No. 848,145. PATENTED MAR. 26, 1907.

J. R. WEMLINGER.

METAL SHEET PILING.

APPLICATION FILED NOV. 1, 1905.

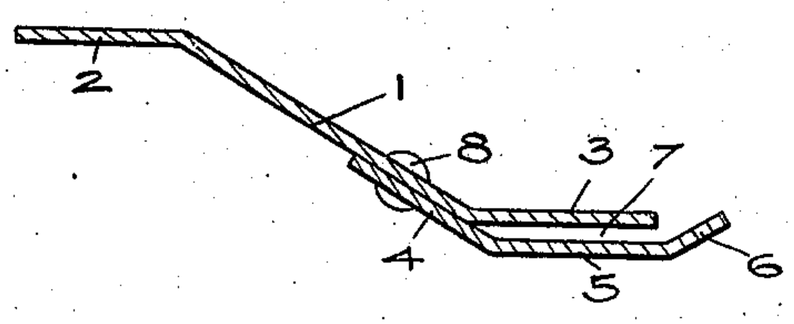

Fig. 1.

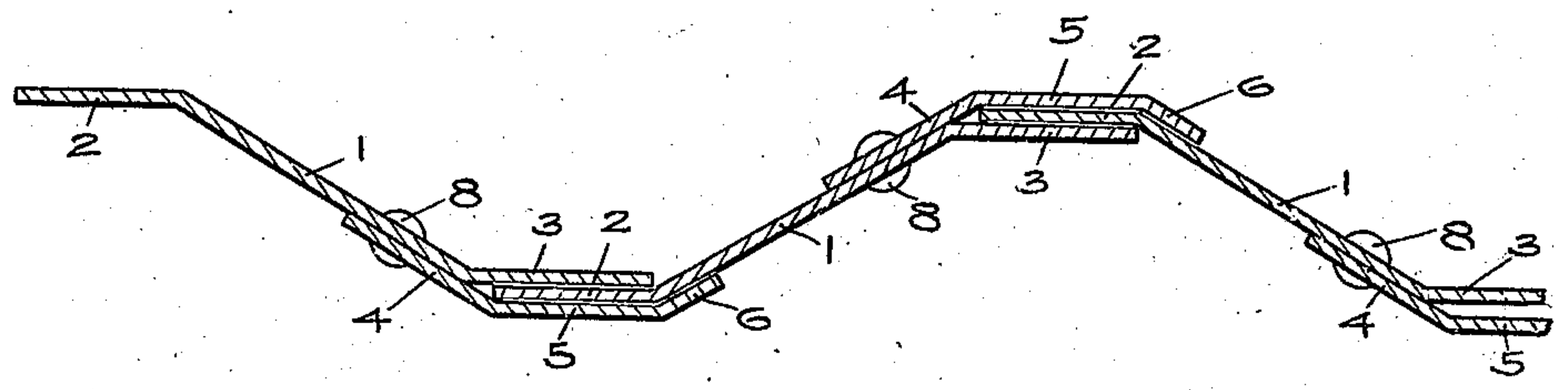

Fig. 2

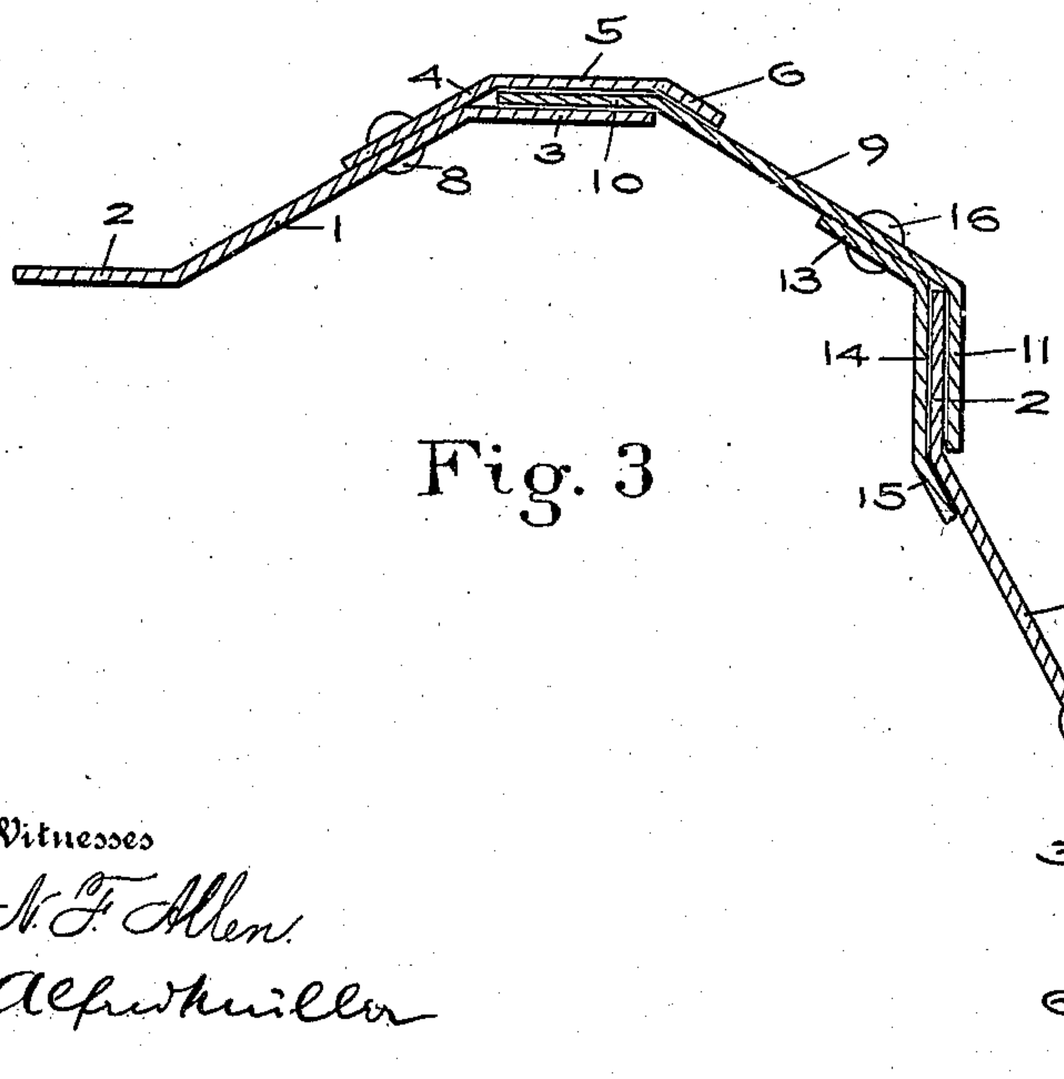

Fig. 3

Witnesses

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METAL SHEET-PILING.

No. 848,145. Specification of Letters Patent. Patented March 26, 1907.

Application filed November 1, 1905. Serial No. 285,371.

To all whom it may concern:

Be it known that I, JULIUS R. WEMLINGER, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Metal Sheet-Piling, of which the following is a specification

My invention relates to metal sheet-piling, and has for its object to provide a metal sheet-piling comprising units of simple construction, easily manufactured, and provided with effective means for interlocking the said units.

This invention will be more fully understood by reference to the annexed drawing, in which similar reference-numerals designate similar parts, Figure 1 being a transverse section of a single unit; Fig. 2, a transverse section of several units joined together, and Fig. 3 a transverse section of two units joined together by means of a corner-section.

Each unit of my improved sheet-piling is formed of a web 1, having flanges 2 and 3 integral therewith and extending in opposite directions from the edges of the said web 1. To the latter are secured by rivets 8 or in any other suitable manner locking members comprising a flat portion 4, an extension 5 parallel to the flange 3 of the unit, and a flange 6 so arranged that between the said extension 5 and the flange 3 of the unit a space 7 is left, adapted to receive the flange 2 of the adjacent unit, as clearly shown in Fig. 2. The flange 2 of each unit is slightly shorter than the flange 3, so as to fit with some clearance in the space 7 for reasons which will be readily understood by those familiar with the use of sheet-piling.

The individual units are driven successively in the well-known way in their respective positions, as clearly shown in Fig. 2. The space 7, above referred to, is of course somewhat wider than the thickness of the flange 2, whereby sufficient clearance for the easy longitudinal movement of the parts when the units are driven or pulled is insured and binding prevented.

When the units are driven in the proper manner, the flange 6 of each locking member extends over a portion of the web 1 of the contiguous unit, as shown in Figs. 2 and 3, whereby any lateral displacement of the units with respect to each other is prevented, and the units are locked securely together, so that they cannot move laterally, thus forming a wall of great rigidity and strength.

