

C. F. WILSON.
Hinge.

No. 219,552.

Patented Sept. 9, 1879.

Fig. 1.

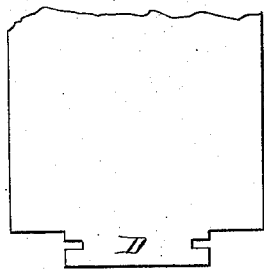


Fig. 2.

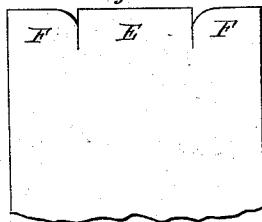


Fig. 5.

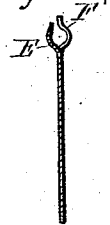


Fig. 3.

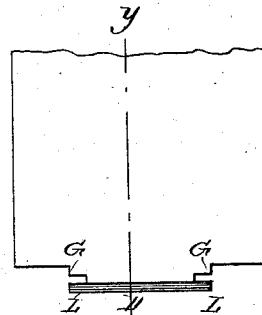


Fig. 4.

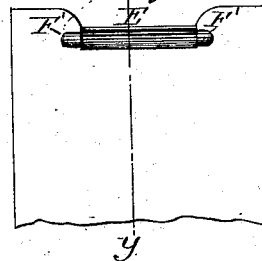
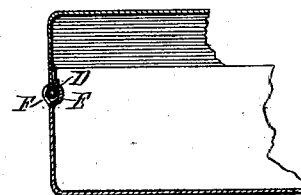


Fig. 6.



Witnesses,

Edw. A. King
H. C. Smith

Inventor,

Charles F. Wilson

UNITED STATES PATENT OFFICE.

CHARLES F. WILSON, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. **219,552**, dated September 9, 1879; application filed April 10, 1879.

To all whom it may concern:

Be it known that I, CHARLES F. WILSON, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Hinges, which is fully set forth in the following specification, reference being had to the accompanying drawings, which are intended to form a part hereof.

My improvement relates especially to that class of hinges which is commonly used for boxes and other articles made of tin and other sheet metals; and consists in the peculiar shape of the complementary parts, and in forming the pivot of the hinge out of one of the pieces of metal used for making the hinge itself, and entirely dispensing with the use of wire or other separate pivots.

In the drawings, Figures 1 and 2 show the two complementary parts of one of my hinges cut out of tin or other metal and ready to be bent into proper shape. Figs. 3 and 4 show the same parts as Figs. 1 and 2 bent into proper shape. Fig. 5 shows a section of Fig. 4 on the line *y y*; and Fig. 6 shows a section of the parts of Figs. 3 and 4 on the line *y y* as put together to form the hinge of a box.

Similar letters of reference indicate like parts.

My invention relates principally to the formation of the parts D, E, and F.

In Fig. 1, D is a projection or ear, cut out of the tin or other metal, forming one of the leaves of the hinge. This projection is then rolled up into cylindrical form, as shown at D in Fig. 3, and two short slots are cut, as shown at G G in the same figure. The other part of the hinge is shown in Figs. 2, 4, and 5. Fig. 2 shows the other leaf of the hinge cut out of metal and ready for stamping into form; and in Fig. 4 the part E is shown drawn into semi-cylindrical form on one side of the plane of the main part of the metal, and the parts F F drawn into the same form on the other side of the same plane. This is shown more clearly in section in Fig. 5.

The pivot D should be made of about the same length as the distance between the outside ends of F F, so that the ends L L will fit closely into the indentations F' F', and the part E should be about the same length as the distance between the inside ends of the slots G G.

In forming the parts of Fig. 4 the lip E is made a little open, as shown in Fig. 5, so that the pivot D may be dropped down into place, and the lip is then closed up snugly about the pivot.

In practice I find it more convenient to form the pivot out of the cover-piece of the box.

It is evident that hinges may be formed in this way out of separate pieces of metal, and then attached to a box or other article; but I find it most advantageous to make them directly out of the metal forming the body of the article itself.

Hinges constructed in accordance with my invention may be used in pairs; but for ordinary purposes I find it advisable to lengthen the hinge and use only one for each article.

Forming a hinge in the manner above described dispenses entirely with wires or other separate pieces now commonly used for pivots in such hinges, and effects a large saving in labor and material, as all of the different parts can readily be made by machinery. Each part may be cut out and formed into proper shape at one operation by appropriate tools, and the hinge may also be closed up in the same way after it is put together.

I am aware that hinges with separate pivots have been hitherto constructed in various forms, and in some instances with the parts shaped somewhat like those above described, and I do not claim such hinges where wires or other separate pivots are used; and I am also aware that the pivot of a hinge has been formed out of the piece of metal used to form one side of the hinge itself, as shown in the patent to J. C. Hyde, dated June 26, 1866, and I do not claim forming the pivot of a hinge in that way irrespective of the peculiar form of the parts of the hinge; but,

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

The combination, in a hinge, of the lip E, the indentations F' F', and the pivot D, the whole being constructed substantially as described, and for the purposes set forth.

CHARLES F. WILSON.

Witnesses:

LEONARD E. CURTIS,
EDWARD HINE.