W. E. MORELAND.

BALE TIE.

APPLICATION FILED MAY 17, 1911.

1,008,850. **Patented Nov. 14, 1911.**

FIG 1

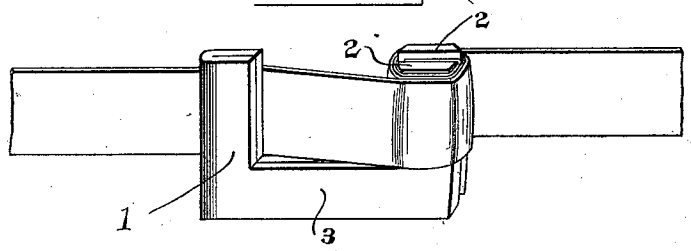


FIG 2

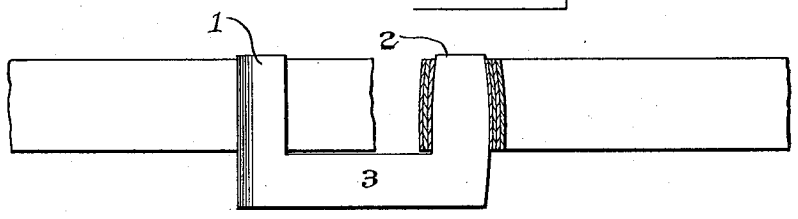


FIG 3

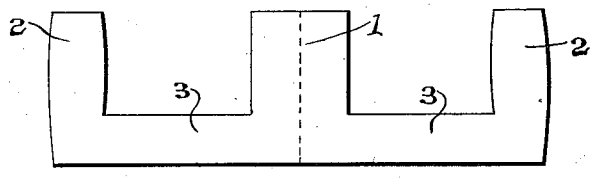
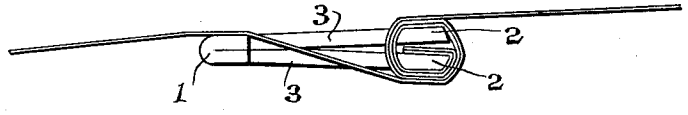


FIG 4



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BALE-TIE.

1,008,850. Specification of Letters Patent. Patented Nov. 14, 1911.

Application filed May 17, 1911. Serial No. 627,764.

To all whom it may concern:

Be it known that I, WILLIAM E. MORELAND, a citizen of the United States, residing at Union City, in the county of Campbell and State of Georgia, have invented new and useful Improvements in Bale-Ties, of which the following is a specification.

This invention supplies a novel form of tie for securing the ends of binders employed for securing fibrous material after the same has been compressed into bales, the tie being specially adapted for retaining the ends of the binder after they have been wound on and about each other.

The invention relates to a bale tie of substantially U form, one member being adapted to receive the end portions of the binder after the same have been wound about each other, the other member of the tie engaging the binder to form a stop to prevent the unwinding of the ends of the binder after being slipped upon the tie from the bale tying machine.

The invention consists of the novel features, details of construction and combination of parts, which hereinafter will be more particularly set forth, illustrated in the accompanying drawing, and pointed out in the appended claims.

Referring to the drawing, forming a part of the specification, Figure 1 is a perspective view of a bale tie embodying the invention. Fig. 2 is a side view thereof, a part of the binder being in section. Fig. 3 is a view of the blank from which the tie is formed. Fig. 4 is a top view.

Corresponding and like parts are referred to in the following description, and indicated in all the views of the drawing, by the same reference characters.

The tie is approximately of U form and comprises end members 1 and 2 and a longitudinal member 3. The end member 2 comprises similar parts which are separated so as to receive between them the ends of the binder. The longitudinal member 3 is likewise formed of two parts which come together near the member 1, thereby admitting of the parts of the member 2 having a limited movement toward and from each other. The parts comprising the member 1 come together. The tie is preferably formed from a blank such as indicated in Fig. 3, said blank being folded upon itself midway of its ends, the folded part forming the member 1. The member 2 is bulged midway of its ends, the purpose being to prevent slipping of the rolled or wound ends of the binder therefrom when the tie is in operative position. Moreover, this construction results in reducing the outer end of the member 2 so that the rolled ends of the binder may be readily slipped thereon when pressed from the spindle of the tying machine. After the rolled portion of the binder has been slipped upon the member 2 the tension upon the middle portion of the binder causes the same to stretch or perceptibly bulge, thereby enabling the edge portions of the binder to fit close to the parts of the member 2 upon opposite sides of the bulge, hence the bale may be subjected to the usual rough usage in handling without fear of disengaging the tie from the binder.

In practice after the binder, which preferably consists of a metal strap, is passed around the bale and has its end portions brought together and inserted in a slot in the spindle of a bale tying machine, said spindle is rotated to wind or roll the ends of the binder thereon and about themselves. After the binder has been tightened the tie is placed in position to admit of the rolled ends of the binder slipping upon the member 2 of the tie, the terminal portions of the binder passing between the parts of said member 2, as indicated most clearly in Fig. 1. The member 1 of the tie forms a stop which engages an end portion of the binder to prevent backward movement of the tie and an unwinding of the rolled ends of the binder from the member 2.

From the foregoing description, taken in connection with the accompanying drawing, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention what is claimed as new, is:—

1. A bale tie of substantially U form embodying like parts connected at one end, one of the end members having its parts pressed together and the other end member having

its parts separated and tapering from the center toward the extremities, and the longitudinal member having its parts touching adjacent the closed-end member and gradually spreading toward the open-end member.

2. In combination a tie of substantially U form embodying like parts connected at one end, one of the end members having its parts pressed together and the other end member having its parts separated and tapering from the center toward the extremities to form a bulge, the longitudinal member having its parts touching adjacent the closed-end member and gradually spreading toward the open-end member, and a binder having its end portions brought together between the parts of the open-end member of the tie and rolled about the parts of said member and prevented from disengagement therefrom by the bulge and the spring action of the parts of said member, and a portion of the binder engaging the closed-end member of the tie to prevent turning thereof and the unwinding of the binder therefrom.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM E. MORELAND.

Witnesses:
ROBT. F. BUTLER,
J. S. BARRON.