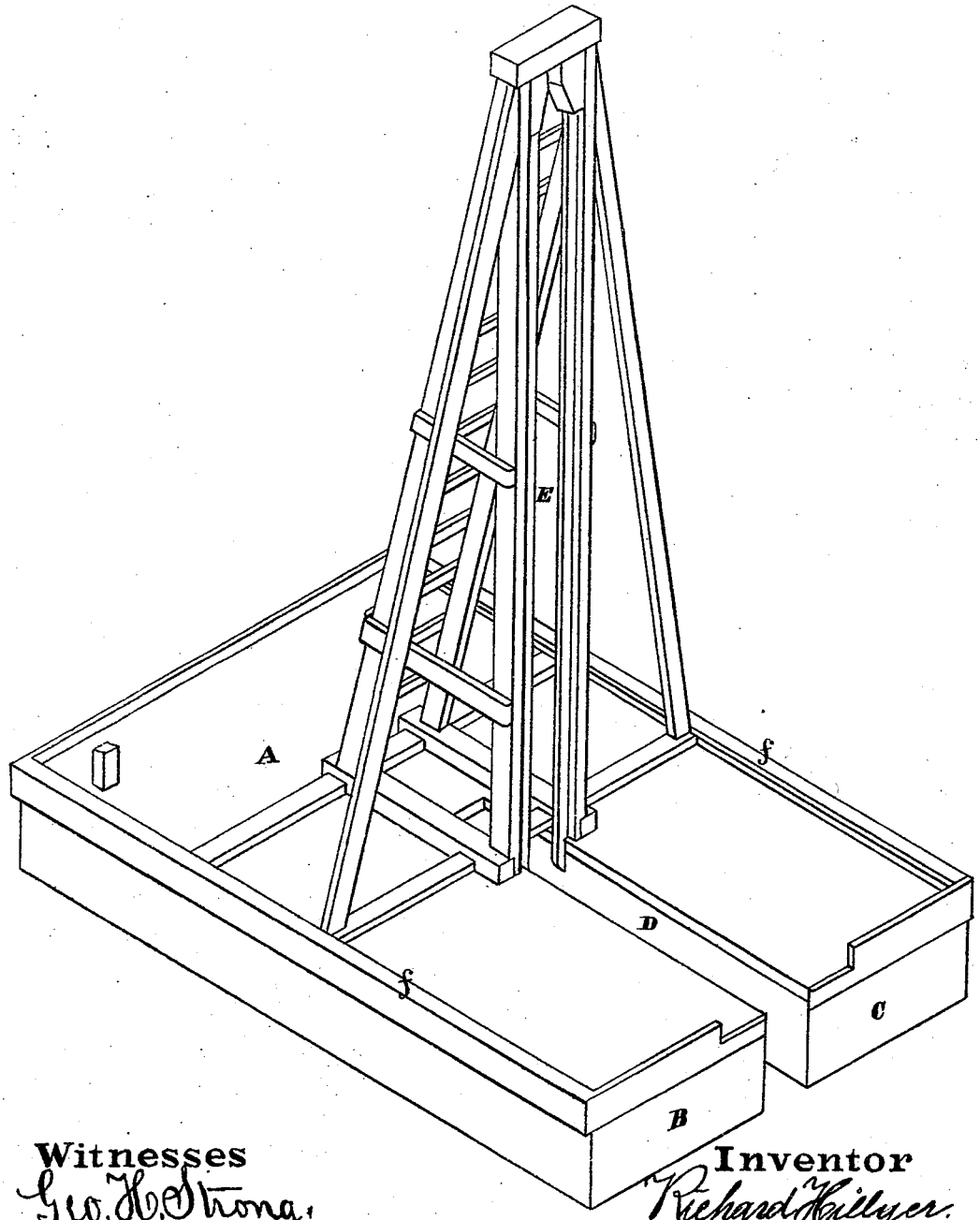
R. HILLYER.

PILE-DRIVER.

No. 184,779. Patented Nov. 28, 1876.



Witnesses

Geo. H. Strong.

O. T. Stacy

Inventor

Richard Hillyer.

By his Attys.

Dewey & Co.

UNITED STATES PATENT OFFICE.

RICHARD HILLYER, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO RICHARD HARRIS.

IMPROVEMENT IN PILE-DRIVERS.

Specification forming part of Letters Patent No. **184,779**, dated November 28, 1876; application filed October 17, 1876.

To all whom it may concern:

Be it known that I, RICHARD HILLYER, of the city and county of San Francisco, and State of California, have invented an Improved Scow and Pile-Driver; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing.

My invention relates to an improvement in floats or scows as are used for supporting pile-drivers, and moving them from place to place, in order to conveniently drive such piles as are driven into material under water. It also relates to an improved manner of securing the pile-driver so that it can be adjusted back or forward, according as required by the circumstances of each case, all as hereinafter described.

Referring to the accompanying drawings, in which Figure 1 is a perspective view, let A represent the deck of a float or scow. The hull of this craft I make in two separate parts, B C, which are placed at a short distance apart, and the deck is made to unite them across a portion of the length of the scow. This leaves a space between the two hulls throughout the entire length of the scow, while the deck bridges over the space over a portion of the length of the vessel, leaving a slot or space, D, at one end, as represented, which is as wide as the space between the hulls. This space is wide enough to permit a standing pile to pass through it. The pile-driver E I mount upon the deck over the slot or space D, so that the guides of the pile-driver will stand vertically over the space. The engine which supplies the power to operate the pile-driver and scow I mount on the deck at the opposite end of the scow, where the space is bridged over. The derrick is steadied by guides *f f*, so that it can be moved in the manner of a slide to any desired point in the length of the slot or space D.

In driving piles, the pile-driver is shifted by means of the engine, to accommodate the position of the pile, and the pile passes down through the slot or space D. When the pile is driven down sufficiently to permit its upper end to clear the portion of the deck which bridges the space D, the scow or vessel is moved forward, allowing the upper end of the pile to move in the slot until the position for the next pile is reached. The scow is then lashed to the pile already driven, and the next pile is driven, and thus the work proceeds until the entire number of piles are driven. I am thus able to drive the piles in a straight line, and at the same time fasten the scow immovably while driving each pile. This arrangement also enables me to use my griping device for pulling piles to a great advantage, as I can work all around the pile, and I obtain the advantage of applying the downward force at or near the middle of the scow.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of a float or scow, consisting of the two hulls B C, secured together by means of the deck of the vessel, which only covers the space between the floats, (a portion of the length of the vessel,) so as to provide a slot, D, through a portion of the deck, and a corresponding slot between the floats, and extending under the remaining portion of the deck, with a pile-driver arranged substantially as and for the purpose described.

2. The combination of the float or water-craft, provided with a slot, D, through its deck, and a corresponding passage through its hull, with a movable pile-driver, E, which can be shifted to any desired point in the length of the slot, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand and seal.

RICHARD HILLYER. [L. S.]

Witnesses:

GEO. H. STRONG,

OLWYN T. STACY.