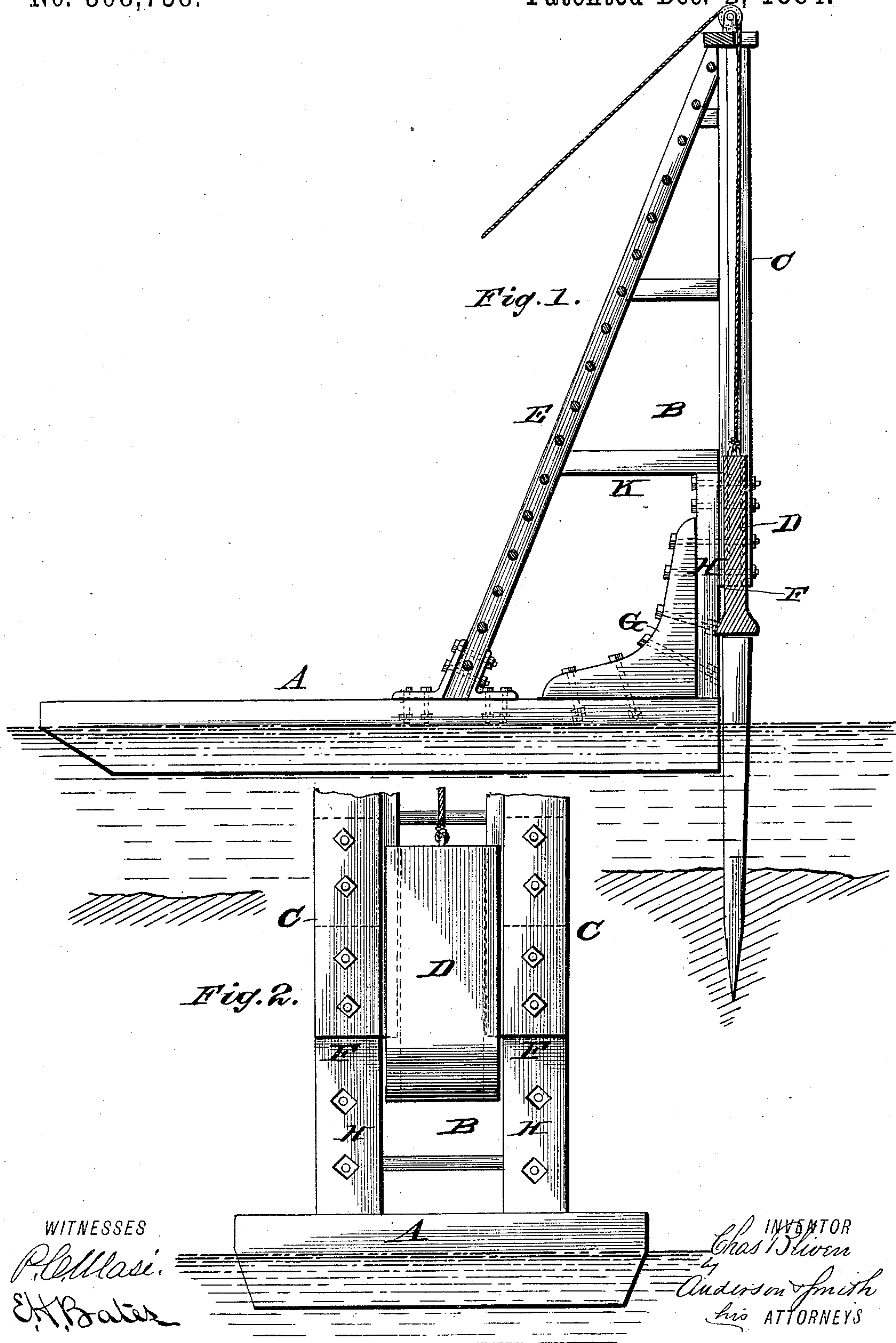


(No Model.)

C. BLIVEN.
PILE DRIVER.

No. 308,738.

Patented Dec. 2, 1884.



UNITED STATES PATENT OFFICE.

CHARLES BLIVEN, OF NORFOLK, VIRGINIA.

PILE-DRIVER.

SPECIFICATION forming part of Letters Patent No. 308,738, dated December 2, 1884.

Application filed June 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BLIVEN, a citizen of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Steam Pile-Drivers; and I do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a vertical sectional view of my device, and Fig. 2 is a front view of the same.

This invention has relation to steam pile-drivers; and it consists in the construction and novel arrangement of devices, as hereinafter set forth, and pointed out in the appended claims.

In the accompanying drawings, the letter A designates the scow by which the derrick B is supported. The derrick is erected at the end of the scow, and consists of the uprights C, which are provided on their inner sides with the guides for the hammer D and the ladder-braces E, which are firmly connected at their upper ends to the guide-uprights C, and to each other by the ladder-rounds and such other transverse braces as may be necessary.

The object of this invention is to facilitate driving the piles in close relation side by side, and to this end the guide-uprights are shortened below, their lower ends terminating above the level of the deck of the scow, as indicated at F. In order to support these elevated guide-timbers in such a manner that the working interspace below them will be clear, I have provided the strong knees G and the supplementary upright timbers H, which are bolted fast to the guides C and to the deck of the scow. In this construction the short up-

rights H are placed back of the uprights C at their lower portions under the side braces K, and extend downward to the deck, while the uprights C terminate above the deck at F, as shown. Both the guide-uprights and the supporting-uprights are bolted to the knees G. By this construction the guiding portion of the derrick, which directs the hammer in its fall, is elevated, so that the derrick can be moved readily over the tops of the piles in such a manner as to enable them to be driven side by side in contiguous position.

I am aware that it is customary to block up derricks in order to drive piles in this manner, and it is designed by this invention to avoid this troublesome and expensive proceeding. It also keeps the deck clear, as extra timber for blocking up is not required.

In order to lengthen out the guides C at their lower ends when necessary, extension-guides of various lengths are adapted to be bolted to the uprights and knees below said guides and continuous therewith.

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

1. In a pile-driver, the guide-uprights C, having their lower ends above the level of the deck of the scow; and supported by rear timbers and knees, substantially as specified.

2. In a pile-driver, the combination, with the scow, of the elevated guide-uprights C, the ladder-braces, the rear supplementary uprights H, and the knees G, bolted to and supporting the guide-uprights in position above the level of the scow-deck, substantially as specified.

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

CHARLES BLIVEN.

Witnesses:

H. C. REREY,
O. D. WEMPLE.