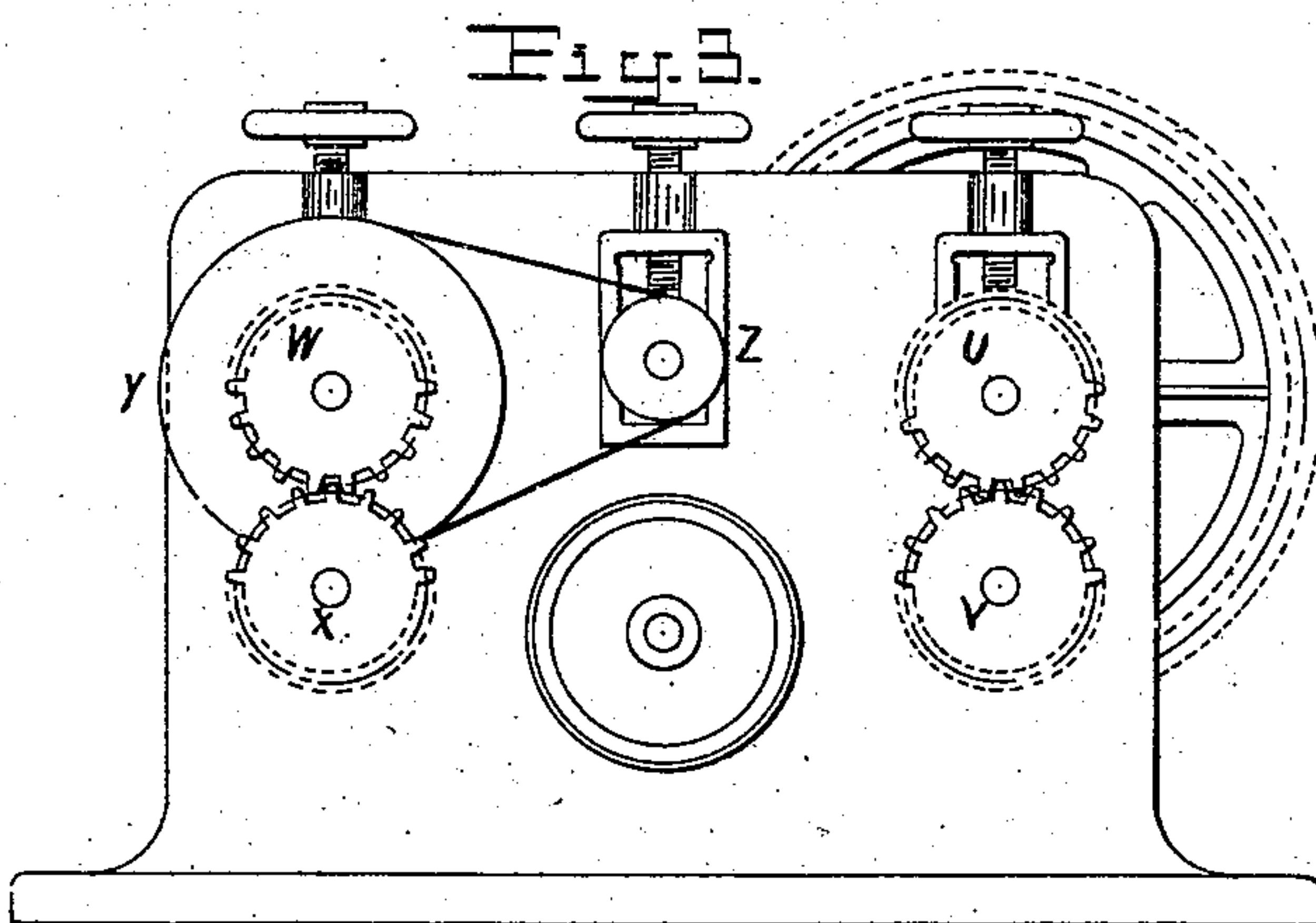
