No. 782,035. PATENTED FEB. 7, 1905.

H. F. KEIL.

BRACKET AND SUPPORT.

APPLICATION FILED JULY 12, 1904.

3 SHEETS—SHEET 1.

Fig. 1.

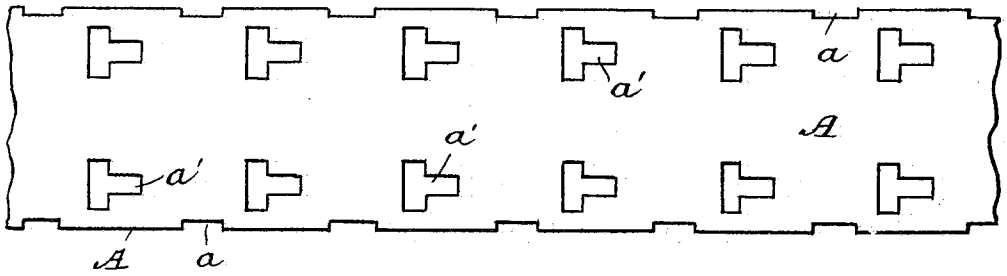


Fig. 2.

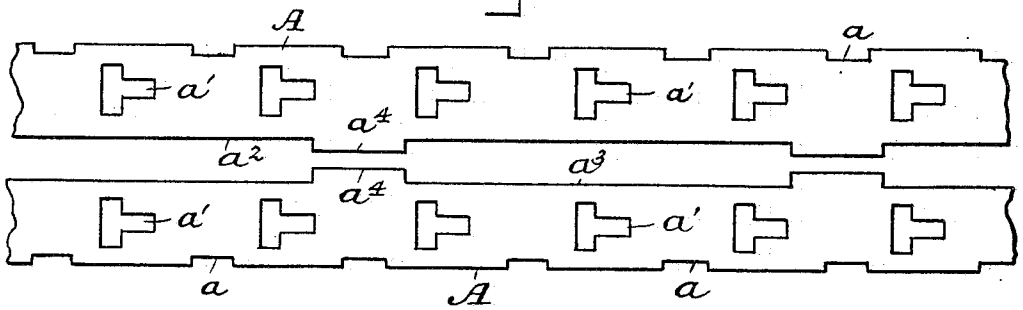
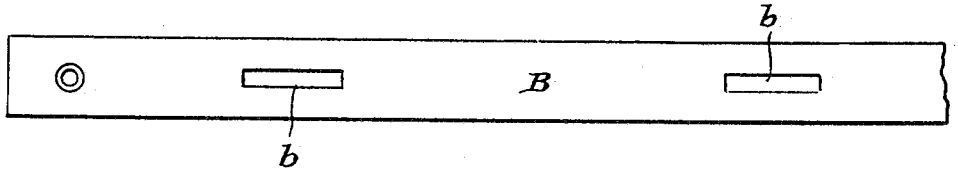


Fig. 3.



Witnesses:
E. B. Bolton
E. Mills.

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his Attorney

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3 SHEETS—SHEET 2.

Fig. 6.

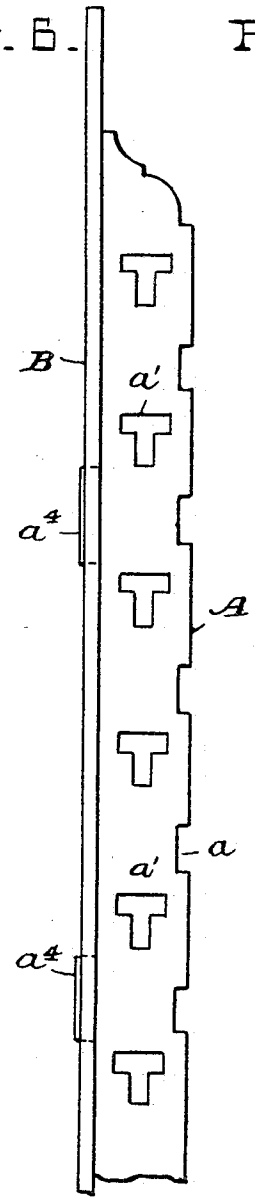


Fig. 5.

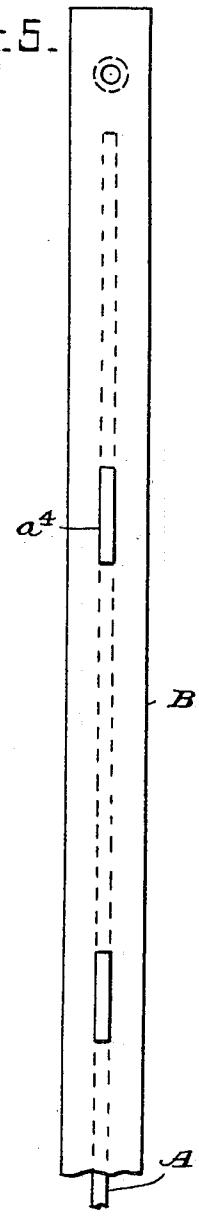


Fig. 4.

