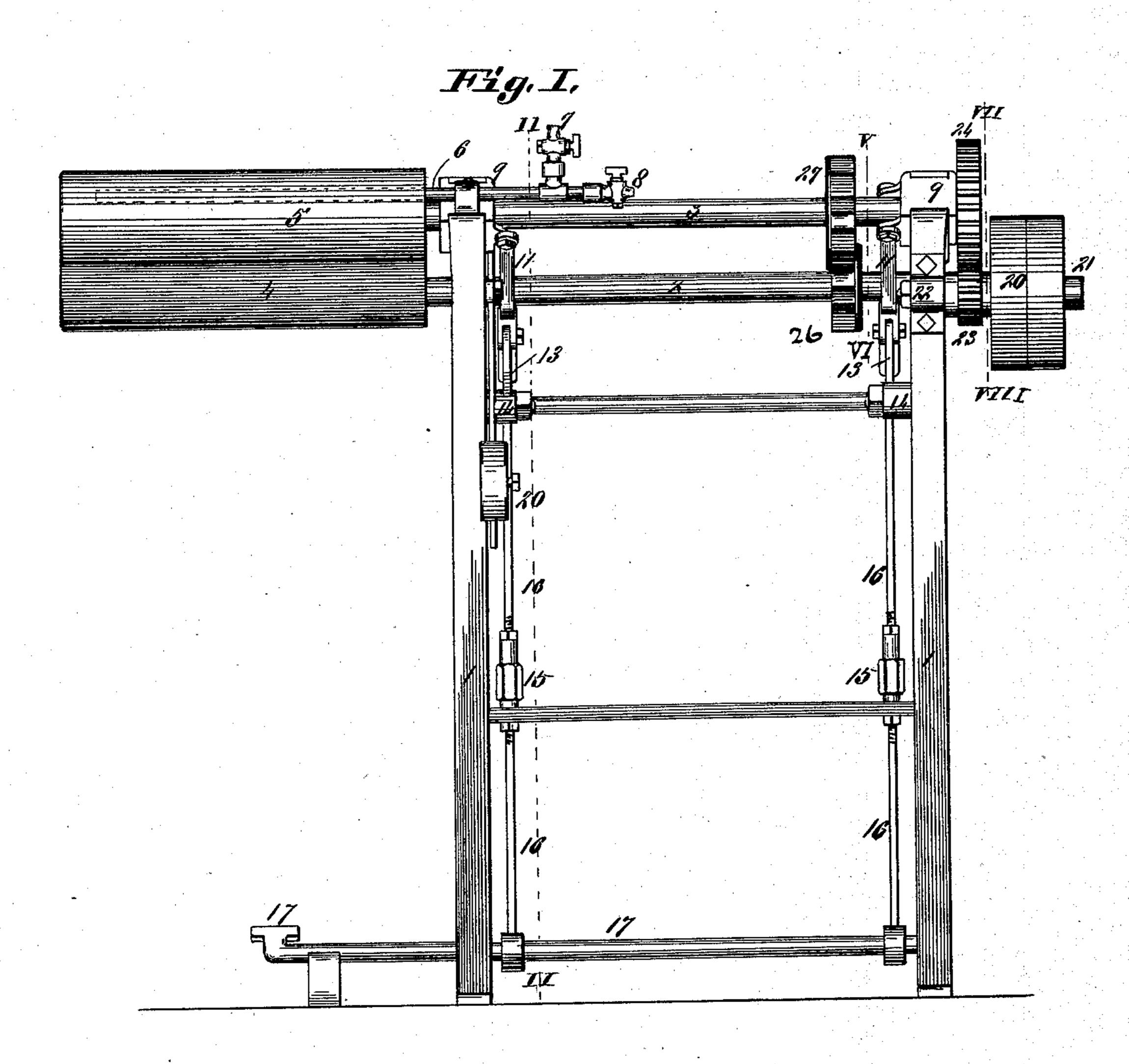
(No Model.)

G. J. FRITZ.

IRONING MACHINE.

No. 388,660.

Patented Aug. 28, 1888.



