

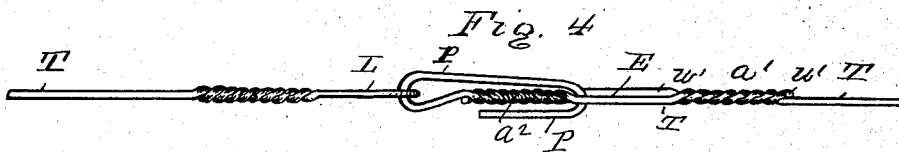
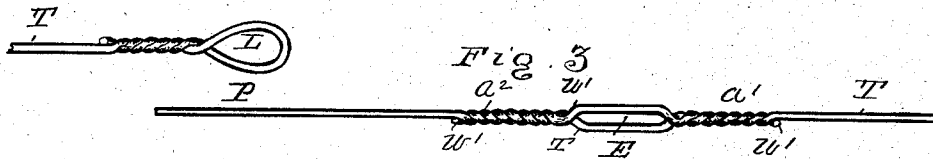
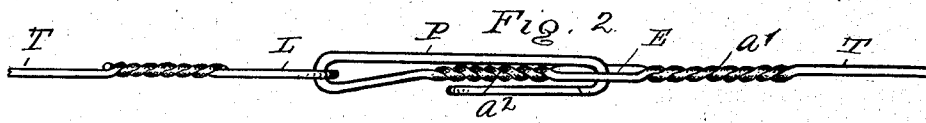
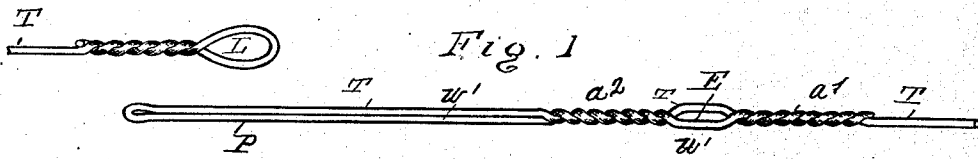
(No Model.)

F. B. GRISWOLD.

BALE TIE.

No. 322,442.

Patented July 21, 1885.



WITNESSES:

Stanley M. Holden

Charles S. Brintnall

Frank B. Griswold INVENTOR

BY

W. E. Hagan his ATTORNEY

UNITED STATES PATENT OFFICE

FRANK B. GRISWOLD, OF TROY, NEW YORK.

BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 322,442, dated July 21, 1885.

Application filed May 22, 1885. (No model.)

To all whom it may concern:

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

My invention relates to that class of bale-ties that are made to be adjustable as to their girth; and my invention has for its object to simplify the means for making the connection, and to make the latter durable and easy to fasten.

My invention consists (as will be more fully detailed hereinafter in connection with its illustration) in the combination, with an eye or loop upon one end of the tie-wire, of an eye upon the other end of the latter, the said last-named eye being located back from the end of the tie-wire, with the latter prolonged beyond said eye for connecting the latter and the loop on the other end of the tie-wire, to thus make the girth-length of the tie adjustable by means of a double hitch.

Accompanying this specification, to form a part of it, there is a sheet of drawings containing four figures illustrating my invention, with the same designation of parts by letter-reference used in all of them.

Of these illustrations, Figure 1 shows the separated ends of a bale-tie containing my invention. Fig. 2 shows as connected the same parts that are illustrated as separated at Fig. 1. Fig. 3 shows a method of producing the eye by means of an intwisted piece of wire, the ends of the tie being shown separately and as not connected. Fig. 4 shows as connected the same parts that are shown at Fig. 3.

The several parts thus illustrated are designated by letter-reference, and their function is described, as follows:

The letter T designates the tie-wire proper, which is made to have at one end a loop, L, and the other end is made to have an eye, E, formed in the wire back of the end, with the latter at P shown as prolonged beyond the said eye E. At Figs. 1 and 2 this eye E is formed in the wire back of its end by doubling the tie-wire back on itself at w' , twisting the latter and the wire T at a' , leaving an untwisted place to form the eye E; then twisting together the said parts at a^2 , and prolonging them therefrom to form the end P. As

shown at Figs. 3 and 4, a piece of wire, w' , corresponding to the backwardly-bent end w' of the tie-wire T of Figs. 1 and 2, is intwisted with the tie-wire at a' , to connect the two, and then where parallel the eye E is formed between the two, and then the tie-wire and wire w' are twisted together at a^2 , and therefrom prolonged to make the subtending end P. If desired, the latter may be formed on the body-wire T, extended beyond the end of the wire w' , or on the intwisted piece w' , by extending the latter beyond the end of the wire T, or by extending the wires T and w' together beyond the eye E, to form the projecting end P.

The tie is connected by passing the end P through the loop L and drawing back on the latter to obtain the proper girth-tension, when the end P is passed through the eye E and wound around the tie thereat, or passed down under the eye and drawn toward the connection, with the end of the wire P in contact with the bale or twisted portion that is between the eye E and the loop L. When the parts are thus connected, and any strain is brought upon the tie-union, such strain tends to close in the side of the eye E, so as to more firmly hold the wire P in its clutch, and hence the latter need only be secured beyond the eye E by any means that will keep it where bent toward the loop L, so as to rest on the bale or against itself where bent back along toward the loop L; but, if desired, it may be wound around the twisted part a^2 .

The essential feature of my invention being the combination, with an attaching-loop at one end of the tie-wire, of an eye formed in the other extremity of the tie-wire back from its end, and with the latter prolonged beyond said eye for attachment, any arrangement of a single wire bent back on itself or piece of wire added to a single wire which will produce the eye E and the prolonged end P may be used, provided they are made and arranged to operate substantially as shown and described.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A bale-tie having an eye, E, that is produced in the tie-wire at a short distance back from one of its ends, and the end P prolonged beyond said eye for connection with

the other end of the tie and said eye E, substantially in manner as and for the purposes set forth.

2. A bale-tie having an eye, E, that is produced in the tie-wire a short distance back from one of its ends, the end P prolonged beyond said eye, and a loop or eye on the other end of the wire, said parts being constructed and arranged to connect substantially in the manner set forth.

Signed at Troy, New York, this 12th day of May, 1885, and in the presence of the two witnesses whose names are hereto written.

FRANK B. GRISWOLD.

Witnesses:

GEO. M. PAYFER,
GEO. A. DARBY.