L. P. SUMMERS.

Making Butt Hinges.

No. 105,513. Patented July 19, 1870.

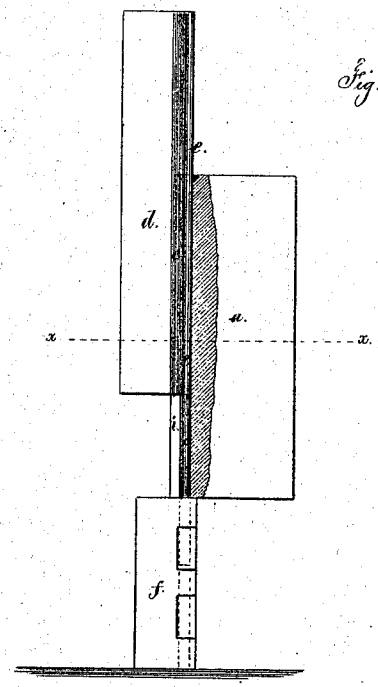

Fig. 1.

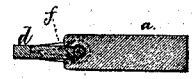

Fig. 2.

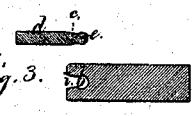

Fig. 3.

Witnesses,

Chas. H. Smith

Geo. D. Walker.

Lucius P. Summers.

Lemuel W. Serrell

atty

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

LUCIUS P. SUMMERS, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO P. & F. CORBIN, OF SAME PLACE.

Letters Patent No. 105,513, *dated July* 19, 1870.

IMPROVEMENT IN DEVICES FOR INSERTING THE PINTLES OR PINS IN BUTT-HINGES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, LUCIUS P. SUMMERS, of New Britain, in the county of Hartford and State of Connecticut, have invented and made an Improvement in Means for Driving Butt-hinge Pins; and the following is declared to be a correct description of the same.

Machines have heretofore been made for driving hinge-pins, in which the wire is drawn in, cut off, and forced into the hinge, and a reference is hereby made to the patent of H. D. Blake, assigned to P. & F. CORBIN, granted March 24, 1868.

My invention relates to the peculiar construction of the holding and driving mechanism, that receives, guides, and forces the wire into the hinge-joint.

In the machines heretofore made, the wire is liable to be bent, and difficulty is experienced in directing it into the hole in the butt. My improvement obviates all these difficulties, and consists in a holder for the pin, made with a hole and intersecting longitudinal groove or slot and a driver working into the holder. The pin to be driven is fed into the hole in the holder, and the driver, which is made as a punch on the edge of a projecting feather to fit the said groove, is employed to force the pin into the hinge.

In the drawing—

Figure 1 is an elevation, partially in section, showing my improvement;

Figure 2 is a section of the holder and driver at the line *x x*; and

Figure 3 shows the separate parts sectionally.

The holder *a* is made with a groove along its edge, of a size and shape adapted to the hinge-pin to be driven. The inner part *b* of said groove is similar to a three-quarter round hole, the other quarter, or about that proportion, being a groove, *i*, longitudinally of the holder, and opening into the said hole. This holder may be made of one solid piece, or of two pieces screwed together, and the end of the hole *b* is flaring, to facilitate the insertion of the wire.

The driver *d* is made with a fin, *c*, and cylindrical punch *e*, fitting loosely the groove *b i*, so as to be slidden therein.

The parts to be made use of are to be mounted in any suitable frame and operated by mechanism of any desired or well-known character.

The blank previously cut is introduced into the hole *b* by any suitable feeding device, or it may be fed a gauged distance into the hole *b*, and then cut off by any suitable cutter. The sizes of the hole *b* and wire are such that the wire will be sustained and kept from bending, but it can be moved endwise with facility by the driver *e*, that receives motion at the proper time from a cam or otherwise.

The hinge *f* is presented and held in the proper place at the end of the hole *b* of the pin-holder, so that said pin or wire *o* may be driven into the same, to connect the two parts of said hinge.

The device aforesaid, although primarily intended to be operated by automatic means in machines for making hinges, might be employed by hand, if desired.

I claim as my invention—

The combination of the punch *e*, fin *c*, and driver *d*, with the holder *a*, provided with a hole, *b*, to receive the wire, and a slot, *i*, less than the diameter of the hole *b*, substantially as and for the purpose described.

Signed by me this 3d day of June, A. D. 1870.

L. P. SUMMERS.

Witnesses:

CHARLES PECK,

EDWD. L. PRIOR.