

No. 887,825.

PATENTED MAY 19, 1908.

L. W. MAMMEN.
GEARING FOR WASHING MACHINES.

APPLICATION FILED JUNE 27, 1907.

2 SHEETS—SHEET 1.

Fig. 2.

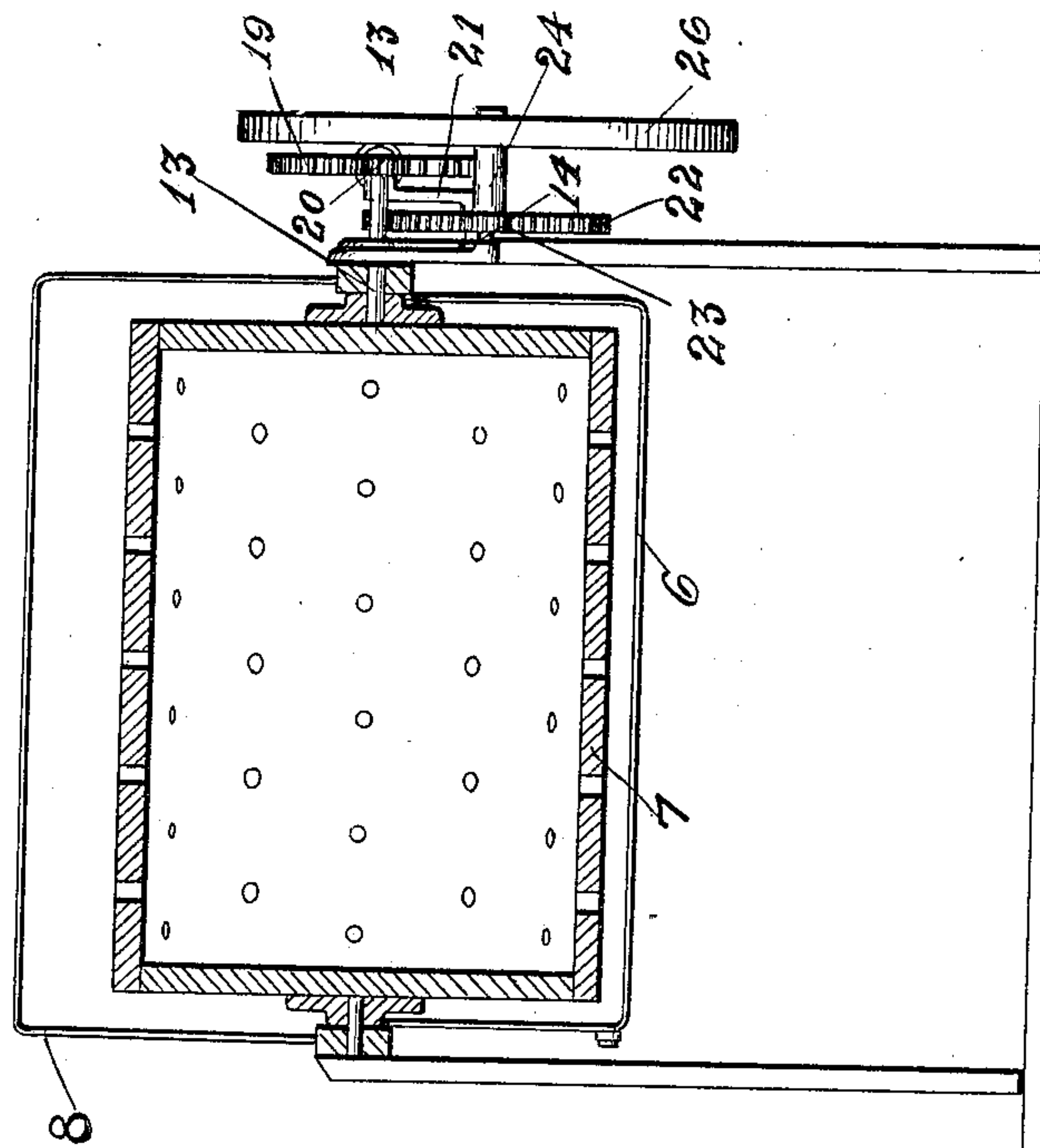
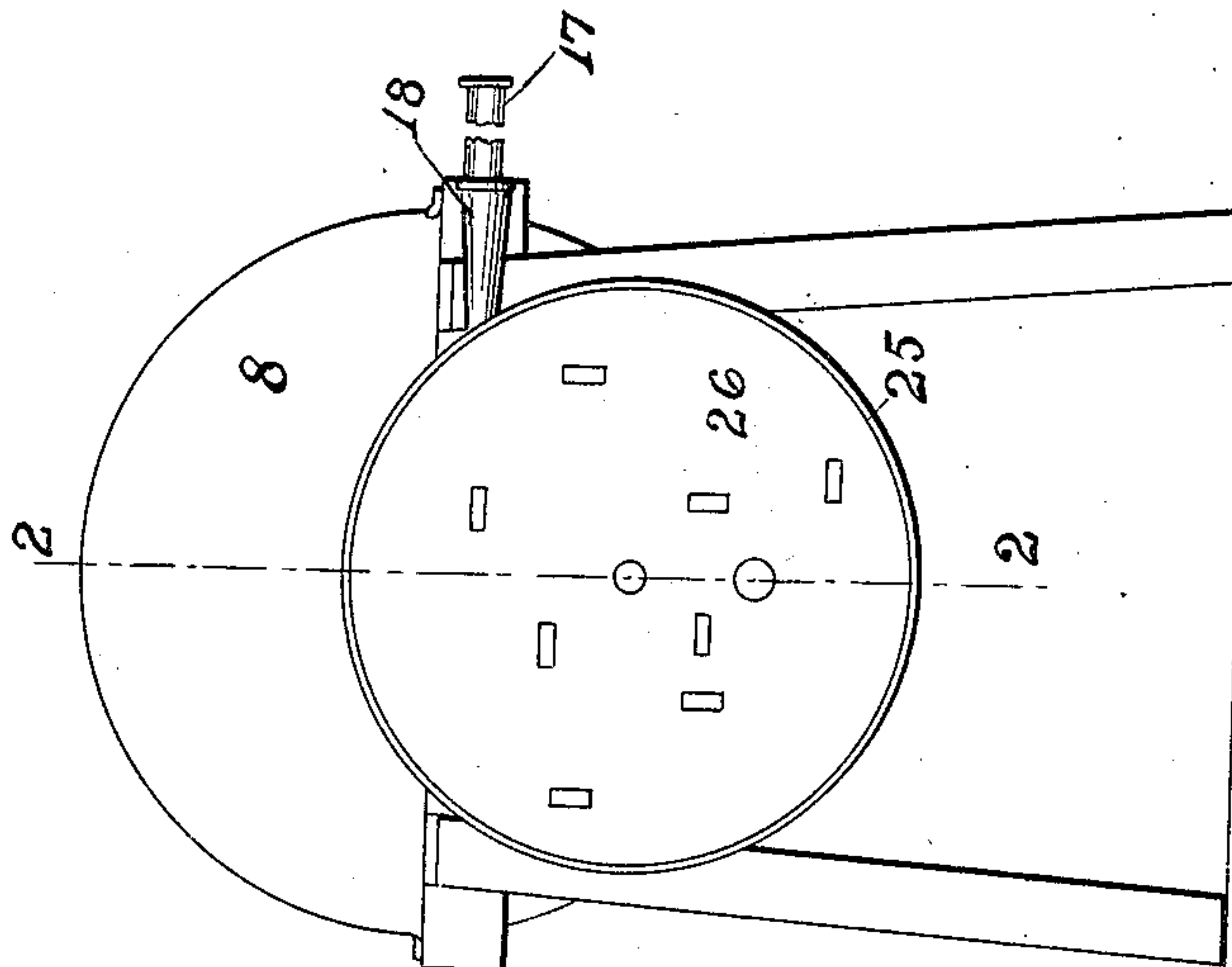


Fig. 1.



