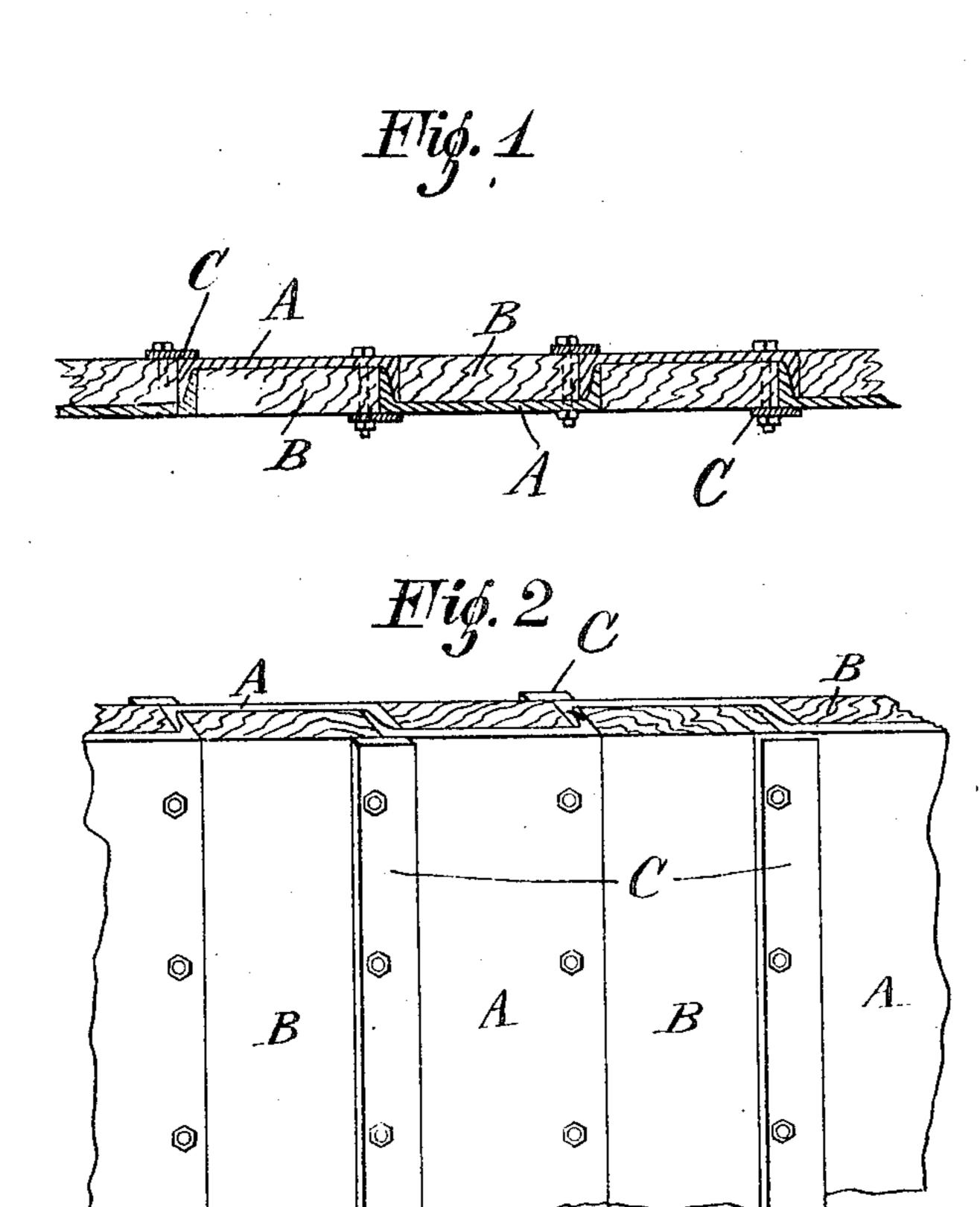
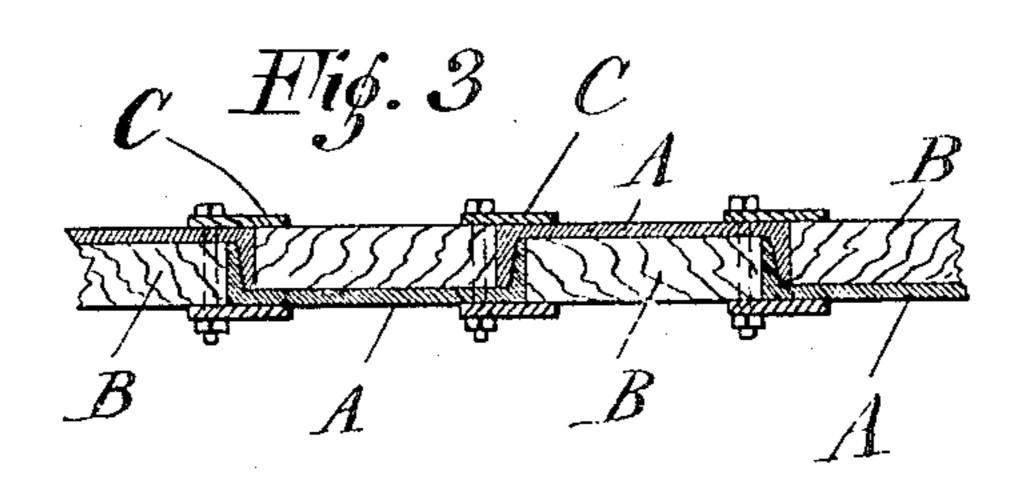
J. J. HAROLD.

