No. 753,094. PATENTED FEB. 23, 1904.

G. E. NYE.

INTERLOCKING METAL SHEET PILING.

APPLICATION FILED NOV. 2, 1903.

NO MODEL.

Fig. 1.

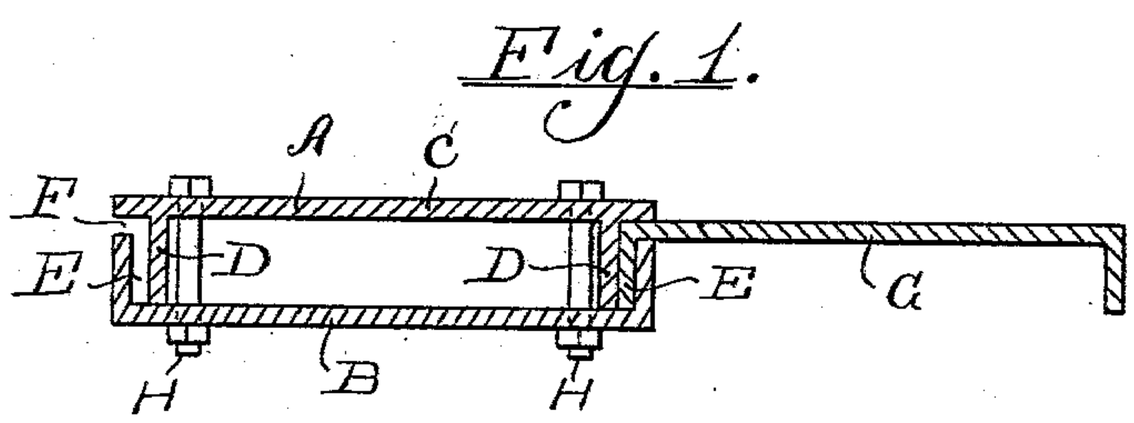
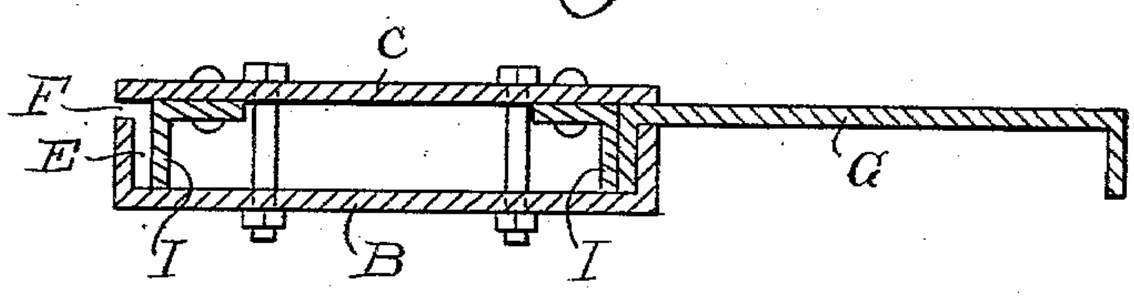


Fig. 2.



Witnesses:

C. F. Wilson

R. J. Snowhook

Inventor:

George E. Nye

By Rudolph Ernst

Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 753,094. Patented February 23, 1904.

UNITED STATES PATENT OFFICE.

GEORGE E. NYE, OF CHICAGO, ILLINOIS.

INTERLOCKING METAL SHEET-PILING.

SPECIFICATION forming part of Letters Patent No. 753,094, dated February 23, 1904.

Application filed November 2, 1903. Serial No. 179,611. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. NYE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Interlocking Metal Sheet-Piling; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a novel construction in metal sheet-piling, the object being to provide durable and efficient interlocking piling; and it consists in the features of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a horizontal section of sheet-piling constructed in accordance with my invention. Fig. 2 is a similar section, showing a modified form of construction.

My present invention consists, essentially, in constructing an interlocking unit A, which consists of a channel-beam B and a member C, equal in width to said channel-beam B and provided inwardly of its side edges with longitudinal ribs D of greater depth than the flanges of said channel-beam B and adapted to be received between the latter sufficiently far inward thereof to provide spaces E between the said flanges and ribs D of a width practically equal to the thickness of the flanges of said channel-beam.

The difference in length between the flanges of the channel-beam and the ribs D of the member C is practically equal to the thickness of the web of the channel-beam, so that between the edges of the flanges of said channel-beam and the overhanging edge portions of said member C recesses F are formed, which receive part of the webs of channel-beams G, the flanges of which fit within the spaces or recesses E, and thereby are firmly interlocked with said units A. The said channel-beam B and member C are bolted or otherwise secured in relative position by means of the bolts H. The said member C is preferably specially rolled, this being the most efficient and economic method of constructing such units A; but the same may be built up in other ways—for example, as shown in Figs. 2, 3, and 4.

Fig. 2 shows the member C, consisting of a plate to which two angle-irons I are secured in such position that one flange of each forms the equivalent and takes the place of the rib D.

The important feature of this invention resides in the member A, which is a special form of iron capable of being advantageously rolled and is therefore practically as cheap as channel-bars or other standard shapes, and by comprising in a single piece a form which otherwise must be composed of a plurality of pieces renders the entire structure very much cheaper, lighter, and in every way more advantageous.

Fig. 4 shows a form of construction which while it will serve the same purpose cannot be advantageously made by reason of the increased labor, material, and weight and its lesser strength.

I claim as my invention—

1. In a sheet-metal piling, a unit comprising in combination a member consisting of a plate provided with parallel longitudinal ribs inwardly of its side edges, and an opposing part abutting against the free edges of said ribs and provided with flanges of less depth than said ribs extending parallel with the latter and separated therefrom to form L-shaped recesses in the sides of said unit.

2. In sheet-metal piling a unit provided in its side edges with L-shaped recesses, said unit being composed of a plurality of members secured together and including a member consisting of a plate provided inwardly of its side edges with parallel integral ribs.

3. In metal sheet-piling, a unit comprising in combination a channel-beam, a member equal in width with said channel-beam and having its web extending parallel therewith, longitudinal ribs on said member of greater depth than said flanges of said channel-beam and extending between the latter inwardly thereof and resting on the web of said chan-

nel-beam, the free edge portions of said members overhanging said flanges of said channel-beams but being separated therefrom, the spaces between the ribs of said member and said flanges and between the free ends of the latter and the overhanging portions of said member together forming L-shaped recesses each adapted to receive a flange and part of the web of a channel-beam adapted thereby to interlock with said unit.

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

GEORGE E. NYE.

Witnesses:

RUDOLPH WM. LOTZ,

E. F. WILSON.