(No Model.)

## C. A. COTTER. METAL BRACKET.

No. 557,111.

Patented Mar. 31, 1896.

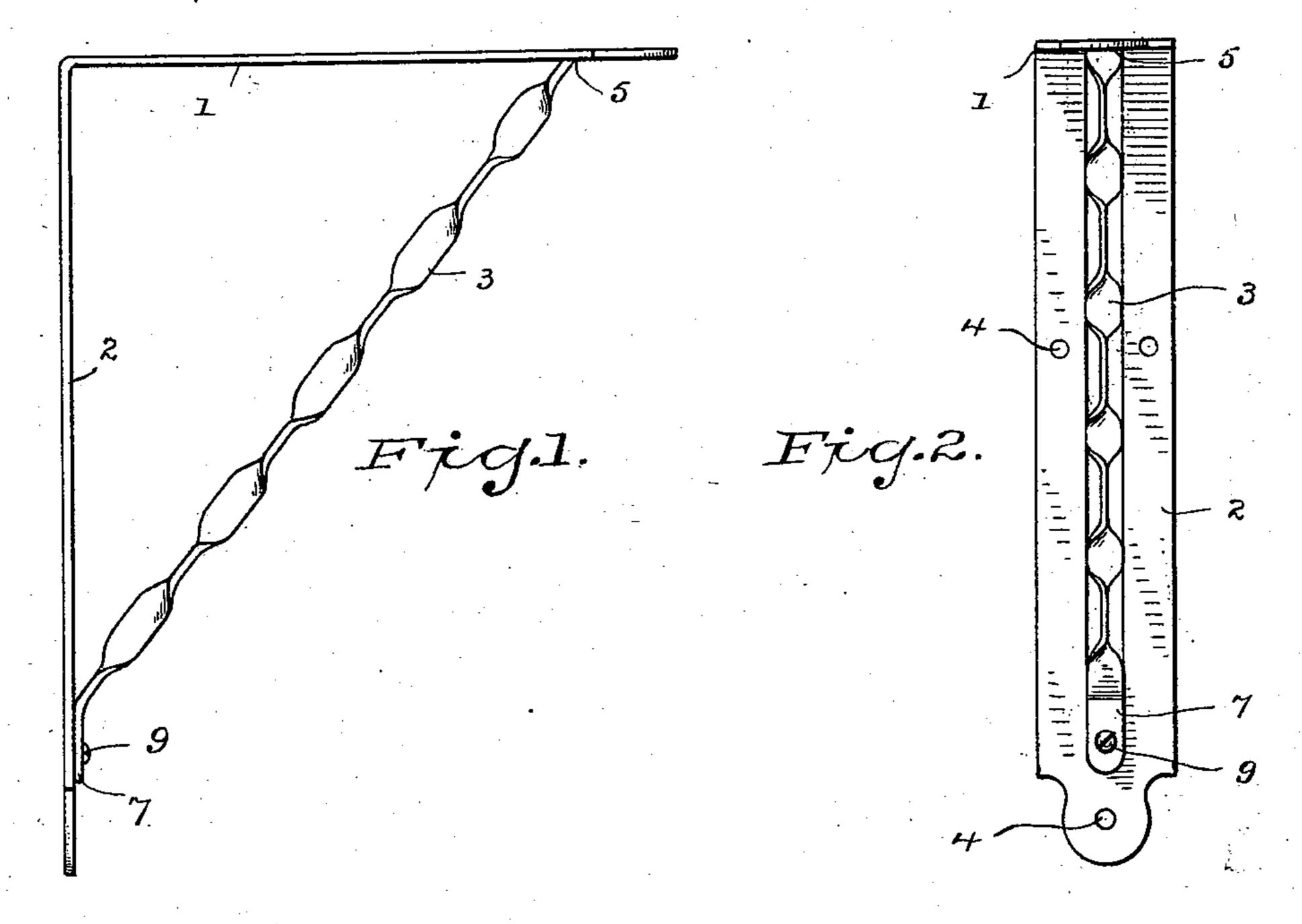
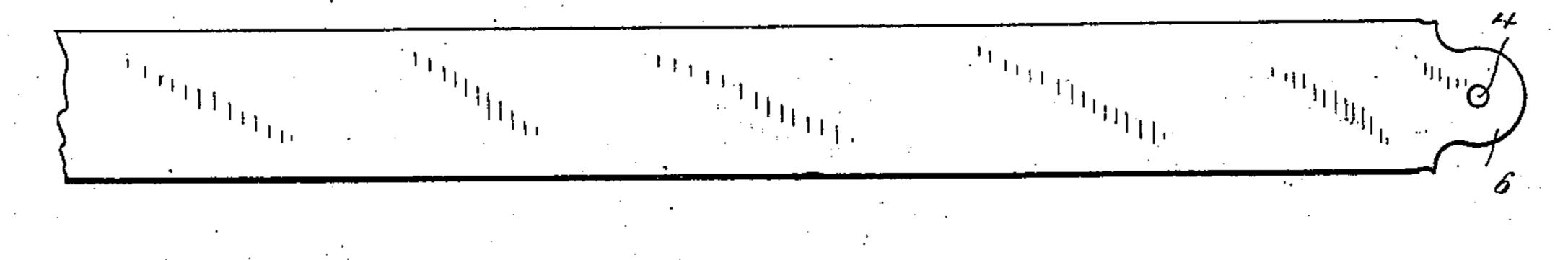
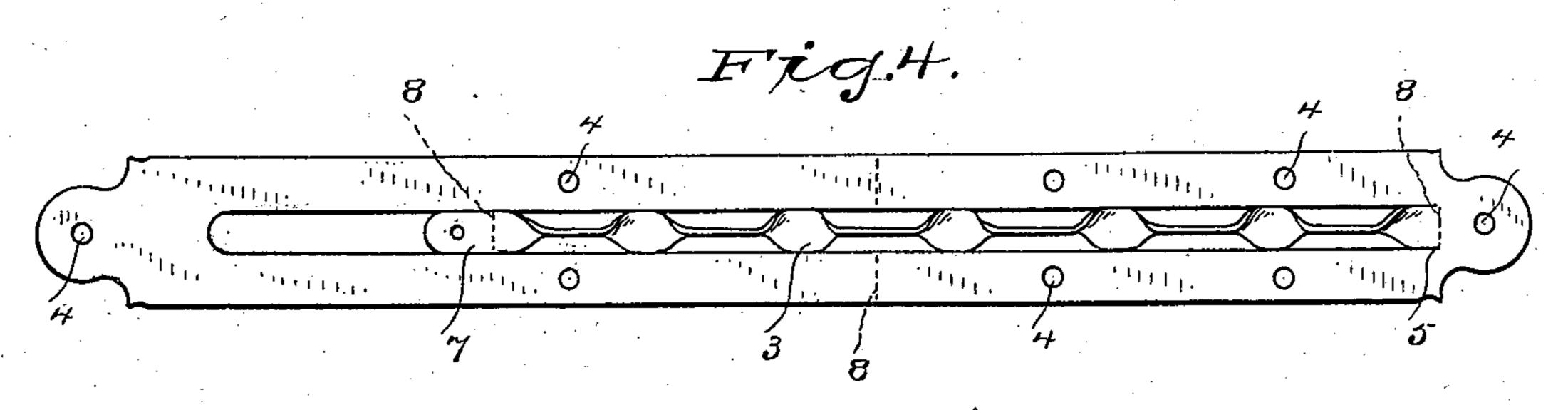


