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APPARATUS FOR STRIPPING WASTE OFF SINGLE HEADED TUBES, BOBBINS, OR PIRNS.

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993,422.

Patented May 30, 1911.

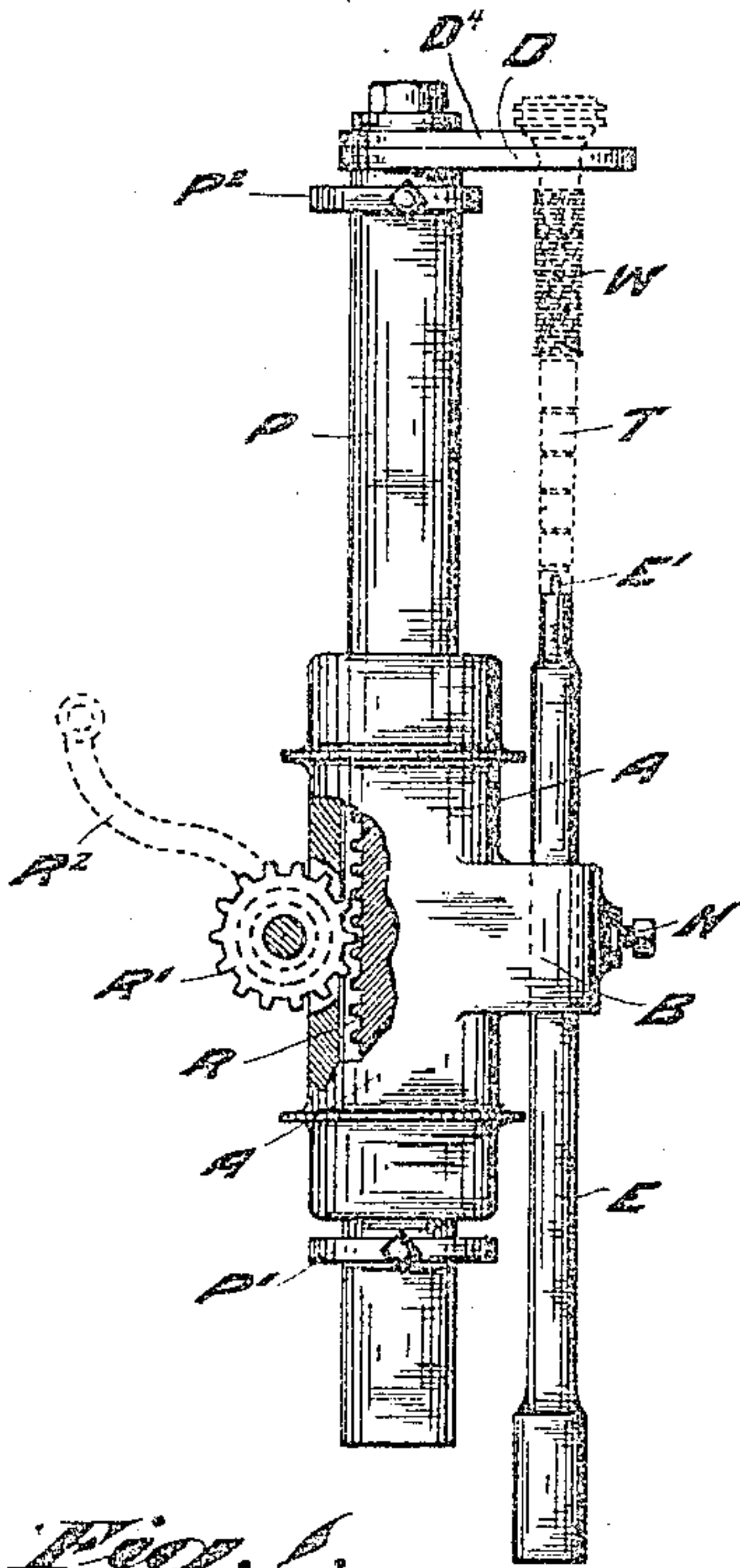


Fig. 1.

