

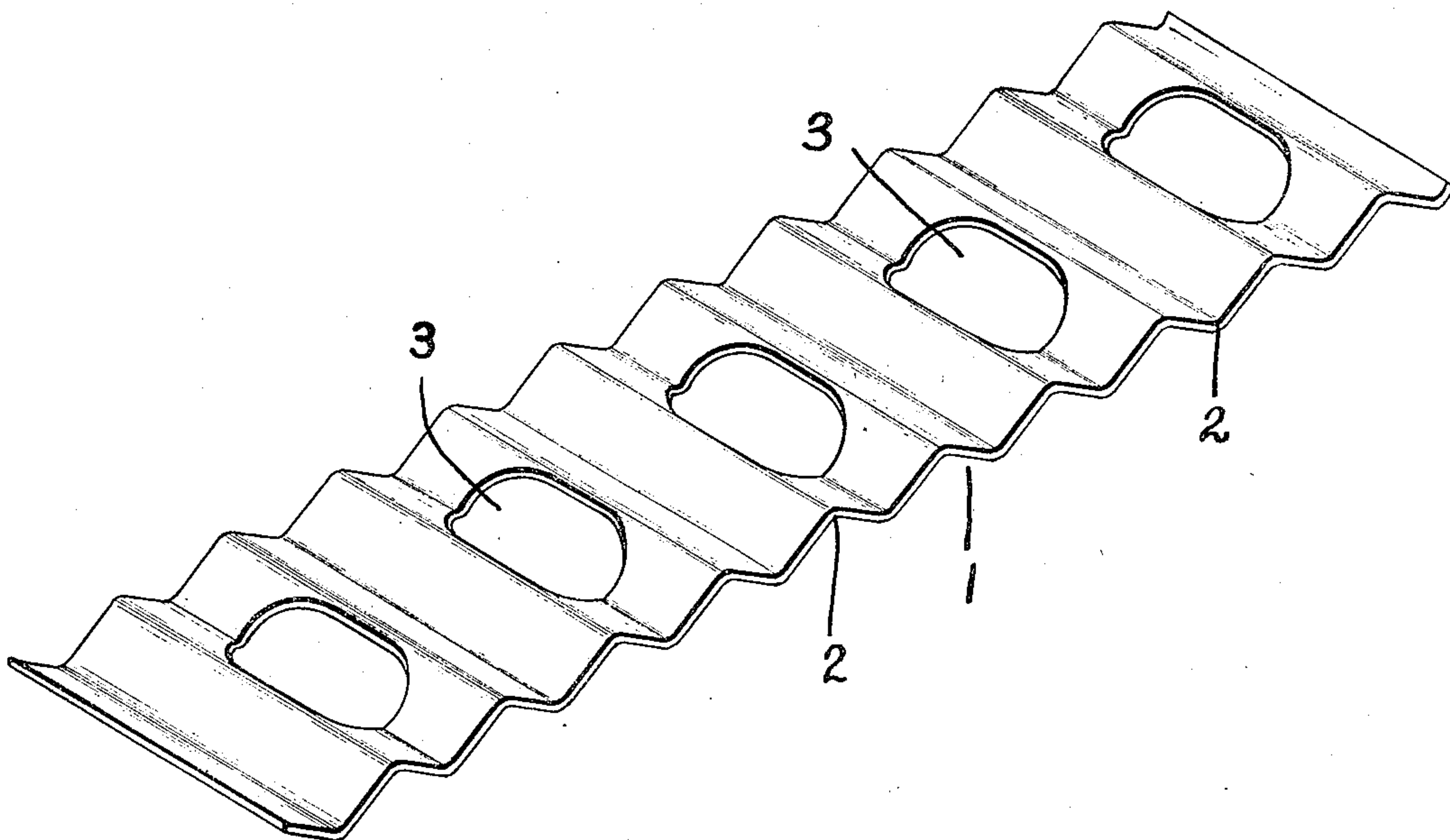
No. 816,297.

PATENTED MAR. 27, 1906.

G. H. CHARLS.

WALL TIE.

APPLICATION FILED DEC. 7, 1905.



Witnesses:
Elmer R. Shipley.
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UNITED STATES PATENT OFFICE.

GEORGE HERBERT CHARLS, OF MIDDLETOWN, OHIO, ASSIGNOR TO THE
AMERICAN ROLLING MILL COMPANY, OF MIDDLETOWN, OHIO.

WALL-TIE.

No. 816,297.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed December 7, 1905. Serial No. 290,664.

To all whom it may concern:

Be it known that I, GEORGE HERBERT CHARLS, a citizen of the United States, residing at Middletown, Butler county, Ohio, (post-office address No. 539 East Third street, Middletown, Ohio,) have invented certain new and useful Improvements in Wall-Ties, of which the following is a specification.

This invention, pertaining to improvements in wall-ties for employment in mortar-joints for the purpose of more perfectly bonding together the component members of a wall structure, will be readily understood from the following description, taken in connection with the accompanying drawing, which is a perspective view of my improved wall-tie.

In the drawing, 1 indicates the tie as a whole, the same being in the form of a strip of rather thin sheet metal, preferably galvanized; 2, corrugations extending across the tie from edge to edge, the series of corrugations beginning at one end of the tie and extending uninterruptedly to the opposite end of the tie or of such portion of it as is to find embedment in the joint in which the tie is to be employed; and 3, a continuous longitudinal series of perforations extending through the corrugated portion of the tie, these perforations having greater length than width, their major dimensions being crosswise of the tie.

The holding-power of the tie comes from the intermembering of the corrugations with the mortar and also from the keys formed by the mortar within the perforations, the perforations permitting mortar to pass through the tie while it is being positioned. The cor-

rugated and perforated features being uniformly characteristic of the entire length of the embedded tie permits the tie being use-
fully positioned without special need for ac-
curacy, all embedded portions of the tie being
of equal efficiency. Furthermore, any de-
sired portion of the tie may be cut off with-
out impairing the efficiency of the remaining
portion. The corrugations produce valleys
alternating with ridges, the ridges on one
side of the tie coming opposite the valleys on
the other side. The perforations are through
the corrugations and place each valley on one
side of the tie in communication with the
contiguous valleys on the opposite side. The
result is that the mortar-ridge formed by and
keying into one valley of the tie is directly
bonded to the two mortar-ridges formed by
and keying into the contiguous valleys on the
opposite side of the tie.

I claim—

As an article of manufacture a wall-tie for embedment in a mortar-joint, formed of a strip of sheet metal provided with a continuous longitudinal series of transverse corrugations forming opposing ridges and valleys and with a continuous longitudinal series of perforations through the corrugations and placing each valley in communication with two opposing valleys the perforations, having greater length than width and having their major dimensions parallel with the corrugations.

GEORGE HERBERT CHARLS.

Witnesses:

R. C. PHILLIPS,

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