

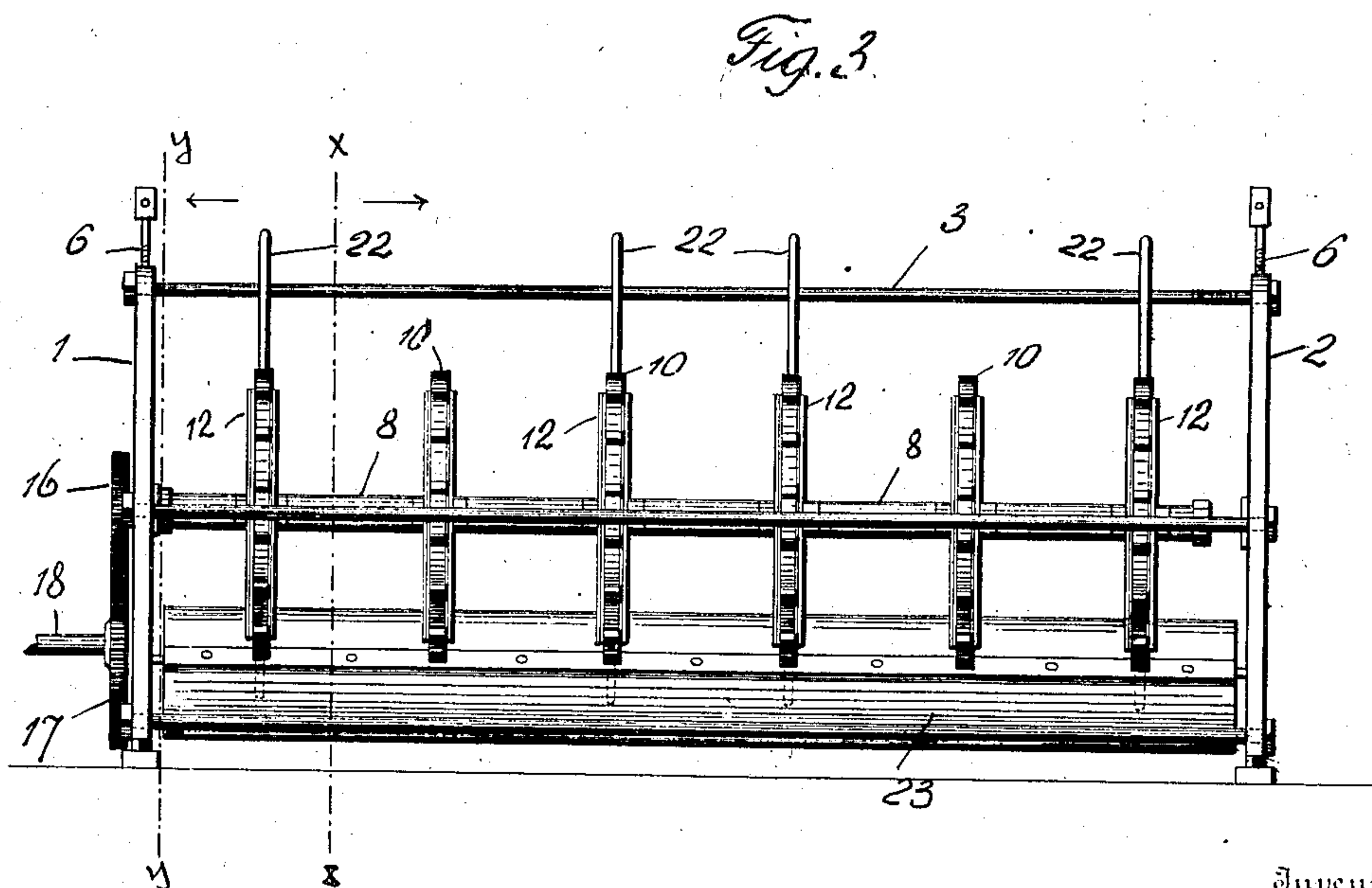
