(No Model.)

G. A. STILLMAN.

HINGE.

No. 423,287. Patented Mar. 11, 1890.

Fig. 2

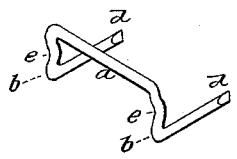


Fig. 1

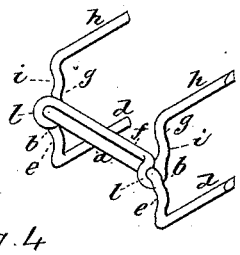


Fig. 3

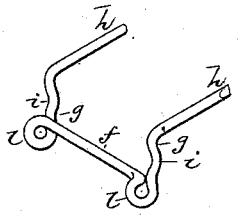


Fig. 4

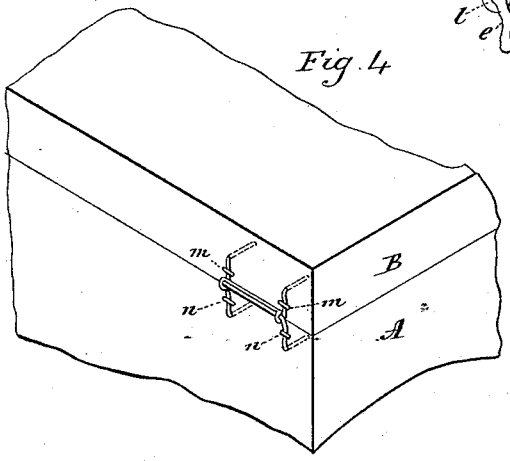


Fig. 7

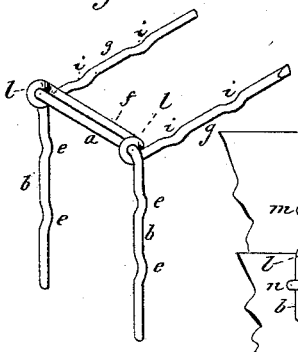


Fig. 5

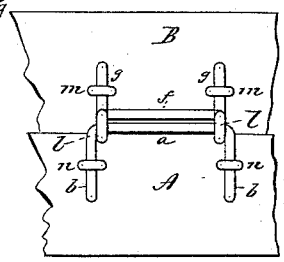


Fig. 6

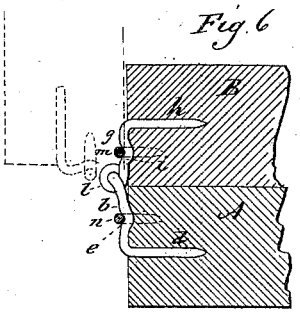
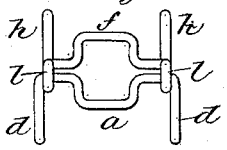


Fig. 8.



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UNITED STATES PATENT OFFICE.

GEORGE A. STILLMAN, OF NEW HAVEN, CONNECTICUT.

HINGE.

SPECIFICATION forming part of Letters Patent No. 423,287, dated March 11, 1890.

Application filed July 10, 1889. Serial No. 317,049. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. STILLMAN, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Wire Hinges; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of the hinge complete; Fig. 2, a perspective view of the pintle part of the hinge detached; Fig. 3, a perspective view of the other part of the hinge detached; Fig. 4, a perspective view representing the application of the hinge to a box; Fig. 5, a rear view of the hinge as applied; Fig. 6, a transverse section through the parts, showing the hinge attached; Fig. 7, a perspective view of the hinge in a modified form; Fig. 8, a rear view of the hinge, showing the bars bent at an axial line to extend the surface-bearing.

This invention relates to an improvement in the construction of hinges adapted to be applied to the hinging of box-covers and for similar purposes, the object of the invention being to construct a hinge from wire which may be produced by automatic machinery; and the invention consists in the construction as hereinafter described, and particularly recited in the claims.

The hinge is made in two parts and from two separate pieces of wire, the two parts being shown detached in Figs. 2 and 3. The one part consists of a bar or pintle *a*, bent into U shape to form two sides *b b*, and preferably the ends *d* of the two sides are turned at substantially right angles to the sides *b* and to the bar *a*, and one or more corrugations *e* are formed in each of the sides *b*, the bend of the corrugations being in the plane of the turned-in ends *d*, all as clearly seen in Fig. 2. The other part, as seen in Fig. 3, is made of similar shape—that is, bent into U shape to form a bar *f*; but the length of the bar corresponds to the distance between the two sides *b b* of the one part. The ends *h* of this part are preferably turned at right angles, as were the ends *d* of the one part, and the sides *g* are constructed with corrugations *i*, like the corrugations of the one part. The length of the sides from the bar is greater than the length of the sides *b*. The two parts are set together, placing the bar *f* between the two sides *e e*, then bending the sides *g* around the bar *a*, so as to form eyes *l* between the two parts, the bar *f* being parallel with the bar *a*, and as seen in Fig. 1. Thus united the bar *a* of the one part forms a pintle around which the other part is closed to form a knuckle-joint, the eyes readily turning on the pintle-bar *a* in the opening and closing movement of the hinge. The two bars are bent between the sides out of the axial line in opposite directions, as seen in Fig. 8, thus producing extensions from the bars to give a greater bearing of the hinge upon the surface to which it is applied.

To apply the hinge thus constructed, as to a box A and cover B, (see Fig. 4,) the hinge is set upon the two parts so as to bring the knuckle at the proper position with relation to the joint between the cover and box, and then the prongs *d h* are driven into the respective parts, as represented in broken lines, Fig. 4. To form an additional support for the hinge, U-shaped staples *m* are driven into the respective parts in the bends or corrugations *e i*, as seen in Figs. 4, 5, and 6. These staples give an additional support at a point nearer the knuckle than the prongs themselves, and so as to firmly support the hinge.

The hinge thus constructed is very simple, readily produced complete by automatic machinery, and is stronger and firmer than a common knuckle-hinge of the same size.

The bending of the sides to form the prongs *d h* may be omitted, as seen in Fig. 7, leaving the sides substantially straight except as to the corrugations. In such case additional corrugations are desirable, as represented in Fig. 7, to receive additional staples.

I do not claim, broadly, two U-shaped pieces of wire hinged together by bending the two sides at the closed end of one part around the corresponding closed end of the other part, as such I am aware is not new.

I claim—

1. A wire hinge made in two parts, each part of U shape, the bar portion of one part closed around the bar portion of the other

part to form eyes *l l*, the two sides of the respective parts constructed with corrugations *e i*, adapted to interlock with staples in securing the hinge, substantially as described.

2. A wire hinge made in two parts, each part of U shape, the bar portion of one part closed around the bar portion of the other part to form eyes *l l*, the said two bars between the said eyes bent out of axial line and in opposite directions to increase the extent of bearing-surface of the said bars, substantially as described.

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