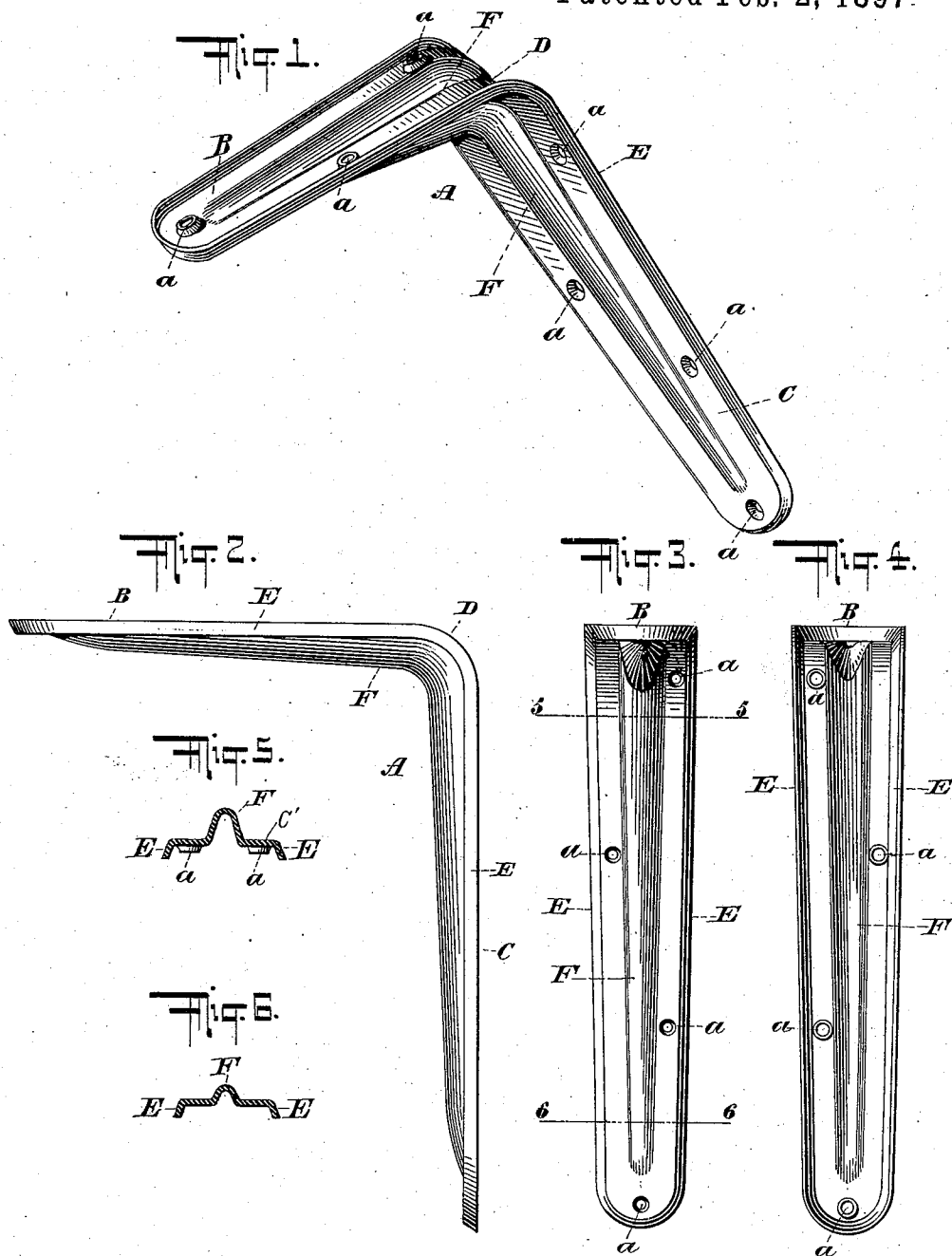


(No Model.)

J. GRAVES.
BRACKET.

No. 576,110.

Patented Feb. 2, 1897.



