

(Model.)

J. W. GRISWOLD.
BALE TIE.

No. 466,563.

Patented Jan. 5, 1892.

Fig. 1.

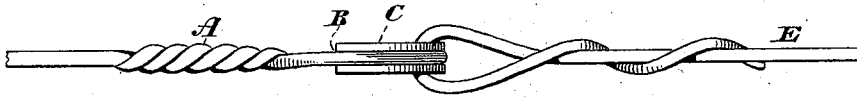


Fig. 2.

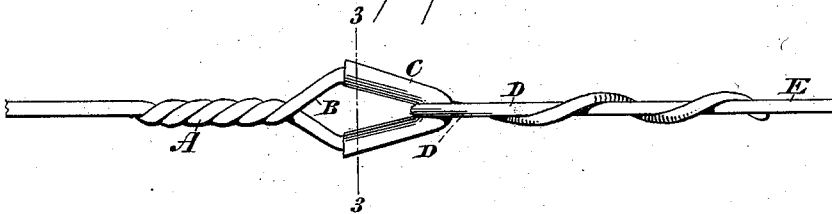


Fig. 3.

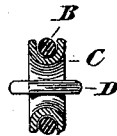
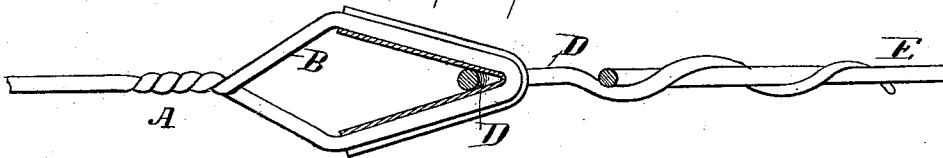


Fig. 4.



WITNESSES:

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BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 466,563, dated January 5, 1892.

Application filed June 16, 1891. Serial No. 396,523. (Model.)

To all whom it may concern:

Be it known that I, JOHN WOOL GRISWOLD, of Troy, Rensselaer county, New York, have invented a new and useful Improvement in Adjustable Bale-Ties, of which the following is a specification.

My invention relates to that class of bale-ties which are usually combined with or formed at the ends of a wire band which surrounds the bale, and more particularly to that variety of adjustable tie which embodies substantially an eye or loop at one extremity of the band, through which eye or loop the other end of the band is passed, drawn tight, and then secured.

My invention consists in a wire bale-band having at one end an eye or loop, and in said eye a saddle or thimble having a V-shaped opening adapted to receive the opposite end of said band.

In the accompanying drawings, Figure 1 is a side view, and Fig. 2 is a plan view, of my improved bale-tie. Fig. 3 is a section on the line 3 3 of Fig. 2. Fig. 4 is a longitudinal section of my tie, showing the inserted end of the band in place in the saddle.

Similar letters of reference indicate like parts.

At one end of the wire band A is produced an eye B by looping the wire and then wrapping or twisting it about itself. The wire forming this eye is received in a groove or channel in the exterior of the metal saddle or thimble C. This saddle may be made of malleable or wrought metal, and may be bent, folded, or doubled over the wire eye. It is also to be bent or otherwise formed so that the opening therein is V or wedge shaped. The opposite end D of the wire is normally straight. In order to secure it, it is passed through the V-shaped opening in the saddle or thimble, and hence through the eye B, and it is then secured to its own standing part E by wrapping or twisting. The end D therefore lies snugly in the angle of the V-shaped opening in the saddle. As soon as strain is applied to the band the eye B tends to close, and the parts of the saddle are thus forced together, so biting or clamping the wire D tightly in the angle of the V-shaped opening in the sad-

dle C, and thus effectually preventing any possible slipping of the said wire.

I am well aware that wire bale-ties embodying a saddle held in a loop, through which saddle the other end of the bale-tie passes and is finally secured by twisting on itself, are old, and such construction I do not broadly claim. In such prior devices the object of the saddle is merely to furnish a support or reinforcement for the eye, and it has no function to grip or lock the end of the band inserted through it. By making the opening in the saddle V-shaped, or with edges so inclined that near the apex of said opening the distance between the inclined sides is less than the diameter of the wire which passes between them, it follows as a necessary consequence that said wire becomes jammed between the parts of the saddle when strain is applied, and that the greater the applied strain the more the eye in the wire tends to close upon the saddle and to contract the opening therein, and therefore the more tightly to jam the received end. This is not at all true of any prior bale-tie embodying a saddle with which I am familiar, and, in fact, such prior saddles have generally been made semicircular in form or otherwise so constructed as that no possible jamming of the wire received by them can occur.

I claim—

1. A wire bale-band having at one end an eye and in said eye a saddle or thimble having an angular opening with its apex outward and adapted to receive the opposite end of said band, the width of said opening near said apex being less than the diameter of said received end of said band.

2. A wire bale-tie having an eye at one end formed by looping and wrapping or twisting the wire about itself and a saddle or thimble having an external groove or channel in which said eye is received and an angular opening with its apex outward and adapted to receive the opposite end of said band, the width of said opening in said saddle near said apex being less than the diameter of said opposite end of said band.

3. A wire bale-band having an eye at one end and a V-shaped saddle or thimble received

- in said eye and having an angular opening with its apex outward adapted to receive the opposite end of said band, the width of said opening near said apex being less than the diameter of the said opposite end of said opening, and the said saddle being constructed of material which, when said parts are engaged, will yield under strain to cause a jamming or compression in said opening of the wire.
- 5 4. The combination, with a wire bale-band A, of the saddle C of plate or sheet metal, provided with an external groove or channel to receive an eye B, formed on one end of said band, and with an angular opening in which the end D of said band is received, the said angular opening being formed near its apex, so that the said end D may become jammed or wedged therein when strain is applied to said band, substantially as described. 15
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