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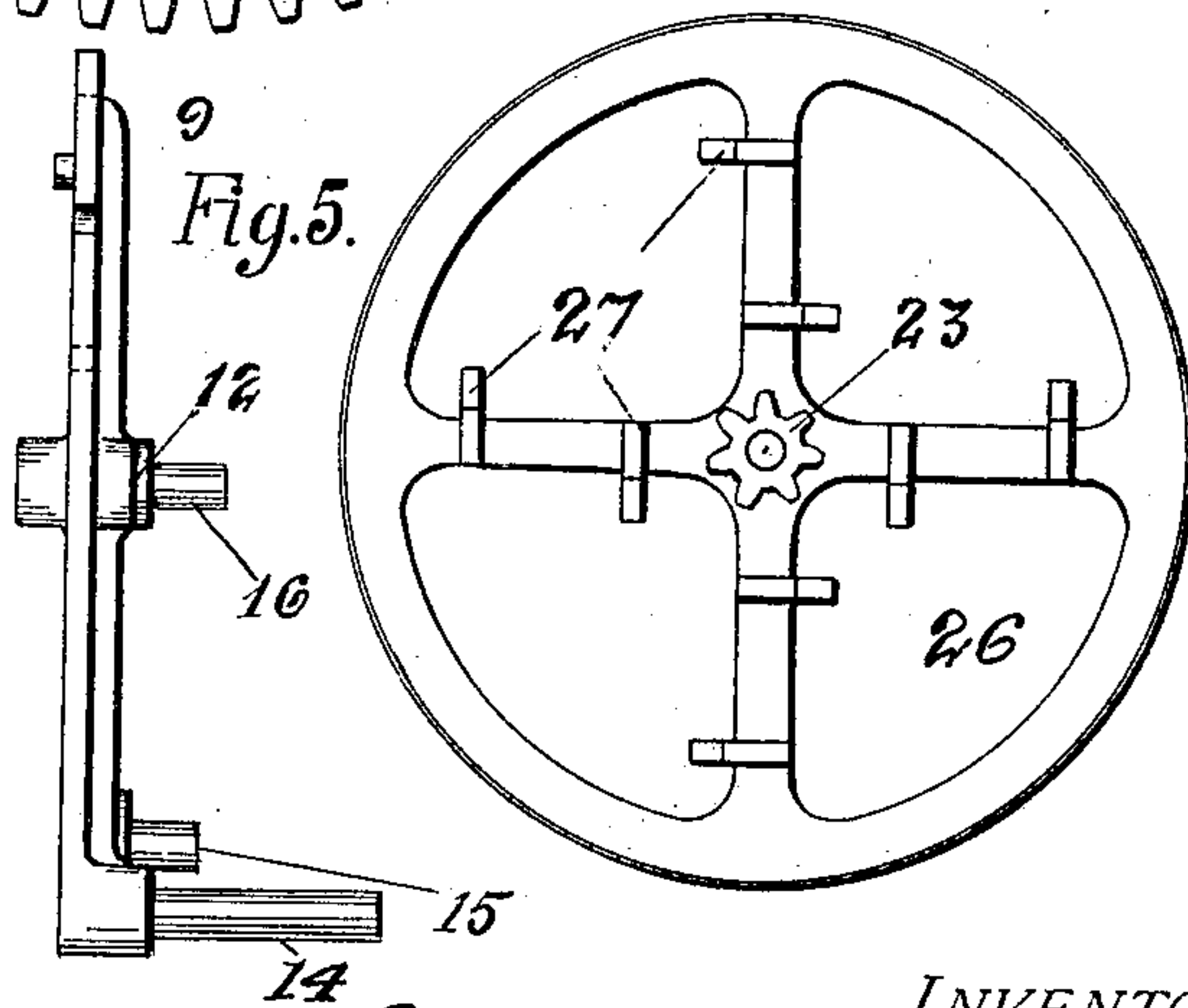
