J. Nelson.
Grain Binder.

No. 47603 Patented May 2, 1865.

Fig: 1.

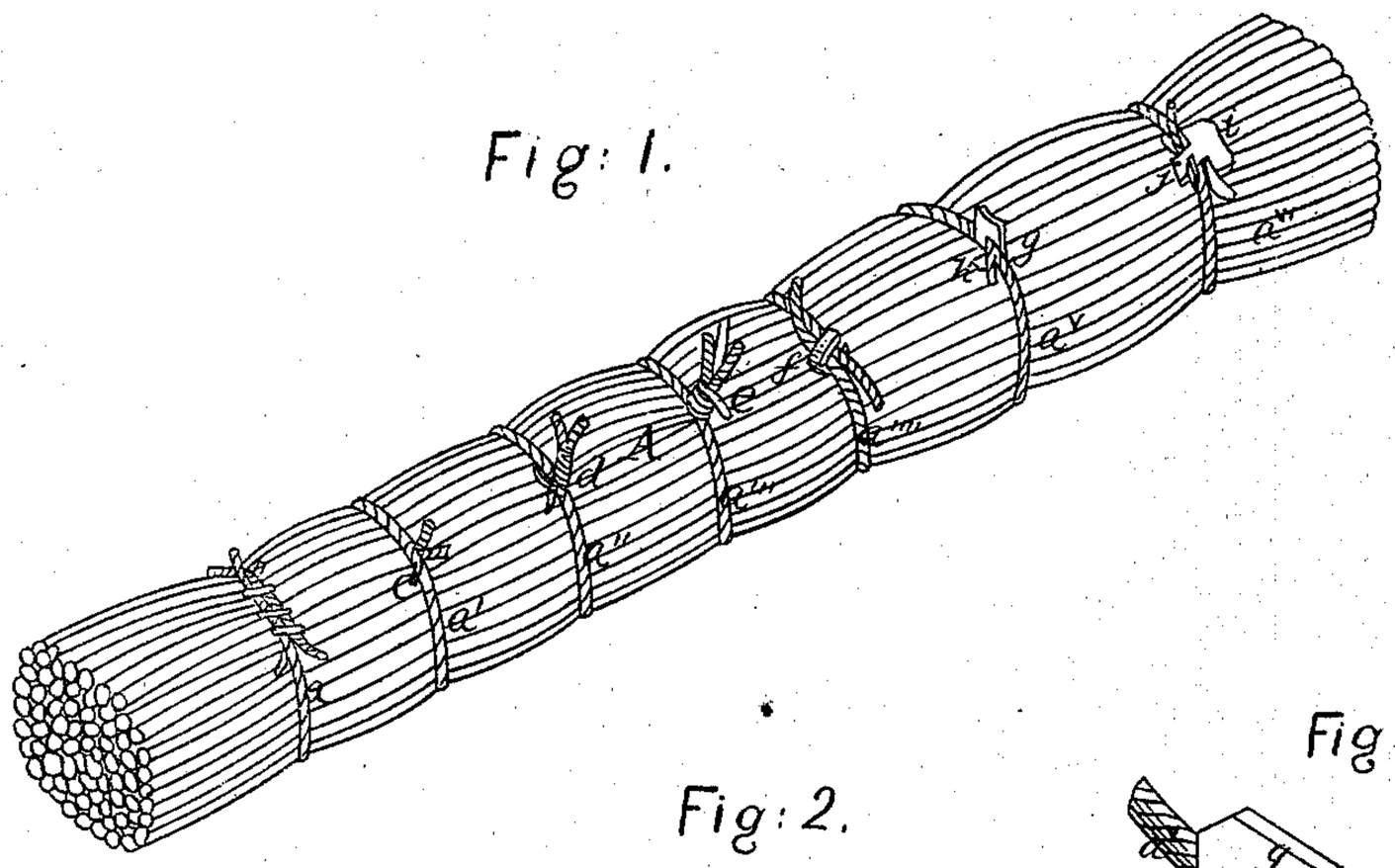


Fig: 2.

