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PATENTED SEPT. 10, 1907.

W. BARTHOLOMEW.
IRONING MACHINE.

APPLICATION FILED FEB. 15, 1907.

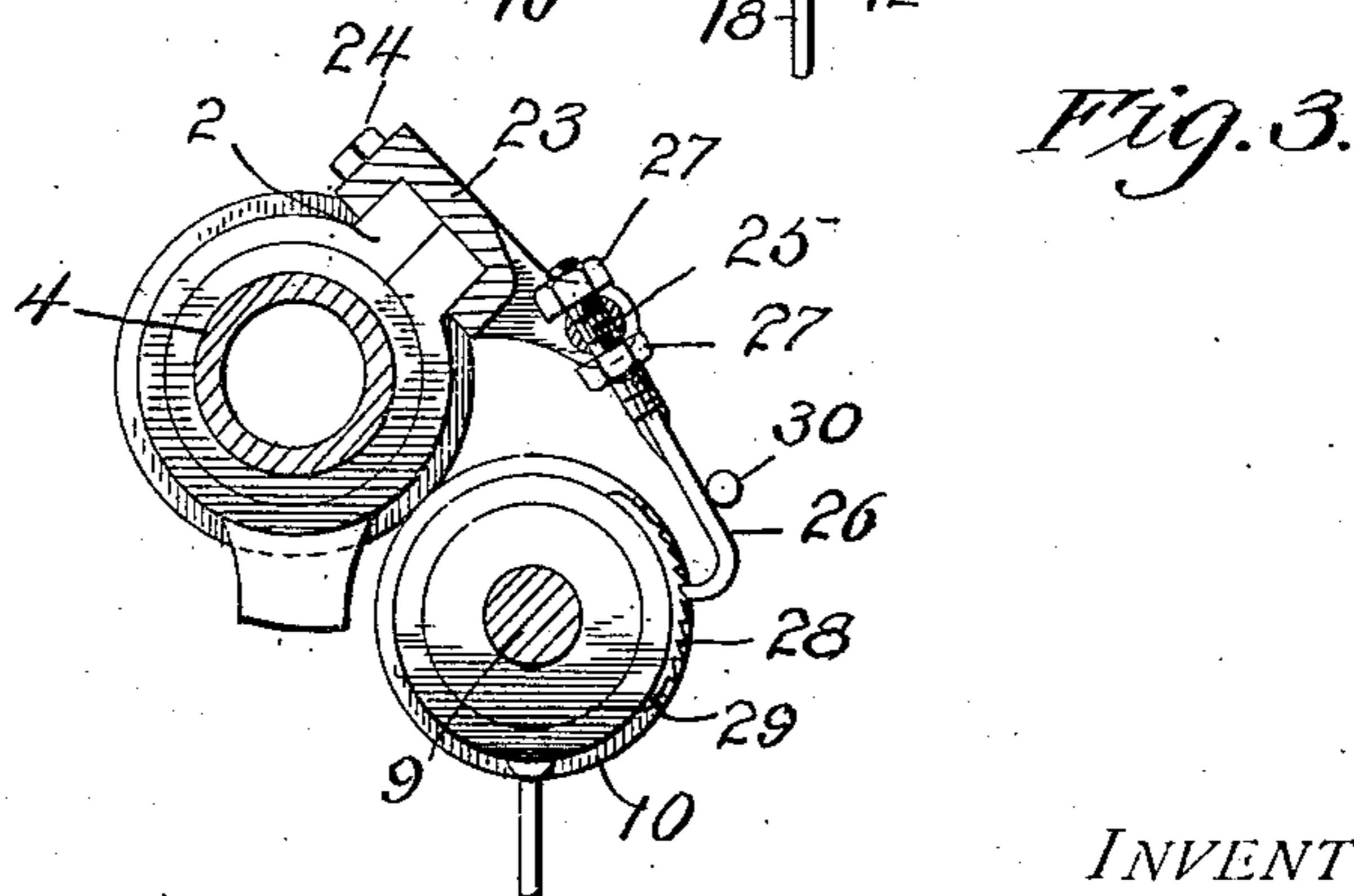
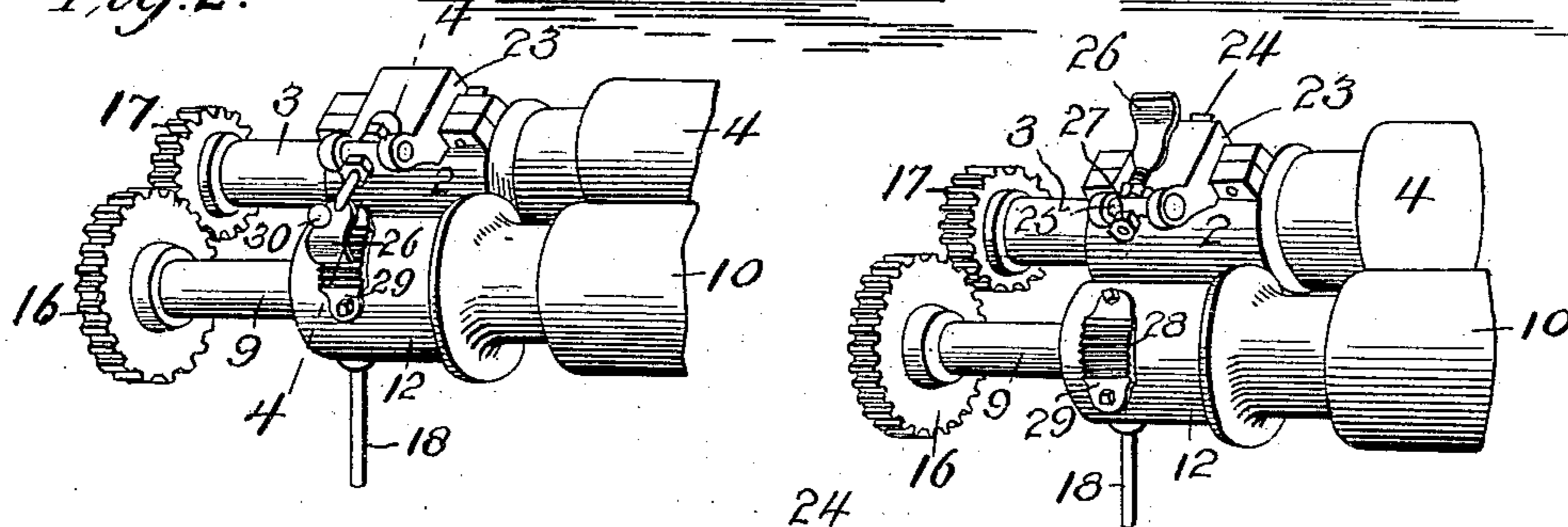
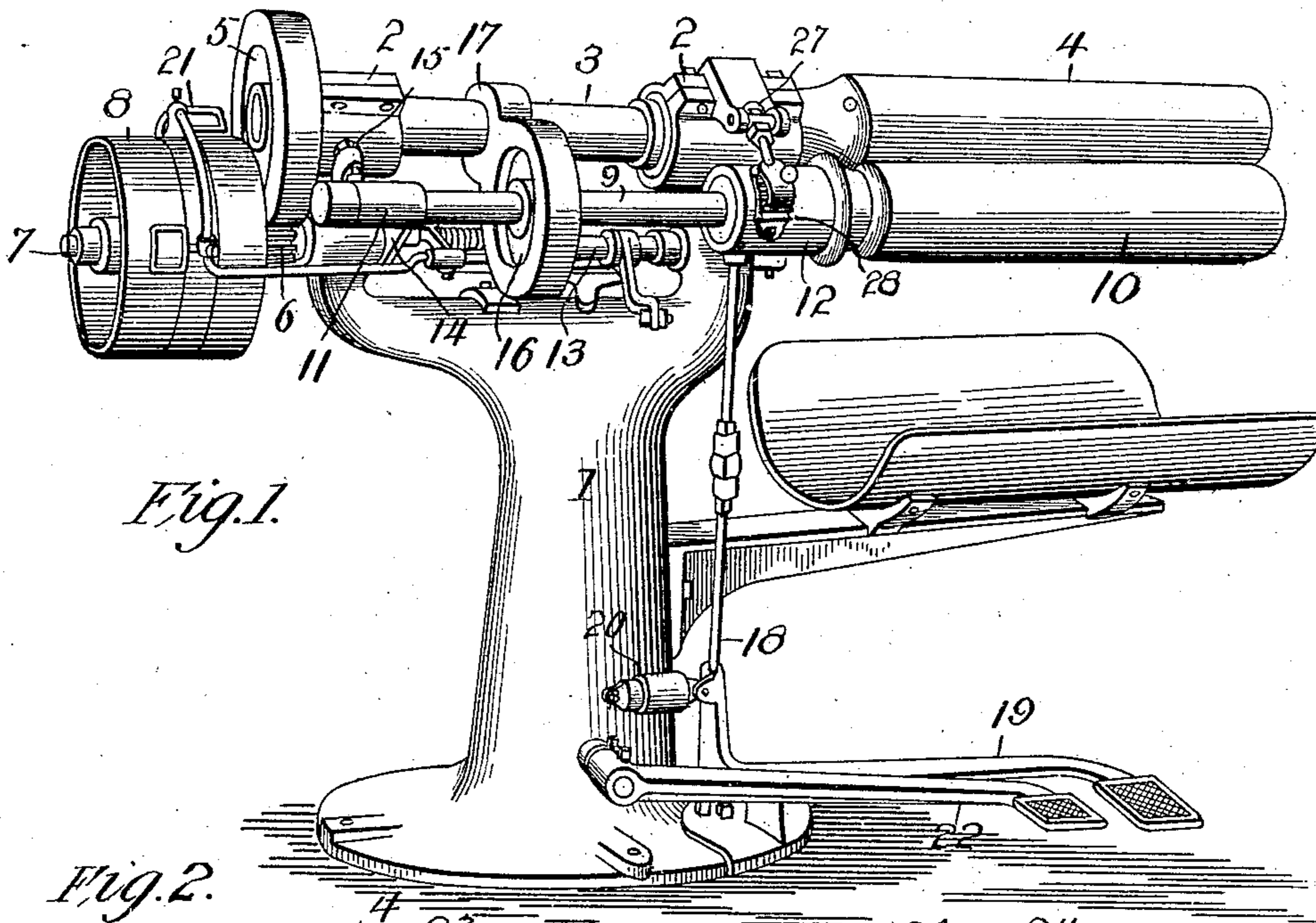


