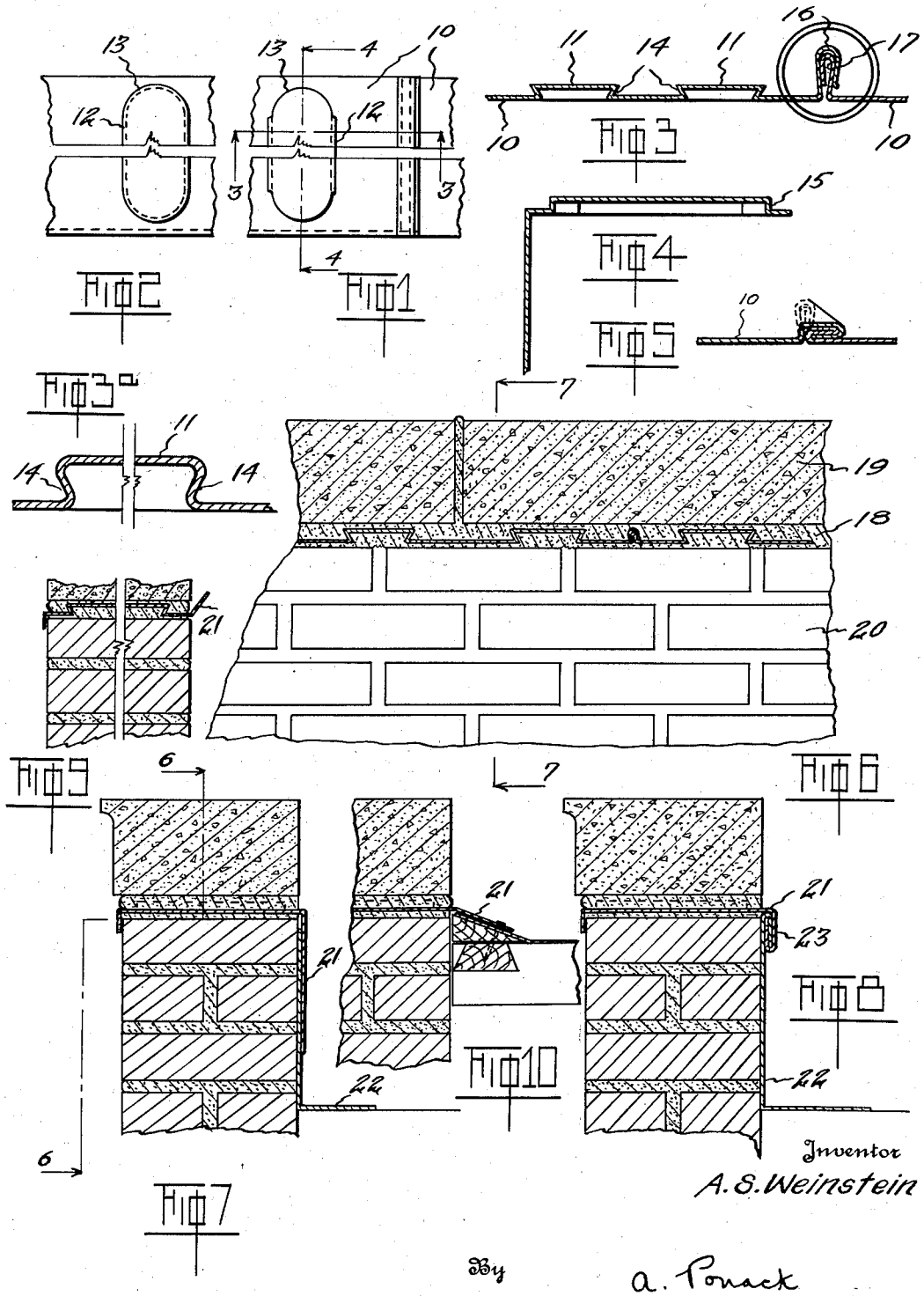
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FLASHING

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FLASHING

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The present invention relates to flashing, and more particularly to that type of flashing usually known as "through flashing".

