No. 635,842. Patented Oct. 31, 1899.

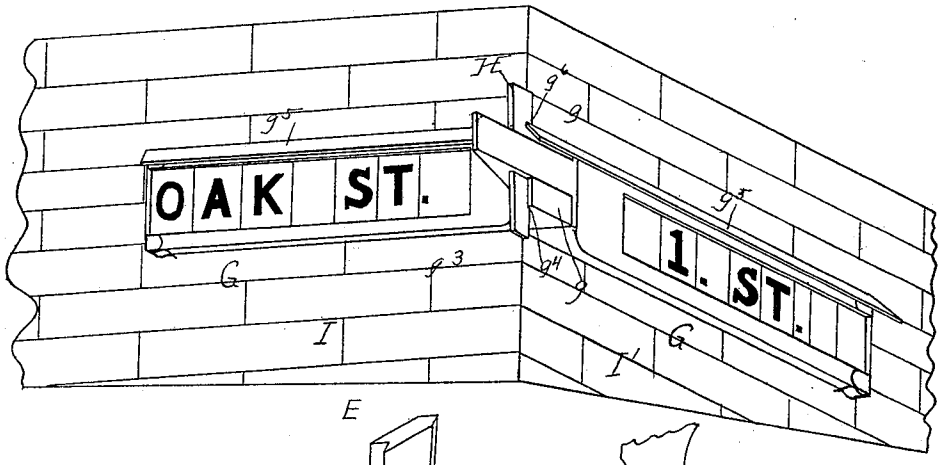
C. I. BUSH.

BRACKET FOR STREET SIGNS.

(Application filed July 17, 1899.)

(No Model.)

Fig. 5.



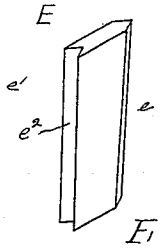


Fig. 4

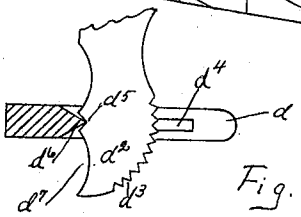


Fig. 8.

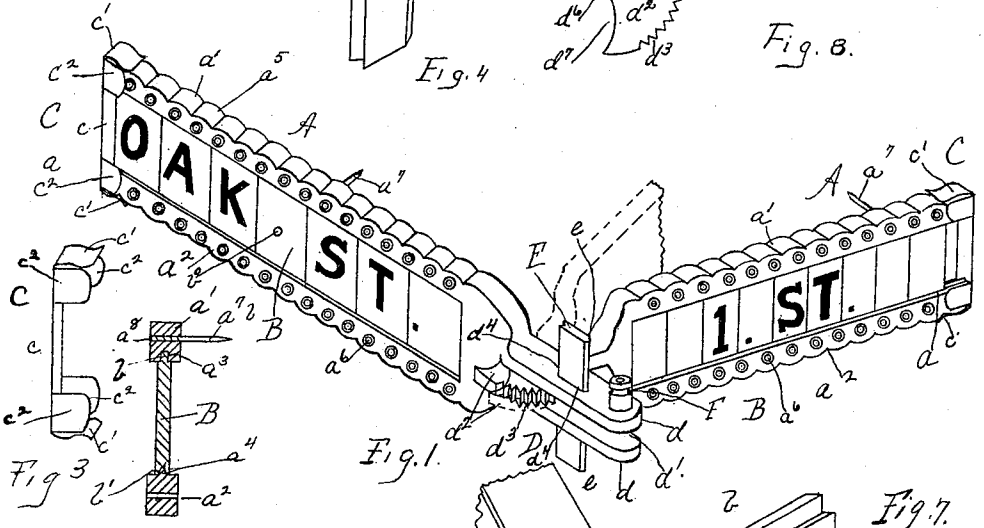


Fig. 1.

Fig. 3

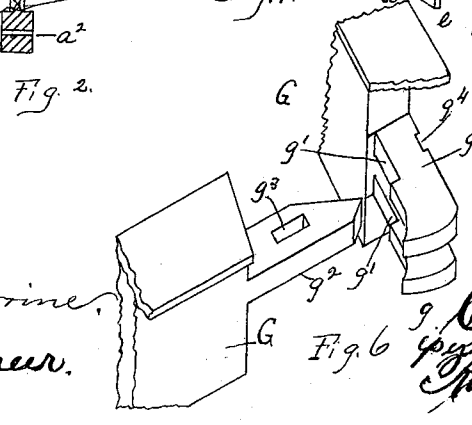


Fig. 2.

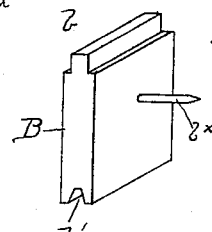


Fig. 7.

Fig. 6

Witnesses.
L. L. Perrine.
A. L. Greer.

Inventor.
Corydon I. Bush
by Pickel & Manning
Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CORYDON I. BUSH, OF KANSAS CITY, MISSOURI.

BRACKET FOR STREET-SIGNS.

SPECIFICATION forming part of Letters Patent No. 635,842, dated October 31, 1899.