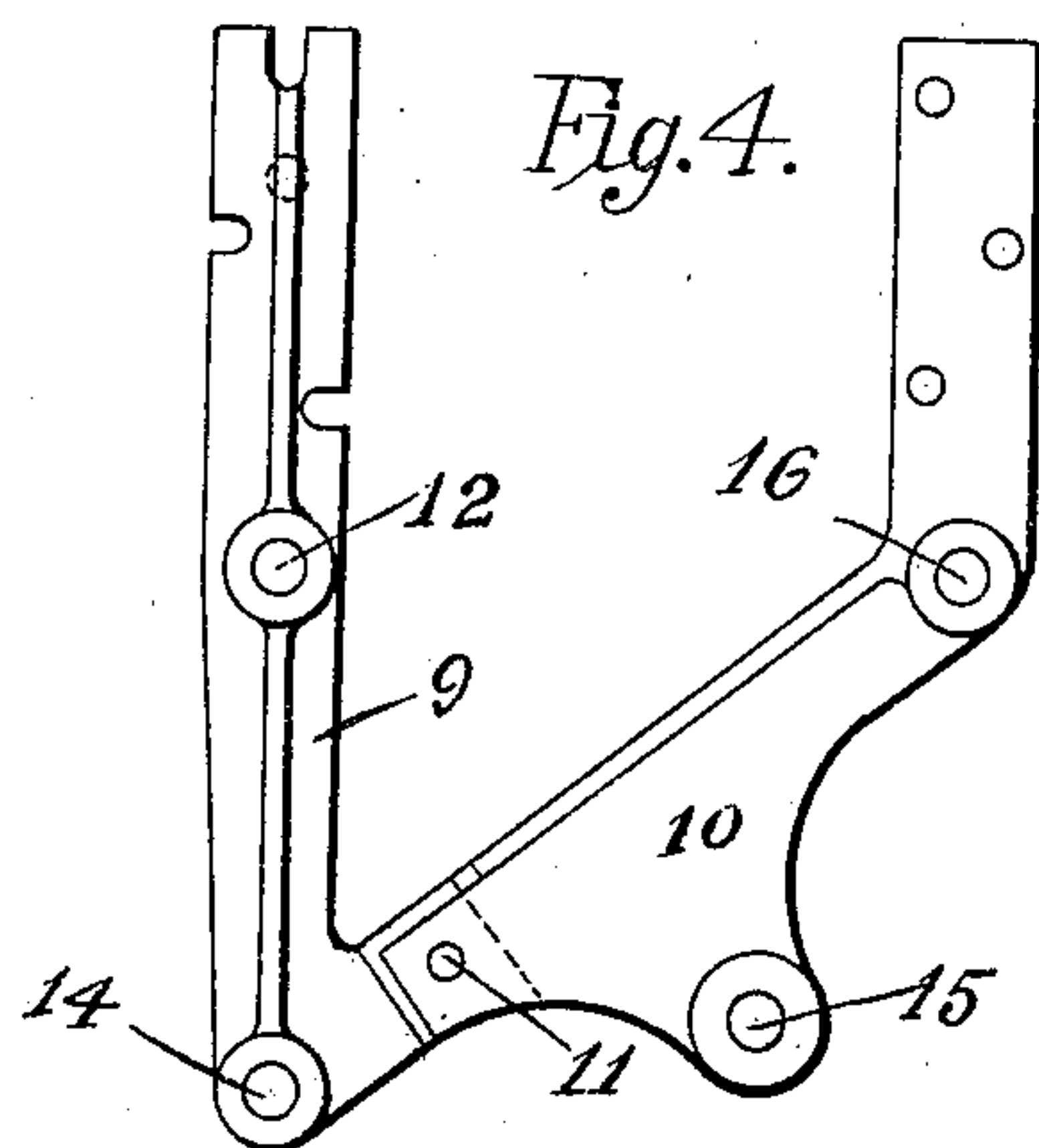
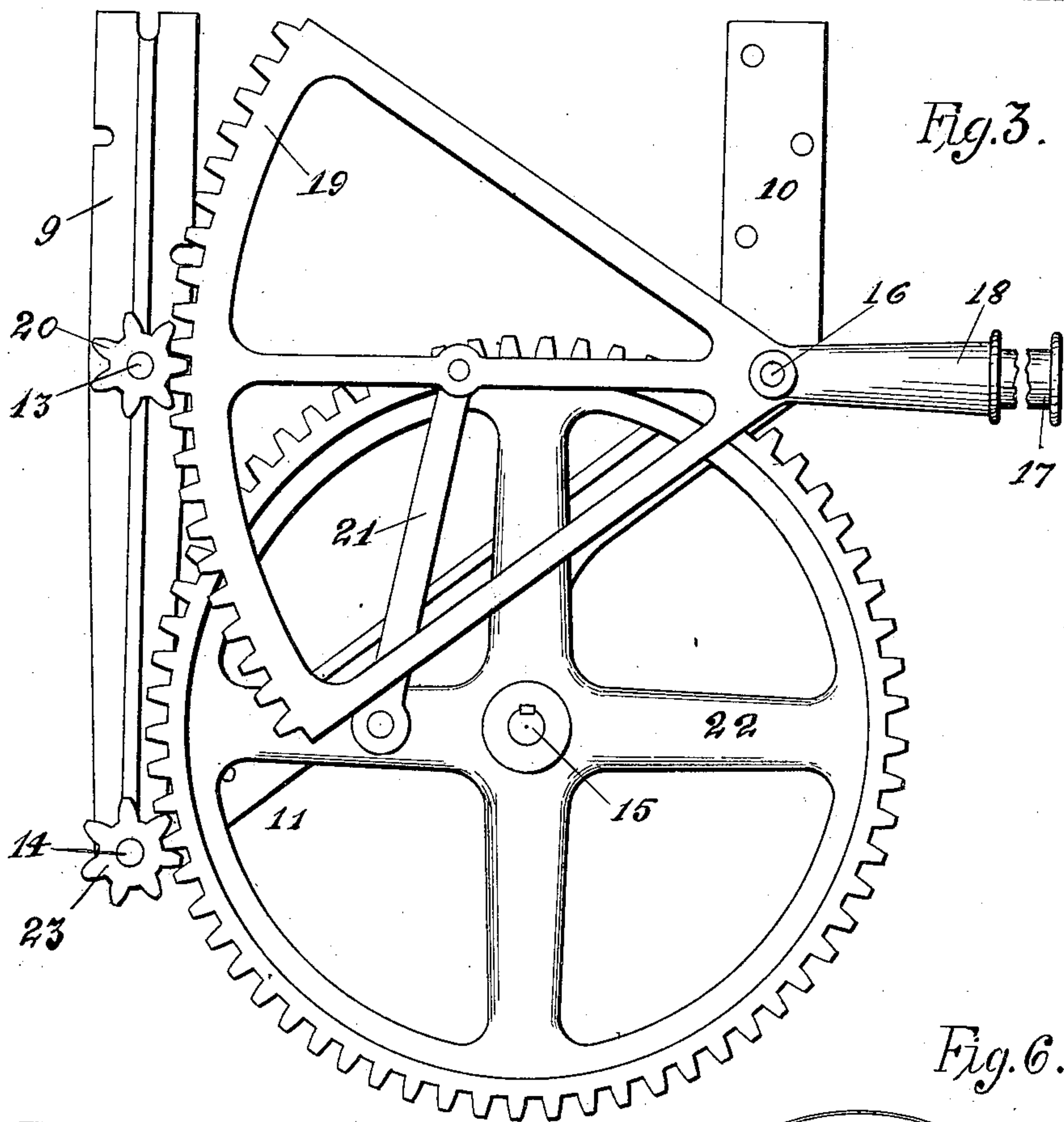
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LAWRENCE W. MAMMEN, OF CHICAGO, ILLINOIS.

