

G. H. CAVANAGH.
Pile-Cutters.

No. 155,222.

Patented Sept. 22, 1874.

Fig. 2.

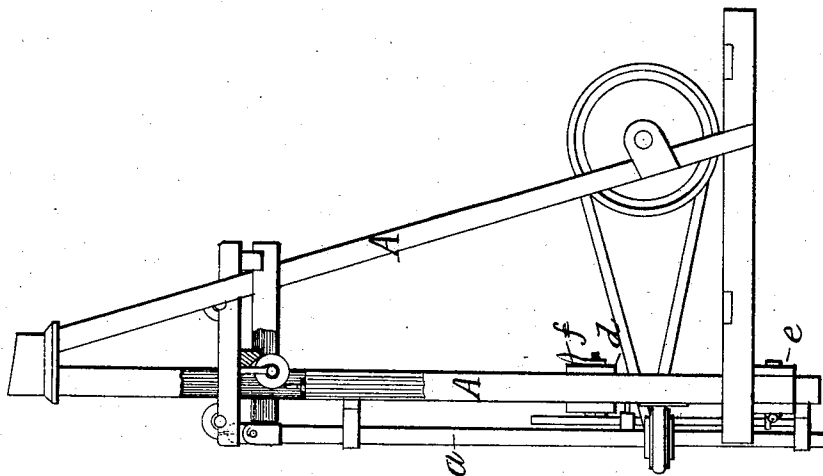
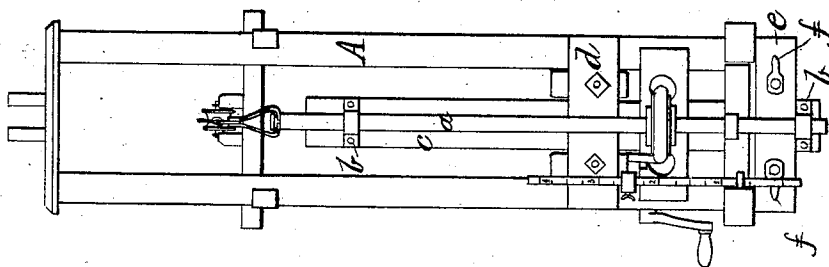


Fig. 1.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE H. CAVANAGH, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN PILE-CUTTERS.

Specification forming part of Letters Patent No. **155,222**, dated September 22, 1874; application filed April 25, 1874.

To all whom it may concern:

Be it known that I, GEORGE H. CAVANAGH, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Pile-Cutter; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The object of my invention is to provide that when the revolving saw-shaft is more and more submerged under the water during the progress of the work, its bearings or supports can also be lowered proportionately, and thus prevent the shaft becoming bent or disturbed by strain or by the action of strong currents of water against it; and it consists in placing the bearings for the shaft upon an adjustable board or bed, which, by means of clamps arranged to tighten or loosen it, as may be desired, permits the lowering of this board to any required extent without deranging the driving mechanism, and the consequent shifting of the shaft-bearings, as may be needed.

In the drawings, Figure 1 is a front elevation, and Fig. 2 a side elevation, partly in section, of a pile-cutting machine illustrating my invention.

The main frame A needs no particular de-

scription. The shaft *a* is feathered or grooved so that it may rise or fall in its pulley and yet be driven by it, and it is supported in bearings *b b* on the supporting beam or board *c*. This board *c* is held to its place by means of the clamps *d e*, which, by means of screws and nuts *f f*, may be loosened or tightened at pleasure upon the board *c*, thus permitting the lowering of the board and its bearings *b b*, the shaft in such lowering slipping through its wheel and leaving its relation to the driving-wheel and belt undisturbed.

It will thus be seen that if the board *c* be firm and strong, this method of adjustment permits the operator always to keep his lower bearing as near to the saw at one time as at another, no matter how deep under water the saw may be working.

I claim—

In combination with the adjustable board *c*, and with the saw-shaft independently-adjustable thereon, the vertically-adjustable upper clamp *d f*, whereby the point at which the board is clamped may be varied to correspond with the varying vertical positions of the board as the latter is adjusted.

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Witnesses:

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