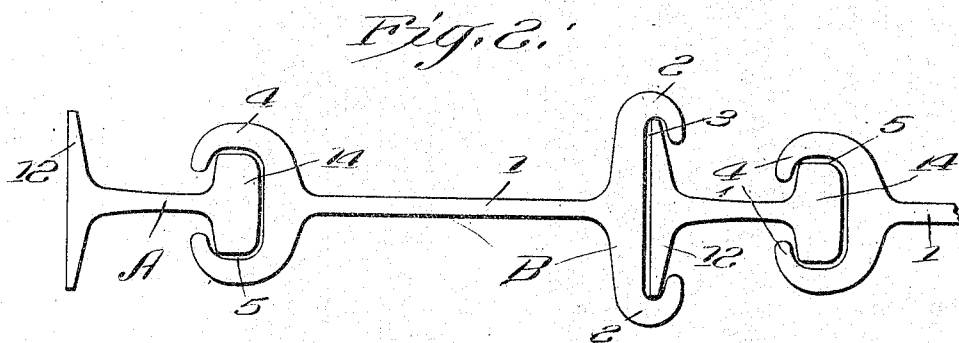
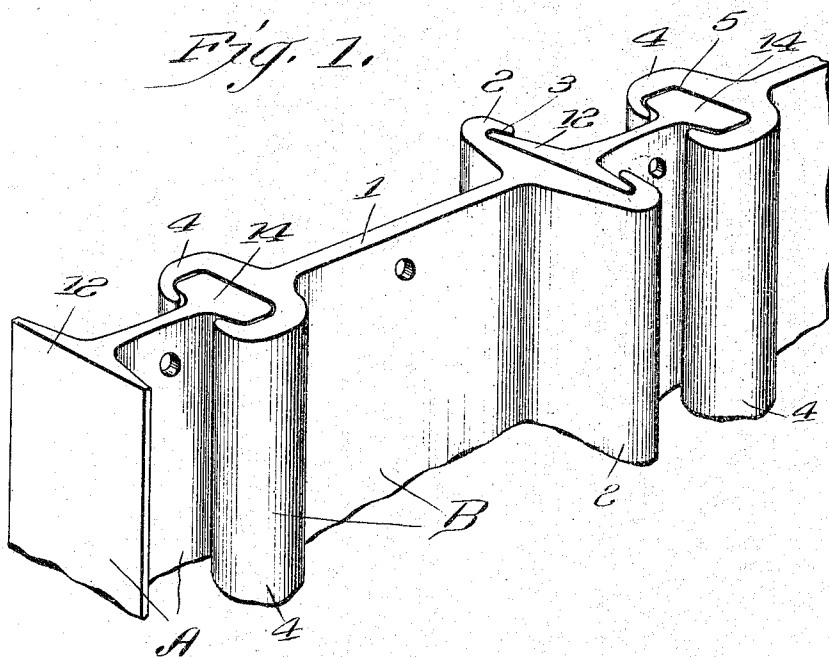


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 STEEL PILING SECTION.  
 APPLICATION FILED MAR. 17, 1909.

981,018.

Patented Jan. 10, 1911.



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# UNITED STATES PATENT OFFICE.

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## STEEL PILING-SECTION.

981,018.

Specification of Letters Patent. Patented Jan. 10, 1911.

Application filed March 17, 1909. Serial No. 484,018.

To all whom it may concern:

Be it known that I, SAMUEL BERTRAM SHELDON, a citizen of the United States, residing at Bethlehem, in the county of Northampton and State of Pennsylvania, have invented new and useful Improvements in Steel Piling-Sections, of which the following is a specification.

My invention relates to steel sheet piling and consists in a new form of pile section to be used with sections of standard form to make a complete wall of piling. The important feature of novelty is an intermediate pile section made in one piece and composed of a web and of a continuous pair of flanges on each edge thereof, forming along each edge a pocket, recess or groove. In forming the continuous wall of piling, these peculiarly formed pile sections are driven alternately with sections of standard shape having a web and flanges or heads along both edges of the web, which flanges or heads extend on each side of the plane of the web.

In the preferred form of my invention here illustrated I have shown a form of intermediate section particularly adapted or use with railway rails. The pockets and hinges on the two edges of the web are of different sizes adapted respectively to receive and engage with the head and the flanges of the rail

My invention is fully shown in the drawing herewith in which the reference letters and numerals of this description are used to indicate the different parts.

Figures 1 and 2 are respectively perspective and plan views showing my invention.

A indicates the rail and B the peculiar intermediate section to be driven alternately with the rails and engaging with a rail on each edge. Said intermediate section may be variously made and formed, but I prefer to roll it of steel, as a complete one piece article having a web 1, a pair of similar, wider, hooked flanges 2 along one edge forming the recess, 3, to receive the rail flange 12, and a pair of similar, narrower, hooked flanges 4, along the other edge forming the recess 5 to receive the rail head 14. Evidently the recesses along the edges are of a form substantially to fit the rail flange and head respectively, but such fit must be somewhat loose to permit easy driving.

I have thus produced a piling which is economical to construct and use, and strong

to resist strains. It may be used in all situations where sheet pile is desirable, but is particularly adapted for lighter work in coffer-dams, retaining walls, sewer-work etc. It is desirable for temporary work in which, when finished, the sections of the piling may be withdrawn for further use. To this end, holes should be formed in the upper ends of all the sections as shown. One great advantage is that old rails and similar shapes may be used without special rerolling or other modification.

While I have described a desirable form of intermediate sections, yet that form may be modified without departing from my invention.

Having thus described my invention, what I claim is,—

1. A steel, sheet-piling wall composed of railway rails, and arranged alternately with said rails interlocking sections having along each edge corresponding hooked flanges, said flanges extending outwardly from the web, the flanges at one edge being longer than the flanges at the other edge.

2. Interlocking sections for steel sheet piling combined with railway rails, and consisting as an integrality of a web and of a pair of hooked flanges along each edge of the web, forming an interlocking groove along each edge, the flanges along one edge being lower and having the hooks more bent to form a long and narrow groove to receive the rail flange and the flanges along the other edge being shorter to form a short and wide groove to receive the rail head.

3. A wall of steel, sheet piling composed, as alternate elements, of railway rails, having the usual narrower and thicker heads and the wider and thinner flanges, and of interlocking sections, having a pair of corresponding flanges on each edge inclosing grooves to engage with a part of the rail, the groove at one edge being of a size to correspond with and receive the rail head and the groove at the other edge to correspond with and receive the rail flange.

4. Interlocking sections for steel sheet piling adapted to be arranged alternately with standard shapes and consisting of a web and of a pair of hooked flanges along each edge of the web forming an interlocking groove, one of said grooves being wider than the other.

5. Interlocking sections for steel sheet pil-

ing adapted to be arranged alternately with  
standard shapes and consisting of a web and  
of a pair of hooked flanges along each edge  
of the web forming an interlocking groove  
5 on each edge, one of said grooves being  
wider and deeper than the other.

6. Interlocking sections for steel, sheet pil-  
ing, adapted to be arranged alternately, and  
to engage, with standard shapes, consisting  
10 of a straight, thin web and of a pair of  
hooked flanges on each edge of the web

forming an interlocking groove on each  
edge, said web and said two flanges on each  
edge all being formed integral in a single  
piece.

In testimony whereof I have signed my  
name to this specification in the presence of  
two subscribing witnesses.

SAMUEL BERTRAM SHELDON.

Witnesses:

HOWARD H. GACKENBACH,  
RAYMOND C. STEINER.