GEARING FOR WASHING-MACHINES.

No. 887,825.

Specification of Letters Patent.

Patented May 19, 1908.

Application filed June 27, 1907. Serial No. 381,035.

To all whom it may concern:

Be it known that I, LAWRENCE W. MAMMEN, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Gearing for Washing-Machines, of which the following is a specification.

This invention relates to improvements in alternating rotary gearing, particularly suitable for washing machines, of that class in which an oscillating cylinder is contained within a tub or box and is oscillated by movement of a hand lever connected thereto.

The object of the invention is to form an improved device of the kind, an especial feature of which is a connection to a fly wheel the rotation of which serves to assist in the successive operations of the gearing. The fly wheel also has an improved guard, of cheap and simple construction.

The invention is illustrated in the accompanying drawings, in which

Figure 1 is an end view of a cylinder washing machine provided with the improvement, the fly wheel and its guard showing particularly. Fig. 2 is a central vertical section on the line 2—2 of Fig. 1. Fig. 3 is a side view in detail of the gearing. Figs. 4 and 5 are details in side and end elevation of the cast iron frame which sustains the gearing. Fig. 6 is an inside view showing the fly wheel and its shield.

Referring specifically to the drawings, 6 indicates the tub or shell of the washing machine and 7 a perforated cylinder which oscillates therein, and 8 is the hinged cover thereover. These parts may be of any suitable or ordinary construction, and the particulars thereof are immaterial to the present application. The frame shown in Figs. 4 and 5 is preferably made of cast iron and is mounted upon the washing machine at one end thereof, and sustains the gearing. This frame is made in two parts 9 and 10 connected by a bolt at 11. One part, 9, has a bearing 12 for the rock shaft 13 of the cylinder, and also has a stud 14 on which one of the gear wheels is mounted. The other part 10 of the frame has studs 15 and 16 for a similar purpose.

The power is applied by means of a wooden handle 17 which fits in a socket 18 on a swinging segment gear 19, forming a lever fulcrumed on the stud 16. The segment meshes with a pinion 20 on the shaft 13 of the cylinder, and obviously by oscillation of the lever the shaft and cylinder are rotated one way and then the other.

The segment 19 is connected by a pitman 21 to a large gear 22 which is mounted on the stud 15 heretofore referred to, and this gear meshes with a pinion 23 formed or attached at one end of the extended hub 24 of a fly wheel 25, said fly wheel and pinion being rotatable upon the stud 14.

As the segment lever is vibrated the pitman turns the large gear 22, which rotates the pinion 23 and the fly wheel at high speed, thereby storing up power which will serve to operate the parts even after the operator ceases his work, at least until the stored energy is exhausted. The high speed of the fly wheel is a fact of some importance in this connection.

In order to guard the fly wheel, and prevent any person or any other insertion from getting between the spokes of the wheel, it is provided with a shield consisting of a metal disk 26 which is of proper size to fit snugly against the rim of the wheel, and it covers the spokes of the wheel and the spaces therebetween. This shield is attached by means of tongues 27 which are struck up therefrom and bent over the spokes of the fly wheel, as shown in Fig. 6. The disk is therefore smooth upon the outside and a person coming in contact therewith, or with the rim of the fly wheel, is not apt to be injured thereby.

The invention provides very convenient means whereby a fly wheel may be used in connection with a rock shaft, or a shaft which turns first one way and then the other, the direction of rotation of the fly wheel being, of course, the same at all times.

I claim:

The combination of an angular frame having branches in the same plane and bearing studs projecting from one side thereof, a lever fulcrumed on one of said studs and having a segment gear at one end thereof, an

alternating shaft extending through said
frame and a pinion thereon in mesh with said
gear, a fly wheel mounted on one of said studs
and a pinion on the hub thereof, a spur gear
5 mounted on another stud and in mesh with
the last mentioned pinion, and a pitman con-
nected between the lever and the spur gear.

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

LAWRENCE W. MAMMEN.

Witnesses:

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