

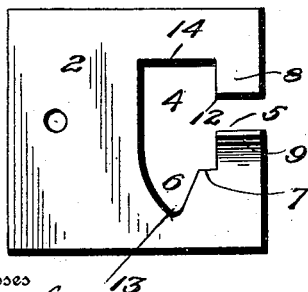
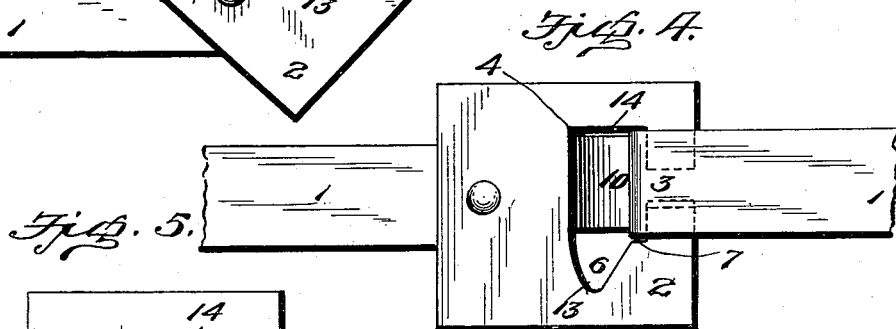
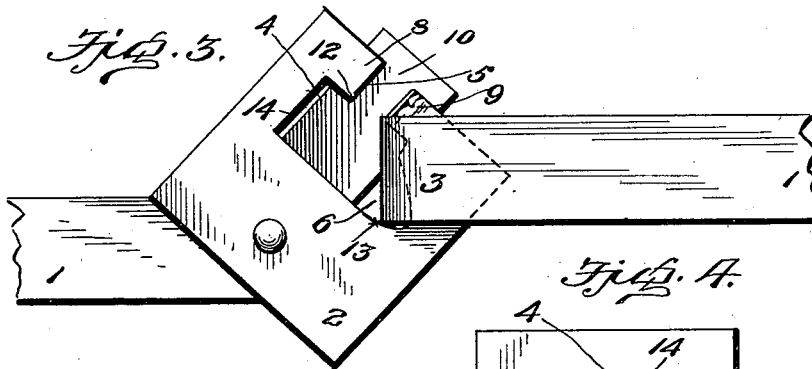
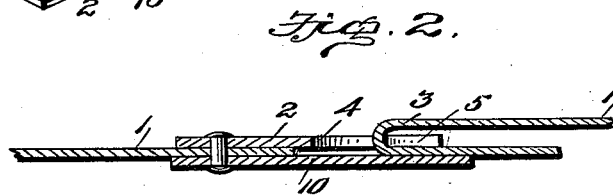
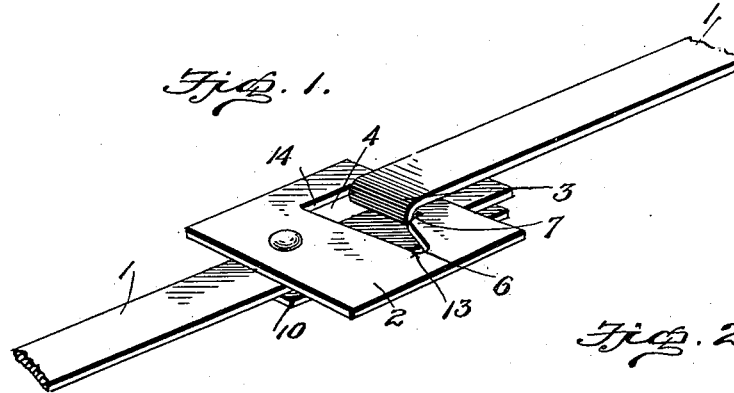
No. 648,783.

Patented May 1, 1900.

A. J. PFEFFER.
BALE TIE.

(Application filed Feb. 15, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

ALBERT J. PFEFFER, OF BELLVILLE, TEXAS.

BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 648,783, dated May 1, 1900.

Application filed February 15, 1900. Serial No. 5,330. (No model.)

To all whom it may concern:

Be it known that I, ALBERT JOHN PFEFFER, a citizen of the United States, residing at Bellville, in the county of Austin and State of Texas, have invented certain new and useful Improvements in Bale-Ties; and I do 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.

The invention relates to bale-ties.

The object of the invention is to provide a bale-tie which shall be simple of construction, durable in use, and comparatively inexpensive of production, easily operated, and which when fastened about a bale cannot possibly become detached therefrom.

