(No Model.) 2 Sheets—Sheet 1.

I. HARRIS.

IRONING MACHINE.

No. 597,410. Patented Jan. 18, 1898.

Fig. 1.

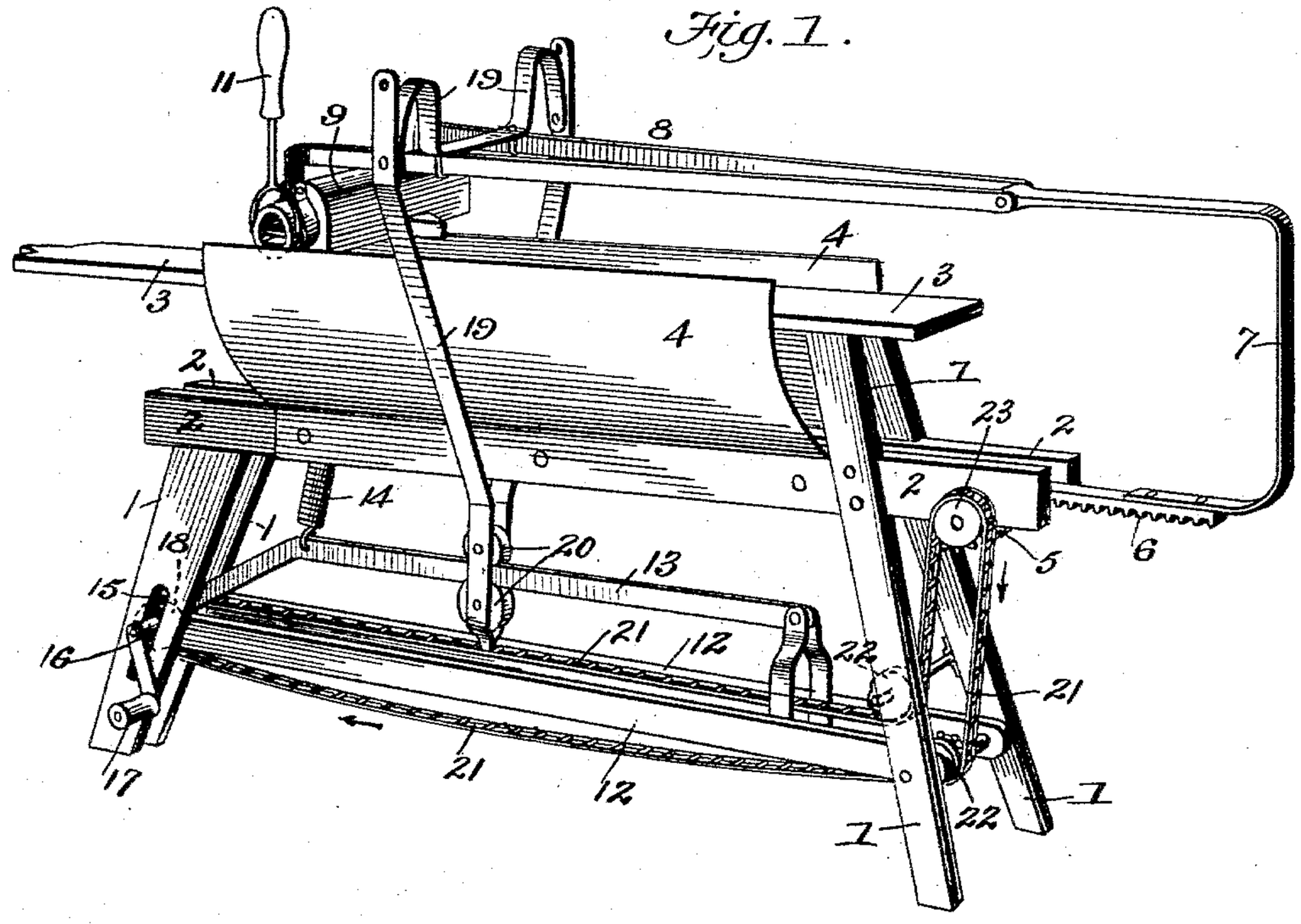
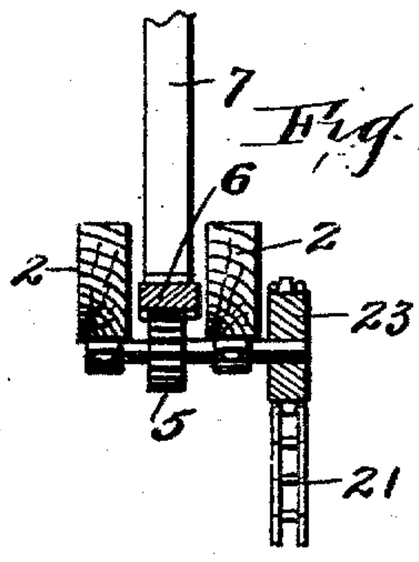


