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METHOD OF MAKING DOUBLE BOOMED SHEET PILE

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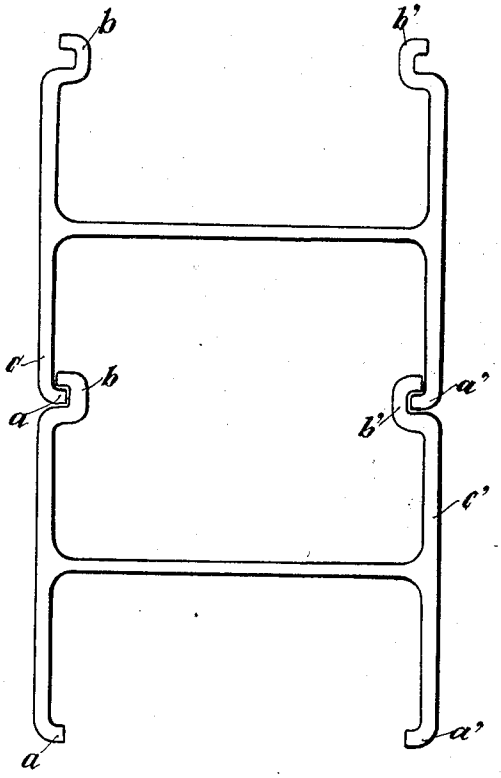

Fig. 1

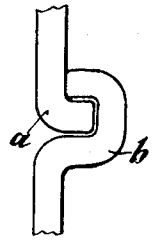

Fig. 2

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METHOD OF MAKING DOUBLE BOOMED SHEET PILE

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2 Claims. (Cl. 29—155)

This invention relates to a double-boomed sheet pile and to a method of producing same.

The usual kinds of sheet piles having the form of a Z or

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are limited with respect to dimensions and moments of resistance by the possibility of producing them by rolling in an economical manner. There is a demand for stronger sheet piles than are made at present to be used in construction work of various types, such as work for protecting the strand, and the building of ports, piers, lock chambers and the like, and the form of pile best suited for these purposes would be that of

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owing to its favorable static and driving properties. However, it has not been possible hitherto to produce sheet piles having this form and fitted with rolled-on connections in view of the difficulties that had to be overcome in rolling, and for that reason it was necessary to resort to various emergency solutions of the problem concerned, such as separately rolling the flanges and webs of the

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profile and uniting them afterwards or welding flange profiles together with an inserted web or employing special connecting irons in conjunction with correspondingly formed girder flanges.

The invention proposes a new method of production for overcoming the great technical difficulties hitherto preventing the production of sheet piles of double T-shaped section with connections directly rolled on thereto so as to provide, in connection with most favorable distribution of material and suitable construction of the connections, a pile having parallel flanges and possessing good efficiency and good driving properties while avoiding an unfavorable accumulation of material.

According to the invention, the hooked parts of the connections are produced by a special machine by deforming the flange ends of a broad flanged girder while still hot on coming out of the roller train.

By way of example, the invention is illustrated in the accompanying drawing showing one form of a sheet pile made under the new process.

Figure 1 shows two interconnected double-boomed sheet piles as required for sheet piling constructions; and Fig. 2 is a view on an enlarged scale of the connection.

Referring to the drawing, the hook *a* on the flange *c* engages the hook *b* on the flange *c* of the second profile in such a way that universal guiding is insured.

It is not necessary to arrange for the inner and outer hook of the connection on the same side of the top and bottom boom, and the hooks may be disposed so as to place similar hooks opposite one another in diagonal fashion.

The application of the new method is as follows:

First a double-T-shaped broad and parallel flanged profile is rolled out on a suitable roller train. On coming out of the last pass of the train the girder profile, while still hot, is moved to a special machine which bends the hooks forming the connection. The machine may operate like a press or bending machine and the connection may preferably be produced on a flanging machine having roller pairs arranged one behind the other in one operation.

I claim:—

1. The method of producing integral double-boomed sheet piles having interengaging integral elements, which consists in rolling a heated blank to form a one piece girder having a central web and parallel flanges integral with the respective free side edges of the web, and then in one continuous operation forming integral interengaging elements at the free side edges of each of the flanges while the blank is in its originally heated state.

2. The method set forth in claim 1 wherein the integral interengaging elements are formed in successive rolling operations.

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