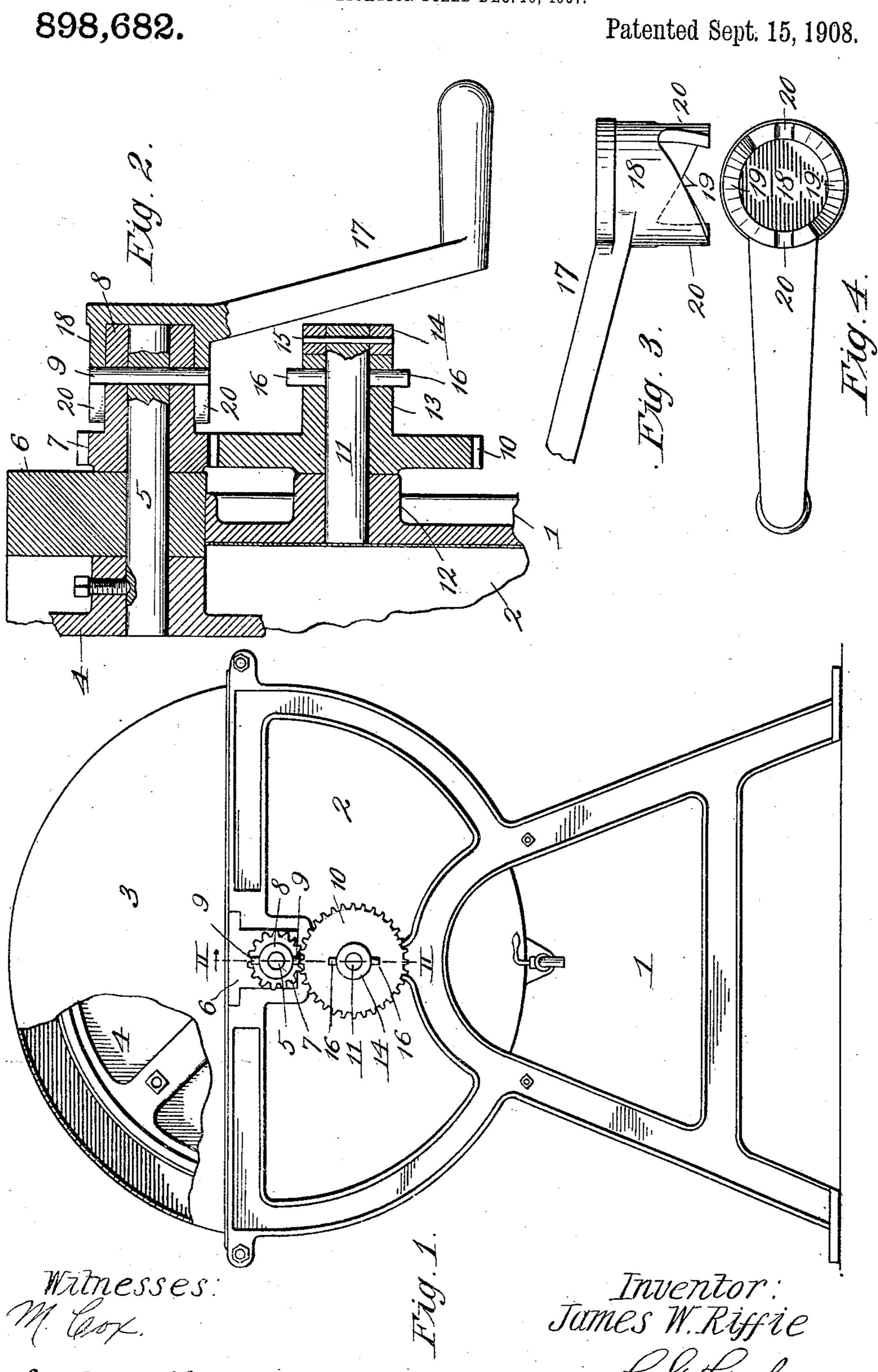
J. W. RIFFIE.
GEARING.

APPLICATION FILED DEC. 10, 1907.



## UNITED STATES PATENT OFFICE.

JAMES W. RIFFIE, OF KANSAS CITY, MISSOURI.