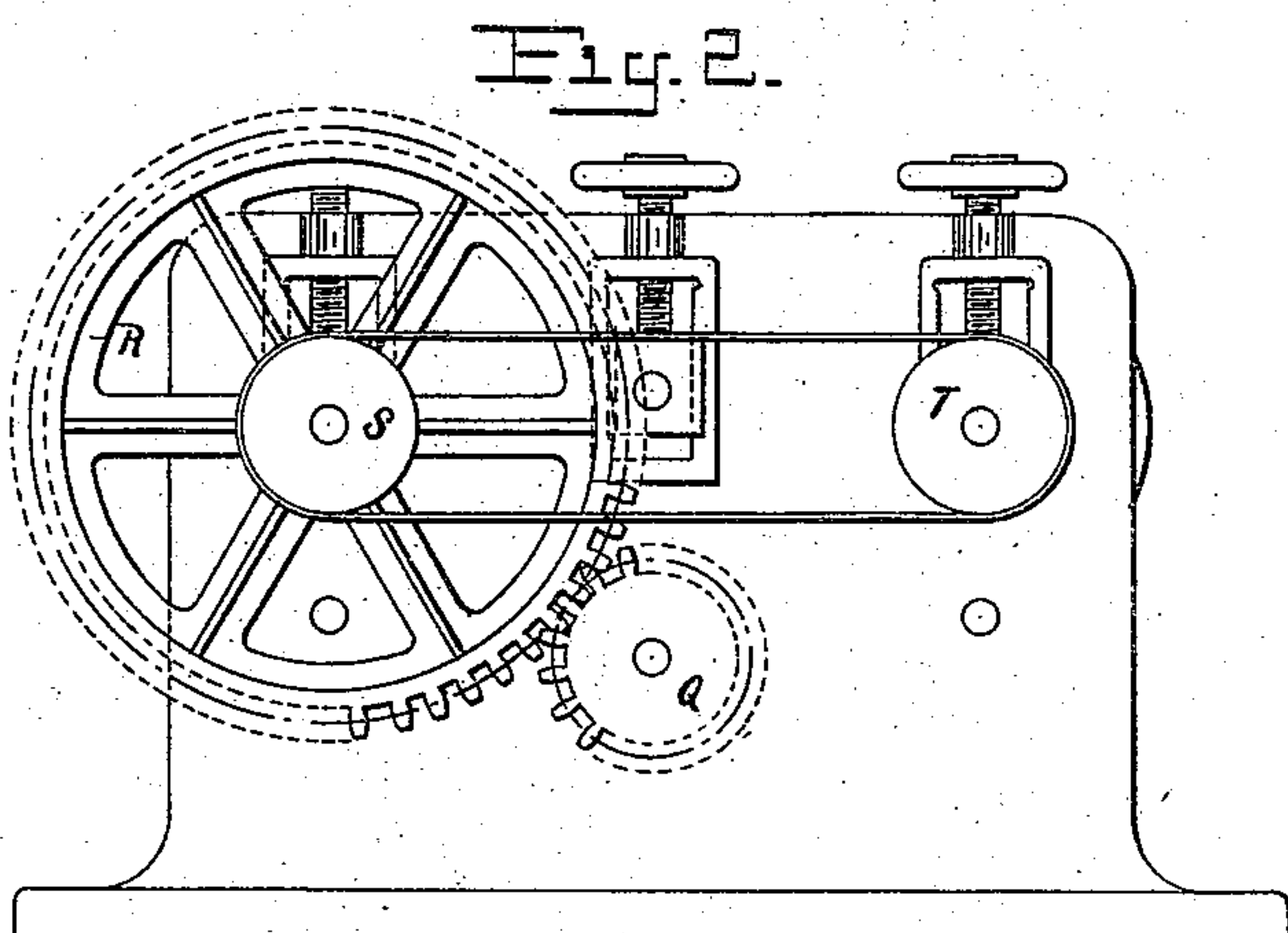
