W. F. PARKER.

METAL CORNER PLATE FOR PROTECTING CORNERS OF PLASTERED WALLS.

(Application filed July 17, 1899.) (No Model.) Trivertor.
William F. Poirker.
Limite meyers Metresses.

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

UNITED STATES PATENT OFFICE.

WILLIAM F. PARKER, OF NEW YORK, N. Y.

METAL CORNER-PLATE FOR PROTECTING CORNERS OF PLASTERED WALLS.

SPECIFICATION forming part of Letters Patent No. 640,410, dated January 2, 1900.

Application filed July 17, 1899. Serial No. 724,156. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. PARKER, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Metal Corner-Plates for Protecting the Angles of Plastered Walls; 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.

This invention relates to corner plates or strips for protecting and ornamenting the an-15 gles of plastered walls; and it has for its object to provide certain new and useful improvements in the corner strip or plate set forth in my application for patent, Serial No.

715,320, dated May 2, 1899.

Corner-strips now in general use usually consist of a perforated strip of sheet metal bent longitudinally between its edges, so as to provide two sections or leaves, one of which is secured to the side of the wall and the other 25 one of which projects outward from the angle of the wall to form the plaster-line. This type of corner-strip, and, in fact, any strip where a portion thereof overlaps and is secured to the side of the wall, is expensive, owing to the 30 additional width of metal required in forming the said overlapping or securing portion, and it is an essential feature of this invention to provide a corner strip or plate wherein a minimum width of metal is required and one 35 that will be comparatively cheap and simple to manufacture and easy of application to a wall.

It is a further purpose of this invention to provide an improved form of bead-piece arranged to be attached to or formed integral with the corner strip or plate, said bead-piece being provided upon opposite sides with two longitudinally - arranged edged projections with undercut sides, forming thick plaster lines or edges at the points where the plaster joins the bead-piece to prevent the plaster from cracking or flaking off, which would be the case if only a thin film or sheet covered the metal bead-piece, and it is the provision of the said longitudinal plaster-lines or edged projections that forms one of the distinguishing features of the present invention over the

invention forming the subject-matter of the application hereinbefore referred to.

It is a further purpose of this invention to 55 provide an improved and simple form of clip and key for locking the corner strip or plate in position upon the wall.

The invention comprises other features of construction and arrangements of parts here- 60 inafter to be referred to in detail and then more definitely pointed out in the claims which conclude this specification.

In order to enable others skilled in the art to which my invention belongs to make and 65 use the same, I will now proceed to describe the invention in detail, reference being had for this purpose to the accompanying drawings, wherein—

Figure 1 is a horizontal sectional view of 70 the angle of a plastered wall, showing one form of my improved corner strip or plate applied in position. Fig. 2 is a front elevation looking in the direction of the arrow, Fig. 1. Fig. 3 is a view similar to Fig. 1, showing one 75 of my improved bead-pieces in position upon the corner-strip. Fig. 4 is a perspective view of a portion of the corner-strip, showing the manner of attaching the bead-piece thereto. Fig. 5 is a sectional view illustrating a modi- 80 fied form of bead-piece. Fig. 6 is a similar view showing a further modification wherein the bead-piece is formed integral with the corner-strip. Fig. 7 is a perspective view of one of my improved forms of clips. Fig. 8 is a 85 similar view illustrating the key or pin employed to lock the corner-plate to the clip.

Referring now to the drawings, Figs. 1 and 2, the reference-numeral 1 designates one of my improved flat corner strips or plates which 90 may be formed from a solid strip of metal, the opposite faces of which lie parallel throughout, or from a sheet folded over upon itself to form a solid strip composed of two layers, which is provided near its outer edge 95 with a row of elongated plaster-openings 2 and two or more rows of combined plaster and key openings 3. The said strip or plate is held in position upon the wall by means of two clips arranged upon opposite sides of the plate, 100 one of which is shown in detail in Fig. 7, and each comprising a flat body portion 4, provided with diagonal nailing-slots 5, and an angular extension 6, having one or more key-