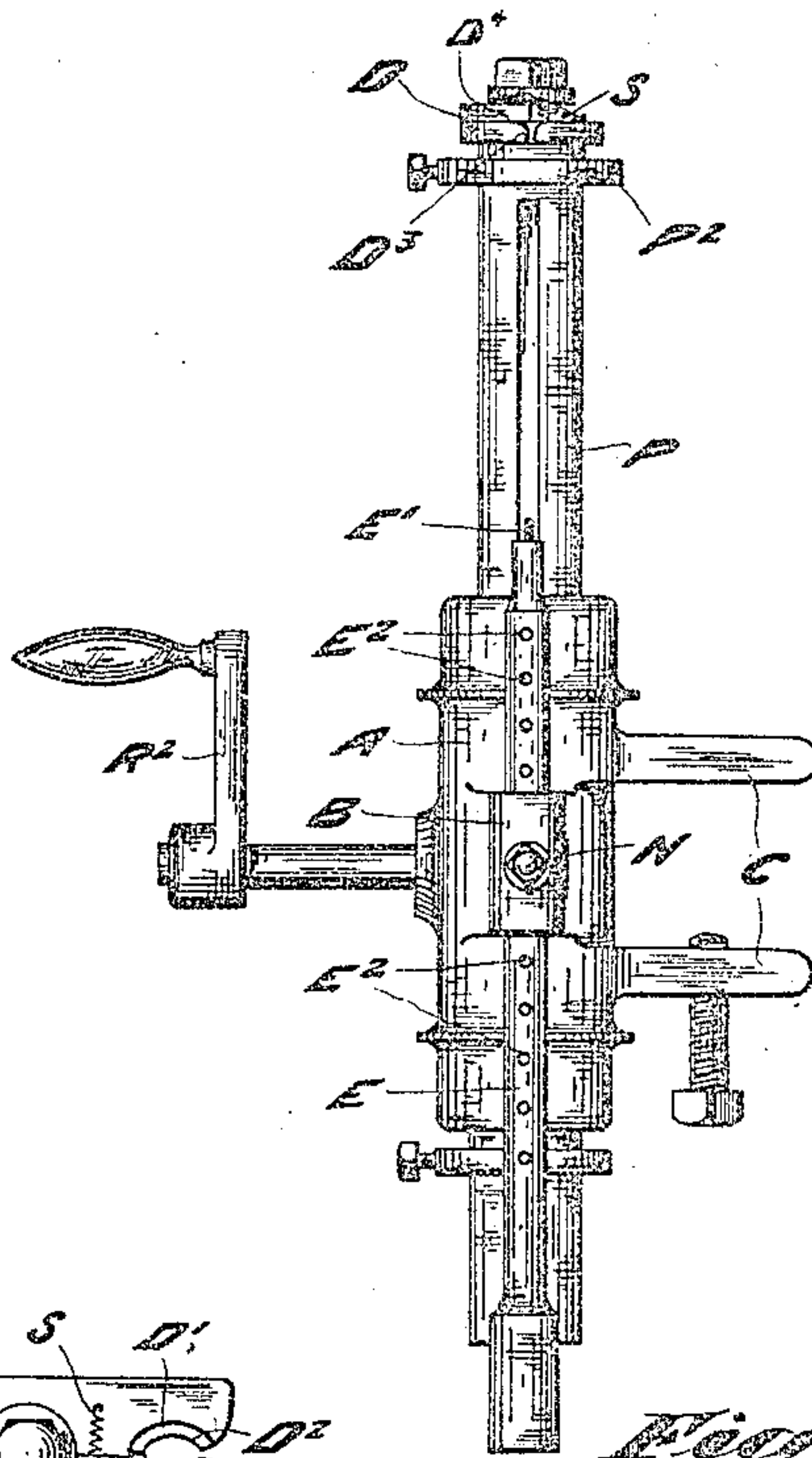


Fig. 2.