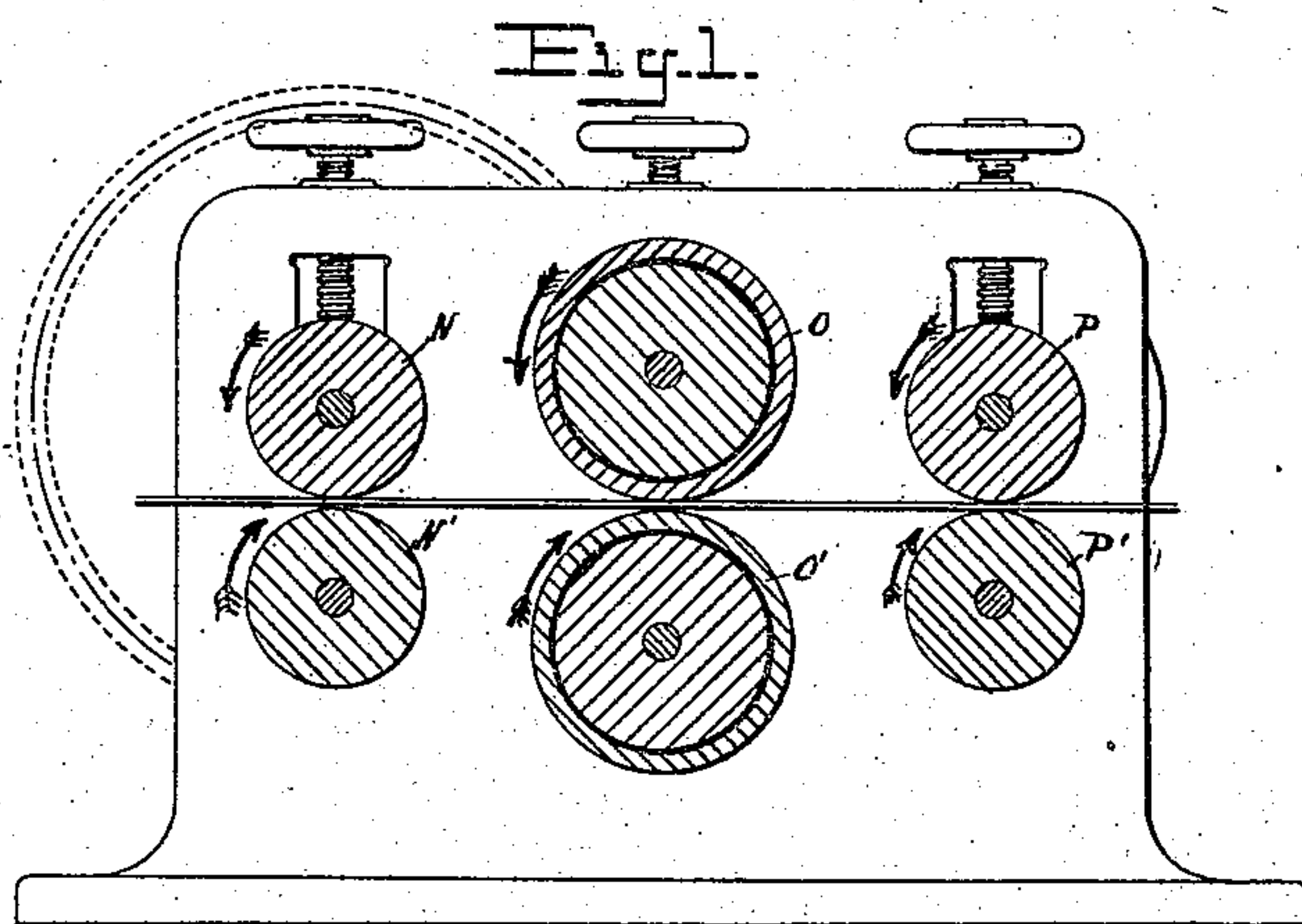