openings 7, as clearly shown in the drawings. When in position, the body portion 4 of the clip is secured to the side of the wall at the angle, so that the angular extension 6 thereof 5 will lie flat against and parallel with the outer face of the plate, and the parts will be held locked in this position by means of the locking-keys, one of which is shown in detail in Fig. 8 of the drawings. These keys consist o each of a flat metal shank 8, having a small flat head 9 at one end and a similar but larger head 10 at the opposite end, and the shank is further provided upon its opposite edges adjacent to the heads with two pairs of inclined valls 11 and 12 for the purpose of drawing the parts together and locking them firmly in position. In attaching the corner strips or plates to a wall the clips are first nailed in pairs opposite each other at the points desired, 20 and the plate or strip is then placed between them, after which the keys (one or more) are inserted in a vertical position through the key-slots 7 of the clips and openings 3 in the plate, and then said keys are given a half-25 turn, so that they will lie in a horizontal position, which will bring the inclined walls 11 and 12 thereof tight against the edges of the clips adjacent to the key-openings 7 therein, thereby drawing the parts tightly together 30 and causing the headed portions 9 and 10 of the keys to overhang the edges of the slots 7, whereupon the parts will be held in locked engagement. I prefer to form the keys with one large head, so that they can be more 35 readily grasped by the hand or by any suitable tool for the purpose of turning them into the locking position. This form of clip and key is very simple and cheap to produce and can be quickly and easily applied in position. In the modified form of the invention illustrated in Figs. 3 and 4 I have shown the corner plate or strip 1, provided with one of my improved bead-pieces, which consists of a solid bar or strip 13, having a channeled 45 rear side to provide two parallel flanges 14, the outer longitudinal edges of which when fitted over the outer edge of the plate will slightly overhang the outer row of plasteropenings 2, so that portions thereof, as at 14a, 50 Figs. 3 and 4, may be crimped or bent inward to lock the bead-piece firmly in position. This crimping may be quickly done by any suitable form of hand-tool and has been found in practice to be a thoroughly practical and cheap 55 manner of combining these parts. The said bead-piece is further provided upon opposite sides throughout its entire length with sharp projecting edges 15, the outer face of the bead between the said sharp edges being prefer-60 ably convexed, while the inner walls of said projecting edges adjacent to the flanges 14 are slightly concaved or curved inward, as at 16, to provide relatively thick lines of plaster at these points, whereby cracking or flaking of 65 the plaster is not likely to occur. This construction I consider to be of considerable importance, since it overcomes a serious objec-

tion heretofore present in corner-beads. Besides forming an ornamental edge for the angle of the wall the said bead-piece adds materially to the strength and rigidity of the plate. It tends to keep the latter in a straight line and serves as a trowel-guide for the plasterer.

In Fig. 5 I have shown a modified form of 75 bead-piece which comprises a hollow shell 17, adapted to be slipped over the outer edge of plates now in use, said bead being provided with lateral flanges 18, longitudinal edged projections 19, and undercut or concaved walls 80 20, substantially the same as the bead-piece illustrated in Figs. 3 and 4, said bead being secured in position upon the plate by crimping the edges thereof into the plaster-openings in the same manner described with re-85 spect to the form last above referred to.

In Fig. 6 of the drawings I have shown a still further modified form of my invention, and in this instance I form the bead-piece and plate in one integral part. Referring to this 90 figure, the numeral 21 indicates the cornerplate, which is composed of a strip of sheet metal folded back and upon itself over a filling wire or rod 22 to form the bead 23 at the front, and this filling-wire I prefer to let respansing in the bead to add strength and rigidity thereto and to the plate. The bead is further provided with longitudinal edged projections 24, concaved or undercut sides 25, and plaster and key openings 26, the same as the 100 plates and bead-pieces heretofore described.

The flat and straight form of corner-plate herein described is very simple in construction and cheap to manufacture, since only about one-half the amount of metal is required as compared with plates having angularly-bent portions which overhang the sides of the wall to provide nailing purchase. Thus I effect a great saving in the initial cost of the metal forming the plate, and at the same 110 time I provide a plate that is not likely to twist out of shape, which is the most serious difficulty now to be contended with in the manufacture and use of corner-plates, it being next to impossible to retain them in shape 115 to produce a straight edge.

What I claim, and desire to secure by Letters Patent, is—

1. A corner-plate for protecting the angles of plastered walls, consisting of a flat metal 120 strip the opposite faces of which lie parallel throughout, and a bead-piece upon one edge of the plate, said bead-piece being provided with sharp-edged projections upon opposite sides thereof, and plaster-openings extending 125 through the plate, substantially as described.