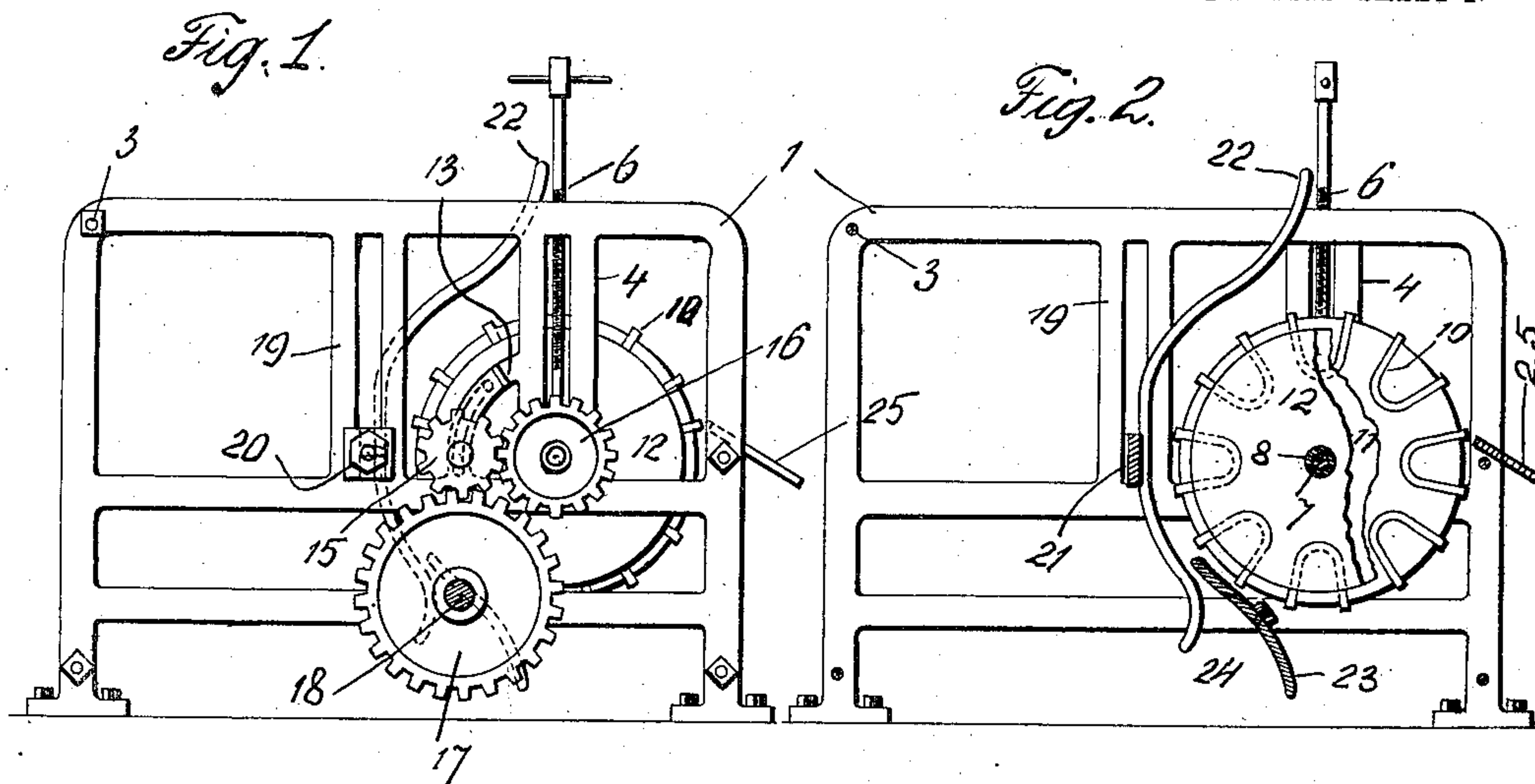
No. 889,589.

