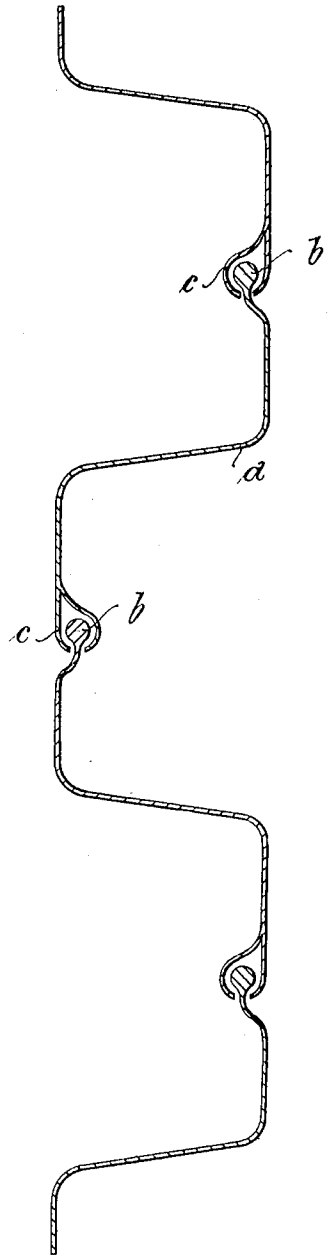
K. F. W. LAMP.

SHEET PILING MADE OF IRON ROLLED INTO Z-FORM.

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1,066,822. Patented July 8, 1913.



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KARL FRIEDRICH WILHELM LAMP, OF HAMBURG, GERMANY.

SHEET-PILING MADE OF IRON ROLLED INTO Z-FORM.

1,066,822. Specification of Letters Patent. Patented July 8, 1913.

Application filed February 15, 1912. Serial No. 677,698.

To all whom it may concern:

Be it known that I, KARL FRIEDRICH WILHELM LAMP, a subject of the German Emperor, and resident of Hamburg, German Empire, have invented a new and useful Sheet-Piling Made of Iron Rolled into Z-Form, of which the following is a specification.

For iron sheet piling as it has been hitherto constructed considerable moments of resistance can only be obtained by increasing the amount of material used. This increase in material is comparatively great. In most of the known sheet piling the parts of which it is composed must be riveted together which is detrimental to the quality of the piling and also causes difficulties when pile-driving. These drawbacks are overcome by my invention which is a rivetless sheet pile in which a great moment of resistance is obtained with a small amount of material.

Reference is to be had to the accompanying drawings in which a cross section of my improved piling is illustrated.

The several bars *a* of rolled iron are of Z-form, their webs being at any desired angle to the flanges which are parallel. Along their edges they have projections *b* and eyes *c*, alternately. By fixing the bars together, the projections being inserted in the eyes, a corrugated sheet is obtained. Preferably the flanges having projections are crooked at or near the projections, as shown, so that two connected flanges are in the same plane.

The principal advantages of my invention are: (1) The moment of resistance obtainable is greatly increased. (2) The material is most advantageously used throughout, the overlapping parts also contributing to the resistance against bending. (3) By arranging the seams at the greatest possible distance from the neutral axis a unitary cross-section is obtained. (4) There is no riveting, so that no parts can burst off and rusting is greatly reduced. (5) The connection of the bar is very simple and reliable.

I claim:

1. A sheet piling made of bars of iron rolled into Z-form and, when fixed together, making a corrugated sheet, the flanges of the bars being parallel to the longitudinal axis of the sheet, seen in plan view, said bars having integral interlocking members formed on that portion which is at the maximum distance from the axis of the total cross section.

2. A sheet piling made of bars of iron rolled into Z-form and, when fixed together, making a corrugated sheet, the flanges of the bars being parallel to the longitudinal axis of the sheet, seen in plan view, and the connections being formed on that portion which is at the maximum distance from the axis of the total cross section, each of said bars having a projection along one edge and an eye along the other, said projections and eyes serving for connecting the bars together.

3. A sheet piling made of bars of iron rolled into Z-form and, when fixed together, making a corrugated sheet, the flanges of the bars being parallel to the longitudinal axis of the sheet, seen in plan view, and the connections being formed on that portion which is at the maximum distance from the axis of the total cross-section, and connecting means on said bars to hold two adjacent flanges in the same plane.

4. A sheet piling made of bars of iron rolled into Z-form and, when fixed together, making a corrugated sheet, the flanges of the bars being parallel to the longitudinal axis of the sheet, seen in plan view, and the connections being formed on that portion which is at the maximum distance from the axis of the total cross section, each of said bars having a projection along one edge and an eye along the other, the flange having the projection being crooked so as to cause two adjacent flanges to be in the same plane.

5. A wall of sheet metal piling elements composed of profiled irons of Z-shaped section assembled along their marginal sides in such a manner that the wing portions are parallel with the axis of the wall.

6. A wall of sheet metal piling elements composed of identical profiled irons, Z-shaped in section and assembled one with the other along their marginal sides in such a manner that the wing portions are parallel with the axis of the wall.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."