(No Model.)

R. B. THOMAS.  
DUSTING METAL PLATES.

No. 501,746.

Patented July 18, 1893.



WITNESSES:

George Baumann  
John Revell

INVENTOR

Richard B. Thomas.  
BY  
Horsman and Horsman  
his ATTORNEYS



# UNITED STATES PATENT OFFICE.

RICHARD BEAUMONT THOMAS, OF LYDBROOK, ENGLAND.

## DUSTING METAL PLATES.

SPECIFICATION forming part of Letters Patent No. 501,746, dated July 18, 1893.

Application filed June 11, 1890. Serial No. 355,017. (No model.) Patented in England December 8, 1886, No. 16,065.

*To all whom it may concern:*

Be it known that I, RICHARD BEAUMONT THOMAS, a subject of the Queen of Great Britain and Ireland, and a resident of Lydbrook, in the county of Gloucester, England, have invented certain Improvements in Dusting Metal Plates or Sheets, (for which I have obtained a British patent, dated December 8, 1886, No. 16,065,) of which the following is a specification.

When metal plates or sheets, such for example as tin orterne plates, have been cleaned in any convenient manner, or by any suitable apparatus, they require dusting or polishing.

Now the object of this invention is to provide means for dusting or polishing metal plates or sheets, whereby this dusting or polishing shall be accomplished very speedily and efficiently and with little or no danger that the surfaces or edges of the plates or sheets shall be injured. With this object, between each two pairs of holding or feeding rollers in my apparatus, I mount preferably one pair of dusting rollers, which revolve in the same directions as the holding rollers, but at a greatly increased speed.

In the accompanying drawings, Figure 1 is a transverse vertical section of a dusting apparatus according to this my invention. Fig. 2 is an elevation of one end thereof, and Fig. 3 is an elevation of the other end thereof.

Three pairs of rollers are adjustably mounted in any suitable framing, and the first pair of rollers N N' are so revolved as to receive and hold the plate, and pass it on between the next pair of rollers O O' which preferably are of a rather larger diameter and are covered with sheepskin or other suitable material. These rollers O O' are caused to revolve in the same directions as the rollers N N', but at a speed greatly increased above that of these rollers N N', preferably about three times as fast, whereby the plate is thoroughly dusted on both surfaces, as it is passed on by the rollers N N' to the third pair of rollers P P', which are revolved in the same directions and at the same speed as the rollers N N' and receive the plate therefrom and draw it out from between the rollers O O'. Therefore as the dusting rollers O O' are re-

volved in the same directions as are the holding or feeding rollers N N' and P P', and consequently treat and dust or polish the plate in the direction in which it is traveling, there is and can be little or no danger that the surfaces or edges of the plates or sheets shall be injured. The aforesaid differing speeds may be given to the rollers in any suitable manner. I show in the drawings one convenient method in Figs. 2 and 3. The power by which the apparatus is driven is applied to the lower dusting roller O', and at one end of the apparatus a toothed wheel Q on this roller O' gears into a larger toothed wheel R on the roller N, whereon also is a smaller wheel S, which by a band drives a similar wheel T on the roller P. At the other end of the apparatus a toothed wheel U on the roller N gears into a similar toothed wheel V on the roller N', and a toothed wheel W on the roller P gears into a similar toothed wheel X on the roller P', while a larger wheel Y on the roller P by a band drives a smaller wheel Z on the roller O.

I consider that the three pairs of rollers hereinbefore described are in general amply sufficient to dust or polish the plates; but when desired I can add two or four more pairs of rollers, in every case one of each two pairs of rollers so added being the dusting rollers, the other being the holding or feeding rollers; and the dusting rollers will always revolve in the same directions as the holding or feeding rollers but at a greatly increased speed.

I claim as my invention—

In an apparatus for dusting or polishing metal plates or sheets, the combination of the two pairs of holding or feeding rollers and intermediate dusting rollers, with driving mechanism for revolving all the pairs of rollers in the same direction, but the dusting rollers at a much greater speed than the holding or feed rollers, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RICHARD BEAUMONT THOMAS.

Witnesses:

JAS. HART,

JOSEPH E. MOORES.