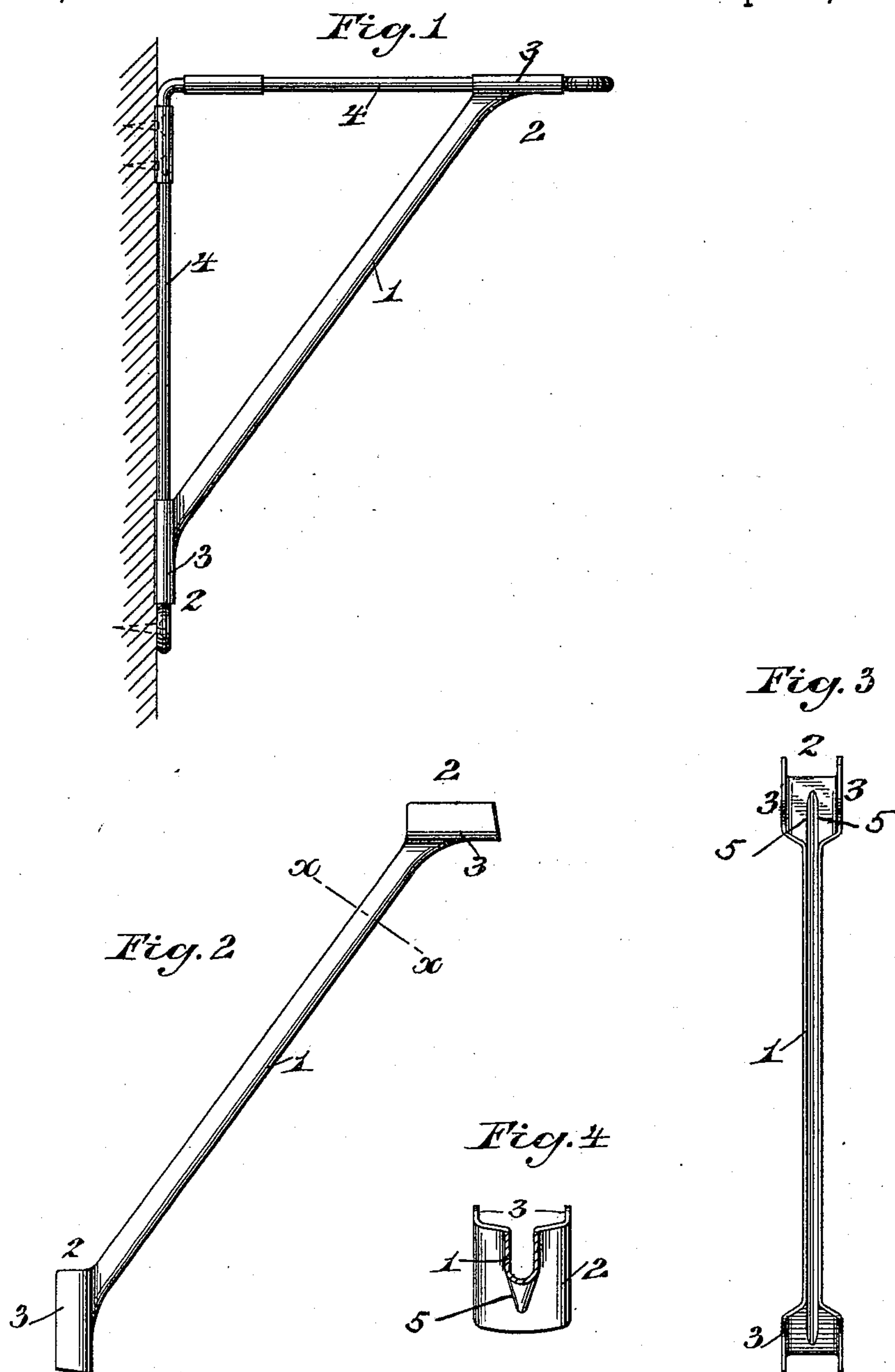


(No Model.)