PATENTED JUNE 2, 1908.

A. C. DONELL.  
TIN TRANSFERRING MACHINE.

APPLICATION FILED DEC. 30, 1907.

2 SHEETS—SHEET 1.



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Witnesses  
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Fig. 4.

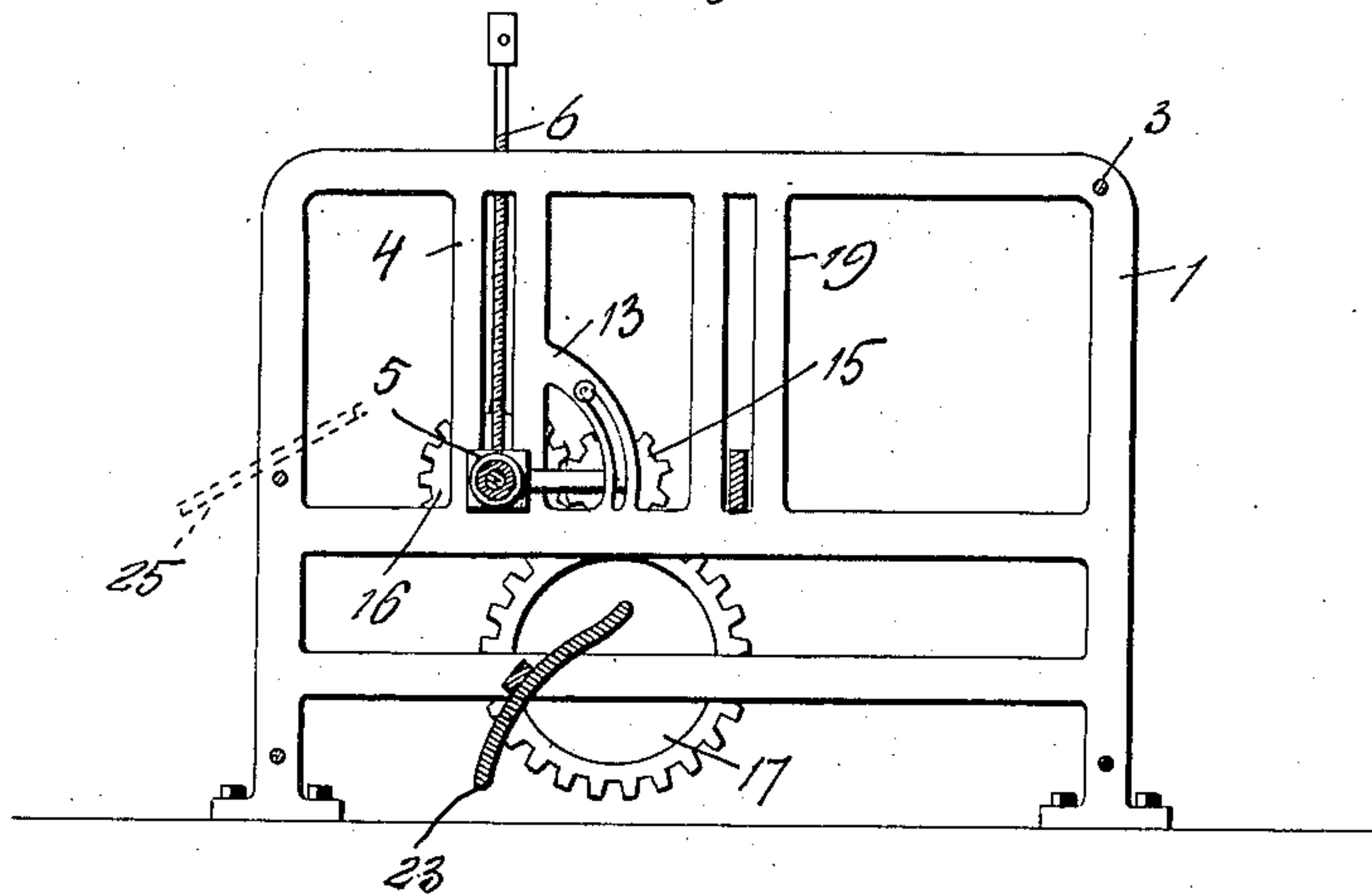


Fig. 5.