To this end the invention consists in certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved bale-tie, showing the ends of the straps fastened together. Fig. 2 is a longitudinal sectional view through the bale-tie and the ends of the straps. Fig. 3 is a plan view illustrating the first step of engaging the hooked end of the strap with the fastening-head. Fig. 4 is a similar view illustrating the final step. Fig. 5 is a plan view of the head. Fig. 6 is a front end view of the fastening-head.

In the accompanying drawings the same reference characters indicate the same parts of the invention.

1 denotes the strap of the bale-tie, and 2 the head. One end of the strap is pivoted or otherwise secured to the head, and the other end of the strap is provided with or bent to form a hook 3. The head is formed with an opening 4, intersected by a slot 5. One of the end walls of the opening 4 is curved to one side to form a recess 6 and is formed with a shoulder 7. The slot 5 is formed by the laterally-projecting lips 8 and 9, the latter of which inclines slightly upwardly, as shown in Fig. 6 of the drawings.

10 denotes a latch pivoted to the head and adapted to project under the slot 5, and when the hooked end of the band is engaged with the head prevents it from straightening out, due to the enormous pressure of the bail, and

thereby prevents the end of the band becoming disengaged from the head.

I will now explain the manner of attaching the hooked end of the band to the head of the bale-tie. After the strap has been clasped around the bale the head is sprung to one side, as shown in Fig. 3, and the hooked end of the bale is slipped under the slightly-inclined lips 9 and engaged with the end wall of the recess 6. The distance between the point 12 of the lips 8 and the point 13 of the wall of the recess 6 is greater than the width of the band, so that after the band has been engaged with the head and the parts are in the position shown in Fig. 3 by releasing the ends of the band the tension or pressure of the bale will draw the head from the position shown in Fig. 3 to that shown in Fig. 4, in which it will be seen that the band slips down and engages the lips 8 and 9 and is confined between the shoulder 7 and the end wall 14 of the opening 4. The distance between the shoulder 7 and the end wall 14 of the opening corresponds to the width of the band, so that the pressure of the material around which the band is placed will hold the hooked end of the band in the position shown in Fig. 4, in which position it will be impossible for the band to become accidentally disengaged from the bale. The lips 9 being elevated a slight distance above the arm 8 facilitates the introduction of the hook into the opening 4.

By pivoting the ends of the fastener to one end of the band and forming it with an opening, the interior walls of which are shaped as hereinbefore set forth, it is only necessary to draw the band that degree of tightness around the bale in which it remains after the hooked end has been engaged with the head. In a great number of band-fasteners it becomes necessary in connecting the ends of the bands to draw them beyond the point at which they remain when they are locked. This requires additional labor, which is rendered unnecessary by the employment of the present invention.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my improved bale-tie will be readily apparent without requiring an extended explanation.

It will be seen that the bale-tie is simple of construction, that such construction permits of its manufacture at small cost, and that it is exceedingly well adapted for the purpose for which it is designed.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a bale-tie, the combination with a band; of a fastening-head, said head being pivoted to one end of said band and provided with an opening 4 intersected by a slot 5 formed by inwardly-projecting lips 8 and 9, one of the end walls of said slot being curved to form a recess 6 and a shoulder 7, and the other end wall being straight, the greatest distance between the wall of the recess 6 and the innermost end of the lip 8 being greater than the width of the band, and the greatest distance between the opposite end wall of the opening 4 and the innermost end of the lip 9 being less than the width of the band, substantially as and for the purpose set forth.

2. In a bale-tie, the combination with a band; of a fastening-head, said head being pivoted to one end of said band and provided with an opening 4 intersected by a slot 5 formed by inwardly-projecting lips 8 and 9, one of the end walls of said slot being curved to form a recess 6 and a shoulder 7, and the other end wall being straight, the greatest

distance between the wall of the recess 6 and the innermost end of the lip 8 being greater than the width of the band, and the greatest distance between the opposite end wall of the opening 4 and the innermost end of the lip 9 being less than the width of the band, one of said lips being inclined slightly above the other, substantially as and for the purpose set forth.

3. In a bale-tie, the combination with a band; of a fastening-head, said head being pivoted to one end of said band and provided with an opening 4 intersected by a slot 5 formed by inwardly-projecting lips 8 and 9, one of the end walls of said slot being curved to form a recess 6 and a shoulder 7, and the other end wall being straight, the greatest distance between the wall of the recess 6 and the innermost end of the lip 8 being greater than the width of the band, and the greatest distance between the opposite end wall of the opening 4 and the innermost end of the lip 9 being less than the width of the band, and a latch pivoted to said head and adapted to project under the slot and to bear against the hooked end of the band when it is engaged with said head, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

A. J. PFEFFER.

Witnesses:

CLEM GLENN,
A. S. HOLLAND.