Fig.3





WITNESSES

JOST Lamb

INVENTOR
Charles A. Cotter
By
A. M. Mooster
Otty

## United States Patent Office.

CHARLES A. COTTER, OF WATERBURY, CONNECTICUT, ASSIGNOR TO RANDOLPH & CLOWES, OF SAME PLACE.

## METAL BRACKET.

SPECIFICATION forming part of Letters Patent No. 557,111, dated March 31, 1896.

Application filed October 15, 1894. Serial No. 525,856. (No model.)

To all whom it may concern:

Be it known that I, Charles A. Cotter, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Metal Brackets; 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 appertains to make and use the same.

My invention has for its object to produce a sheet-metal bracket adapted for general use, which shall be made wholly from one piece of metal and which shall be so constructed as to enable it to be blanked out and completed by simple and inexpensive operations.

With this end in view I have devised the novel bracket of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to designate the several parts.

Figure 1 is a side elevation of my novel bracket complete; Fig. 2, a front elevation; Fig. 3, a plan view of the end of the strip of metal after a blank has been cut off; and Fig. 4 indicates the different steps in the operation of making the completed bracket.

arm, and 3 the brace. The two arms are provided with screw-holes 4 to receive screws for attaching the bracket in place and screws for attaching a shelf or slab to the bracket. The brace is a tongue of metal blanked out from the center of the strip, one end of the tongue being left attached, as at 5 in Fig. 4. As the metal from which each bracket is formed is severed from the strip, the end of the strip is left suitably shaped to form the end of the next op-

eration strikes out and cuts off the tongue from which the brace is formed and also severs the metal for one bracket from the strip. Another operation bends the tongue from which the brace is formed to the re- 45 quired angle, bends the other end of the brace to the proper angle for attachment in place, as at 7, and also twists or corrugates the metal of the brace, so as to impart thereto a highly-ornamental appearance and also to 50 give the greatest possible amount of strength for the metal used. In the present instance I have shown the brace as strengthened and ornamented by twisting alternate portions thereof at right angles to each other. An- 55 other operation bends the two arms of the bracket at right angles to each other, the point of bending the blank and the point of bending the end of the brace being indicated by dotted lines, as at 8 in Fig. 4. The other end 60 of the brace is attached to one of the arms in any suitable manner, as by a screw 9.

Having thus described my invention, I claim—

A bracket formed of a single piece of sheet 65 metal and consisting of a strip having a continuous slot extending nearly from one end to the other and bent to form vertical and horizontal arms, and a brace in front of said slot, said brace being integral with the strip 70 at one end and permanently connected thereto at the other end, whereby said brace serves to prevent movement of the arms of the strip toward or from each other.

In testimony whereof I affix my signature 75 in presence of two witnesses.

CHARLES A. COTTER.

Witnesses:

C. GRAHAM BEACH,

T. McSpeddon Hadley.