Where a corner is to be formed, it is merely necessary to introduce a special unit which, as shown in Fig. 3, comprises a web 9 and flanges 10 and 11, the latter being disposed at a right angle to each other. To the web 9 there is also secured a locking member composed of a portion 13, fastened to said web by rivets 16 or any other suitable means, an extension 14 parallel to the flange 11 of the unit, and a flange 15, all so arranged that a space is provided between the said extension 14 and the flange 11 for the reception of the flange 2 of the normal unit locked to the said special unit at one side, while at the other side to the said special unit there is locked in a similar manner another unit, as will be readily understood from Fig. 3.

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

1. In metal sheet-piling the combination of units each having a web and parallel flanges extending in opposite directions from the edges of said web, said flanges being of different length and locking members each secured to the web of a unit adjacent to the longer flange thereof so as to leave a space between the outer face of said flange and a portion of the locking member for the reception of the shorter flange of the contiguous unit.

2. In metal sheet-piling, units each having a web and parallel flanges extending in opposite directions from the edges of said web, said flanges being of different length, a locking member secured to said web and having its central portion parallel to and distant from the longer flange of said unit so as to provide a space for the reception of the shorter flange of the contiguous unit.

3. In metal sheet-piling, units each having a web and parallel flanges extending in opposite directions from the edges of said web, and a locking member comprising a flat portion parallel to the said flanges and two sides diverging from the edges of said flat portion, one of said sides being secured to the web of the unit.

4. In metal sheet-piling units each having a web and parallel flanges extending in opposite directions from the edges of said web, and a locking member comprising a flat portion parallel to said flanges and unequal sides

projecting from the edges of said flat portion, the longer side of said locking member being secured to the said web, so as to leave a space between the flat portion and one of the flanges of the unit.

5. In metal sheet-piling, the combination of units each having a web and parallel unequal flanges extending in opposite directions from the edges of said web, the shorter flange of one unit being adjacent to the longer flange of the contiguous unit, a locking member secured to each unit and overlapping the shorter flange and portion of the web of the said contiguous unit.

6. In metal sheet-piling the combination of units each having a web and parallel unequal flanges extending in opposite directions from the edges of said web, the shorter flange of one being adjacent to the longer flange of the contiguous unit, and locking members each comprising a flat portion parallel to said shorter flange and sides of unequal extent, the longer of said sides being secured to the said web and the shorter one overlapping portion of the web of the contiguous unit.

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

JULIUS R. WEMLINGER.

Witnesses:

ALFRED MULLER,

LOUISE H. STAADEN.