2. A corner-plate for protecting the angles of plastered walls, consisting of a strip of metal folded upon itself to provide a flat plate the opposite faces of which lie parallel 130 throughout substantially the entire width of the plate, and a bead-piece arranged along one edge of the plate, said bead-piece being provided upon opposite sides with sharp-

edged projections, and concaved walls leading inward from the said sharpened projections, substantially as described.

3. In combination with a corner-plate, a 5 bead-piece having sharp-edged projections arranged upon opposite sides thereof through-

out its length, substantially as described. 4. In combination with a corner-plate, a solid bead-piece having oppositely-disposed 10 and longitudinally-arranged sharp-edged projections, substantially as described.

5. In combination with a corner-plate, a bead-piece having oppositely-disposed, longitudinally - arranged sharpened - edge pro-15 jections, and concaved walls leading inward from the said sharpened - edge projections upon opposite sides of the bead-piece, sub-

stantially as described.

6. The combination with a corner-plate hav-20 ing plaster-openings near the outer edge thereof, of a bead-piece fitted over the edge of said plate and provided with flanges which embrace the opposite faces of the plate, said flanges overhanging the plaster-openings and 25 having portions thereof at the edges crimped or bent into the said plaster-openings to retain the bead-piece in position upon the corner-plate, substantially as described.

7. The combination with a corner-plate hav-30 ing plaster-openings therein, of a bead-piece fitted over the edge of said plate and provided with longitudinal edged projections and lateral flanges, which latter embrace the opposite faces of the plate, and overhang the plas-35 ter-openings with portions thereof crimped or bent into the said plaster-openings to retain the bead-piece in position upon the corner-

plate, substantially as described.

8. The combination with a corner-plate 40 having plaster-openings therein, of a beadpiece fitted over the edge of said plate and provided with longitudinal edged projections and concaved walls leading inward from the edged projections upon opposite sides of the 45 bead-piece, and the latter being further provided with flanges which embrace the opposite faces of the plate and overhang the plaster-openings, and portions of said flanges being crimped or bent toward each other into 50 the plaster-openings to retain the bead-piece in position upon the plate, substantially as described.

9. A bead-piece for corner-plates, comprising a body portion having separated lateral 55 flanges and longitudinal sharp-edged projec-

tions, substantially as described.

10. A bead-piece for corner-plates comprising a hollow body portion having lateral flanges and longitudinal edged projections, 60 substantially as described.

11. A bead-piece for corner-plates, com-

prising a body portion having separated lateral flanges and longitudinal projections the edges of which are sharpened, with concaved walls leading inward from the said sharp- 65 ened edges of the projections upon opposite sides of the bead-piece, substantially as described.

12. The combination with a corner-plate having openings therein, of a clip for attach- 70 ing said plate to the angle of a wall, consisting of a body portion having nail-openings and an angular extension arranged to lie parallel with the plate, said extension being provided with an opening, and a locking-key 75 passed through the openings in the clip and plate to lock the parts together, substantially as described.

13. The combination with a corner-plate having openings therein, of a pair of clips at-80 tached to the opposite sides of the wall at the angle and having extensions which embrace the opposite sides of the plate, and a lockingkey passed through openings in the clip extensions and through the plate to lock the 85

parts together.

14. The combination with a corner-plate having openings therein, of a pair of clips attached to the angle of a wall and having apertured extensions which embrace the opposite 90 sides of the plate, and a headed locking-key passed through the openings in the clips and plate to lock the parts together, substantially as described.

15. The combination with a corner-plate 95 having openings therein, of a pair of clips attached to the opposite sides of the wall at the angle and having apertured extensions which embrace the opposite sides of the plate, and a locking-key passed through the openings 100 in the clips and plate, said key being provided with heads at its opposite ends which overhang portions of the clips to hold the parts together, substantially as described.

16. The combination with a corner-plate 105 having openings therein, of a pair of clips attached to opposite sides of the wall at the angle and each having an apertured extension which embraces the opposite sides of the plate, and a flat, headed locking-key passed through 110 openings in the clips and plate to hold the parts intact, said key being provided upon its opposite edges adjacent to the heads with inclined walls, substantially as and for the purpose described.

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

WILLIAM F. PARKER.

II5

Witnesses:

FERRIS A. MITCHELL, J. S. DU SHAULT.