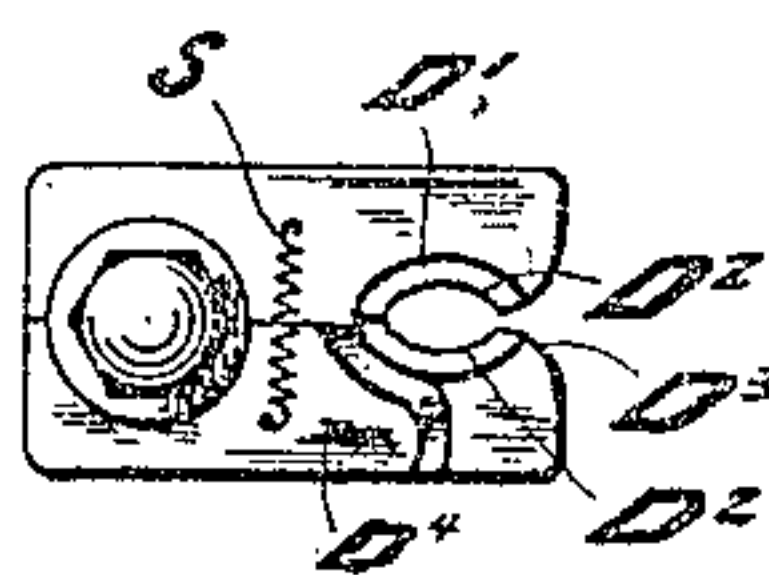


Fig. 3.

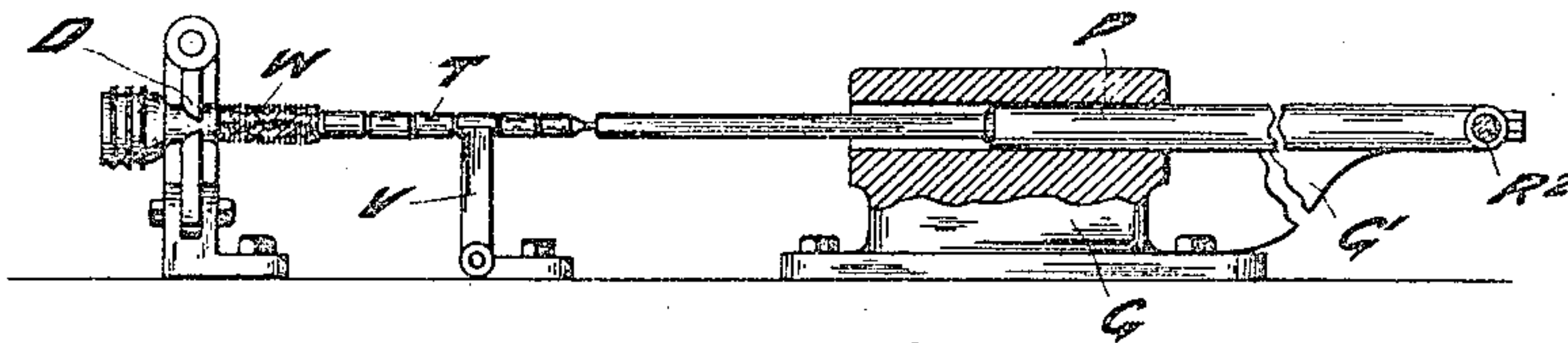


Fig. 4.