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

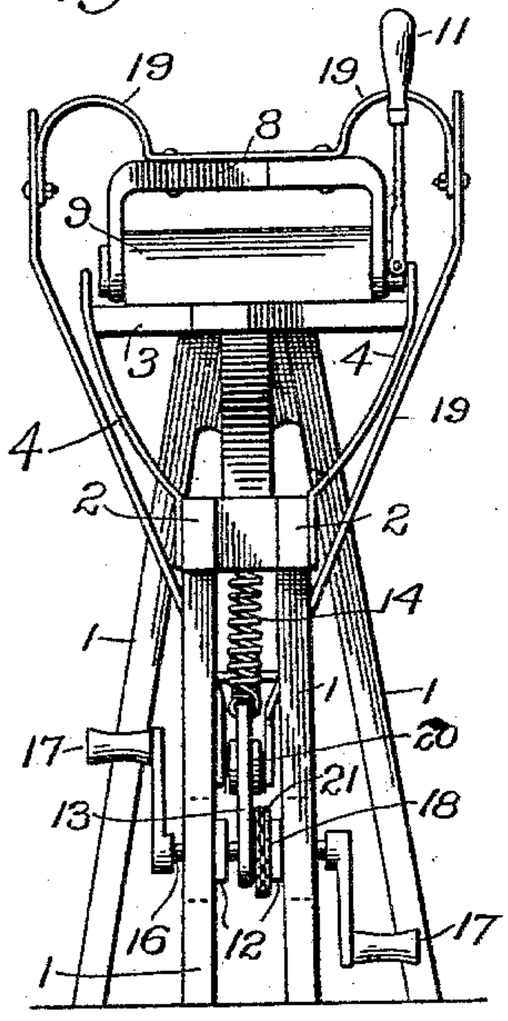
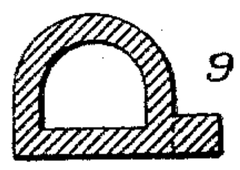


Fig. 4.



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UNITED STATES PATENT OFFICE.

ISAIAH HARRIS, OF WILMINGTON, OHIO.

IRONING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 597,410, dated January 18, 1898.

Application filed May 23, 1896. Serial No. 592,785. (No model.)

To all whom it may concern:

Be it known that I, ISAIAH HARRIS, a citizen of the United States, residing at Wilmington, in the county of Clinton and State of Ohio, have invented certain new and useful Improvements in Ironing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in ironing-machines, having for its object to provide a device of this kind in which the iron proper is operated entirely by foot-power in its backward and forward movements over the clothes being ironed.

The invention consists of a supporting-framework having a pinion mounted at one end thereof, which engages a rack having a curved support rising from the rear end thereof, an iron-supporting frame pivoted to said support, a yoked spring for holding said iron-supporting frame in its upper position, a sprocket-wheel on the shaft of said pinion, and a sprocket-chain passing around said sprocket-wheel and idler-wheels and operated by foot-cranks or pedals, said chain being itself connected to the lower end of said spring. It also consists of certain details of construction which will be more fully set forth in the following description and claims.

In the drawings forming part of this specification, Figure 1 represents a perspective view of my ironing-machine complete. Fig. 2 is a cross-sectional view through that part of the supporting-frame in which the pinion, sprocket-wheel, and rack above referred to are mounted. Fig. 3 is an end elevation of the machine. Fig. 4 is a detail cross-sectional view of the iron.

Like reference-numerals refer to like parts in the different views.

The supporting-framework of my device is made up of the standards 1 1, at the upper end of which are a pair of connecting-beams 2 2, above which beams is supported the ironing-board 3, and to the beams are connected side guides 4 4. Mounted in bearings between the beams 2 2, at one end thereof, is a pinion 5, which meshes with a rack 6, extending between said beams. Extending upwardly and forwardly from the rear end of said rack is a curved bar or support 7, to which is pivoted the iron-supporting frame 8, made up of two rods or bars, at the end of which the iron 9 is suspended. This iron is rotatably mounted in suitable bearings, is heated by gas-jet or otherwise, is flat on one side and curved on the other, and is provided with a handle 11, whereby it may be rotated for the purpose of bringing either its flat or curved surface in contact with the clothes to be ironed.

