. 2. Fig. 4 is a side elevation.

Throughout the drawings and specification the same numerals of reference denote like parts.

Referring more particularly to the parts, 1 represents the body of the device, which consists, as shown, of oppositely-disposed side plates 2 and 3, which attach at their rear edges to flanges formed upon a back plate 4. As illustrated, the side plates are maintained apart by distance pieces or studs 5.

The side plates 2 and 3 are substantially rectangular in form; but they are formed with forwardly-tapered edges 6, so as to form oppositely-disposed rounded noses 7. Between the noses 7 a circular saw 8 is mounted, the same being carried rigidly upon an arbor 9, as shown. One extremity of the arbor 9 is rotatably mounted in the side plate 3. The other extremity is reduced, as shown, and terminates in a tapered point 10, which is received in a cone-bearing formed in the end face of an adjusting-screw 11, as shown. The arbor 9 is provided with a circumferential groove 12, around which passes a twisted or crossed belt 13, preferably of round or

rope form. This belt passes around a pulley 14, rotatably mounted between the side plates 2 and 3, as indicated. The shaft or arbor of this pulley carries rigidly a pinion 15, which pinion meshes with a main gear-wheel 16 to the arbor 17, whereof there is attached a crank 18 for operating the same. This arbor 17 is preferably disposed between the sides or runs of the belt 13. From the construction described it should be evident that if the crank 18 is rotated by hand in the direction of the arrow a movement will be transmitted to the saw 8 in the direction indicated by the arrow adjacent thereto.

The device would be applied as shown in Fig. 1, the noses 7 operating as rests for the device, while the saw cuts its way through the projecting portions of the upper course of shingles at the comb.

In order to facilitate the manipulating of the device, I provide the strap 19 or loop which is adapted to receive the left hand of the carpenter, as shown. This loop is preferably attached to the outer face of the side plate 2 in any suitable manner.

In order to enable the tension of the belt 13 to be adjusted, there is provided an arm 20, pivoted at 21, preferably lying against the inner face of the side plate 3. This arm carries a tightening-pulley 22, which may be held in the path of the belt 13. The tightening-pulley 22 is preferably mounted upon a stud 23, which has a reduced outer extremity 24, which projects through a curved slot or opening 25 in the side plate 3 and is threaded for the attachment of a thumb-head 26. From this arrangement the arm 20 may be locked at any position in the slot 25, so as to give any desired tension to the belt.

By forming the forward portions of the side plates with the forwardly-tapered edges (thus to constitute the noses 7) and by mounting the saw near the noses or near the front end of said forward portions said saw is caused to project partly below the lowermost of said edges to enable the cutting to be effected and also partly above the uppermost of said edges to enable observations to be made, said lowermost edges running on the work and causing the body part of the structure, with its



contained mechanism, to extend away from the work conveniently for manipulation.

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

1. In a shingle-cutting machine, a body having parallel forwardly-tapered edges at the forward part thereof, forming opposite parallel noses, and a saw mounted near the end of said forward part, and projecting partly below the lowermost edges to effect the cutting of the work operated upon, and partly above the uppermost edges for observation purposes, the said lowermost edges running on the work, and causing the said body and its contained mechanism to extend away from the work.

2. In a shingle-cutting machine, a body having parallel forwardly-tapered edges at the forward part thereof, forming opposite parallel noses, and a saw mounted near the end of said forward part, and projecting partly below the lowermost edges to effect the cutting of the work operated upon, and partly above the uppermost edges for observation purposes, the said lowermost edges running on the work, and causing the said body and its contained mechanism to extend away from the work; said mechanism comprising a rotatable arbor for the saw, a pulley, a belt passing over said pulley, and thence around the arbor to operate the latter, a crank, and devices connecting the crank and pulley for driving the latter at an increased velocity,

3. In a shingle-cutting machine, in combination, a body having a tapered forward extremity, a circular saw mounted at said ex-

tremity, a crank, means for driving said saw from said crank, and a strap attached on the side of said body opposite to said crank and adapted to receive the operator's hand.

4. In a device of the class described, in combination, a body consisting of a pair of oppositely-disposed side plates having tapered forward extremities presenting oppositely-disposed noses, a circular saw having an arbor rotatably mounted between said noses, a pulley, a belt passing about said pulley adapted to drive the arbor of said saw, a pinion rigid with the said pulley, a main gear meshing with said pinion, a crank adapted to drive said main gear, and a belt-tightener adapted to adjust the tension of said belt.

5. In a device of the class described, in combination, a body having oppositely-disposed side plates with tapered forward extremities presenting oppositely-disposed noses, a circular saw having an arbor rotatably mounted between said noses, a pulley, a crossed belt passing about said pulley and adapted to drive said arbor, a pinion rigid with said pulley, a main gear meshing with said pinion, a crank adapted to drive said main gear, an arm pivotally attached to one of said side plates, a tightening-pulley carried upon said arm and engaging said belt, said side plate adjacent to said arm having a curved slot and means for locking said arm in said curved slot.

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Witnesses:

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