Flashing of this character is usually made of sheet copper, and is used in building construction in conjunction with the usual layer of mortar between brick joints, or between brick and stone joints, to stop and to deflect to the exterior any seepage of water or moisture of infiltration down through the wall. It is also adapted to be used for a similar purpose over window headers, door headers, at the bottom of a wall where it meets a lower roof, and in many other such places.

The usual practice is to build a flat sheet of copper into the mortar joint at the desired place. One of the effects of this practice is to break the bond in the mortar at that joint, as mortar does not adhere satisfactorily to copper.

It is an object of the present invention to provide a new and improved form of through flashing so formed that it will overcome the above-mentioned disadvantage,—in other words, it will not break the mortar joint in which it happens to be embedded, but will instead enhance the effectiveness of the joint. In addition, it will still possess all the advantages of the old type flat sheet copper through flashing, which was easily and readily worked with and joined to other flashings, such as base flashings.

This and other objects, which will be apparent to those skilled in the art to which the present invention pertains from a perusal of the detailed description below, are attained by the embodiments of the invention hereinafter disclosed, consisting of the construction and novel combination and arrangement of parts fully described below, illustrated in the accompanying sheet of drawing and pointed out in the claims hereunto appended.

In the drawing:

Figure 1 represents a plan view of a portion of one form of a strip of flashing embodying the present invention;

Figure 2 is a view similar to Figure 1, but illustrating a modified form of the invention;

Figure 3 represents a sectional view taken through Figure 1 at line 3—3, looking in the direction of the arrows, the portion in the circles being enlarged to clearly show the construction of the spring lock;

Figure 3a is an enlargement of one of the dove-tail portions of Figure 3;

Figure 4 is a sectional view through Figure 1 at line 4—4;

Figure 5 is a section through an exposed portion of the flashing, showing the spring locking joint after it is flattened;

Figure 6 is a section through the top portion of a wall illustrating applicant's improved flashing inserted between the top stone course and the under course of brick, and taken along line 6—6 of Figure 7.

Figure 7 is a sectional view taken along line 7—7 of Figure 6, showing a form of applicant's flashing in connection with the ordinary roof flashing;

Figure 8 is a view similar to Figure 7, but showing an expansion lock joint between the through flashing and the roof flashing;

Figure 9 is a view similar to Figure 7, and illustrating a form of applicant's flashing used in connection with a narrow wall; and

Figure 10 is a view similar to Figure 7, and showing another method of connecting the exposed portion of the through flashing.

In the drawing, like reference numerals refer to like parts throughout the several views.

Reference numeral 10 indicates a strip or plate or sheet of the through flashing constituting the present invention. The strips 10 are preferably constructed of sheet metal, usually copper. Intermediate the ends of each strip, it is provided with one or more upwardly displaced areas 11. These displaced areas 11 have straight sides 12 preferably parallel to the ends of the strip 10, and rounded or arcuate ends 13 extending between and interconnecting the straight sides 12, as shown. In the form shown in Figure 1, the walls 14 connecting the sides of the areas 11 with the body of the strip are inclined to form a dove-tail groove or depression or recess therebetween, as is clearly shown in Figures 3 and 3a. In addition, each wall 14 forms a groove or recess between itself and the wall 14 of the next adjacent displaced area 11; see Figure 3. As is clear from the drawing, the last-named grooves extend uninterruptedly across the flashing sheet or plate 10 whereby, when the flashing is embedded in a wall, water of infiltration seeping downwardly through the latter may drain freely thereacross. The walls 15, connecting the end portions 13 to the body of the strip are not inclined.

In the form shown in Figure 2, the sides 12 of the area 11 as well as the rounded ends 13, are connected to the body of the strip 10 by inclined walls.