Fig. 4.

WITNESSES:
W. F. Doyle
Alfred T. Gage

INVENTOR
William Bartholomew
By *E. B. Stocking*
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM BARTHOLOMEW, OF NEW YORK, N. Y., ASSIGNOR TO TROY LAUNDRY MACHINERY COMPANY, LIMITED, OF TROY, NEW YORK, A CORPORATION OF NEW YORK.

IRONING-MACHINE.

No. 865,753.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed February 15, 1907. Serial No. 357,511.

To all whom it may concern:

Be it known that I, WILLIAM BARTHOLOMEW, a citizen of the United States, residing at New York, in the county of New York, State of New York, have invented

5 certain new and useful Improvements in Ironing-Machines, of which the following is a specification; reference being had therein to the accompanying drawing.

This invention relates to an ironing machine, and particularly to means for retaining the rolls in contact

10 with each other.

The invention has for an object to provide means for application to the ordinary type of ironing machine where the heated and clothed rolls are separated from each other whereby these rolls may be retained to contact to secure a mangling action upon the goods thereby

15 adapting the machine for use either for laundry ironing or mangling purposes.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

20 In the drawing:—Figure 1 is a perspective showing the application of the invention; Fig. 2 is a detail perspective of the rolls connected together; Fig. 3 is a similar perspective of the rolls separated, and Fig. 4

25 is a vertical section on the line 4—4, Fig. 2.

Like numerals refer to like parts in the several views of the drawing.

The invention is adapted for application to any desired type of ironing machine in which the rolls are

30 mounted for movement toward and from each other, and is here shown in connection with a body ironer of ordinary construction, in which the standard 1 is provided at its upper end with bearing boxes 2 in which the shaft 3 of the heated roll 4 is mounted and is provided at one end with a gear inclosed within the casing

35 5 and adapted to mesh with the pinion 6 carried on the driving shaft 7 upon which the usual fast and loose pulleys 8 are mounted. Parallel to the shaft 3 of the heated roll is the shaft 9 for the clothed roll 10, this

40 shaft being mounted in bearings 11 and 12 each of which is pivotally supported from the shaft 13 by means of the arm 14 extending backward to such shaft, and the upward limit of travel is determined by contact with a stop screw 15. This permits a swinging movement of the

45 clothed roll toward and from the heated roll. The shaft 9 is provided with the inclosed gear 16 adapted when the rolls are in contact to mesh with the cooperating inclosed gear 17 on the shaft 3 of the heated roll.

In the illustration shown the rolls are forced together

50 by means of the ordinary toggle connection 18 provided with the pivoted treadle lever 19 and the cushioning device 20. The machine is also provided with the usual belt shifting mechanism 21 which is controlled by the lever 22 mounted in the base.

55 This invention consists in applying to the fixed bear-

ing of one of the rolls a device adapted to engage the movable bearing of the opposite roll and hold the two rolls together. In the present illustration the block 23 is mounted upon the bearing 2 of the heated roll 4 and secured in position in any desired manner, for

60 instance, by the set screw 24. This block is provided with ears carrying a pivot 25 on which a connecting pawl 26 is mounted, for instance by passing through the pivot 25, and being adjustably secured by the lock nuts 27. This adjustment is important as it permits

65 the length of the pawl to be regulated so as to properly engage the teeth 28 upon the ratchet plate 29 which is secured to the bearing box 12 of the clothed roll 10 the shaft 9 of which carries the gear 16. The pawl 26 may be provided with the lifting knob 30.