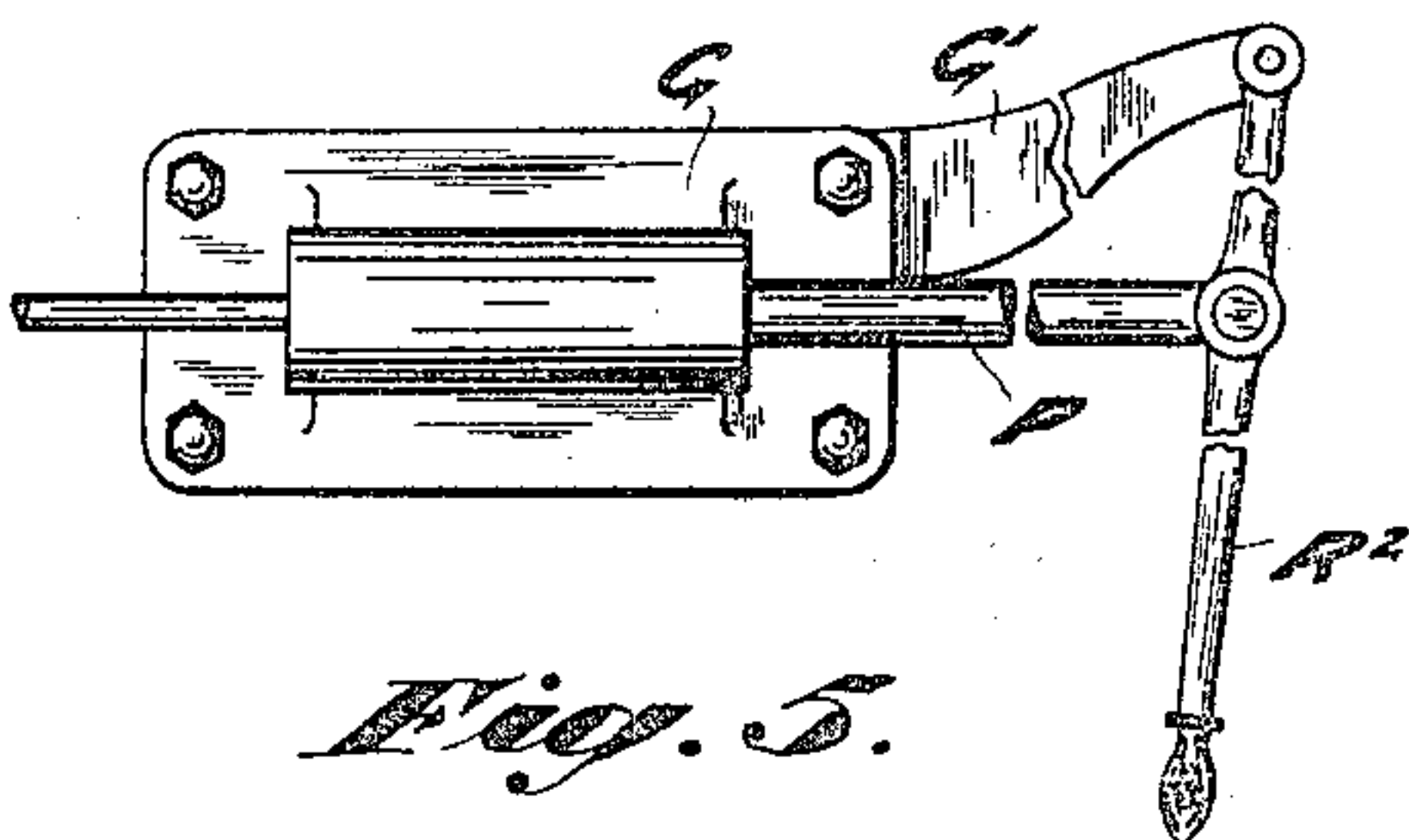


Fig. 5.

WITNESSES

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UNITED STATES PATENT OFFICE.

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APPARATUS FOR STRIPPING WASTE OFF SINGLE-HEADED TUBES, BOBBINS, OR PIRNS.

993,422.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, NORMAN DIXON WALKER, a subject of the King of Great Britain and Ireland, residing at Steeton, near Keighley, in the county of York, England, have invented a new and useful Apparatus for Stripping "Waste" off Single-Headed Tubes, Bobbins, or Pirns, of which the following is a specification.

10 This invention relates to an apparatus for stripping "waste" off single headed tubes, bobbins or pirns, and has for its object, the arrangement and construction of a machine, operated either by hand or power, which
15 will strip off the "waste" without damaging the bobbins.

After use in the first instance, varying amounts of "waste" are generally left on the bobbin, and the usual practice is to
20 strip or cut the yarn or "waste" from the bobbin, by means of a knife or other suitable or convenient implement. This method, as will be readily understood, cuts up the surface of the bobbin, and in course of time
25 spoils the same, whereas, by the use of the hereinafter described apparatus, the "waste" is stripped off without damage to the bobbin.

In describing my invention in detail, reference is made to the accompanying sheet of drawings, similar letters indicating similar parts in which,

Figures 1 and 2 represent front and side elevations respectively, of one form of apparatus. Fig. 3 represents a plan of the
35 jaws or dies hereinafter referred to. Fig. 4 shows another form of apparatus, and Fig. 5 represents an operating handle.

In carrying out my invention, Figs. 1 and
40 2 show a form of device which is arranged to operate vertically, the apparatus being provided with a suitable attaching or clamping device C, a plunger P provided with a rack R operates in a casing A, and engaging with the rack R is a pinion R¹ which
45 is actuated by a suitable handle R². If more power is desirable, other gear wheels or pinions may be used.