## GEARING.

No. 898,682.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, James W. Riffie, a citizen of the United States, residing at Kansas City, in the county of Jackson and 5 State of Missouri, have invented certain new and useful Improvements in Gearing, of which the following is a specification.

This invention pertains to improvements in gearing, and more particularly to gearing

10 for cleaning machines.

My object is to provide a driving mechanism whereby the cylinder of the machine may be driven in reverse directions and at different speeds as required to produce the best 15 results, and in order that the invention may be fully understood reference will now be made to the accompanying drawing in which:

Figure 1 represents a side elevation of the machine, provided with my improved driving 20 mechanism. Fig. 2 is an enlarged broken section on line II—II of Fig. 1. Figs. 3 and | 4 are plan and front elevations, respectively, of a crank forming part of the driving mech-

anism. In said drawing 1 designates a stand supporting a tub 2 provided with a lid 3, and containing a cylinder 4 for receiving the garments to be cleaned. Cylinder 4 is mounted upon trunnions 5, journaled in bearings 6 .30 carried by the upper portion of stand 1.

One of said trunnions extends outwardly through its bearing and is provided with a pinion 7 having an elongated hub 8 projecting from one side thereof and secured to the 35 trunnion by a member arranged in the form of a pin 9, extending diametrically through the trunnion and the hub, from the periphery of which latter its ends project for a pur-

pose hereinafter described.

10 designates a cog-wheel intermeshing with pinion 7 and journaled upon a stubshaft 11 secured to a boss 12 integral with one side of stand 1. Cog-wheel 10 is provided with an elongated hub 13 of substan-45 tially the same diameter and extending in the same direction as hub 8. Cog-wheel 10 is retained upon the stub-shaft by a collar 14 secured to the outer end of the shaft by a pin 15.

50 16 designates a pair of members in the

of the hub 13, from the periphery of which the outer ends of said pins project.

17 designates a crank provided at one end with a barrel 18 having a ratchet-face 19, 55 communicating with a pair of diametricallyopposed notches 20, adapted to engage the projecting ends of members 9 and 16.

In practice the barrel of crank 17 is slipped upon the hub of pinion 7 in such manner that 60 its notched portion 20 will be engaged by the

projecting ends of members 9.

When it is desired to increase the speed of the cylinder, to dry the garments, the crank is removed from hub 8 and placed upon hub 65 13. This may be done without stopping the cylinder, as the ratchet-face of the barrel will guide the notched portions 20 into engagement with the projecting ends of members 16, without interrupting the momentum of 70 the driving mechanism. This is a decided advantage, as it is obvious that more power will be required when driving through cogwheel 10, hence it is desirable to transfer the crank from the pinion to said cog-wheel while 75 the cylinder is in motion to avoid starting it from a standstill.

Having thus described my invention, what I claim is:

1. In a machine of the character described, 80 in combination, a rotatable element, journaled trunnions carrying the same, a pinion for rotating said element having a hub projecting from one side thereof, a pin for securing the hub to one of the trunnions, said pin 85 having its ends projecting from the periphery of the hub, a cog-wheel larger than the pinion intermeshing therewith and provided with a hub extending in the same direction and substantially of the same diameter as the 90 hub on the pinion, a stub-shaft projecting from one side of the machine upon which the cog-wheel is journaled, pins projecting from the hub of the cog-wheel, and a crank having a barrel adapted to fit either hub and pro- 95 vided with notches to receive the projecting ends of the pins, substantially as described.

2. In combination with a frame, a rotatable element journaled thereon and having trunnions, a pinion having a hub secured to 100 one of said trunnions, a pin passed diametform of pins, driven into the opposite sides | rically through said hub and trunnion and

having its ends projecting beyond said hub, a stub shaft on said frame, a cog wheel on said stub shaft having a hub, a pair of pins secured in said last named hub and projecting outwardly therefrom, a collar on the outer end of said stub shaft, a pin passed through said collar and said stub shaft, and a crank having a barrel to be received over said hubs

and having portions to engage said projecting parts of said pins.

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

JAMES W. RIFFIE.

Witnesses:

F. G. FISCHER,

M. Cox.