As is clearly shown on the drawing, displaced areas or parts 11 and the walls which connect

them to the body of the flashing sheet 10 define struck-up encased projections extending upwardly from the body of the sheet.

An important detail of the present construction is that the edges, at which the walls 14 join the areas 11 and the body of the strip 10, are rounded avoiding sharp angular edges at these points. These rounded edges tend to minimize the chances of the mortar within the dove-tail groove to chip and loosen.

Along one edge each strip 10 is provided with a springy socket member or rib 16, and at its other edge with a locking lug or rib 17. As each strip of flashing is laid in place on the wall, its socket member 16 is sprung over the locking lug 17 of the next adjacent strip 10, thus keeping the several strips securely in place while they are being covered with a layer of mortar.

In Figure 6, several strips 10 of flashing are shown embedded in the mortar layer 18 which binds together the stone course 19 at the top of the wall and the under course of brick 20. This view also clearly shows the spring locking joint embedded in the layer of mortar. That portion of the joint which is not embedded in the mortar but which is exposed, is flattened down to form the ordinary welt joint, as shown in Figure 5.

The areas 11 are of slightly less extent transversely of the flashing strip 10 than the wall with which the flashing coacts, while the flashing per se may be of any desirable width. Thus it is evident that wherever the flashing extends out of the mortar it does so in the form of a single flat sheet of metal, that is, the extending or flange portion of the flashing is free from displaced areas and is therefore adapted to be worked with readily.

As a result of the dove-tail character of the grooves formed by the inclined or obliquely disposed walls 14, each of which acts as a key for the mortar on each side thereof, a perfect mechanical bond is formed between the mortar above and below the flashing, notwithstanding the fact that the mortar does not satisfactorily adhere to the sheet metal of the flashing.

In Figure 7, the exposed portion 21 of the flashing strip 10 is shown in overlapping relationship with the ordinary type of roof flashing 22.

Some architects specify that there be an expansion lock between the through flashing and the roof flashing. As a result of the improved construction of applicant's flashing, it is adapted to be readily connected to the roof flashing by means of an expansion lock joint, as shown at 23 in Figure 8, while at the same time a perfect bond is maintained at the mortar joint in which the flashing is embedded.

Figure 9 shows the flashing as used in rather narrow walls. Here the type of flashing shown in Figure 2 is preferably used, because it provides a mortar lock joint which is as long as possible.

In Figure 10, another type of joint where applicant's through flashing is well adapted to be used, is illustrated.

Having described the invention, what is claimed and desired to secure by Letters Patent is:

1. A sheet metal flashing for masonry structures comprising a sheet of sheet metal of the width to extend substantially through the wall of said structure and thereby provide a means for deflecting and draining moisture of infiltration from said wall, said flashing being deformed to provide a series of struck-up encased projections extending upwardly from the sheet providing recesses on opposite sides of said sheet for the reception of mortar to bond the flashing sheet and masonry structure against relative movement in all directions.

2. A sheet metal flashing for masonry structures comprising a sheet of sheet metal of the width to extend substantially through the wall of said structure and thereby provide a means for deflecting and draining moisture of infiltration from said wall, said flashing being deformed to provide a series of struck-up encased projections extending upwardly from the sheet providing recesses on opposite sides of said sheet for the reception of mortar to bond the flashing sheet and masonry structure against relative movement in all directions, the recesses on the upper side of said sheet being arranged between said projections and extending uninterruptedly transversely of the sheet.

3. The construction defined in claim 1, said projections being dovetail-shaped in at least one cross section thereof.

4. A through wall sheet metal flashing comprising a sheet of sheet metal deformed to provide a series of struck-up encased projections extending upwardly from the sheet providing recesses on opposite sides of said sheet for the reception of mortar to bond the flashing sheet and wall against relative movement in all directions, said projections being dovetail-shaped in all vertical cross sections thereof.

