(No Model.)

J. ELMER.

FASCINE FOR THE PROTECTION OF HARBORS, &c.

No. 303,137. Patented Aug. 5, 1884.

Fig. 2.

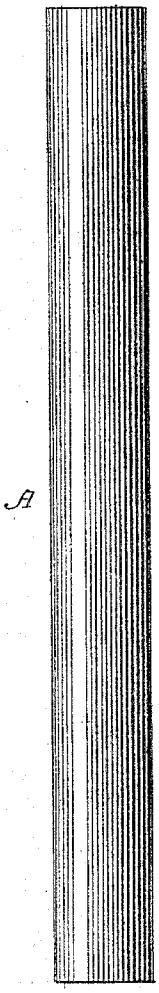


Fig. 1.

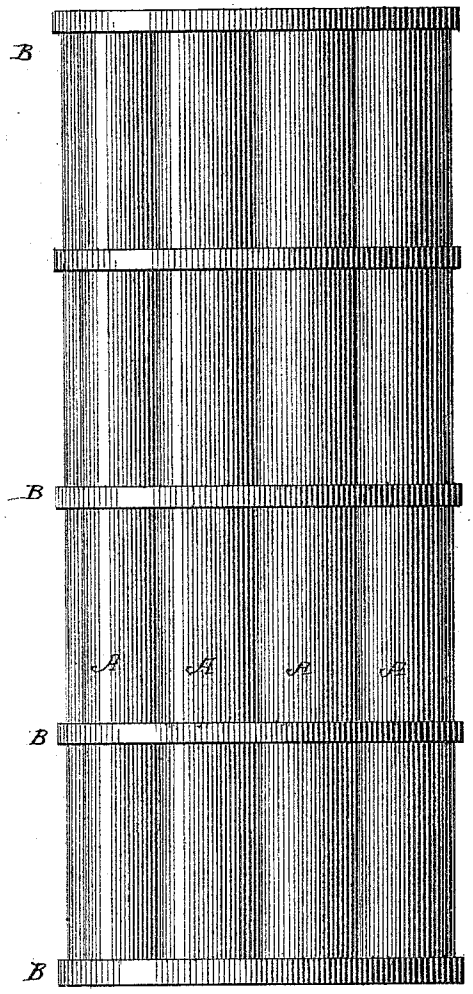


Fig. 3.

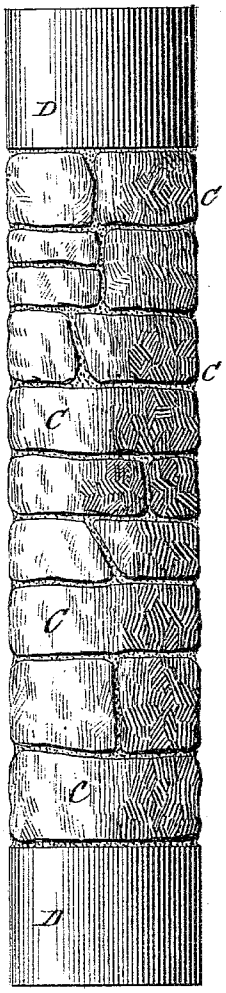
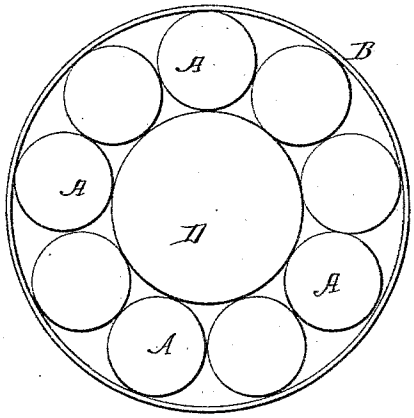


Fig. 4.



Witnesses:
L B Welzel
L B Holley

Inventor:
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UNITED STATES PATENT OFFICE.

JACOB ELMER, OF BILOXI, MISSISSIPPI.

FASCINE FOR THE PROTECTION OF HARBORS, &c.

SPECIFICATION forming part of Letters Patent No. 303,137, dated August 5, 1884.

Application filed March 10, 1884. (No model.)

To all whom it may concern:

Be it known that I, JACOB ELMER, a citizen of the United States, residing at Biloxi, in the county of Harrison and State of Mississippi, have invented a certain new and useful Improvement in Fascines for the Protection of Harbors, Banks of Rivers, and Filling Crevasses; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Figure 1 is a side elevation of the fascine. Fig. 2 is a detail view of one of the saplings. Fig. 3 is a detail view of the core of the fascine, and Fig. 4 is a plan view of the fascine.

A indicates a series of saplings, which are secured together in tubular form by bands or hoops B, preferably of iron. The interior of the tube thus formed is filled with a core made of stones, C, and cylindrical blocks D of stone or wood, which are secured in the ends of the tube to hold the stones therein; the diameter of the fascine to be from one to three feet; length from ten to forty feet, according to size and shape of break or wash of bank; size of saplings from two to six inches in diameter; the saplings to be of pine or any other kinds of wood, pine preferable. The fascine can be lowered and placed from boats or river-banks with derricks or any other suitable contrivance. This fascine is particularly adapted for the repairing and protection of the banks of the Mississippi river, and for any other river. After a layer of fascines is placed in position, it is to be covered with small gravel, and so on up to the level of the water; above that the layers to be covered with clay or mud.

These improved fascines will be beneficial to build new levees and raise and strengthen old ones. These improved fascines will be beneficial to build and raise beds of railroads or any other kind of road through swamps and low lands.

I claim for my invention—

1. A fascine consisting of a tubular body made of saplings secured together, which body is filled with stones, substantially as shown and described.

2. A fascine consisting of a tubular body made of saplings bound together by iron hoops, and a core of stones secured therein by cylindrical blocks inserted into the ends of said tubular body, substantially as shown and described.

JACOB ELMER.

Witnesses:
L. B. WETZEL,
L. B. HOLLEY.