

J. J. HAROLD.
METAL PILING.
APPLICATION FILED OCT. 23, 1903.

NO MODEL.

Fig. 1

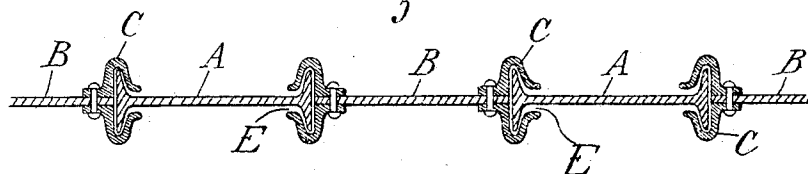
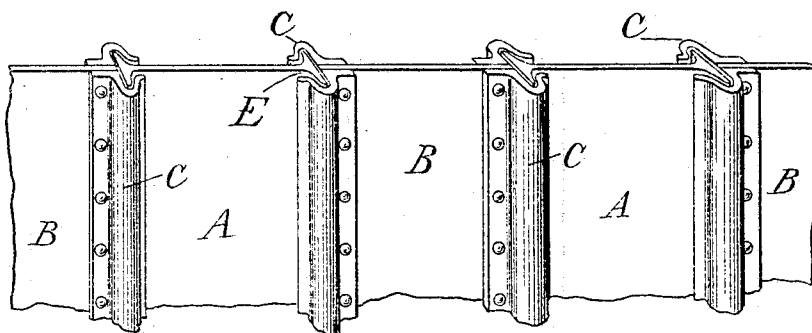


Fig. 2

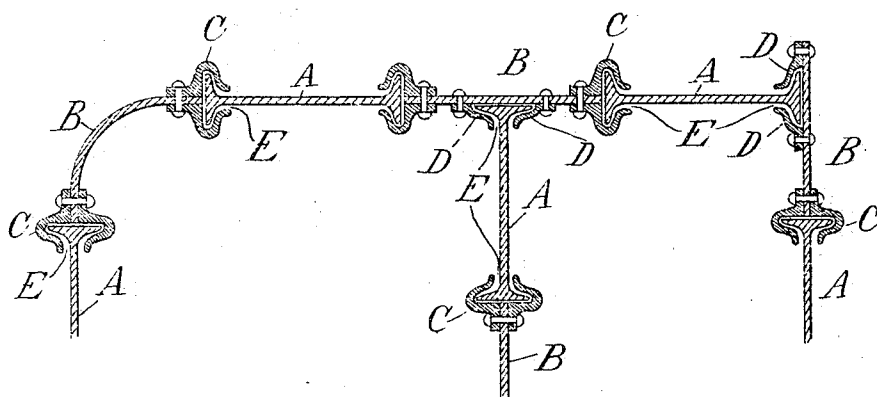


Fig. 3

Witnesses
Ivan Honigsberg.
Smith D. Kover.

Inventor
By his Attorney James J. Harold
Thouyad & Hief.

UNITED STATES PATENT OFFICE.

JAMES J. HAROLD, OF JERSEY CITY, NEW JERSEY.

METAL PILING.

SPECIFICATION forming part of Letters Patent No. 766,185, dated August 2, 1904.

Application filed October 23, 1903. Serial No. 178,278. (No model.)

To all whom it may concern:

Be it known that I, JAMES JOSEPH HAROLD, a citizen of the United States of America, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Metal Piling, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in metallic piling as used in subway, foundation and irrigation work, dams, mine-shafts, caissons, sea-walls, locks, coffer-dams, retaining-walls, and similar structures, and comprises the usual form of I-beams interlocked by coupling-plates and lug-strips, and other details to be hereinafter set forth.

Referring to the accompanying drawings, Figure 1 is an end view of a straight run of my piling, and Fig. 2 a perspective view of the same. Fig. 3 is an end view showing the formation of a partition or wall and curved and angular corners.

A represents the I-beams, B the coupling-plates having interlocking jaws C and lug-strips D, and E are spaces left for calking after the piles are driven into position. The jaws C open outwardly from and extend longitudinally along the opposite sides and edges of the coupling-plate B. The lug-strips D open inwardly and extend longitudinally along one side of the coupling-plate, and the jaws and lug-strips may be formed with or fastened by rivets or similar means to the coupling-plate. In turning corners the coupling-plate B may be curved transversely, as shown on the left of Fig. 3, or the lug-strips D may be formed or attached to one side of the coupling-plate, as shown on the right of the same figure. With these lug-strips partitions or walls may also be formed, as shown in the center of the figure.

In the construction of my piling the piles are driven down in the usual manner, the

grooves formed by the jaws C of the coupling-plates being large enough to allow a little play and serving as guides for the I-beams. When the piles are driven into place, the spaces E may be calked or made watertight by any well-known method. It should be observed that the ends of the jaws and lug-strips of the coupling-plates extend for a short distance along the flat surfaces of the I-beams, thus presenting the necessary space in an accessible position for calking.

I do not confine my invention to use in connection with the various structures before named, and while I prefer to construct my improvements throughout substantially as shown and described they may be variously modified without departing from the spirit of my invention as defined by the claims.

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

1. A wall, dam, box or similar structure comprising I-beams connected by coupling-plates having interlocking jaws and lug-strips substantially as described and shown.

2. A wall, dam, box, cylinder or similar structure comprising coupling-plates having jaws interlocking I-beams, the ends of said jaws extending over the flat surfaces of the said I-beams substantially as described and shown.

3. A wall, dam, box, cylinder or similar structure comprising I-beams, said I-beams interlocked with coupling-plates having longitudinally-extending jaws and lug-strips extending over flat surfaces of said I-beams, and calking between said jaws and lug-strips and said I-beams substantially as described and shown.

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

JAMES J. HAROLD.

Witnesses:

WAYNE KRATZER,
SMITH D. NIVER.