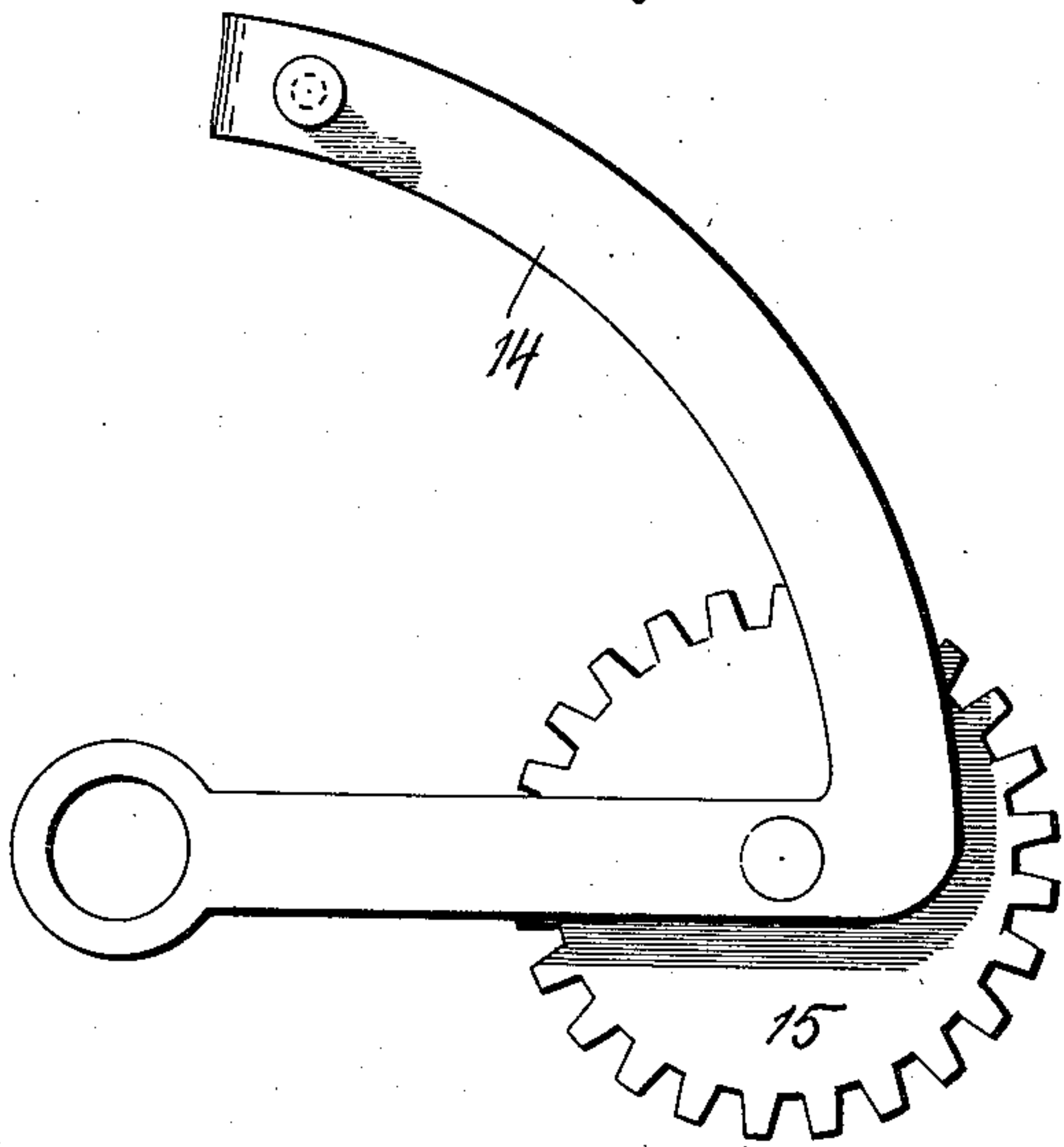