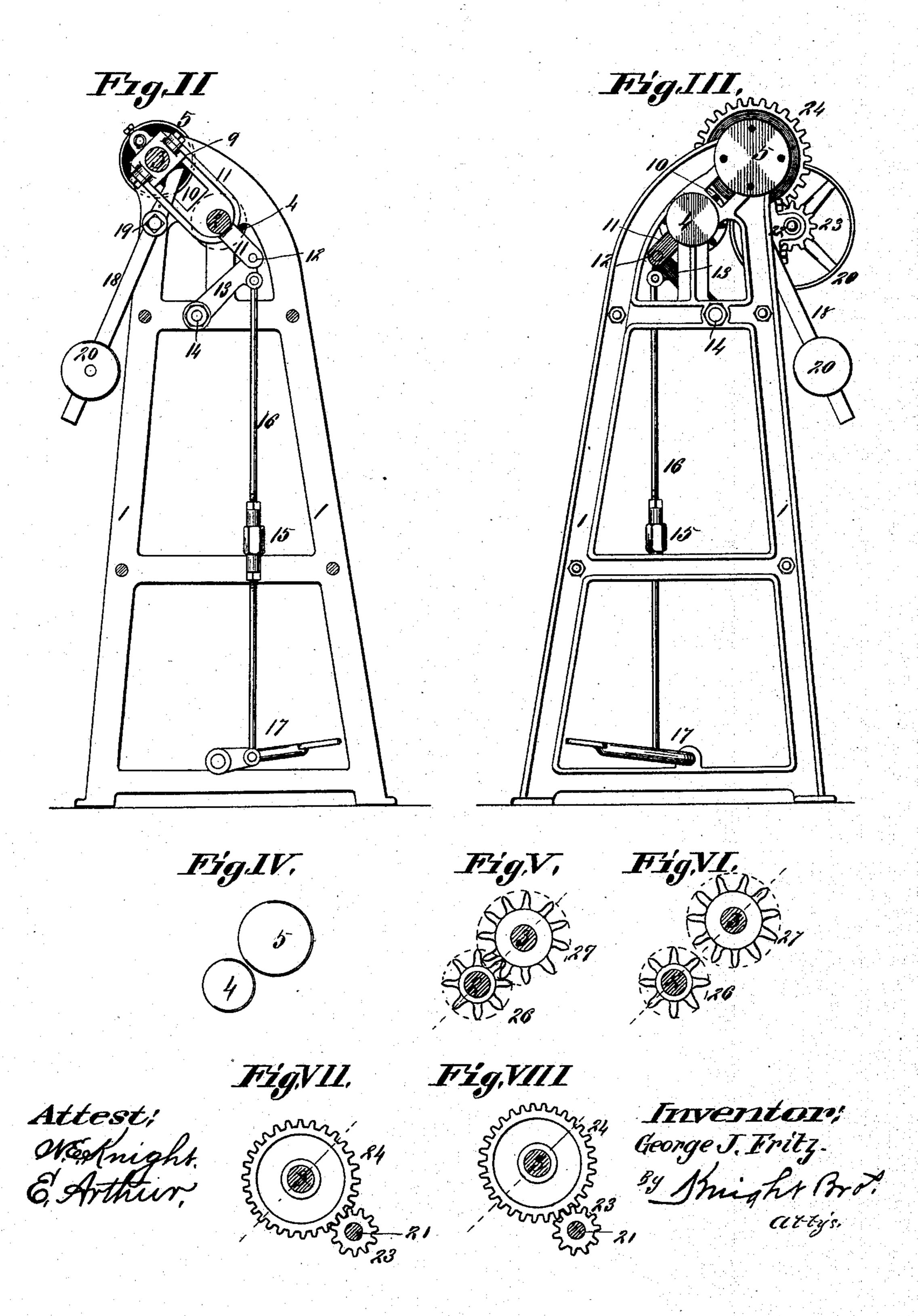
Attest; Worknight, E. Arthur, Triveritor:
George, J. Fritz
By Smight Bord.
Attys.

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## United States Patent Office.

GEORGE J. FRITZ, OF ST. LOUIS, MISSOURI.

## IRONING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 388,660, dated August 28, 1888.

Application filed December 27, 1887. Serial No. 259, 106. (No model.)

To all whom it may concern:

Be it known that I, GEORGE J. FRITZ, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improve-5 ment in Ironing-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure I is a side elevation of my improved machine. Fig. II is a vertical section taken on line II II, Fig. I. Fig. III is an end view. Fig. IV is an end view of the rolls. Figs. V and VI are sections taken on line V VI, Fig. 15 I, Fig. V showing the finger-gearing engaged and Fig.VI showing it disengaged. Figs. VII and VIII are sections taken on line VII VIII, Fig. I, Fig. VII showing the position of the gearing when the rollers are together, and 20 consequently when the gearing shown in Figs. V and VI is engaged, and Fig. VIII showing are moved apart.