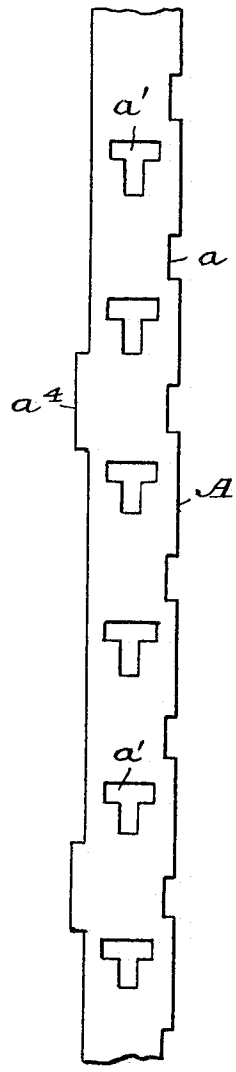
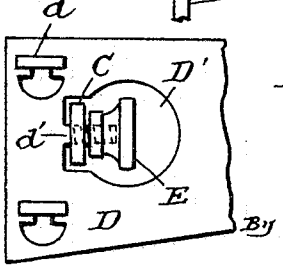


Fig. 7.



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3 SHEETS—SHEET 3.

Fig. 8.

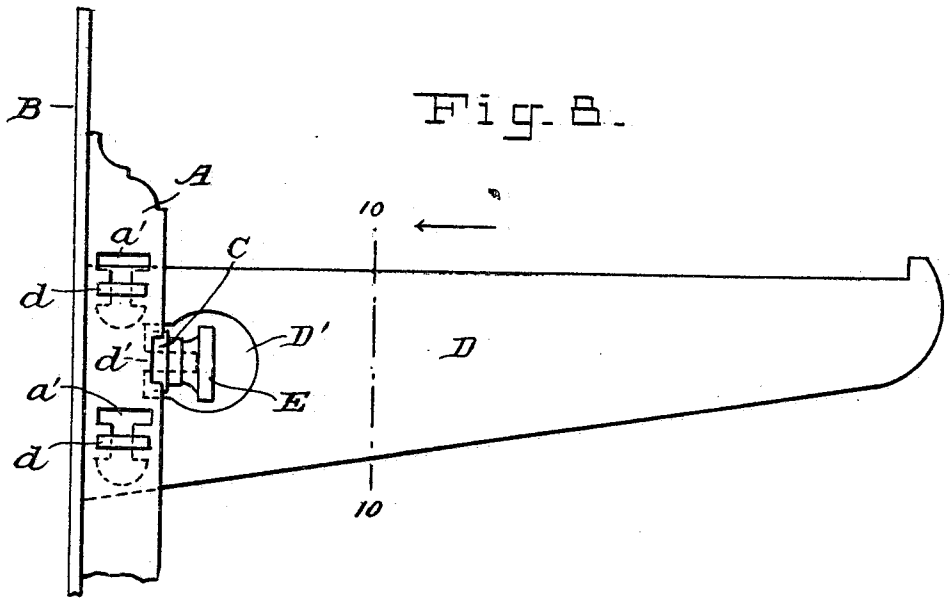


Fig. 9.

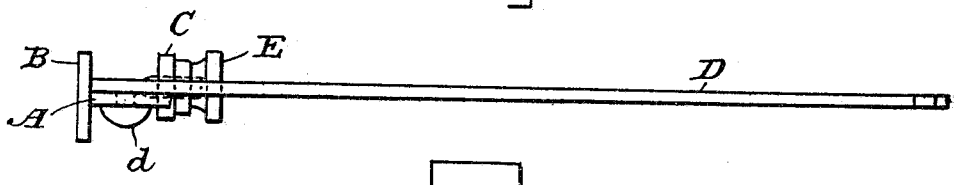
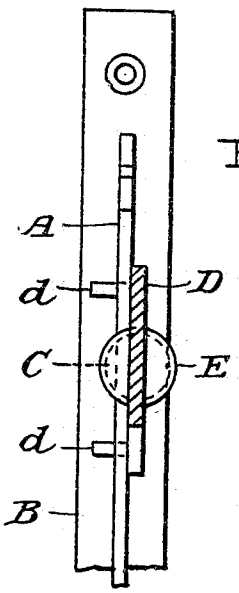


Fig. 10.



Witnesses:
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No. 782,035. Patented February 7, 1905.

UNITED STATES PATENT OFFICE.

HENRY FRANCIS KEIL, OF BRONXVILLE, NEW YORK.

BRACKET AND SUPPORT.