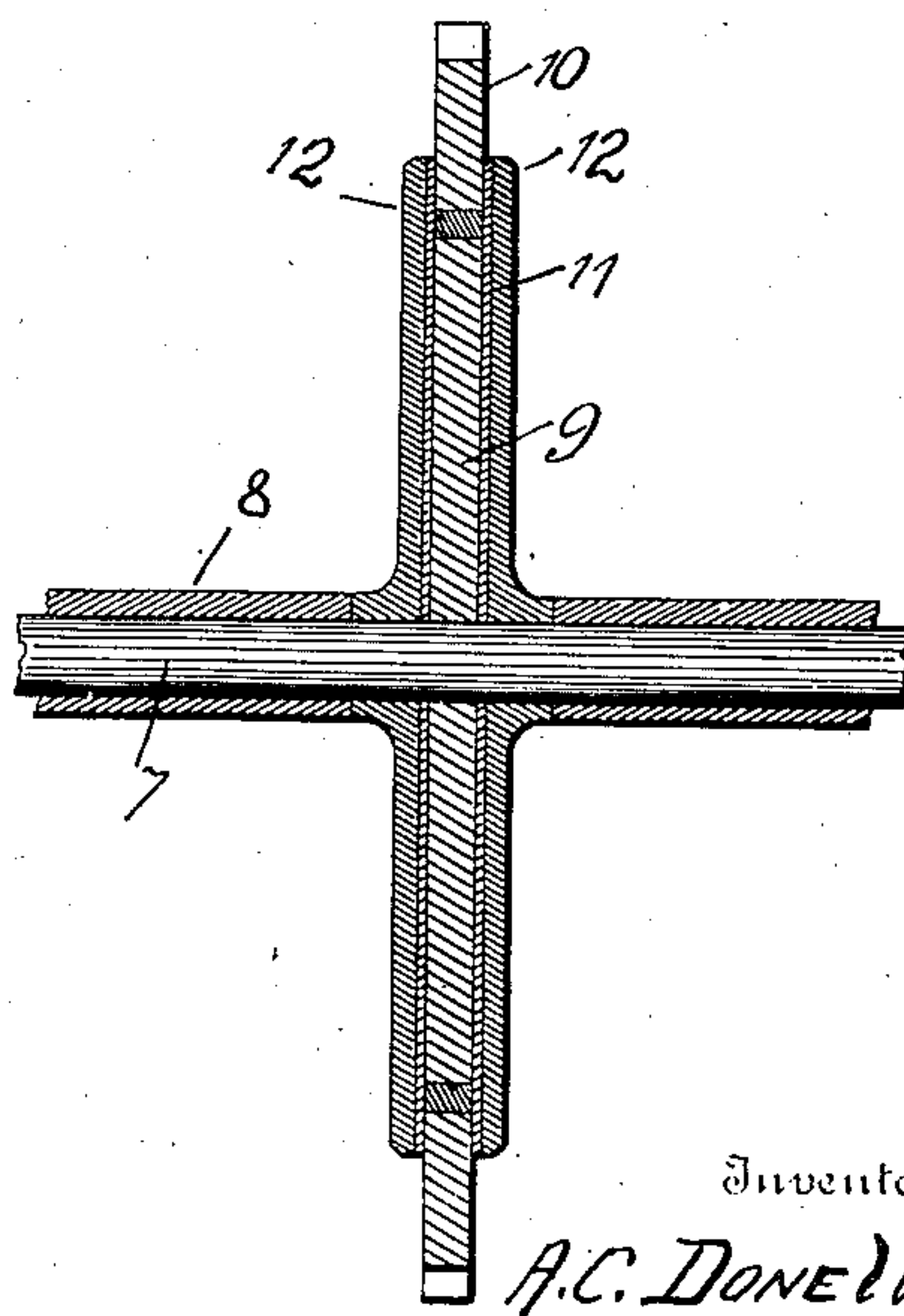