H. L. BRADLEY.  
BRACE.

No. 494,622.

Patented Apr. 4, 1893.



Witnesses:  
E. M. Gallahan  
Edith G. Ely.

Inventor  
Henry L. Bradley  
By J. M. Wooster atty.

# UNITED STATES PATENT OFFICE.

HENRY L. BRADLEY, OF NEW HAVEN, CONNECTICUT.

## BRACE.

SPECIFICATION forming part of Letters Patent No. 494,622, dated April 4, 1893.

Application filed October 10, 1891. Serial No. 408,353. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY L. BRADLEY, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Braces; 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 strengthen and to greatly improve the construction of braces while at the same time the cost of construction shall be reduced, the general appearance improved and the brace shall be rendered self attaching, all fastening devices such as screws, bolts, nails, &c., being wholly dispensed with.

I have illustrated my novel brace as used in connection with a wire bracket. It should be understood, however, that my novel brace is adapted for any of the general purposes for which light, stiff and strong braces are required as for example corner irons and braces on boxes, baby carriages, sleds, wheelbarrows, and on shelf, flower pot, lamp and the various other classes of brackets. The essential features are that the braces are made and sold independently of the brackets or other articles with which they are to be used, that the braces are blanked out and formed to shape by die work only and that the heads are provided with flanges by which they are made readily attachable—by the latter terms meaning that only the brace itself, shaped in the peculiar manner described, is necessary to effect the attachment.

With these ends in view I have devised the simple and novel readily attachable brace of which the following description in connection with the accompanying drawings is a specification, numbers being used to denote the several parts.

Figure 1 is a side elevation illustrating one of my novel braces in use in connection with an ordinary wire bracket; Fig. 2 a side elevation and Fig. 3 a rear elevation of my novel brace detached; and Fig. 4 is a section on an enlarged scale on the line  $x x$  in Fig. 2.

My novel brace is blanked out from sheet

metal and is then formed to shape by the successive action of suitable dies. 1 denotes the body of the brace which is made U shape in cross section as clearly shown in Fig. 4. At each end of the body is a flattened head 2 formed from the same piece of metal as the body, said bodies starting from the central portion of the heads, and said heads lying ordinarily at right angles to each other and each lying at an obtuse angle to the plane of the body, it being of course understood however that the special angle at which the flattened heads are set relatively to the plane of the body is not of the essence of my invention, as I contemplate making special braces so formed as to be adapted to the various uses for which they are intended. The heads are united with the body or shank of the brace along the U-shaped end edges of the body on the U-shaped line 5, whereby the parts of the brace are stiffly and rigidly united with each other, and the brace enabled to effectively perform its office. Any bending of the head relative to the body, which would cause the flanges 3, (hereinafter described) or other fastening devices to be bent up and loosened, is thus prevented.

In order to make my novel brace readily attachable when used in connection with brackets, carriages, sleds, &c., I provide the flattened heads with side flanges 3 formed integral therewith and ordinarily left standing at right angles to the planes of the flattened heads.

In use the brace is locked in position by clamping the side flanges closely about the article upon which it is used as for example in Fig. 1 where the side flanges are shown as closed about the arms 4 of a wire bracket.

In the drawings I have shown simply an ordinary plain brace. It will be understood however, that the bodies and heads of these braces may have any desired ornamentation imparted to them by the use of dies having ornamental figures cut therein. These braces may be made from brass or bronze although the cheaper grades are made from sheet iron and ornamented by plating or japanning.

Having thus described my invention, I claim—

A sheet metal brace the body or shank of



which is U-shaped in cross section, having  
flattened heads set at opposite angles to the  
said body and provided on their edges with  
side flanges 3 adapted to be curved about the  
5 parts with which the brace is used, whereby  
said parts are secured and braced, the said  
heads being joined to the body along the U-  
shaped end edges of the latter on the line 5,

whereby the parts of the brace are stiffly  
united, substantially as set forth. 10

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

HENRY L. BRADLEY.

Witnesses:

A. M. WOOSTER,  
EDITH G. ELY.