SPECIFICATION forming part of Letters Patent No. 782,035, dated February 7, 1905.

Application filed July 12, 1904. Serial No. 216,230.

To all whom it may concern:

Be it known that I, HENRY FRANCIS KEIL, a citizen of the United States of America, and a resident of Bronxville, in the county of Westchester and State of New York, have invented a certain new and useful Bracket and Support, of which the following is a specification, the same being 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 relates to articles constructed and arranged to serve as supporting plates or arms and provided with means to sustain shelves, &c., and also having engaging means whereby the same may be secured to a suitable back bar, channel-plate, or other support, and also to supporting devices for the said bracket-arms; and it has for its object the production of structures formed of sheet metal and stamped out in order to provide a light as well as strong and durable, although inexpensive, metal bracket-arm and support therefor.

With this object in view the invention consists in certain novel features of construction and combination and arrangement of parts, all of which will be hereinafter described, and specifically illustrated in the drawings, which accompany and form a part of this specification, in which—

Figure 1 represents a plan view of a blank from which one set of the plates used in my bracket-support is made. Fig. 2 is a similar view of the said blank cut so as to form a pair of plates. Fig. 3 is a plan view of a plate used in connection with one of the plates shown in Fig. 2. Fig. 4 is a plan view of one of the support-pieces made from the blank shown in Fig. 2. Fig. 5 is a rear elevation, and Fig. 6 a side elevation, of my bracket-support. Fig. 7 is a side elevation of a portion of my bracket-arm. Fig. 8 is a side elevation of my bracket-arm and support therefor; and Figs. 9 and 10 represent, respectively, a plan view and a front elevation of the same, the bracket in Fig. 10 being shown in section, taken on the line 10 10, Fig. 8.

Like letters of reference indicate like parts in all the views.

Referring particularly to the drawings, A denotes the duplex plate-blank provided with edge recesses a and interior and preferably angular orifices or slots a' and blanked out, as shown in Fig. 1. The plate-blank is then cut on the lines a^2 and a^3 in Fig. 2, whereby the two bracket-support plates A, blanked out in duplicate, are formed, each having recesses a formed in the outer edge thereof and interior angular recesses a' and projections a^4 located along the rear edge thereof. The advantage of blanking out the bracket-support in duplicate is that the metal keeps its shape and does not become curved out to one side as occurs when a single bracket-support is cut out in strips. B denotes another support-plate, constructed and arranged to be engaged with the first-named plate A, the said plate B being formed with slots or recesses b to register with and engage the projections a^4 of the plate A. The two plates A and B are assembled as shown in Figs. 5 and 6, the projections a^4 being passed through the slots b and riveted to the rear face of the plate B, the two plates A and B being thus held at a right angle with regard to each other.

The bracket-arm D is provided with integral projections, studs, or prongs d, made with a wide head and narrow neck and struck up out of the same and bent at an angle thereto, and also with an opening or orifice D', located near the rear end thereof, and an integral threaded pin d', projecting into the said opening or orifice. A washer C is placed loosely on the pin d', and an interiorly-threaded thumb-nut E is constructed and arranged to work on the said pin d' in order that the said washer may be adjustably fitted in a recess and also screwed down and rigidly held in the same.

In assembling the parts the bracket-arm D is attached to the support A B, the laterally-disposed prongs d entering the slots a', whereby the bracket-arm will be sustained in proper relation to support the shelf or other articles to be held. In order, however, to lock the parts, the washer C, which is preferably of such a form and contour as to register with and fit the recess a, is caused to enter the said recess a and be tightly screwed down thereto

by manipulating the thumb-nut E, whereupon the bracket will not become loosened from the support even if the same is subjected to jars and rough usage, as sometimes occurs in moving the cases containing the brackets or in cases of shipments of the said articles.

As it is evident that many changes in the construction, form, proportion, and relative arrangement of parts might be resorted to without departing from the spirit and scope of my invention, I would have it understood that I do not restrict myself to the particular construction and arrangement of parts shown and described, but that such changes and equivalents may be substituted therefor.

What I claim as my invention is—

1. A bracket-support having a series of recesses arranged along its edge and a series of interior slots, in combination with a bracket-arm having lateral projections to engage the said slots, a washer to engage one of the said recesses and means to screw and rigidly hold the washer and bracket to the support.

2. A bracket-arm having laterally-disposed projections and an interior orifice and a threaded pin entering therein, and a washer and thumb-nut mounted on the said pin, in combination with a support having a series of interior slots to register with the bracket-arm projections, and a series of recesses along its edge to register with and rigidly hold the said washer, to lock the bracket to the support.

In testimony of the foregoing specification I do hereby sign the same, in the city of New York, county and State of New York, this 26th day of June, 1904.

HENRY FRANCIS KEIL.

Witnesses:
DIEDRICH STEGEN,
CHAS. H. J. DILG.