No. 752,781. PATENTED FEB. 23, 1904.

C. KERR.

GABION.

APPLICATION FILED JUNE 11, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

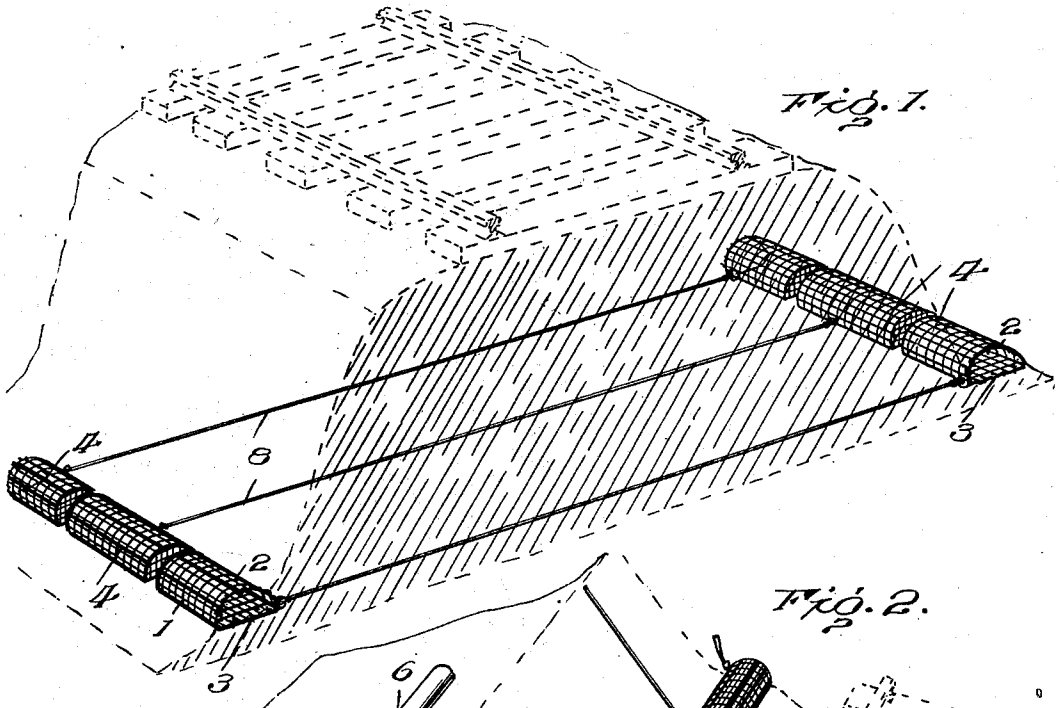
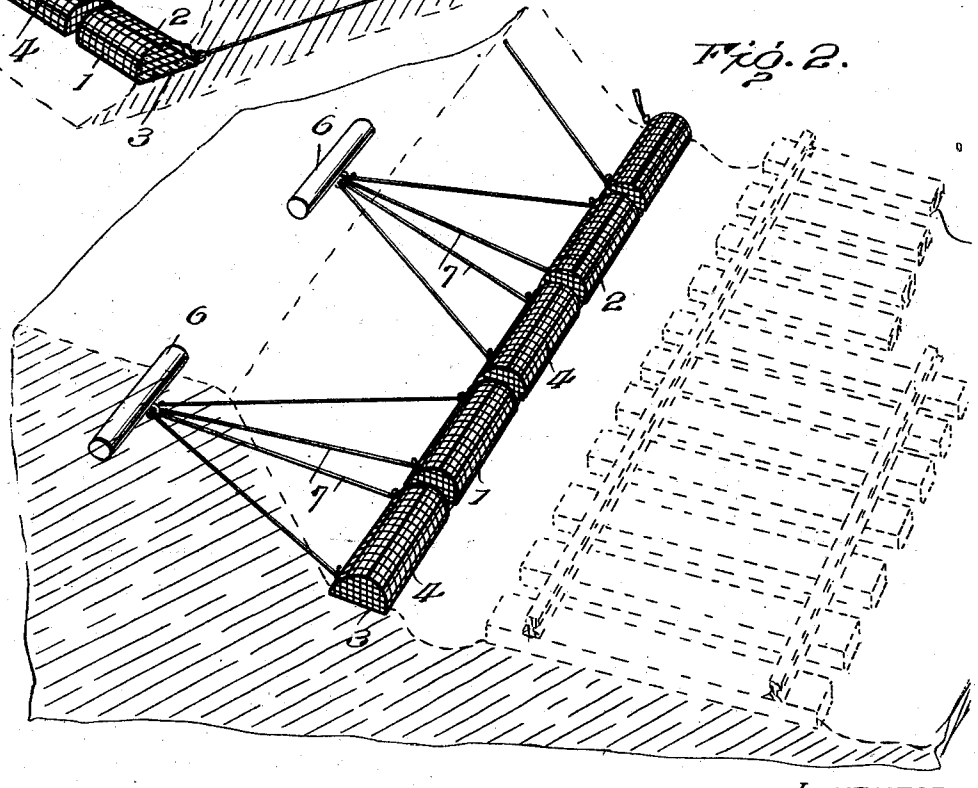