METAL PILING.

APPLICATION FILED DEC. 22, 1904.





Dan Honigsberg! Umie Honigsberg! James J. Hurold

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UNITED STATES PATENT OFFICE.

JAMES J. HAROLD, OF JERSEY CITY, NEW JERSEY, ASSIGNOR, BY MESNE ASSIGNMENTS, TO EMMA HAROLD, OF JERSEY CITY, NEW JERSEY.

METAL PILING.

No. 808,838.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed December 22, 1904. Serial No. 237,872.

To all whom it may concern:

Beit known that I, James J. 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 flanged beams, preferably of the channel-beam type, reinforced by planks and provided with bolted plates for interlocking pur-

Referring to the accompanying drawings, Figure 1 is an end view of a run of my piling, showing the manner in which the beam members are reinforced and locked together. Fig. 2 is a perspective view of the same, and Fig. 3 is a modified construction.

A represents the beam members, B timber or other suitable reinforcing material, and C the bolted plates interlocking the combination. Planks, such as shown, are preferably bolted in the channels of the beam members with the plates, and as the beams are driven into place the flanges are held together by the bolted plates and timber reinforcement.

If desirable, the timber of each beam may be bolted on both sides and provided with a plate on each side, as shown in Fig. 3, and

other modifications may be made without departing from the spirit of my invention.

Having described my invention, what I claim, and desire to secure by Letters Pat-

1. In piling, beam members provided with flanges on opposite sides of one face thereof, planks adapted to engage the channels formed by said flanges, one of the flanges on one beam member adapted to slide between 45 a flange on another beam member and its plank, a plate at the outer edge of each of said planks extending over the back of the adjoining beam member, and said plate secured to said plank by bolts passing through 50 its beam member.

2. In piling, beam members provided with flanges on opposite sides of one face thereof, planks adapted to engage the channels formed by said flanges, one of the flanges on 55 one beam member adapted to slide between a flange on another beam member and its plank, a plate at the outer edge of each of said planks extending over the back of the adjoining beam member, a plate on the opposite side of the piling extending over the adjoining plank, and said plate secured by bolts passing through said planks and said beam members.

In testimony whereof I affix my signature 65 in presence of two witnesses.

JAMES J. HAROLD.

Witnesses:

BEATRICE UNGER,
THOMAS A. HILL.