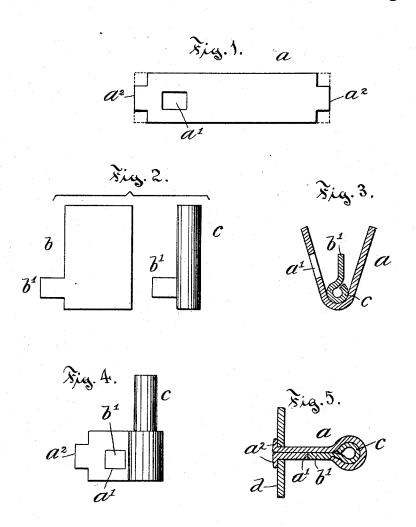
(No Model.)

## C. E. HART.

PINTLE FOR BLIND HINGES AND PROCESS OF MAKING SAME.

No. 524,483. Patented Aug. 14, 1894.



Wixnesses: 1. a. Canxin Arthur P. Jenkine. Smoonkor Charles & Hart. Ty Chas L. Burden

## United States Patent Office.

CHARLES E. HART, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE STANLEY WORKS, OF SAME PLACE.

## PINTLE FOR BLIND-HINGES AND PROCESS OF MAKING SAME.

SPECIFICATION forming part of Letters Patent No. 524,483, dated August 14,1894.

Application filed June 19, 1894. Serial No. 515,008. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. HART, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Pintles for Blind-Hinges and Processes of Making the Same, of which the following is a full, clear, and exact description, whereby any one skilled in the art

10 can make and use the same.

My invention relates to the general class of devices on which a blind is adapted to be supported in a swinging position and in the process of making the same, and the object of my invention is to provide a device of this class that shall embody the qualities of cheapness, lightness and durability, and one that can be struck or stamped to shape from sheet metal causing a great saving in cost of manu-20 facture and increasing the rapidity with which they may be constructed.

To this end my invention consists in the details of the several parts making up the device as a whole and in their combination as 25 more particularly hereinafter described and

pointed out in the claims.

Referring to the drawings: Figure 1 is a detail view of a blank from which the pintle bracket is formed. Fig. 2 is a detail view 30 showing the pintle blank, and the pintle formed to shape. Fig. 3 is a detail view showing the pintle bracket and pintle in relative position just before being finally compressed together. Fig. 4 is a side view of the com35 pleted pintle, and Fig. 5 is a view in cross section through the pintle.

In the accompanying drawings the letter adenotes a flat piece of metal cut to a proper size to adapt it to be bent or folded into shape to form a pintle bracket. The blank a has a key socket a' formed in the substance of the metal and preferably consisting of a rectangular opening near one end as shown, and on opposite ends of the blank lugs  $a^2$  are formed

which are to form the specific fastening means by which the bracket may be secured to a base piece. The blank a with the socket a' and lugs  $a^2$  is preferably struck from sheet metal at one operation or it may be formed 50 in a series of steps.

which the pintle c is formed. This blank is preferably struck or stamped to shape from sheet metal of the desired thickness which will depend on the size of the pintle, and on 55 one edge of the blank there is formed a key b' adapted to fit the socket a' made in the pintle bracket.

In the process of manufacture the pintle bracket blank is preferably stamped to shape 60 from sheet metal of a thickness depending on the size of the pintle to be formed and the blank is then bent at the center to a V-shape, as shown in Fig. 3 of the drawings, so that the ends when folded upon each other shall 65 meet the lugs on the opposite ends registering with each other. A pintle blank b, struck or stamped to shape as illustrated is by means of suitable dies bent into a substantially cylindrical form as shown in Fig. 2 with the key 70 b' projecting radially on one side of the cylinder. In the form described the pintle is shown as cylindrical in form and tubular, such a construction affording a light and strong structure. The pintle c with the key 75 b' is placed in the bend in the pintle bracket blank, as shown in Fig. 3 of the drawings, the key on the pintle being placed opposite the socket a' in the pintle bracket. The ends of the pintle bracket blank are then closed down 80 upon each other and the bracket wrapped closely about the pintle adjacent to the key as by means of dies under pressure, the ends of the blank registering as described. In this operation the key b' on the pintle is forced 85into the socket a' in the pintle bracket in such manner as to cause the parts to intermesh and to prevent the pintle from working loose in the bracket. In the construction described the open socket affords a space into which go the key is forced in the process of folding the parts together. A serious objection to prior forms of pintle brackets having cylindrical pintles without the key has been the difficulty experienced by the pintles working loose but 95 such objection is entirely overcome by the means described in which the pintle is provided with a key which projecting from the pintle between the folds of the bracket aftetal at one operation or it may be formed a series of steps.

The letter b denotes the pintle blank from form of pintle is the preferred form and the pintle may be either tubular as described or formed in a more solid roll and of a slightly

tapered shape if desired.

In the practice of my invention a cheap and durable pintle for blind hinges is provided that may be placed on the market as a separate article of manufacture or it may be secured to a base plate d the tangs projecting through a socket in the base plate and being 10 spread outward to clinch the bracket to the plate, or the ends may be riveted down, at the back of the base plate.

I have illustrated and described herein a

preferable form for the blanks both for the 15 pintle and the bracket and methods of forming them up and uniting them, but it is obvious that other means of constructing the parts may be employed and changes made in details of the shape of the blanks and of the 20 engaging means without departing from the invention and by the exercise of merely mechanical skill, and I do not limit myself to the specific shapes or proportions of the parts described, nor the precise method of uniting

I claim as my invention-

1. A blind support including a cylindrical pintle formed to shape from a blank of sheet metal and having a key projecting from the 30 pintle, and a pintle bracket wrapped about the pintle at one end and provided with a socket into which the key projects, and fastening means at the end of the bracket, all

substantially as described.

2. In combination in a blind support, the 35 cylindrical pintle formed from a sheet metal blank with a key projecting from the pintle near one end, a pintle bracket of sheet metal wrapped about the pintle near one end and having a socket in the bracket in which the 40 key on the pintle is located, fastening means on the end of the pintle bracket, and a base piece to which the bracket is secured as by riveting, all substantially as described.

3. The process of constructing a blind pin- 45 tle that includes first, forming a blank of sheet metal with lugs on the ends and a key socket in the substance of the blank, second forming a blank for the pintle with a projection on the blank for forming a key, third 50 forming the pintle blank to cylindrical shape with the key projection, fourth wrapping the sheet metal blank forming the pintle bracket about the pintle and firmly compressing the parts and causing the forcible engagement of 55 the key in the socket, all substantially as described.

CHARLES E. HART.

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m Witnesses:}$ 

G. L. REYNOLDS,

F. H. MARSH.