G. S. FRANCE.

No. 176,613.

Patented April 25, 1876.



Big. 2.

Thomas Estand

Mille Colombia

INVENTOR; Juilles Sommer

UNITED STATES PATENT OFFICE.

GUSTUS S. FRANCE, OF COBLESKILL, N. Y., ASSIGNOR TO WASHBURN & MOEN MANUFACTURING COMPANY, OF WORCESTER, MASS.

IMPROVEMENTIN BALE-TIES.

Specification forming part of Letters Patent No. 176,613, dated April 25, 1876; application filed April 10, 1876.

To all whom it may concern:

Be it known that I, Gustus S. France, of Cobleskill, in the county of Schoharie and State of New York, have invented certain new and useful Improvements in Bale-Ties; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a top or plan view of the interlocking ends of a bale-tie embracing the improvements which form the subject-matter for which these Letters Patent are prayed. Fig. 2 represents a side view of the parts shown in Fig. 1.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

In the drawings, so much of a bale-tie is represented as is necessary to illustrate my present improvements; and the parts marked A and B represent sections of the bale-wire, the ends a and b of which are bent to form the loops C, and then the ends of the wire are partially twisted about the main wire, as shown at c, and then one of the strands—by preference, the main strand—is bent to form a hook, D, after which both strands are twisted

together to form a close union and connection and stiff part, E, upon each end of the baletie, as shown in the drawings.

It will be noticed that the twisted parts cc lap upon each other, thereby rendering those portions of the tie between the hooks D D, when the bale-tie is clasped or locked about the bale, very strong, rigid, and firm.

The portion of the bale-tie which passes around the bale may be made from one or more sections of wire or hoop-iron, as may be preferred, although I prefer to make the entire bale-tie from a single piece of wire.

Having described my said improvement in bale-ties for baling purposes, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

1. The combination, with the ends of a baletie, of the hooks D D and loops C C, substantially as and for the purposes set forth.

2. As an improved article of manufacture, a bale-tie, each end of which is provided with a loop, D, and hook C, with a partial twist between the respective loops and hooks, substantially as and for the purposes set forth.

GUSTUS S. FRANCE.

Witnesses:

THOS. H. DODGE, EDWIN E. MOORE.