

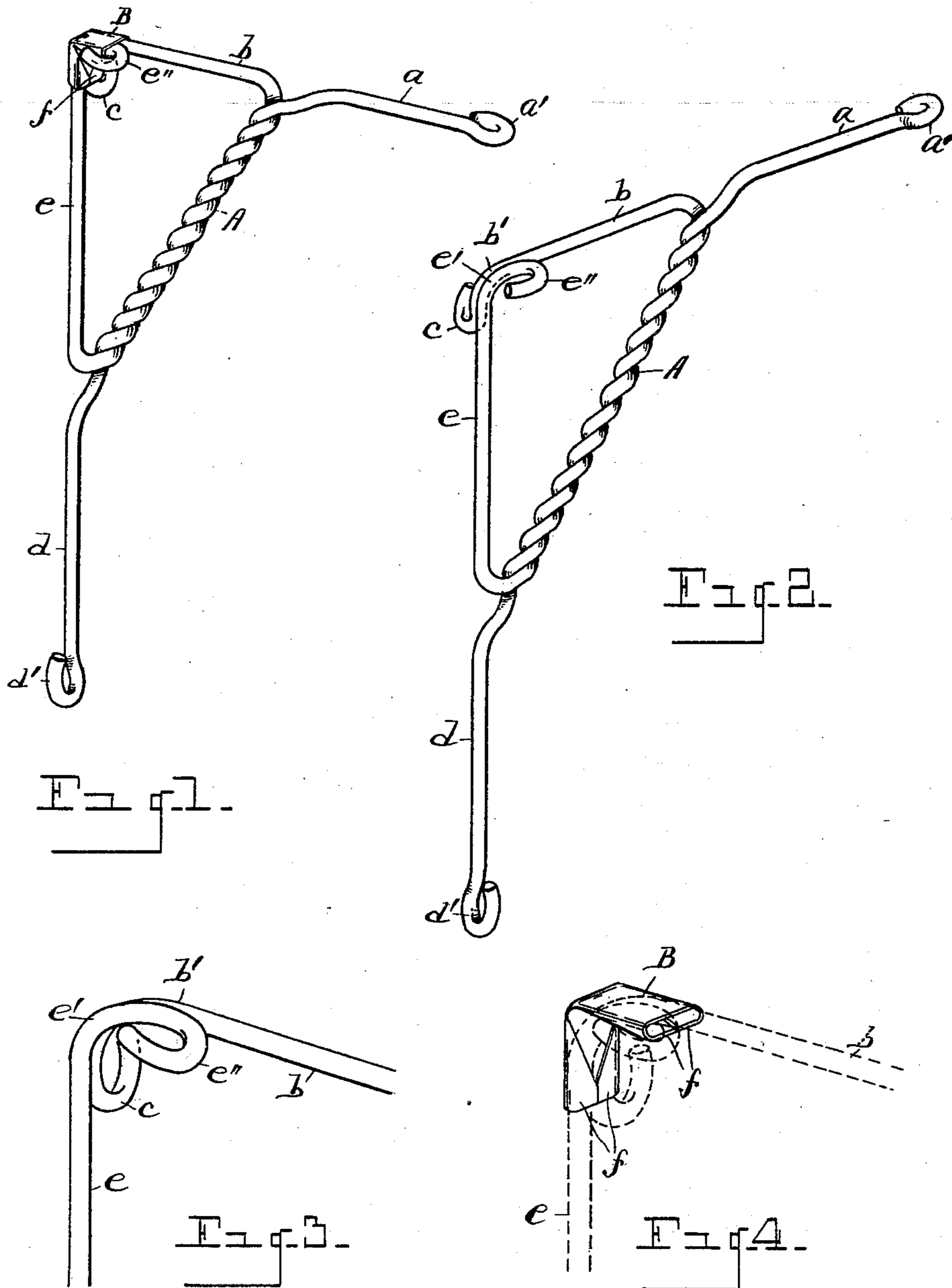
No. 622,933.

Patented Apr. 11, 1899.

J. E. TWITCHELL.  
SHELF BRACKET.

(Application filed May 18, 1898.)

(No Model.)



WITNESSES.

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# UNITED STATES PATENT OFFICE.

JAMES E. TWITCHELL, OF DETROIT, MICHIGAN.

## SHELF-BRACKET.

SPECIFICATION forming part of Letters Patent No. 622,933, dated April 11, 1899.

