S. WHITEHALL.

BOX FASTENING.

APPLICATION FILED JULY 30, 1909.

998,822. Patented July 25, 1911.

Fig. 1.

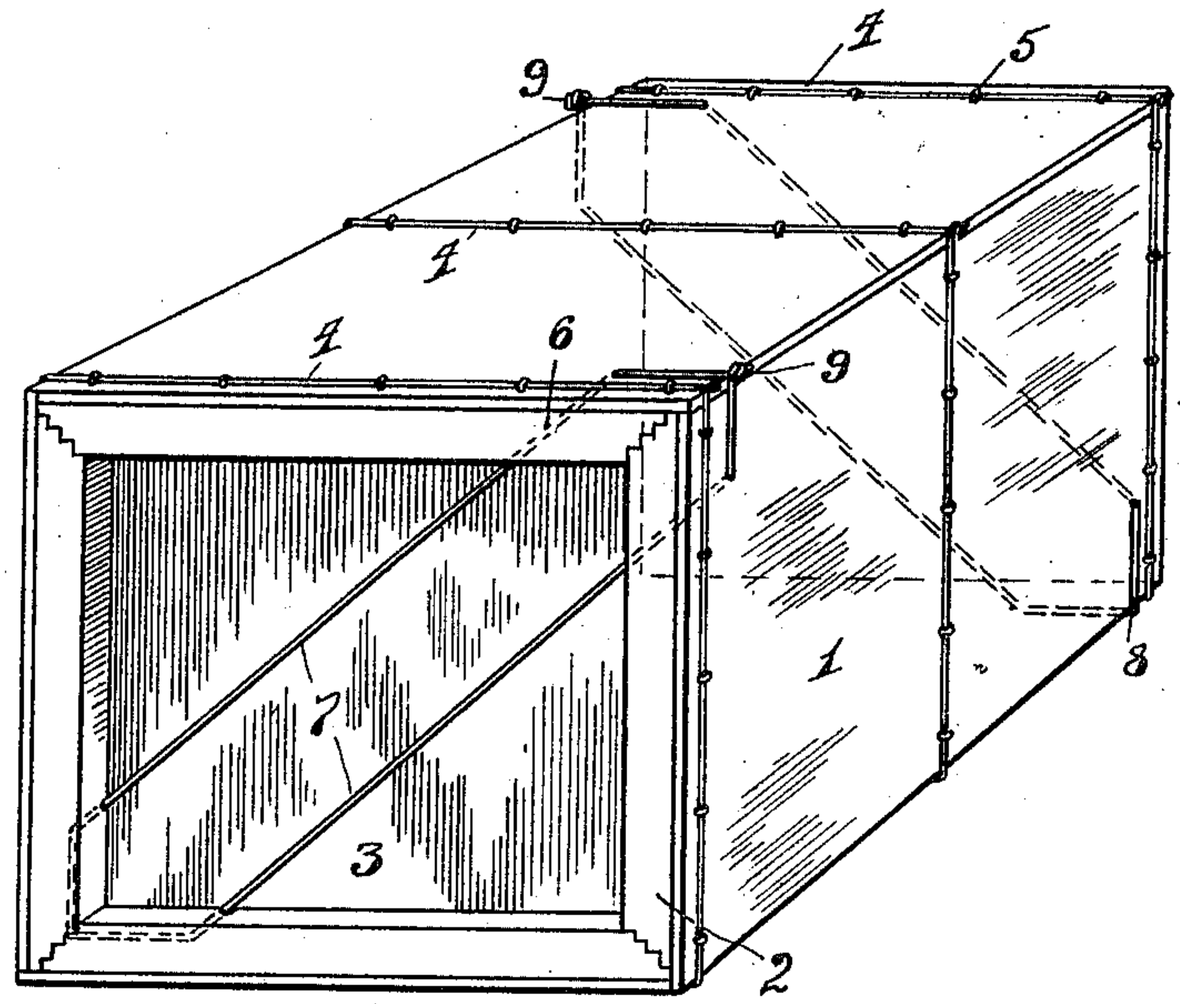
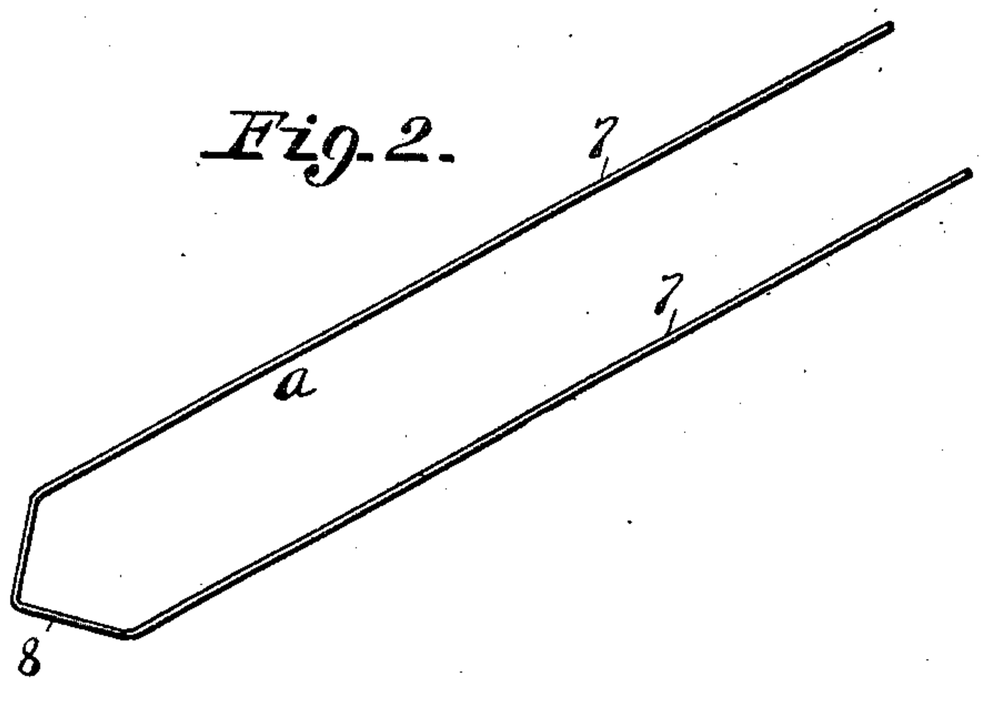