Fig. 2.



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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3.

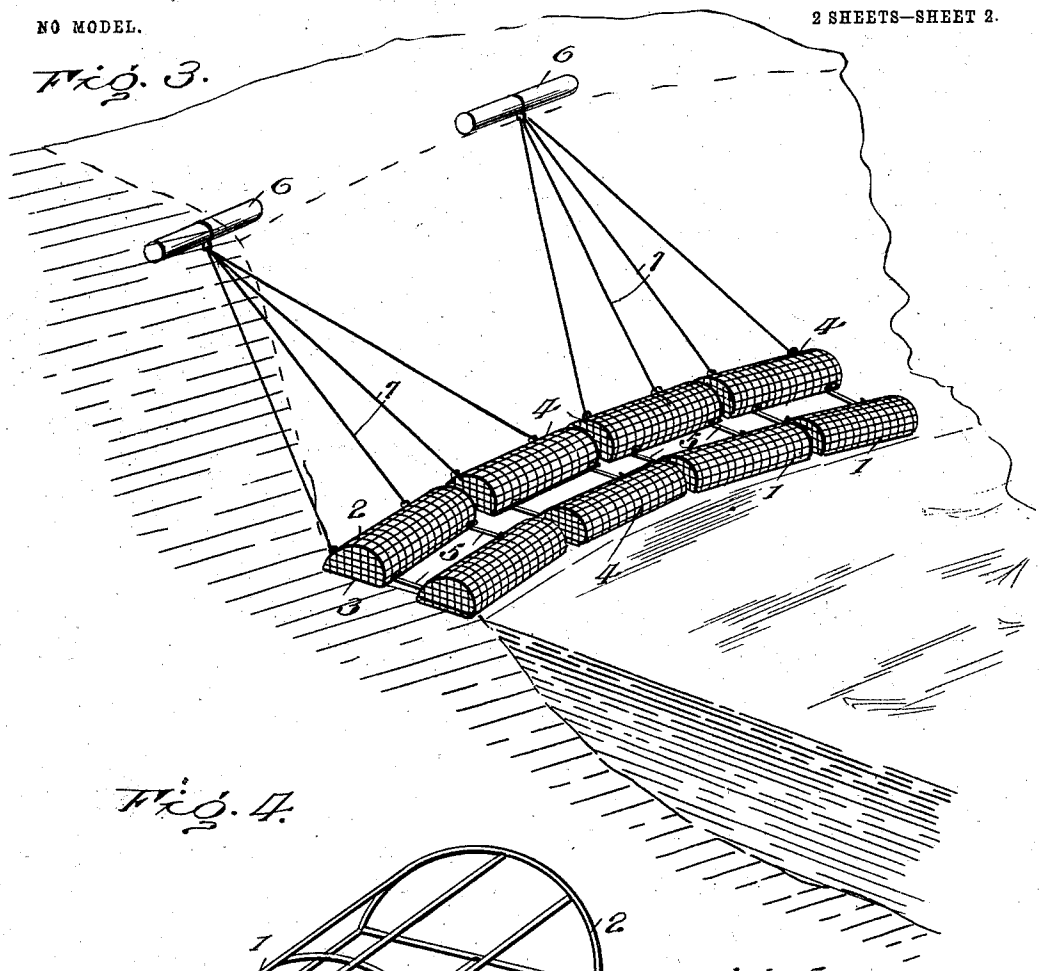


Fig. 4.

