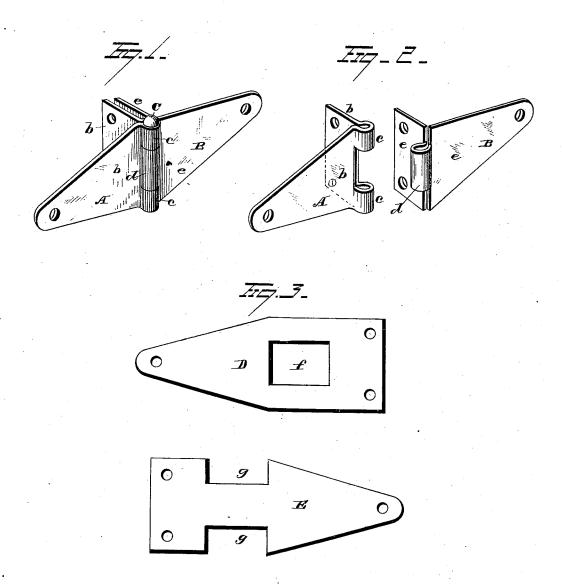
(Model.)

## J. E. GOWEN.

HINGE.

No. 261,150.

Patented July 18, 1882.



WITNESSES

Statingham, Moran.

James & Sowen
Bota Symon.

## UNITED STATES PATENT OFFICE.

JAMES E. GOWEN, OF PEABODY, KANSAS, ASSIGNOR OF ONE-HALF TO CHARLES A. HAULENBECK, OF SAME PLACE.

## HINGE.

SPECIFICATION forming part of Letters Patent No. 261,150, dated July 18, 1882.

Application filed July 6, 1881. (Model.)

To all whom it may concern:

Be it known that I, James E. Gowen, of Peabody, in the county of Marion and State of Kansas, have invented certain new and useful 5 Improvements in Hinges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in hinges, the object being to provide an article of the character designated which will combine simplicity, durability, and strength, and which may be manufactured and supplied to

the trade at a greatly-reduced cost.

With these objects in view my invention consists in certain details of construction and 20 combinations of parts, as will be herein described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a view in perspective of a hinge constructed in accordance with my invention. Fig. 2 represents in elevation both of the hinge-sections as they appear when operated, and Fig. 3 is a view of the blanks from which the hinge sections are struck up.

Each of the hinge-sections consists in two
leaves or straps bent at right angles to each other, and having one or more knuckles formed integral with and between them, and located at the point of their convergence. The section A consists of two leaves, b, bent at right ansection A consists of two

the knuckles in the usual manner.

The blanks from which the sections A and B are formed are designated by D and E. Blank D is prepared for forming by the removal of a rectangular piece, f, from its center, while to prepare blank E to be struck up rectangular slots g are made in its opposite edges. The diameter and width of the knuckles formed between the two leaves of each sec-

of the said rectangular pieces f and slots g, respectively. After the blanks are prepared, as above, by the removal of pieces f and the formation of slots g the knuckles are formed or struck up. This operation consists in bending 55 their ends at right angles with each other, and in imparting a circular form to the strip or strips of metal formed midway of the length of the blanks by the removal of a rectangular piece from blank D and the formation of rect- 60 angular slots in blank E, as aforesaid. Both the preparation for and the actual forming of the blanks will probably be done by dies particularly designed for this work. It is probable that in most instances the leaves of each 65 hinge-section will be unequal in length, so that one leaf may be attached to the side of and one to the edge of the object to which it is designed to secure the hinge. The number of knuckles to each hinge-section may be varied 70 as desired, and will depend on the size of the hinge and the use to which it is to be placed. The shape and finish of the leaves will also depend upon the same conditions.

I am aware that it is not new to make a hinge of two blanks, the ends of the blanks being slitted to form three fingers, one of said fingers on one blank being formed into a knuckle and the other two bent at right angles to the body of the blank or main leaf to constitute a supplemental leaf while two of the fingers of the other blank are formed into knuckles and one of the fingers is bent at right angles to form a supplemental leaf. In this construction of hinge the supplemental leaves are narrow and of little strength, and also the knuckles, being formed by the ends of the fingers, are liable to become bent and allow the leaves to separate, especially if the stock of which the hinge is made is light and thin.

I am also aware that hinges have been made of three blanks and a knuckle formed on each blank. In this latter construction the blanks are necessarily narrow, and produce leaves of such width that they do not have the desired 95 bearing-surface to insure a durable and lasting attachment.

formed between the two leaves of each section will depend upon the length and breadth in made of two blanks, each having two wide 100

leaves which afford a broad bearing surface, and thereby enable the hinge to be firmly secured in place, and as the knuckles are formed at the juncture of the two leaves all spreading 5 or opening of the knuckles is prevented.

·Having fully described my invention, what I claim as new, and desire to secure by Letters

Patent, is-

A hinge formed of a blank, E, cut away at o g g to form a strip which is bent to form the knuckle d and to bring the leaves B and e at right angles to each other, and a blank, D, hav-

ing a rectangular slot, f, to form an upper and a lower strip which are bent to form knuckles  $c\,c$ , and to bring the leaves  $A\,b$  at right angles to 15 each other, and a pintle, C, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of June, 1881.

JAMES E. GOWEN.

Witnesses:

HOWARD RATHBONE, THOS. OSBORNE.