Fig. 2.



Witnesses:
George Oltsch
G. M. Cole.

Samuel Whitehall.
Inventor
By G. F. C. Holmaker
Attn'y.

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

SAMUEL WHITEHALL, OF SOUTH BEND, INDIANA.

BOX-FASTENING.

998,822. Specification of Letters Patent. Patented July 25, 1911.

Application filed July 30, 1909. Serial No. 510,475.

To all whom it may concern:

Be it known that I, SAMUEL WHITEHALL, a citizen of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Box-Fastenings, of which the following is a specification.

This invention relates to wire bound boxes.

One object of the invention is to provide a wire bound box with fastening members associated therewith which are so arranged as to draw all the cleats at the ends of the sides of the box toward each other, or to a common center, to insure an effectual binding of the parts of the box together.

Another object of the invention resides in the provision of a box provided with fastening means arranged peculiarly with relation thereto for the purpose of drawing the sides of the box toward a common center whether the fastening means be arranged in the same plane or in opposite directions.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes may be made in the form, proportion, size and minor details without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a perspective view of a box illustrating the invention. Fig. 2 is a detail perspective view of one of the fastening members.

Referring now more particularly to the accompanying drawings, the reference character 1 indicates the sides of a box each provided at each end with a cleat 2, the ends of the cleats being mortised, beveled, or mitered to provide for the formation of a rectangular or other shaped box, the character 3 indicating the ends of the box.

When assembling the box, the cleats of the sides thereof are placed together, as are also the sides with relation to one another, and wires 4 are usually passed around the box and stapled to the sides thereof, as indicated by the reference character 5. Under certain conditions this method of binding the sides together is sufficient, but in the present instance, additional means is employed for fastening the parts of the box together. To this end each cleat 2 is preferably provided with an inclined perforation 6 and when the cleats 2 are assembled, the perforations 6 of the abutting cleats will be disposed in alinement and adapted to receive the legs 7 of a substantially U-shaped fastening *a*, whose bight portion 8 is bent, as shown, for engagement with the outer faces of the corresponding sides of the box, the free ends of the legs 7 being twisted together, as shown at 9, in Fig. 1 for the purpose of securing the fastening *a* against displacement, there being two of these fastenings *a* illustrated in the drawings, and while they are shown as disposed in opposite directions, at the ends of the box, it will be understood that they may be disposed in the same plane without departing from the spirit of the present invention.

By passing the fastening members *a* through the cleats and sides of the box diagonally, as shown, the free ends of the fastening, when twisted together, will have a tendency to draw all four cleats at each end of the box and sides toward each other or to a common center. By twisting the ends of the legs 7 of the fastening members *a*, the box is strengthened and capable of maintaining the same in rigid condition when the box is heavily loaded. Thus the fastening members *a* have a two-fold function in that they reinforce the wires 4 to strengthen the box and also provide for drawing the cleats and sides toward each other or to a common center, as stated.

What is claimed is:—

1. The combination with a box including sides and a cleat secured to each side at each end thereof and provided with inclined perforations, of fastening members passed through the inclined perforations of the cleats at each end of the box and disposed diagonally with relation to the latter to draw the sides and end cleats toward a common center and to fasten the sides and cleats together against torsional strain, each fastening member being U-shaped and having its legs disposed parallel to each other in a diagonal line with relation to the box, each fastening member being formed of a single piece of material and having its terminals twisted together.

2. The combination with a box including sides having perforations, of substantially U-shaped fastening members each having its legs passed through corresponding perforations of the sides at the ends of the box

and disposed diagonally with relation to the latter to draw the sides toward a common center and to further fasten the sides together, the bight portion of each fastening member being bent to conform with the right angled joint between adjacent sides and to bear against both of said adjacent sides, the free ends of the legs of each fastening member being twisted together over the right angled joint between corresponding adjacent sides of the box.

3. The combination with a box including sides and ends, of fastening members passed through the sides at each end of the box, each fastening member being substantially U-shaped in formation and having its legs disposed parallel with each other and arranged diagonally of the box, the terminals of the legs being twisted together exteriorly of the box and each fastening upon being twisted together being adapted to draw the sides toward a common center to prevent torsional strain.

In testimony whereof I affix my signature, in presence of two witnesses.

SAMUEL WHITEHALL.

Witnesses:
GEORGE OLTSCH,
G. M. COLE.