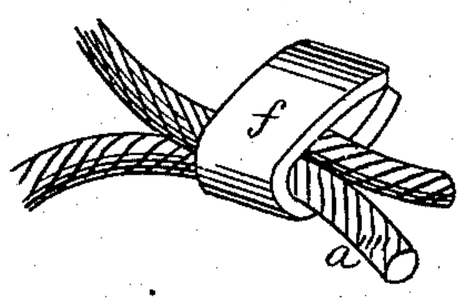


Fig: 3.

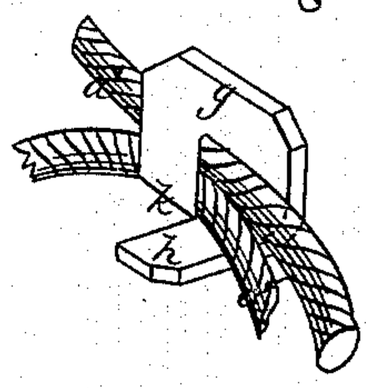
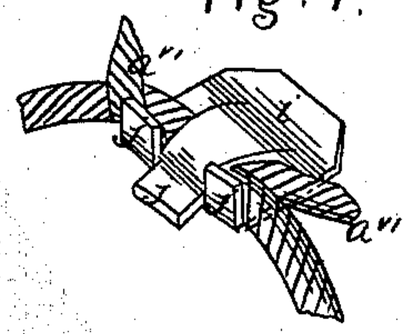


Fig: 4.



Witnesses:

J. W. Coombs

G. W. Reed

Inventor.

John Nelson

per Munn & Co

Attorneys

UNITED STATES PATENT OFFICE.

JOHN NELSON, OF ROCKFORD, ILLINOIS, ASSIGNOR TO HIMSELF AND WALES NEEDHAM, OF SAME PLACE.

IMPROVED DEVICE FOR SECURING GRAIN-BANDS.

Specification forming part of Letters Patent No. **47,603,** dated May 2, 1865.

To all whom it may concern:

Be it known that I, JOHN NELSON, of Rockford, in the county of Winnebago and State of Illinois, have invented new and useful Improvements in Binding Sheaves of Grain; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a sheaf or gavel bound by cords and fastened by clamps. Figs. 2, 3, and 4 are enlarged detached views of various forms of clamps used.

Similar letters of reference indicate corresponding parts in the several figures.

This invention is designed to be used in connection with a harvesting-machine, but may be adapted to independent use. The cord used for binding may be carried on a reel attached to the harvesting-machine, or it may be borne upon a reel moved upon independent wheels.

The invention consists in securing together the ends of the cord that constitutes the band for the sheaf by means of wire or flat metallic strips cut into short pieces and bent into the form of the letter **U**, which are caused to embrace the cord that forms the band of the sheaf. These grips may be made of round wire bent into the form of the letter **U**, or of a flattened piece of metal, as seen at *f*, Fig. 2, (shown also at *f*, Fig. 1,) or single cleft, as at *g k h* in Fig. 3, (shown also at *g h* in Fig. 1,) or doubly cleft, as at *i j j* in Fig. 4. (Shown also at *i j* in Fig. 1.) These pieces may be prepared in quantity and carried in a convenient box, in connection with the reel of cord for the band of the sheaf. In using wire an extra turn may be made.

In binding the sheaf the cord a'''', a^{v}, or a^{vi} is passed around the sheaf and drawn tightly, as represented in Fig. 1. One of the grips is then applied so as to embrace both the cords, and with a pair of pinchers or other similar instrument compressed closely upon the cord so as to prevent them from slipping. This being done, the end coming from the reel is cut off and the operation is completed. In this manner the grip or clamp will hold the two ends of the cord sufficiently tight for all practical purposes.

What I claim is—

Securing the ends of the twine or cord bands used for binding sheaves of grain by means of metallic clamps applied in the manner, without any knotting of the band in fastening, as herein set forth.

JOHN NELSON.

Witnesses:
J. G. MANLOVE,
JACOB KNOPP.