12 12 represent two beams pivoted to the rear standards 1 1 and constituting with the supplemental beam 13 a frame through which the iron 9 is actuated in an upward and downward direction. The forward end of this frame is held upward by means of a coiled spring 14, which connects said frame with the beams 2. The front standards 1 are provided with elongated slots 15 15, in which works a shaft 16, projecting laterally from the forward end of the beams 12 12. The outer ends of the shaft 16 have attached to them pedals 17 17, and at an intermediate point said shaft is provided with a sprocket-wheel 18, as clearly shown.

Connected to the upper side of the iron-supporting frame 8 is a double-yoked spring 19, which extends upwardly and thence downwardly on both sides of the ironing-board 3 to the beams 12 12. A pair of rollers 20 20, mounted in suitable bearings in the lower ends of this spring, are located on each side of the beam 13, which forms a guide for them. The extreme lower end of the spring 19 is rigidly connected to a sprocket-chain 21, which passes around the sprocket-wheel 18, idler-wheels 22 22, and the sprocket-wheel 23 upon the shaft on which the pinion 5 is mounted.

From the foregoing description the operation of my invention will be readily understood. Briefly stated, however, it is as follows: With the machine in the position in which it is shown in Fig. 1 the goods to be ironed are placed on the board 3, and the operator seated at the end of the board with his feet on the pedals 17 bears down on them, at the same time pressing the frame made up of the beams 12 and 13, and through the connection of the spring 19 with said frame forces the iron 9 down in contact with the goods. At the same

time the pedals 17 are turned, rotating the sprocket-wheel 18 on the pedal-shaft and moving the sprocket-chain 21 in the direction of the arrow. By reason of the connection of the lower end of the spring 19 with said sprocket-chain and the engagement of the pinion 5 with the rack 6 a rearward movement is imparted to the iron-supporting frame 8. When at the end of its stroke, a reverse operation to that just described will carry the iron back to its starting-point. If at any time it is desired to raise the iron from the goods, it is only necessary to relieve the pressure from the pedals, when the spring 14 will raise it.

My invention is particularly applicable to home use, but it may also be used in laundries. When starched goods are being ironed, the iron 9 is turned by the handle 11, so that its curved outer surface may be brought in contact with the goods, and when unstarched goods are being ironed a reverse movement of the lever 11 will bring the flat side of the iron in contact with the goods.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the main frame having an ironing-board secured to the upper end thereof, a pivotally-mounted iron-supporting frame, a spring for normally holding said iron-supporting frame in its raised position, a pedal-shaft rotatably and slidingly mounted in said main frame and connections between said pedal-shaft and said iron-supporting frame whereby the free end of said iron-supporting frame may be depressed and a longitudinal back-and-forth movement may be imparted thereto, substantially as described.

2. The combination of a main frame having an ironing-board at the upper end thereof, a rack engaging a pinion mounted in said frame, a curved support extending upwardly and forwardly from said rack, an iron-supporting frame pivoted to said curved support, an iron mounted in said frame, a spring for normally holding said iron-supporting frame in its raised position, a pair of beams pivoted to the main frame, a movable connection between said beams and said iron-supporting frame, a sprocket-wheel secured to the shaft upon which said pinion is mounted, a sprocket-wheel mounted at the forward ends of said beams, pedals for turning said latter sprocket-wheel and a chain passing around said sprocket-wheels and connected to an extension upon said iron-supporting frame, substantially as and for the purpose described.

3. The combination with a main frame having an ironing-board at the upper end thereof, and a pair of parallel beams located beneath said ironing-board, of a rack moving between said parallel beams, a pinion mounted in said beams meshing with said rack, a sprocket-wheel upon the outer end of the shaft upon which said pinion is mounted, a curved support extending upwardly and forwardly from said rack, an iron-supporting frame pivoted to said curved support, an iron mounted in said frame, a pair of beams pivoted at one end to the main frame, a supplemental beam connected thereto and located above the same, a spring connecting said supplemental beam with the main frame, a main shaft connected to the front ends of said pivoted beams extending through elongated slots in the uprights forming part of said main frame, pedals upon the outer ends of said main shaft, a sprocket-wheel thereon, a sprocket-chain passing around said sprocket-wheel on the shaft to which said pinion is connected and around suitable idle sprocket-wheels and around the sprocket-wheel on the main shaft, arms connecting said iron-supporting frame with said sprocket-chain, and guide-pulleys in said arms located one on each side of said supplemental beam, substantially as and for the purpose described.

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

ISAIAH HARRIS.

Witnesses:
A. M. SANDERSON,
ISAIAH SMITH.