(No Model.)

A. R. TIFFANY.

MACHINE FOR TWISTING WIRE.

No. 532,406. Patented Jan. 8, 1895.

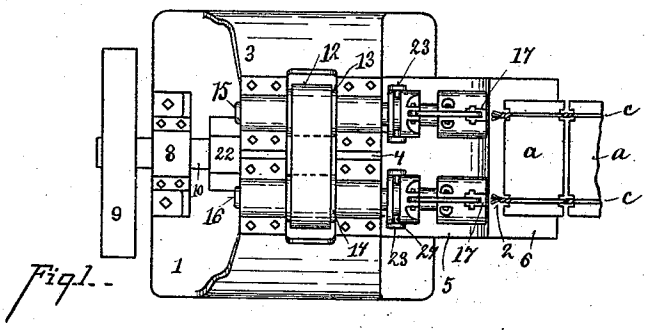

Fig. 1.

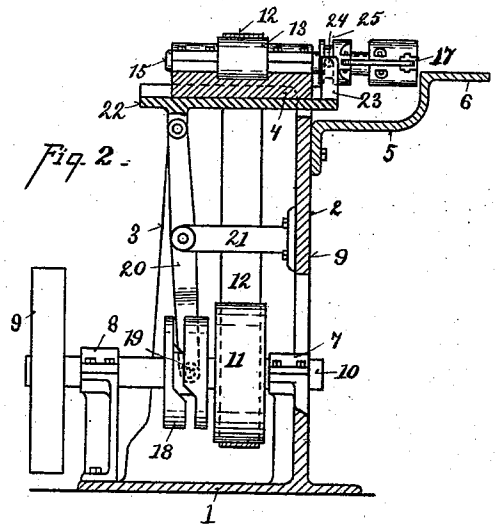

Fig. 2.

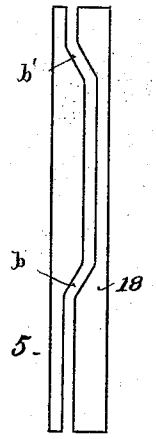

Fig. 5.

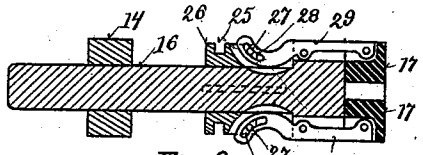

Fig. 3.

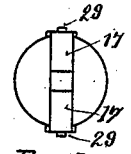

Fig. 4.

Witnesses
C. M. Miles.
Oliver B. Kaiser.

Inventor
Albert R. Tiffany
By Wood & Bond
Attorneys

UNITED STATES PATENT OFFICE.

ALBERT RODGERS TIFFANY, OF DAYTON, OHIO, ASSIGNOR OF ONE-HALF TO WESLEY YOUNG, OF SAME PLACE.

MACHINE FOR TWISTING WIRE.

SPECIFICATION forming part of Letters Patent No. 532,406, dated January 8, 1895.

Application filed May 17, 1894. Serial No. 511,605. (No model.)

To all whom it may concern:

Be it known that I, ALBERT RODGERS TIFFANY, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Machines for Twisting Wires, of which the following is a specification.

The object of my invention is to provide a machine which will twist the double strands of wire of a series of slats into an endless band, being adapted to form one step of the process shown in my application filed April 24, 1894, Serial No. 508,854, the subject-matter of said application being baskets, and the process of forming the same.

The features of my invention are more fully set forth in the description of the accompanying drawings making a part of this specification, in which—

Figure 1 is a top plan view of the machine. Fig. 2 is a side elevation partly in section. Fig. 3 is a sectional view of the twisting jaws. Fig. 4 is an end view of the same. Fig. 5 is a plan view of the cam.

1, represents the base of the frame of the machine.

2, 3, represent the upright sides of the frame; 4, the top of the frame; 5, a bracket supporting a table 6, attached to the side of the frame.

7, 8, represent journaled bearings; 9, a driving pulley secured to the shaft 10, which turns in the bearings 7, 8.

11, represents the transmitting pulley; 12, the belt which passes over the pulleys 13, 14, attached to the spindles 15, 16, which are suitably supported in journal bearings on the top of the frame.

17, represents twisting jaws. These twisting jaws are operated automatically to make two twists at each revolution of the machine. This is accomplished by the automatically opening and closing jaws 17, to grip the double strands of wire 2 of the band of slats. This automatic opening and closing of the jaws to grip and release the strands of wire is accomplished by the following mechanism.

18, represents a cam pulley provided with a groove of the form shown in Fig. 5.

20, represents a lever provided with a roller 19, journaling on its lower end which travels in the groove of the cam pulley. Said lever is journaled to the bracket arm 21, and hinged to the slide 22. Said slide is provided with yokes 23.

24, represents pintles engaging with the grooves 25, of the collars 26, which are rigidly attached to the spindles 15, 16.

27, represents pins attached to said collars which travel in circular slots 28, of the levers 29, which are hinged to the head of the spindles 15, 16. The front ends of the levers 29, are hinged to the jaws 17.

Mode of operation: When the machine is set in operation the journal 19, travels in the slot of cam 18, until it reaches the incline *b* which moves the lever 20, and throws the slide 22, forward. This moves the collars 26, forward on their spindles. The engagement of the pins 27, with the slots 28, on the ends of the levers 29, moves their rear end outward and drives the jaws 17, together. The endless band has been laid upon the table as shown in Fig. 1, and the double strands of the two ends of the bands of wire are inserted into the jaws before the jaws are closed. The closing of the jaws grasps the strands of wire firmly and as these jaws are revolved by the belt 12, the strands of wire are twisted. As soon as the roller 19, has reached the incline *b'* of the cam groove, the collars 26, are drawn backward and the jaws released. By this means the series of slats *a* are secured into an endless band by the twisting of the double wires of strands *c*.

I claim—

1. In a wire-twisting machine, the combination with spindles provided at their ends with movable jaws, of mechanism adapted to rotate said spindles, jaw-operating levers fulcrumed upon opposite sides of said spindles and pivotally connected to the jaws, collars keyed upon said spindles and connected by means of pins to curved slots in the ends of the jaw-operating levers, and means for moving said collars longitudinally upon the spindles at stated intervals, substantially as described.

2. In a wire-twisting machine, the combination with spindles provided at their ends with movable jaws, of means for rotating said spindles, jaw-operating levers fulcrumed

upon the spindles and pivotally connected at their ends to said jaws, collars keyed on the said spindles and connected by pins to curved slots in the ends of the jaw-operating levers, a lever fulcrumed on the machine frame and having one end so connected to the collars on the spindles as to move the same longitudinally on the spindles, and a cam having an angular slot in which lies a journal on the other end of said lever, substantially as described.

In testimony whereof I have hereunto set my hand.

ALBERT RODGERS TIFFANY.

Witnesses:
FRANK M. COMPTON,
A. L. WILSON.