M. QUIN.

MACHINE FOR TIGHTENING IRON BANDS ON BALES.

No. 189,138. Patented April 3, 1877.

Fig. 1.

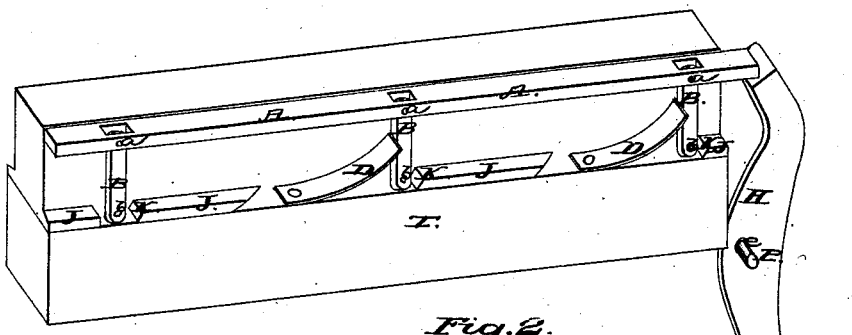


Fig. 2.

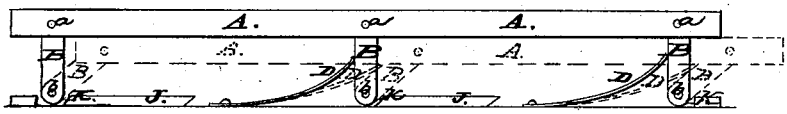
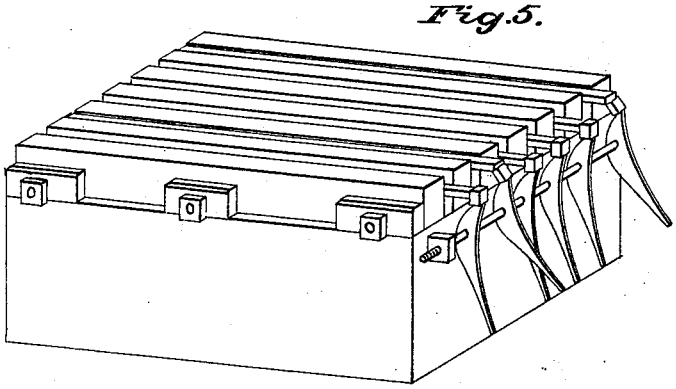


Fig. 3.

Fig. 4.

Fig. 5.



Attest

B. B. Richardson
W. D. Soresen.

Inventor:

Michael Quin.

UNITED STATES PATENT OFFICE.

MICHAEL QUIN, OF GALVESTON, TEXAS.

IMPROVEMENT IN MACHINES FOR TIGHTENING IRON BANDS ON BALES.

Specification forming part of Letters Patent No. **189,138**, dated April 3, 1877; application filed February 14, 1877.

To all whom it may concern:

Be it known that I, MICHAEL QUIN, of Galveston, in the county of Galveston and State of Texas, have invented a new and Improved Machine and Mode for Tightening Iron Bands on Cotton-Bales during the process of tying the same while compressing the bales, which invention may be attached to any form of compress now in use for compressing cotton-bales; and I do hereby declare the following to be a full and exact description of the same.

The nature of my invention consists in providing a series of metal bars to be inserted between what is known as the "channel bars or teeth," both on the upper and lower platens of a compress used for compressing cotton-bales, which bars thus inserted shall be so attached to the channel-bars that, by the force of springs, the said bars will be kept below the surface of the teeth on the platens, allowing ample space to insert the iron bands to be used in tying the bales, in the same manner as they are now universally inserted. I also provide a lever or levers by which the said bars may be elevated and brought in contact with the iron band, pressing it tightly against the bale, thereby taking up all the slack, and the bars will be retained in that position by the pressure of the bale, and will so remain until the pressure on the bale is relaxed, when the said bars will resume their original position; and that each of the bars so placed between the teeth on the platens shall be independent in action of each other, and be movable at will by the men engaged in tying the bale, either by a lever over each bar, or by a lever which may be moved from bar to bar, and the levers, forming part of this invention, may be fixed to slide on a rod or bar to be placed along each platen, or may be unattached, as convenience suggests or requires.

To enable others skilled in mechanics to make and use my invention, I will proceed to describe its construction and operation; and I do hereby declare the following is a full, clear, and exact description of the construc- and operation of the same, reference being had to the annexed drawing, making a part of this specification, in which—

No. 1 is a perspective view of the invention, showing the bar for tightening the bands when it has been by use of the lever elevated to the surface of the channel bars or teeth, and in contact with the cotton-bale. No. 2 is a longitudinal elevation, and the dotted lines show the bar when, by action of the springs, it is depressed between the channel-bars, so that the iron bands may be readily inserted. No. 3 is a transverse section, showing how the legs are let into the horizontal bar, and also the drilled hole through which is inserted the pins or pivots on which it moves. No. 4 shows the form of a lever which may be used and removed at will.

A is the horizontal bar, which, when operated on by the lever H, is brought in contact with the iron hand, and presses the same tightly against the bale. B are the legs by which the bar A is attached to the platen of the compress, which legs are inserted into a slot prepared for them in the bar A, and are there secured by pins *a a a*, so that the bar A shall have free motion on said legs. *b* represents holes drilled in the foot of each leg B, and by which the said legs are to be attached to the platen of a compress, between the channel bars or teeth, either by pins running from tooth to tooth, or by a rod running through all the teeth, and passing through *b*, and on which pin or rod the legs B shall have free motion. D represents springs of either metal, rubber, or other material, to be so applied as to keep the horizontal bar A depressed below the surface of the channel bars or teeth, as shown by the dotted lines and letters in Fig. 2, retaining it in that position until elevated by the lever H, as before described. E represents a hole drilled in lever H, so that it may slide on a rod, P, running along the platen of the press in front of and a little below the channel bars or teeth. H represents a form of lever to be used in elevating the bar A against the bale of cotton; but the form of said lever may be altered to suit the will of the party constructing or using the same.

Another form of lever is shown at N, No. 4. J represents the flange at the base of each channel bar or tooth, in which should be cut a slot, K, to give free motion to the legs B. K represents the slots cut in the flanges of the channel-bars, in order to give free motion

to legs B. P represents a rod running along the front of each platen, (both upper and lower,) and firmly attached thereto, acting as a fulcrum for the lever H, and on which the lever or levers may be permanently attached. T represents a transverse section of the lower platen of a compress, showing how the horizontal bar and lever should be applied.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, in a cotton-press, of the horizontal bar A, parallel bars B, pivoted to platen T and bar A, and depressing springs D, with rod P and operating lever or levers H, all constructed as shown and described.

MICHAEL QUIN.

Witnesses:
B. B. RICHARDSON,
W. F. SWAIN.