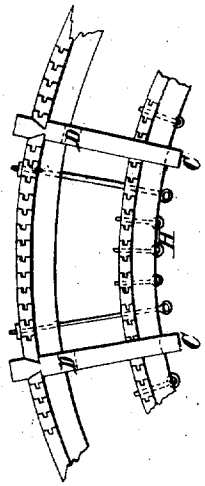
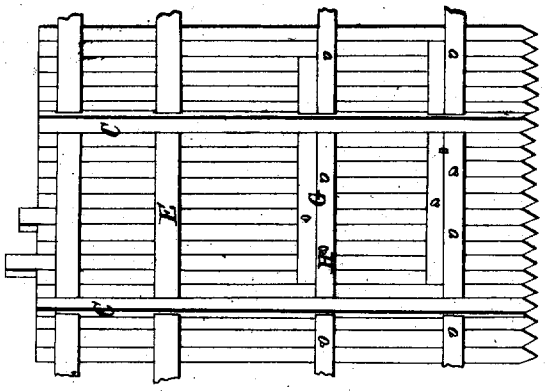
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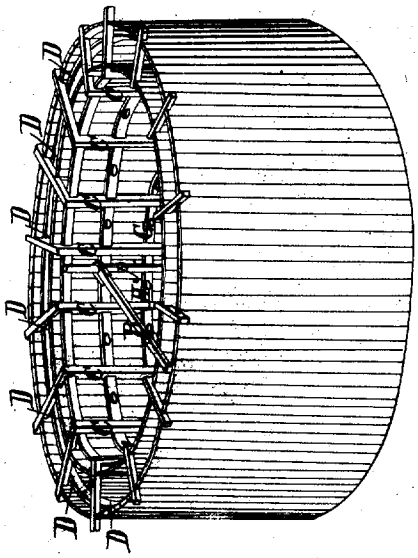
W. Easby.

Coffer Dam.

Patented Nov. 19, 1833.







William Easby 7799X Nov 19, 1833

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said William Easby himself of his improvement in the construction of Coffer Dams.

Be it known that I William Easby of the City of Washington District of Columbia have made a new and useful improvement in the construction of Coffer Dams called Easby's Coffer Dams which is described as follows. reference being had to the annexed drawings —

This dam is constructed in the following manner, Wooden piles of a suitable length and strength are driven in by a pile driving machine in a circular form or many sided polygon. inclosing the space where the pier or other work is to be built inside. These piles are shod at their points with iron or steel, and their heads protected by iron rings. When cut down to their proper height. they are also tongued and grooved so as to fit into each other perfectly. In order to form the circle it will be necessary first to drive a pile near the centre of the intended circle. marked A. in the drawing. On this pile place a beam or boom B. turning on a collar. by which the radius of the circle will be described. Piles C. will then be driven at about one foot within — the periphery of the dam and at about 8 feet asunder, another circle D. will be formed at the distance of about 10 feet outside of the first driving in piles in the same manner as the first. The heads of both circles will then be cut off at about 4 feet above high water at common tides. The frame being now formed is ready to receive the pile driving engine. the circle B. must be to the upper inner rim will be secured to the cut ends of the inner tier of piles by suitable

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parallel to the one above mentioned at low water mark. The piles being properly prepared with their cap converging to the center of the circle, the driving may be commenced: Care however must be taken that the first pile be driven perpendicularly and secured to its place by treenails passing through the head and the upper rim. The next pile will be inserted into the groove of the first, driven home and secured. After the dam is inclosed the water may be pumped out to 10 ft below the surface, at which point a rib of oak G. of from 6 to 12 inches thick may be secured on the inside of the dam or inner circle by large screw eye bolts H. after which the water may be pumped out to 18 feet and another rib I. inserted. The reason for placing these ribs as directed is not only to regulate the piles and strengthen the dam but in case any pile should be out of its place it can be brought into its place again by the screw bolts. Should any obstruction occur it will be necessary to be provided with a good oak pile having a steel shod point with its head well hooped. This pile is to be used to make way for the other dam pile to be driven. When the bottom of formation is good one tier of piles only is necessary. When two ranges of piles are deemed necessary, the proof will be the same the loose mud must be taken from between the circles & the circles be secured by screw bolts passing from the exterior circle to the interior circle to prevent them from being separated by the packing between them.

What I claim as my invention and desire to secure by Letters Patent is the peculiar construction of the before described Coffer dam, but I particularly claim the circular figure of the dam, whether a perfect circle, oval or a polygonal of many sides dispensing with braces and giving it

N.B. greater strength

Witness W. P. Elliot William Easby
Jno. L. Walker