My invention relates to certain improve-25 ments in ironing-machines; and it consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, 1 represents the frame of the machine, to which is journaled 3c shafts 2 and 3. On one end of the shaft 2 (preferably outside of the frame, as shown in Fig. I) is a roller, 4, and parallel with it on the shaft 3 is a roller, 5. The roller 5 is made hollow, and is provided with means for heat-35 ing it, consisting, preferably, of a gas-pipe, 6, which extends into the roller, and which is provided with a gas-valve, 7, and an air-valve, 8. The shaft 2 of the roller 4 is mounted in fixed bearings, while the shaft 3 of the roller 5 40 is movable, for the purpose of allowing the roller 5 to be shifted from the roller 4 when desired. The shaft 3 is journaled in boxes 9, fitting in slots or openings 10 of the frame 1. (See Figs. II and III.) Pivoted to these boxes 45 are yokes 11, which are connected at 12 to arms 13, journaled to the frame 1 at 14. Both of the ends of the machine are provided with similar boxes, openings, and yokes.

16 represents rods connected by their upper 50 ends to the arms 13, the other ends of which are made fast to a treadle, 17. The boxes 9 l

are capable of being moved inwardly and outwardly in the slots or openings 10, and they are held in their outer position by means of a lever, 18, pivoted at 19 to the frame 1, and 55 which is provided with a counter-balance, 20, on its outer end, its inner end bearing against the under side of one of the boxes, as shown in Fig. II, the office of this lever being to hold the boxes in their outer position, and conse- 60 quently hold the roller 5 away from the roller 4, except when pressure is applied to the treadle 17, which pulls down on the arms 13 and inward on the yokes 11, drawing the rollers together, the operator applying as much 65 pressure to the treadle as is required to do the work of ironing. The rods 16 are made in two parts, each connected by right and left threaded sleeves 15, and by adjusting these sleeves, or one of them more than the other, 70 the roller 5 can be made to assume the proper position (from end to end) with relation to the the position of the gearing when the rollers | roller 4—that is, its outer end may be thrown up or down, as desired.

The roller 5 is driven continuously by means 75 of a pulley, 20, on a shaft, 21, journaled in a box, 22, by which it is secured to the frame of the machine, and on which is a pinion, 23, engaging a cog-wheel, 24, on the end of the shaft 3. As the shaft 3 is moved to carry the roller 80 5 away from the roller 4, the cog-wheel moves on the dotted lines shown in Figs. VII and VIII, and in doing so is not disengaged from the pinion 23, which is not placed directly behind it. The roller 4 is driven or turns only 85 when the roller 5 is brought toward it, or into working position. It is thus driven, and allowed to stop when not thus driven, by means of finger-wheels 26 27 on the shafts 2 and 3. The wheel 27 moves away from the wheel 26 oc when the shaft 3 is shifted on the dotted line shown in Figs. V and VI, and as the wheel 26 is placed directly behind or on the line in which the wheel 27 moves, it will be understood that these wheels will disengage when 95 the shaft 3 is moved, while the cog and pinion 23 24 do not so disengage. With this arrangement I am able to provide for the continuous driving of the roller 5, while the roller 4 operates intermittently. 100

I claim as my invention— 1. In an ironing-machine, the combination

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of the frame having inclined slots 10, a shaft mounted in fixed bearings, a movable shaft, roller on the shafts, sliding boxes in which the movable shaft is journaled, and means for shifting the movable shaft, consisting of an independently movable lever pivoted to the frame at 19, and having a bearing at one end against the under side of one of the sliding boxes, and a weight at the other end of the lever, said movable shaft being moved by the said lever in one direction, and yokes secured to the boxes, pivoted arms connected to the yokes, and a treadle, to which the arms are connected, for moving the shaft in the other direction, substantially as and for the purpose

2. In an ironing-machine, the combination of the shaft 2, mounted in fixed bearings, movable shaft 3, rollers on the shafts, sliding boxes 9, fitting in slots 10 of the frame, yokes 20 11, pivoted to the boxes and encompassing shaft 2, arms 13, pivoted to the yokes and to the frame, operating treadle, and adjustable rods 16, connecting the arms to the treadle, substantially as shown and described.

GEORGE J. FRITZ.

In presence of—GEO. H. KNIGHT, EDWD. S. KNIGHT.