

No. 887,018.

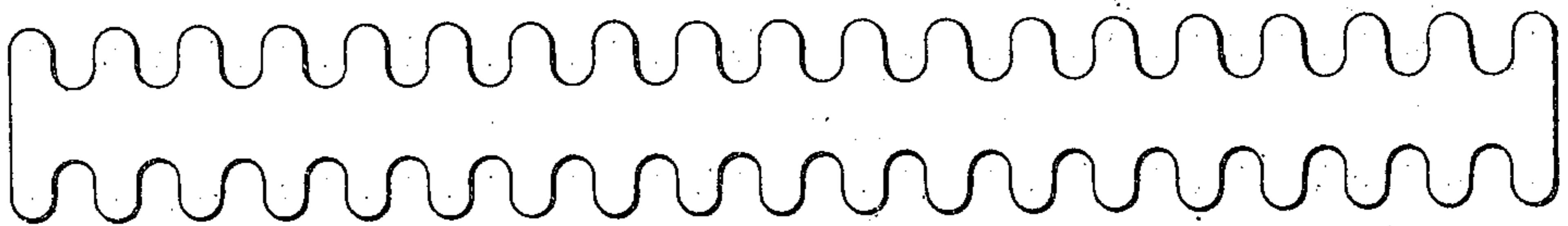
PATENTED MAY 5, 1908.

J. SCHIRRA & F. WEBER.

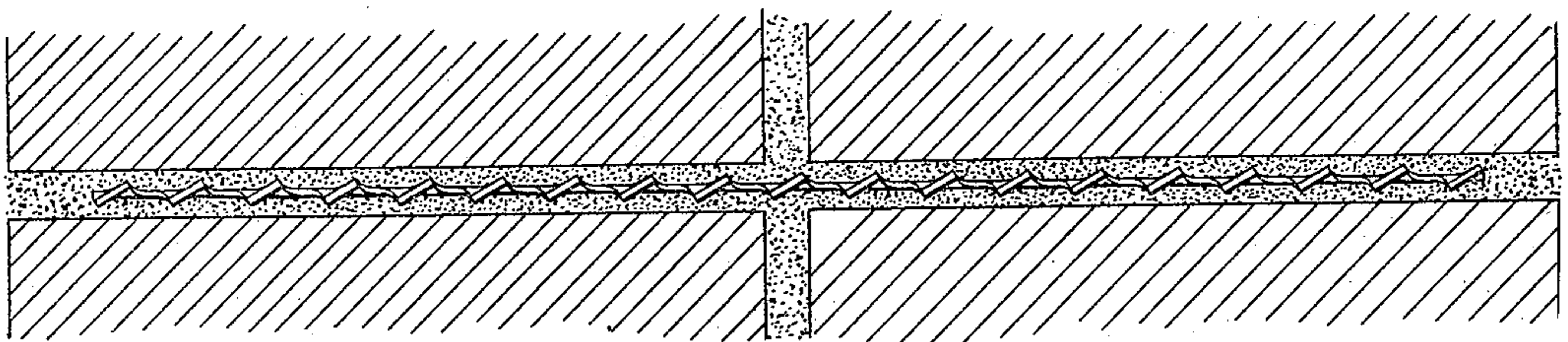
WALL TIE.

APPLICATION FILED OCT. 29, 1904.

*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*  
*Chas. S. Ripley.*  
*Fred. Staul.*

*Inventors*  
*Julius Schirra*  
*Frau Weber*  
*V. C. M. Clarke*  
*Attorney*

# UNITED STATES PATENT OFFICE.

JULIUS SCHIRRA, OF PITTSBURG, AND FRANK WEBER, OF ALLEGHENY, PENNSYLVANIA,  
ASSIGNORS TO BRAUN MANUFACTURING COMPANY, A CORPORATION OF PENNSYLVANIA.

## WALL-TIE.

No. 887,018.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed October 29, 1904. Serial No. 230,492.

*To all whom it may concern:*

Be it known that we, JULIUS SCHIRRA and FRANK WEBER, citizens of the United States, residing at Pittsburg and Allegheny, respectively, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Wall-Ties, of which the following is a specification, reference being had therein to the accompanying drawing, forming part of the specification, in which—

Figure 1 is a plan view of our improved wall tie. Fig. 2 is a sectional view of the meeting courses of a brick wall, showing the tie in position. Fig. 3 is an edge view showing twisted terminals.

Our invention relates to improvements in wall ties adapted for use in brick or other walls for forming a bond between adjacent layers of brick-work, etc., and consists generally of a strip of sheet metal provided with laterally extending more or less closely adjacent twisted projections or teeth. It is adapted to be embedded in the mortar as shown in Fig. 2, the various extremities being incorporated therewith so as to provide a strongly connected structure, the ties being inserted at intervals within the judgment of the operator, as will be readily understood.

The tie consists of a sheet metal body 2, corrugated along one or both sides so as to provide projecting tongues 3 and intervening spaces 4, the tongues being preferably rounded at their extremities and similarly rounded at their bases, so that each tongue and the adjacent space practically form counterparts one of the other. It will be understood however that the tongues may be of greater or less width than the intervening openings and that they may be spaced at any desired distance apart and of any length.

In Fig. 3 we show a partial edge view of our tie wherein the tongues are individually twisted as at 8 so as to be arranged at an an-

gle to the longitudinal plane of their edges, whereby each tongue will present a sloping face in a longitudinal direction. These twisted tongues may extend for the full length of the tie or only part way, and their direction may be reversed if desired *i. e.* by sloping them oppositely at opposite ends, to further increase their holding effect.

The subject matter of the present application is similar in construction to that of an application filed by Frank Weber, one of the applicants herein on July 27th, 1904 bearing the Ser. No. 218,359.

These ties are easily and rapidly stamped from sheet metal with a minimum of waste; they are very strong and efficient and in practice have been found to give the desired results in a very satisfactory manner. Ordinarily the sheet metal ties, usually of iron or steel, are coated in any suitable manner to prevent corrosion, as by galvanizing, which treatment also considerably adds to their appearance and commercial advantage.

The ties may be made in any length or thickness to suit the work in view and may be modified in the features noted or in any other manner, and all such changes and variations are considered to be within the province of the skilled mechanic and to be included within the scope of the following claim.

What we claim is:

A wall-tie consisting of a sheet metal strip having a series of twisted teeth extending laterally therefrom, a portion of each twisted tooth lying above and a portion below the general plane of the body of the strip.

In testimony whereof we affix our signatures in presence of two witnesses.

JULIUS SCHIRRA.  
FRANK WEBER.

Witnesses:

JAS. J. McAFEE,  
C. M. CLARKE.