(No Model.)

F. BALDWIN.

STEAM MANGLE.

No. 482,609. Patented Sept. 13, 1892.

Fig. 1.

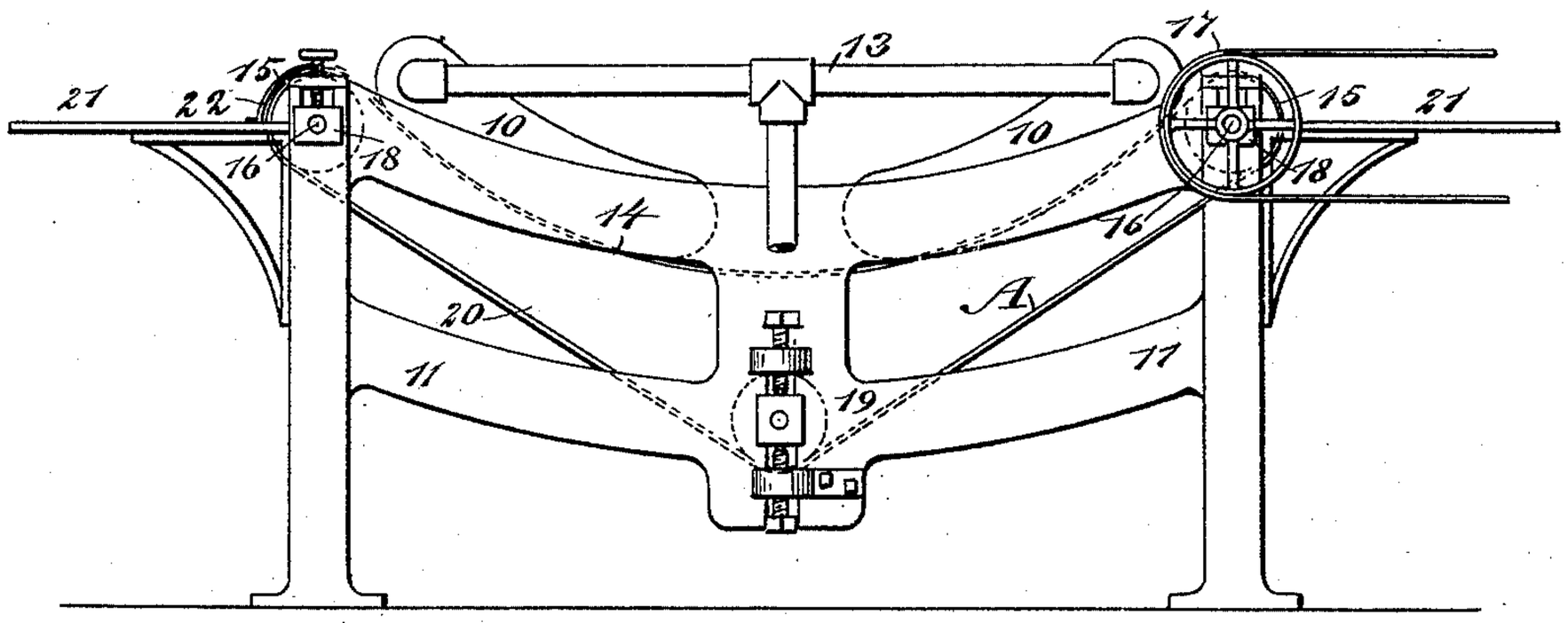
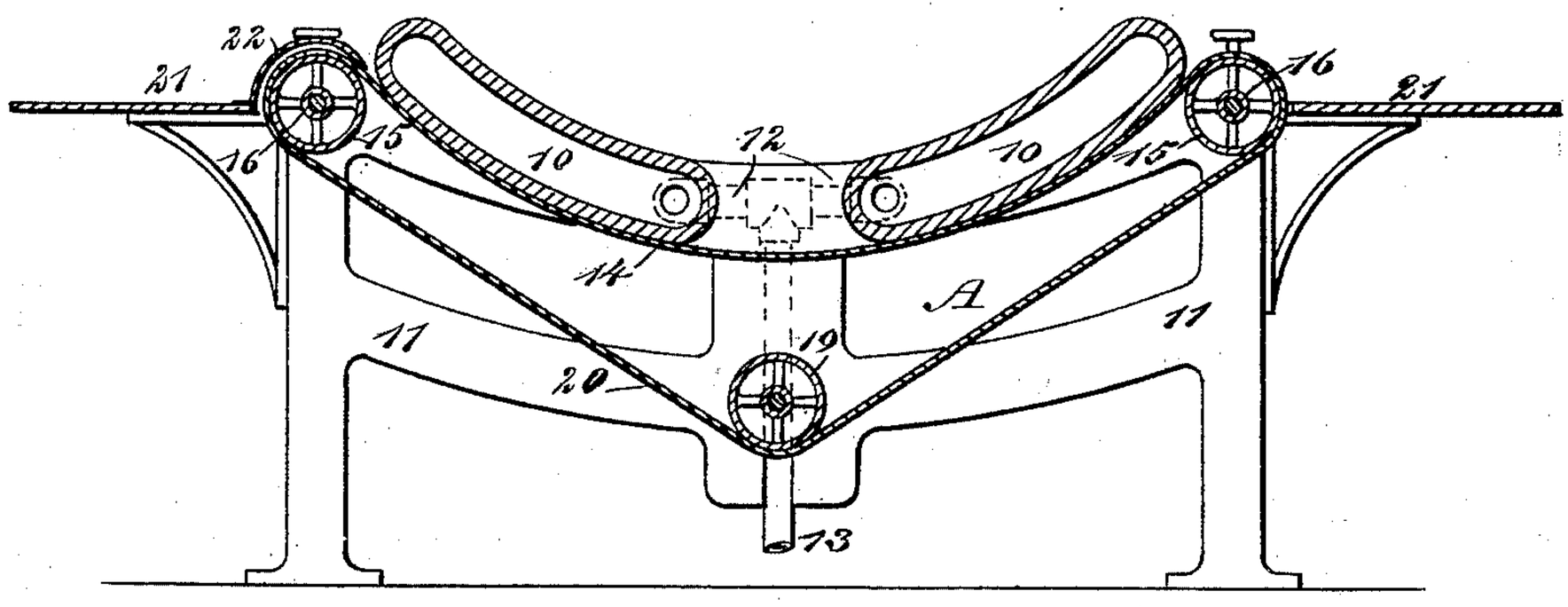