Application filed July 17, 1899. Serial No. 724,115. (No model.)

To all whom it may concern:

Be it known that I, CORYDON I. BUSH, a citizen of the United States of America, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Brackets for Street-Signs; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

The object of my invention is a bracket for securing street or other signs, insulator for electric wires, or other devices to wall-posts, &c.; and it consists in the novel construction and combination of parts, such as will be first fully described, and specifically pointed out in the claims.

In the drawings, Figure 1 is a view in perspective of my improved bracket for street-signs, showing an alternate position of one part of the bracket in dotted lines. Fig. 2 is a cross-section of the slotted arm of the bracket, showing the tongue and groove on the upper and lower longitudinally-extended parts and also in the blocks for the characters and the securing-pin. Fig. 3 is a detail view in perspective of the clamps at the outer end of the arms of the bracket. Fig. 4 is a detail enlarged perspective view of the key for securing the arms of the bracket in an adjusted position. Fig. 5 is a view of the bracket applied to the corner angle of the front and side walls of a building, showing a modification of the locking devices to the meeting ends of the arms of the bracket. Fig. 6 is a detail view in perspective of the locking parts as seen in Fig. 5 in a detached position, showing the mortise-joint. Fig. 7 is a detail view of one of the blocks in the arms of the bracket, showing the pin in the block. Fig. 8 is a detail view showing the adjustable toothed plate and a sectional view of a portion of the bracket-arm, showing the bearing for the said plate.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

Referring to the drawings, A A represent the separate arms of the bracket. The said arms consist of flat plates of suitable length and thickness and in which are longitudinal slots or openings a a, extending from the outer ends of said arms to a point a short distance from the inner meeting ends of said arms. The inner longitudinal edge of the upper part a' of the arms A A is grooved, as at a^3. (See Fig. 2.) On the inner longitudinal edge of the lower part a^2 of said arms is a tongue a^4, the sides of which tongue incline in opposite directions. The outer longitudinal edges of the parts a' a^2 of the plates A A are corrugated, as at a^5.

A^6 are screw-threaded openings extending transversely through the upper and lower parts a' a^2 of the arms A A and about equal distances apart.

a^7 is a pin having a screw-threaded portion a^8 fitted within one of the openings a^6.

B represents the separate blocks between the upper and lower parts a' a^2 of the arms A A, and upon each block the letters are placed in any well-known manner.

b^9 is an opening for a nail or screw in block B.

In the upper edge of the blocks are tongues b, which enter the grooves a^3 in the part a' of the arms A A, and in the lower edge of the block is a V-shaped groove or guide b', which receives the tongue a^4 on the inner edge of the part a^2 of said arms.

C is a clamp on the outer ends of the parts a' a^2 of the arms A A. Said clamp consists of a flat vertical spring-plate c, the upper and lower ends c' of which plate are bent nearly at right angles to the plate c and in an outwardly-curved line and extend over the corrugations a^5 at the end of the parts a' a^2 of the arms A A. On the edge portion of the plate c are side or ear spring-plates c^2, which extend a short distance over and parallel with the sides of the parts a' a^2 of the said arms, so as to clamp upon said sides. At the meeting ends of the arms A A are adjustable interlocking devices D, which are constructed as follows: Upon the inner end of arm A are longitudinally-extended flat plates d d, between which is an opening or slot d', extending from the outer ends of said plates to the said arm A. Upon the inner end of the other arm A is a longitudinally-extended flat plate d^2, which extends between the plates d

d, upon the outer edge of which plate d^2 are teeth d^3, the points of which teeth lie in the arc of a circle and the sides of which teeth incline outwardly to a single edge. The inner edge of the plate d^2 is in the plane of the inner side of arm A and is provided with a notched bearing d^5, which receives a pointed extension d^6 at the inner end of the slot d'. (See Fig. 8.) Said inner edge is also curved, as at d^7. In the plates d d is a slot d^4, extending from the vertical plane of the teeth d^3 on the plate d^2 a short distance in the direction of the outer ends of said plates.

E is a wedge-shaped key for securing the plate d^2 in an adjusted position. Said key consists of a flat plate the edges e e' of which are inclined in a slight degree downwardly and inwardly toward each other, so as to make a wedge-shaped key. In the edge e' is a longitudinal V-shaped groove e^2, adapted to fit the teeth d^3 of plate d^2. The sides of the outer edge e of plate E incline toward each other and form a wedge-shaped edge adapted to extend between adjacent teeth d^3 d^3 on plate d^2. Upon one of the plates d of arm A is an insulator F.

For the purpose of a street-sign the blocks B, which are commonly of a cast material with the appropriate letter or symbol thereon or in the form of a letter, are placed consecutively between the upper parts a' a^2 of the bracket-arms A A and the clamps C fitted upon the ends of said parts a a', the spring-plates c' engaging with the corrugations a^5 and drawing upon the said parts a a' and holding the blocks B in place, the ears c^2 preventing the movement sidewise of said clamps.

