

UNITED STATES PATENT OFFICE.

WILLIAM J. L. MOULTON, OF SAN FRANCISCO, CALIFORNIA.

IMPROVED METHOD OF PROTECTING PILES.

Specification forming part of Letters Patent No. **55,694**, dated June 19, 1866.

To all whom it may concern:

Be it known that I, WILLIAM J. L. MOULTON, a citizen of the United States of America, and of the State of California, and now of the city and county of San Francisco, State of California, have at said city and county discovered a new and useful invention called "Moulton's Patent Pile-Protector," of which the following is a full and exact description.

The pile between high and low water mark is covered with galvanized iron, zinc, or copper, secured by metallic nails. Then the pile between mean low-water mark and the bottom, or that portion of the pile in the earth, and from one to two feet into the earth, is incased in a tube of galvanized iron, zinc, or copper, leaving a space between the pile and the casing of from one to six inches, which is filled and puddled in with hydraulic cement or concrete, filling all the cavities in the pile caused by worms or

otherwise. In forty-eight hours the concrete becomes set, the pile is strengthened fifty per cent., and shielded by stone and iron, so as to thoroughly protect it against worms or decay for twenty years.

What I claim, and desire to secure by Letters Patent of the United States, is—

The mode of protecting piles by means of metallic covering and cement filling, as set forth and described.

In testimony whereof I, the said WILLIAM J. L. MOULTON, hereunto subscribe my name, in the presence of the witnesses whose names are hereunto subscribed, on the 31st day of July, A. D. 1865, at said city and county of San Francisco.

WM. J. L. MOULTON.

In presence of—

DAVID MAHONEY,
JAMES GALLAGHER.