5. A sheet metal flashing comprising a body portion and a flange portion, said body portion comprising a plurality of spaced parts displaced upwardly from said body portion and connected thereto by tapering walls, whereby a plurality of hollow projections is formed, the areas of said displaced parts being greater than the areas of the openings of said projections, said flange portion being adapted to be easily joined to other flashing or the like.

6. As an article of manufacture, a bonding flashing comprising a sheet metal plate presenting a plurality of hollow projections, each of which is surrounded completely by a portion of the body of the plate, each projection comprising an obliquely disposed wall adapted to serve as a key for mortar.

7. A through wall interlocking flashing strip comprising a plurality of upwardly-extending, hollow, mortar-bonding projections, each of which is surrounded completely by a portion of the body of the strip, each projection comprising a wall extending therearound whereby the projection is connected to the body of the strip, a portion at least of said wall being obliquely disposed whereby it is adapted to serve as a key for mortar, and riblike connecting means extending transversely across the flashing strip adjacent the ends thereof.

8. A building construction comprising superposed courses of masonry constituting a wall, a layer of mortar or like binding material between adjacent courses, a flashing comprising a portion embedded in said layer of mortar or the like and a portion extending from said layer for connection to other flashing or the like, and means on said embedded portion of flashing for interlocking and keying the mortar thereabove with the mortar therebelow, said means comprising spaced areas displaced from the body of said flashing and connected thereto by endless

walls, whereby a plurality of hollow projections is formed, a portion at least of each of said walls being obliquely disposed.

9. As an article of manufacture, a bonding flashing comprising a sheet metal plate provided with a plurality of hollow projections, each of which is surrounded completely by a portion of the body of the plate, each projection comprising a plurality of obliquely disposed walls adapted to serve as keys for mortar, and walls extending between and interconnecting said obliquely disposed walls.

10. As an article of manufacture, a bonding flashing comprising a sheet metal plate provided with a plurality of hollow projections, each of which extends upwardly from and is completely surrounded by a portion of the body of the plate, each projection comprising a plurality of obliquely disposed walls extending transversely across said plate and adapted to serve as keys for mortar, and arcuate walls extending between and interconnecting said obliquely disposed walls.

11. A through wall flashing for masonry wall structures including a mortar joint, said flashing comprising a sheet metal plate adapted to be embedded, in part at least, in said mortar joint, the embedded part only of said plate being provided with a plurality of spaced hollow projections displaced upwardly from said plate providing recesses on opposite sides of the latter, each of the said projections being surrounded completely by a portion of the body of the plate and each comprising an obliquely disposed wall adapted to serve as a key for mortar, the recesses on the upper side of said plate being arranged between said projections and extending uninterruptedly transversely of the plate.

12. A through wall flashing for masonry wall structures including a mortar joint, said flashing comprising a sheet metal plate adapted to be embedded, in part at least, in said mortar joint, the embedded part of said plate being provided with a plurality of struck-up, hollow, elongated projections providing corresponding mortar-receiving depressions on the under side of the plate and grooves extending therebetween on the upper side of the plate, each of the said projections being surrounded completely by a portion of the body of the plate and each being dovetail-shaped in at least one cross section thereof.

13. The construction defined in claim 12, said grooves also being dovetail-shaped in cross section.

14. A through wall flashing for masonry wall structures including a mortar joint, said flashing comprising a sheet metal strip including a portion adapted to be embedded in said mortar joint and a portion adapted to extend from said joint for connection to other flashing or the like, means at the ends of said strip for connecting the latter to contiguous flashing strips, said embedded portion being provided with a plurality of upwardly displayed, hollow, elongated projections extending transversely across the strip and providing corresponding depressions on the underside of the strip and grooves extending therebetween on the upper side of the strip, each of the said projections being surrounded completely by a portion of the body of the strip and each comprising an endless wall extending therearound, portions of the said wall being obliquely disposed in different directions.

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