Fig. 2.



WITNESSES:
J. A. Criswell.
C. Sedgwick

INVENTOR
F. Baldwin
BY Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANK BALDWIN, OF NEW YORK, N. Y.

STEAM-MANGLE.

SPECIFICATION forming part of Letters Patent No. 482,609, dated September 13, 1892.

Application filed August 1, 1891. Serial No. 401,365. (No model.)

To all whom it may concern:

Be it known that I, FRANK BALDWIN, of New York city, in the county and State of New York, have invented a new and useful Improvement in Steam-Mangles, of which the following is a full, clear, and exact description.

My invention relates to an improvement in steam-mangles, and has for its object to so construct a mangle of this description that an endless belt will be constantly in close frictional engagement with the convexed faces of spaced stationary arms.

A further object of the invention is to provide a machine of the character described, which will be exceedingly simple, durable, economic, and effective in operation.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in both the views.

Figure 1 is an end view of the improved mangle, and Fig. 2 is a central vertical section through the same.

Two or more stationary horizontally-aligned heating-irons 10 are supported at their extremities in a frame preferably consisting of two spaced end pieces 11, which may be connected by rods, bars, beams, or in any approved manner. The irons are stationary upon their supports, being fixed thereto, and are so located that a space 12 intervenes their adjacent side surfaces. The irons are hollow, having closed ends, and are segmental or curved in cross-section, their under surfaces being convexed and forming segments of a common circle. Steam, hot air, or other heating agent is introduced by suitable pipes 13 in one end of the irons, which heating agent exhausts or discharges at the opposite ends. The entire under or convexed faces of the irons are constantly, when the mangle is not in use, in engagement with the upper member 14 of an endless belt A, as shown in Fig. 2. This belt travels over two pulleys 15, preferably drum-pulleys, attached to shafts 16, journaled in the frame, one at each upper side of the machine a short distance in front of the outer edges of the irons. One of the shafts is a drive-shaft, being provided with a driving-pulley 17, and both shafts are journaled in adjustable boxes 18, held to slide in the frame as shown in Fig. 1. More or less tension is imparted to the belt through the medium of a pulley 19, under which the lower member 20 of the belt is passed at or near its center. The tension-pulley is preferably as long as the belt is wide, and its bearings are vertically adjustable in the frame of the machine by the manipulation of screws engaging with the bearing-boxes, as shown in Fig. 1, or in any other approved manner. A table 21 is located at each side of the machine adjacent to its side pulley 15, one of which tables is adapted to support the articles to be mangled and the other to receive said articles when mangled. The pulley at the feeding side of the machine is preferably provided with a guard 22.

In the operation of the machine the articles to be mangled are passed over the guard 22 and introduced between the upper member of the belt and the under face of the iron adjacent to the guard. The clothes are damp when passed in engagement with this iron, and while passing under the said iron the water in the clothes is vaporized to such an extent that when the clothes reach the open space 12 before engaging with the next iron a large percentage of the vapor escapes and the clothes pass comparatively dry to the next iron and are perfectly smooth, and in most cases almost entirely and in some cases entirely dry when they reach the receiving-table 21. The belt serves as a carrier and also as a compressing agent, as it maintains the clothes or articles to be operated upon in positive and close engagement with the convexed faces of the irons. The clothes are far better mangled when passed over a hot convexed surface than over a concaved surface, as they cling to the former with much more tenacity than to the latter surface, and the traveling belt may be much more conveniently made to engage continuously a convexed surface than a concaved one.

It is evident that the device is exceedingly

simple, durble, and economic in its construction, and it is further evident that the machine is most efficacious in operation.

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

A mangle comprising a frame, a plurality of stationary horizontally-aligned irons mounted on the frame with a space between their adjacent edges and having their lower faces convex and forming segments of a common circle, means for heating the irons, an endless belt, the upper run of which lies against the lower convex faces of the irons, and rollers carrying the said belt, substantially as set forth.

FRANK BALDWIN.

Witnesses:
WILLIAM SAWYER,
THO. MCGRATH.