WITNESSES:
Gustav Dietrich.
John Kehlbeck

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UNITED STATES PATENT OFFICE.

JOHN GRAVES, OF BROOKLYN, N. Y.

BRACKET.

SPECIFICATION forming part of Letters Patent No. 576,110, dated February 2, 1897.

Application filed September 21, 1895. Serial No. 563,161. (No model.)

To all whom it may concern:

Be it known that I, JOHN GRAVES, a citizen of the United States, residing at Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Brackets, of which the following is a full, clear, and exact description.

My invention relates to improvements in shelf-brackets, and has for its object, primarily, to make a completed sheet-metal bracket out of a single piece of sheet metal and at the same time be able to make the same sufficiently strong and rigid without the diagonal brace common to both the cast and sheet metal brackets now generally used.

A further object of my said invention is to make the brackets lighter than it has been possible heretofore, to produce the same without impairing their strength or durability, and, finally, to greatly reduce the cost of manufacture and transportation, the latter being accomplished by reason of the fact that the brackets made in accordance with my invention, and that irrespective of their sizes, are capable of being nested one within the other, thereby facilitating the packing of a large number thereof into a small and compact mass.

All of these objects, as above set forth, I am enabled to attain by means of my invention, which consists in the novel details of construction hereinafter described, and particularly pointed out in the claim.

In the accompanying drawings, forming part of this specification, wherein like letters of reference indicate like parts, Figure 1 is a perspective view of my bracket. Fig. 2 is a side view thereof; Fig. 3, a front view; Fig. 4, a back view; Fig. 5, a section taken on the line 5 5 of Fig. 3, and Fig. 6 a section taken on the line 6 6 of Fig. 3.

In the drawings, A designates the bracket, formed of a single piece of sheet metal, comprising the arms B and C, bent at an angle to each other and provided with apertures *a*, adapted to receive the screws whereby the bracket is secured in position, and D is a round corner formed at the place of juncture of the said arms B and C.

C' is the base for the rib or reinforce F, and E is a rearwardly-bent reinforcing-flange

extending entirely around the edge of the bracket and adapted to strengthen said bracket and serve to maintain the base C' at a distance from the wall and the under side of the shelf.

F is a central longitudinal rib or reinforce of approximately the length of the base C' struck up therefrom. This central longitudinal rib or reinforce F begins near the lower edge of the vertical arm C, near which edge it is hardly perceptible, and then gradually increases in height and width until it reaches the rounded corner D, the point of its greatest strain, and at which point it is largest. Thereupon it again gradually tapers down to nothing near the edge of the horizontal arm B.

It will be observed that by means of the rounded corner D and the peculiar formation of the central longitudinal rib or reinforce F, the highest and widest portion of which, and consequently its strongest, is capable of withstanding a great strain, that the bracket will thereby be rendered very strong and rigid at the point which would otherwise be its weakest.

It will further be observed that my improved bracket is wholly devoid of sharp angles, thereby insuring great strength and stability as a whole, that the faces proper of the arms B and C, forming the base C', do not, owing to the flange E, rest against the wall or under side of the shelf, thereby forming a cushion for the rib or reinforce F, which will take up or neutralize the effect of a heavy weight when suddenly thrown upon the shelf and prevent the bracket from being broken in two.

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

As a new article of manufacture, a complete bracket formed of a single piece of sheet metal comprising arms B and C bent at an angle to each other, a rounded corner D at the juncture of the, aforesaid arms, a base C' of approximately the length of the bracket having a rearwardly-bent reinforcing-flange E extending entirely around the edge thereof, and a central, longitudinal rib or reinforce F of approximately the length of the base C' struck up therefrom, said rib or reinforce being ar-

ranged wholly within the outline of the base
C', and made largest in cross-section at the
rounded corner D, and becoming gradually
smaller as it approaches the ends of the arms
5 B and C, near both of which ends it loses it-
self substantially as specified.

Signed at the city of New York, in the

county and State of New York, this 18th day
of September, 1895.

JOHN GRAVES.

Witnesses:

GUSTAVE DIETERICH,
JOHN KEHLENBECK.