In securing the bracket-arms to the walls of a building and at the corner formed by the angle of said walls one arm A of the bracket is placed with its inner side toward the front wall and the pin a^7 inserted in a proper opening in the brick in a brick wall or into the wood of frame building and with the parts d d of the securing device D on the arm extending beyond the edge of the corner. The other arm A is placed upon the other or side wall of the building and the pin a^7 inserted within the opening therefor in the wall and the part or plate d^2 upon said arm toward and extended between the plates d d upon the other arm of the bracket. The key E is then inserted in the slot d^4 in the plates d d with the groove e^2 toward one of the teeth d^3 and forced downwardly in the slot, wedging the plate d^2 against the inner bearing d^5 on the inner side of the slot d' and preventing accidental movement of the key, at the same time securing the arms A A to the building, so that they cannot be detached without removing the key E. The bracket-arms thus not only afford a permanent support for street-signs, but also enable the arms to be utilized in the support of electric wires from the insulator F or street-lamps, and other devices may be readily supported in like manner, the pins a^7 on each arm A being moved in position to afford the best position for entering the wall and for attachment to lamp-posts or other like supports.

In fitting the bracket-arms A A to the angles in the walls of buildings which are at an acute or obtuse angle or in any position from a right angle the arms are placed upon the walls, as heretofore described, and the interlocking parts adjusted in position at the desired angle, as shown in dotted lines, Fig. 1, the bearing d^6 preventing the plate d^2 from slipping, and the key inserted. Should the angle of adjustment be such as to bring adjacent teeth d^3 past the slot d^4 in plate d, the key E is reversed and the key inserted with the edge e toward and between the adjacent teeth d^3 d^3, thus securing the arms firmly in position to the wall. These interlocking securing devices are shown in a modified form in Figs. 5 and 6, the bracket-arms being shown connected with the front I and side wall I' of a building, in which figures g g are longitudinally-extended plates on a bracket-arm G, which are similar to the plates d d on the bracket-arm A, on the inner edge of which plates g g are gains g' g'. Upon the other bracket-arm G is a flat plate or tenon g^2, which extends between the plates g g and in which is a vertical slot g^3. In the outer edges of the plates g g is a groove g^4.

H represents the key, which consists of a wedge-shaped plate with flat outer edges. In this construction the gains g' extend over a portion of the sides of the bracket-arm G and the key H extends within the groove g^4 and the slot g^3 in the tenon g^2, drawing the meeting ends of the bracket-arms close together at right angles and enabling the arms to support great weight. I have shown an inclined plate or shield g^5 upon the upper edge of the bracket-arms G G, which is extended to shed the water from the securing device and bracket-arms, one portion of which extends to the key H and is slotted at g^6 for said key. Both the plate g^5 and the tongue b' on the part a^2 of the bracket-arm A serve to prevent the water from lodging upon the arms and corroding the parts.

Obvious changes may be made in construction without departing from the spirit of the invention—as, for instance, the pin a^7 may be connected with one of the blocks B, as at $b^\times$, Fig. 7, and the block secured to the building or post. The arms may then be secured to the blocks without necessitating the screw-threaded openings in the the parts a' a^2 of the bracket-arms. Any other form of pin than here described may be used.

The obvious advantage of the tenon and wedge at the meeting ends of the bracket-arms is to enable the arms to be placed firmly against the wall and the pins driven into the wall, so that when the wedge is inserted in the vertical openings in the outwardly-extended plates and driven in place the drawing of the tenon and said plates together also draws upon the pins a^7 and binds the bracket-arms

to the wall without danger of being drawn from position by any force applied in a direction outward from the wall.

I am aware that bracket-arms at their outer ends have been connected by a hinge of ordinary construction. Such hinge would have no clamping force to draw upon the pins securing the arms to the wall. My invention avoids the necessity of attachments, such as braces, to secure the arms to the wall or other support.

Having fully described my invention, what I now claim as new, and desire to secure by Letters Patent, is—

1. In a bracket comprising separate arms extending at an angle to each other, the combination with the securing-pins on said arms of securing devices at the meeting ends of said arms, consisting of separate longitudinally-extended vertically-slotted plates upon one arm having an opening between said plates, a tenon upon the meeting end of the other arm and a suitable tapered key.

2. In a bracket comprising separate arms extending at an angle to each other, the combination of securing devices at the meeting ends of said arms, consisting of separate longitudinally-extended vertically-slotted plates having an opening between said plates, a plate upon the other arm extending within said opening, and having teeth upon the outer edge, the points of which are in an arc of a circle, and a reversible wedge having one of its longitudinal edges grooved, and the sides of the other edge inclined and adapted to engage with the teeth upon said plate.

3. In a bracket comprising separate arms extending at an angle to each other, the combination of securing devices at the meeting ends of said arms, consisting of separate longitudinally-extended vertically-slotted plates having an opening between said plates, and a bearing at the inner end of said slot, a plate upon the other arm having teeth upon the outer edge of said plate, the points of which teeth are in an arc of a circle, and a depression in the inner edge of said plate to receive said bearing, and a wedge having its inner edge adapted to engage with said teeth in said plate.

CORYDON I. BUSH.

Witnesses:
HENRY STUBENRAUCH,
C. F. MEAD.