Application filed May 16, 1898. Serial No. 680,787. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES E. TWITCHELL, a citizen of the United States, residing at Detroit, in the county of Wayne, State of Michigan, have invented certain new and useful Improvements in Shelf-Brackets; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

15 This invention relates to new and useful improvements in wire shelf-brackets; and it consists in the construction and arrangement of parts hereinafter fully set forth, and pointed out particularly in the claims.

20 The object of the invention is to secure a light, strong, and inexpensive bracket of ornamental appearance. This object is attained by the construction shown in the accompanying drawings, in which—

25 Figure 1 is a perspective view of my improved bracket. Fig. 2 is a like view looking at the rear face thereof. Fig. 3 is an enlarged detail in perspective, showing the eyes formed in the arms of the bracket at the corner thereof. Fig. 4 is a perspective view of the corner-plate, showing the manner of confining the arms of the bracket at the corner.

Referring to the letters of reference, A designates the brace of the bracket, which is 35 formed by twisting together the strands of wire of which the bracket is composed. At the upper end of the brace A the strands composing it divide, one extending outwardly, as at *a*, forming the outer portion of the horizontal arm of the bracket, the extreme end 40 of which is provided with an eye *a'*. The other strand *b* of the brace extends rearwardly, forming the rear portion of the horizontal arm of the bracket and standing in line with the 45 forwardly-extending portion *a* of said arm. The rear end of the rearwardly-extending portion *b* of the horizontal arm of the bracket is bent at right angles, as at *b'*, and is provided with the depending eye *c*, which serves as a 50 means of attaching the bracket to the wall. At the lower end of said brace A the strands composing it also divide, one strand, as *d*, ex-

tending downwardly and forming the lower portion of the vertical arm of the bracket, its free end being provided with an attaching-eye *d'*. The other of said strands of said 55 brace at its lower end extends upwardly, as at *e*, forming the upper portion of the vertical arm of the bracket, its upper end being bent at right angles, as at *e'*, and provided 60 with the horizontally-projecting attaching-eye *e''*.

By bending the inner converging ends of the arms of the bracket, so that they cross the corner, and by forming the attaching-eyes *c e''* 65 in the right-angled portions thereof, respectively, a very strong corner is formed, while at the same time the inner ends of the bracket-arms are braced one against the other. As an additional security to the corner of the bracket 70 the clamping-plate B is employed, which is bent at right angles and provided with the folding flanges *f*, adapted to embrace the wires of the bracket-arms at the corner and retain them securely in place. 75

In mounting this improved bracket in position screws or other suitable fastening means are passed through the eyes *d'* and *c* into the wall and through the eyes *a'* and *e'* 80 into the shelf, thus firmly securing the bracket to the shelf and to the wall and providing a firm support for the shelf through the medium of the twisted brace A, which extends obliquely between the arms of the bracket, making a strong, light, and ornamental 85 bracket which may be cheaply made.

Having thus fully set forth my invention, what I claim is—

1. In a shelf-bracket, the combination with the brace, of the arms of the bracket formed 90 integral therewith, said arms projecting in a plane at right angles to each other, and each of said arms being provided with attaching-eyes formed therein at both ends thereof.

2. In a shelf-bracket, the combination with 95 the brace, the arms formed integral with said brace standing at right angles to each other, the inner ends of said arms forming the corner of the bracket lapping and crossing said corner and provided with attaching-eyes 100 standing at right angles to the plane of said arms.

3. In a shelf-bracket, the combination with the brace, the arms of the bracket formed in-

tegral with said brace and standing at right angles to each other, the inner ends of said arms forming the corner of the bracket lapping and being bent at right angles and provided with attaching-eyes, and the angle-plate 5 embracing the lapping ends of the arms of said bracket at the corner.

4. A shelf-bracket comprising two strands of wire twisted together to form the brace, 10 said strands being divided at both ends of said brace and extended in opposite directions to form the right-angled arms of the bracket.

5. A shelf-bracket comprising two strands

of wire twisted together to form the brace, 15 said strands at both ends of said brace being divided and extended in opposite directions to form the arms of the bracket, the ends of the inwardly-extending strands being bent at right angles to extend across the corner of 20 said bracket in opposite directions and provided with attaching-eyes.

In testimony whereof I sign this specification in the presence of two witnesses.

JAMES E. TWITCHELL.

Witnesses:

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