The plunger P carries at one end a pair
50 of dies or jaws D, such dies or jaws being formed with a cone shaped opening D¹ (Fig. 3) the lower edges D² being somewhat sharp. One of the jaws D is preferably provided with a support D³ against

which the head of the tube or bobbin T
55 rests during the operation of the apparatus. The jaws D may be provided with a spring or like S, in order to tend to keep them in the closed or gripping position, and thus make allowances for any taper in the bob-
60 bin or the like, or the spring or the like may be discarded, and the jaws pressed together by hand during operation.

Mounted on or attached to the casing A is a bracket B in which works an adjustable
65 rod or bobbin retainer E having a reduced end E¹ for engaging with the hollow end of the tube or like T. The rod E is provided with notches or the like E² (Fig. 2) and a holding nut N is provided on the bracket B.
70 On the plunger P are placed adjusting collars P¹ and P² in order to allow of the device being set for bobbins or tubes of varying length.

In operation the collars P¹ and P² are set
75 at the desired points in the plunger P, the rod E is set in the desired position, the pointed or narrow end of the tube T is placed on the end E¹ of rod E, and the other end of the tube is pressed into the jaws or
80 dies D which may be curved as at D³ (Fig. 3) to facilitate this operation. The plunger is then operated, and the jaws or dies are brought down gradually, clearing the
85 "waste" from the tube without in any way cutting or damaging the tube surface. In another form, the device may be arranged horizontally and the movements carried on as before described.

In Fig. 4 is shown a form of apparatus in
90 which the dies D do not move, such dies of jaws being arranged in any convenient manner and position; a plunger P slides in a head G, and the bobbin or tube T is pressed through the dies or jaws by the movement
95 of the plunger. A V-shaped rest V may be provided for the tube to rest in; such rest V may be suitably hinged to the frame work or table. The plunger may be operated by any
100 suitable mechanism, that shown in Fig. 5 will answer the purpose, wherein a handle R² is pivoted to the plunger P, and to a bracket G¹ attached to the gauntree G.

If desired the apparatus may be actuated by power or by foot. It will be readily
105 understood that the dies may be operated in other ways than those described without in any way departing from the principle

hereinbefore set forth, and the tube may be rigidly held either by its head or by being mounted or fixed on a spindle.

What I claim as my invention is:—

5 1. A waste stripper for bobbins and the like, comprising a carrier, a jaw supported thereon, a second jaw pivotally supported thereon, elastic means normally holding said second jaw in closed relation with respect to
10 said first jaw, said jaws being provided with recesses in their inner edges adapted to register with one another to form an opening for engaging one end of the bobbin, said pivotal point of connection being in the rear
15 of said opening, whereby the front ends of said jaws may be separated to provide an entrance to said opening, a support for the other end of the bobbin, and means for causing the jaws to strip the waste from the
20 bobbins.

25 2. A waste stripper for bobbins and the like, comprising a movable support, a pair of jaws pivoted thereto, means for closing said jaws, said jaws being provided with recesses in their inner edges adapted to register with one another to form an opening for engaging one end of the bobbin, said pivotal point of connection being in the rear of said opening, whereby the front end of said jaws

may be separated to provide an entrance to 30 said opening, a support for the other end of the bobbin, and means for moving said movable support and said jaws relatively to said second support, whereby to strip the waste from the bobbin. 35

3. A waste stripper for bobbins and the like, comprising a body portion, a plunger reciprocatingly supported thereon, a rack and pinion gear operatively associated with said body portion and said plunger for re- 40 ciprocating the latter, a pair of jaws pivotally mounted upon said plunger, said jaws being provided with recesses in their inner edges adapted to register with one another to form an opening for engaging one end of 45 the bobbin, said pivotal point of connection being in the rear of said opening, whereby the front end of said jaws may be separated to provide an entrance to said opening, and a support for the other end of the bobbin 50 carried by said body portion.

In witness thereof, I have hereunto set my hand in the presence of two witnesses.

NORMAN DIXON WALKER.

Witnesses:

CLIVE WAUGH,
JOSEPH P. KIRBY.