Fig. 6.



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# UNITED STATES PATENT OFFICE.

ADISCH C. DONELL, OF CANONSBURG, PENNSYLVANIA.

## TIN-TRANSFERRING MACHINE.

No. 889,589.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed December 30, 1907. Serial No. 408,668.

*To all whom it may concern:*

Be it known that I, ADISCH C. DONELL, a citizen of the United States of America, residing at Canonsburg, in the county of Washington and State of Pennsylvania, have invented certain new and useful Improvements in Tin-Transferring Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a tin transferring machine, and the primary object of the invention is, to provide a novel machine for automatically moving single sheets or packs of tin.

Another object of this invention is to dispense with the manual labor heretofore necessary for transferring plates from one machine to another, or from a pickling vat to a drying machine.

A further object of this invention is to provide a machine by which the production of tin plates will be materially increased and a better quality of goods produced.

With the above and other objects in view which will more readily appear as the invention is better understood the same consists in the novel construction, combination and arrangement of parts to be hereinafter more fully described, and then specifically pointed out in the appended claims.

In the drawing: Figure 1 is an end elevation of the machine, Fig. 2 is a cross sectional view of the same, Fig. 3 is a front elevation, Fig. 4 is a sectional view taken on the line  $y-y$  of Fig. 3, Fig. 5 is an enlarged elevation of a gear wheel supporting member, and Fig. 6 is a cross sectional view of one of the manipulating wheels.

To put my invention into practice, I construct my machine of two frames 1 and 2 connected by tie rods 3. The frames 1 and 2 are formed with guides 4 for adjustable blocks 5, these blocks being adjusted through the medium of screws 6 operating in the frames 1 and 2. In the blocks 5 is journaled a shaft 7, and upon said shaft are mounted a plurality of manipulating wheels, these wheels being spaced apart by sleeves 9. Each manipulating wheel comprises a disk 9 having a plurality of radially disposed horseshoe magnets 10, said magnets being mounted in the periphery of the disk 9 and protruding therefrom. The sides of the disk 9 are provided with an insulating material 11, as celluloid, and with heads 12.

The frame 1 is provided with a segment-

shaped slotted arm 13, and adjustably connected to said arm is a gear wheel supporting member 14 having a revoluble pinion 15. This gear wheel is adapted to mesh with a gear wheel 16 mounted upon the end of the shaft 7. Meshing with the gear wheel 15 is a large gear wheel 17, carried by a shaft 18, which is driven from a suitable source of power.

By providing the adjustable gear wheels supporting member 14, the shaft 7 carrying the gear wheel 16 can be elevated or lowered and maintained in mesh, whereby a rotary movement will be imparted to the shaft 7 by the shaft 18.

The frames 1 and 2 are provided with guide-ways 19 for adjustable blocks 20, these blocks carrying a longitudinally disposed bar 21 for a plurality of guide strips 22, these strips guiding plates carried by the magnets 10 of the manipulating wheels. The lower ends of the guide strips 22 extend in close proximity to a guide plate 23 arranged longitudinally between the frames 1 and 2, the ends of said strips and the plate 23 providing an entrance 24, for plates ejected by the rolls of the tinning machine.

In operation, the plates passing between the guide strips 22 and the plate 23 are gripped by the magnets 10 of the manipulating wheels, carried upwardly over said wheels, and are precipitated upon a suitable conveyor (not shown), thereby dispensing with the manual manipulation of plates ejected by tinning machines.

In order that the plates will be released by the magnets 10 of the machine, I arrange an inclined plate 25 between the frames 1 and 2, this plate engaging the edges of the tin plates carried by the magnets and forcing said tin plates from the magnets of the manipulating wheels.

It is thought that the construction and operation of my machine will be apparent from the foregoing description taken in connection with the drawings, and I desire it to be understood that such changes as are permissible by the appended claims may be resorted to without departing from the spirit of the invention.

Having now described my invention what I claim as new, is:—

1. In a machine of the type described embodying frames, an adjustable shaft journaled in said frames, a plurality of manipulating wheels mounted upon said shaft, each



wheel comprising a plurality of radially disposed horseshoe magnets; a plurality of adjustable guide strips mounted between said frames, a guide plate mounted between said frames at the lower ends of said guide strips, a gear wheel carried by said shaft, an adjustable gear wheel member carried by one of said frames, a gear wheel revolvably carried by said member and meshing with the first mentioned gear wheel, and means for imparting a rotary movement to said gear wheels, substantially as described.

2. In a machine of the type described embodying frames, a plurality of manipulating wheels journaled between said frames, each wheel comprising radially disposed horseshoe magnets, adjustable guide strips ar-

ranged between said frames and the lower ends of said strips, means for adjusting said wheels vertically with relation to said frames, and means for imparting a rotary movement to said wheels.

3. A machine of the type described embodying frames, a plurality of manipulating wheels journaled between said frames, magnets carried by wheels, adjustable guide strips, and means for adjusting said manipulating wheels.

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

ADISCH C. DONELL.

Witnesses:

JOHN CARCELLI,  
B. RISNOLD.