70 In the operation of the invention, with the parts in the position shown in Figs. 1 and 2 the rolls are connected together so as to run in contact with each other, at the desired pressure, and the heated roll acting in conjunction with the clothed roll performs the func-

75 tions of a mangle, while, when the parts are shifted in the position shown in Fig. 3 these rolls are disconnected and the ordinary ironing function may be accomplished, and the movement of the clothed roll relative to the heated roll controlled by the treadle lever

80 for that purpose.

It will therefore be seen that the invention provides an attachment adapted for application to ordinary constructions of ironing machines by which they may be used for that purpose and also converted into a small

85 mangle which is of material advantage to users of such machinery whose business does not justify the expense of a steam mangle as with the present attachment all of the functions and advantages of such a mangle can be obtained for small work.

90 It will be obvious that the simplicity of the invention permits its ready application and economical manufacture.

Having described my invention and set forth its merits, what I claim and desire to secure by Letters Patent is:—

1. In an ironing machine, the combination of heated and clothed rolls, of driving shafts for said rolls, means for shifting said rolls toward each other, and a locking device supported upon the shaft of one roll to engage a

100 cooperating device upon the shaft of the other roll and lock the rolls together when they are brought into operative relation.

2. In an ironing machine, cooperating rolls, means for shifting said rolls toward each other, and means independent of the shifting means carried upon the bearing of one of said rolls to engage the bearing of the other roll and adjustably lock them in contact.

3. In an ironing machine, cooperating rolls, means for shifting said rolls toward each other, a pawl carried on the bearing of one roll, and a ratchet plate disposed upon the bearing of the cooperating roll.

4. The combination with an ironing machine comprising

a fixed and movable roll, of a treadle mechanism for shifting said rolls toward each other, and an independent locking device carried by the bearing of the fixed roll to automatically engage and lock the bearing of the movable roll
5 relatively to the bearing of the fixed roll in the movement toward the same.

5. A connecting attachment for an ironing machine comprising a locking member mounted upon the bearing of one roll, and a cooperating locking member for adjustable attachment to the first locking member and mounted upon
10 the bearing of the opposite roll.

6. A connecting attachment for ironing machines comprising a block adapted to be mounted upon the bearing of one roll, a connecting plate having a series of projections thereon and mounted upon the bearing of the opposite roll, and a pivoted pawl carried by said block to engage one of the projections on said plate.
15

7. A connecting attachment for an ironing machine comprising a block adapted to be mounted upon the bearing of one roll, a connecting plate mounted upon the bearing of the opposite roll, a pivoted pawl carried by said block to engage said plate, and means for adjusting the length of said pawl beyond its pivot.
20

8. In an ironing machine, a heated roll provided with a fixed bearing, a clothed roll mounted for movement toward and from the heated roll, a block mounted upon said fixed bearing, a curved ratchet plate mounted upon the bearing of the clothed roll, and a pawl carried by said block to engage said ratchet plate.
25

9. In an ironing machine, a heated roll provided with a
30

fixed bearing, a clothed roll mounted for movement toward and from the heated roll, a block mounted upon said fixed bearing, a curved ratchet plate mounted upon the bearing of the clothed roll, and a pawl having a hooked free end to engage the teeth of said ratchet plate.
35

10. In an ironing machine, a heated roll provided with a fixed bearing, a clothed roll mounted for movement toward and from the heated roll, a block mounted upon said fixed bearing, a curved ratchet plate mounted upon the bearing of the clothed roll, a pawl having a hooked free end to engage the teeth of said ratchet plate, and means for adjusting the length of said pawl.
40

11. A connecting attachment for an ironing machine comprising a block having pivoting ears, a pivot mounted in said ears, a pawl having its shank extended through said pivot, and locking nuts threaded upon said shank at opposite sides of said pivot.
45

12. A connecting attachment for an ironing machine comprising a block having pivoting ears, a pivot mounted in said ears, a pawl having its shank extended through said pivot, locking nuts threaded upon said shank at opposite sides of said pivot, a hooked free end carried by said pawl, and a ratchet plate having teeth to be engaged by said hooked end.
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In testimony whereof, I affix my signature in presence of two witnesses.
55

WILLIAM BARTHOLOMEW.

Witnesses:

G. A. WEBNER,

WM. KROGMAN.