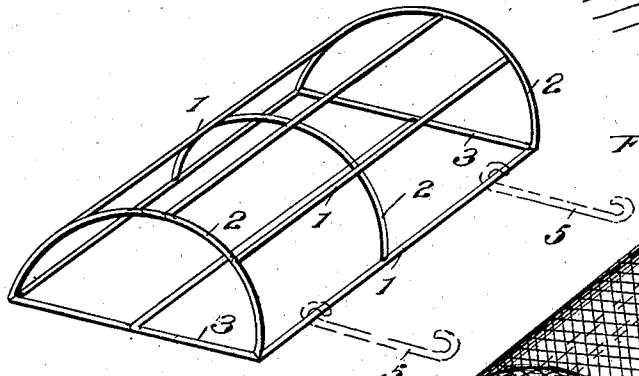
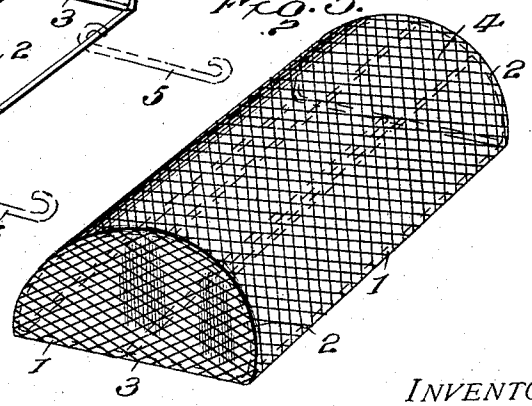


Fig. 5.



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No. 752,781. Patented February 23, 1904.

UNITED STATES PATENT OFFICE.

CHARLES KERR, OF JACKSON, MISSISSIPPI.

GABION.

SPECIFICATION forming part of Letters Patent No. 752,781, dated February 23, 1904.

Application filed June 11, 1903. Serial No. 161,113. (No model.)

To all whom it may concern:

Be it known that I, CHARLES KERR, a citizen of the United States, residing at Jackson, in the county of Hinds and State of Mississippi, have invented certain new and useful Improvements in Gabions, of which the following is a specification.

This invention provides a species of gabion or fascine for protecting banks, building sea and river walls, constructing wing-dams, closing breaks in levees, and for like work in connection with flowing water.

The device is constructed of metal, wood, or other suitable material and comprises a frame and a covering of meshed material and is oblong, the bottom side being flat and the top arched or curved. A number of these devices are connected in series and are anchored to the shore or bank and collect sand, silt, mud, and like matter, so as to prevent washing out of banks and assist in building walls, levees, dams, and the like.

In the accompanying drawings, forming a part of the specification, Figure 1 is a detail view in perspective, showing the application of the invention for protecting the sides of a railroad embankment. Fig. 2 is a view showing the application of the invention for protecting the bank of a railroad cut. Fig. 3 is a detail perspective view showing the invention as applied for building a wing-dam. Fig. 4 is a perspective view of the frame or skeleton of the device. Fig. 5 is a perspective view of a gabion or fascine embodying the invention.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The gabion or fascine comprises a frame substantially as shown in Fig. 4, the same consisting of a series of stout bars rigidly connected. The device is oblong in its preferable construction, and its ends are straight, its bottom flat, and its top arched. The longitudinal bars 1 are straight and disposed in parallel relation, and the transverse bars 2 are bowed or arched and are connected at their extremities by chord-bars 3, which subtend the arcs formed by the curved bars 2. Over the skeleton frame is stretched a covering 4 of meshed material, either of wire or other material, the same completely inclosing the frame at its bottom, top, and ends, as shown most clearly in Fig. 5. The gabion may be of any size, depending upon the special work for which it is designed. In practice the gabions or fascines are connected in series and may be arranged in straight or curved lines and in a single or series of rows. Links 5 connect the device in series and admit of their assuming any desired relative position according to the irregularities of the surface upon which they may be placed or the predetermined line to be followed.

The gabions or fascines are secured in the required position by means of anchors 6 and cables, chains, or like connections 7, secured at one end to the anchors and at the opposite end to the several gabions according to the particular location and relative arrangement of the parts.

When the sides of a railroad embankment are to be protected, the gabions are arranged about as shown in Fig. 1, those upon one side of the embankment being connected to corresponding ones on the opposite side by means of a tie 8, which may consist of a cable, rod, chain, or the like. To protect a side of a railroad cut, the gabions are arranged along the bank or side of the cut and are secured thereto substantially in the manner herein stated. For building a wing-dam, jetty, or the like the gabions or fascines are projected into the stream or body of water according to the desired wall, dam, or the like to be constructed and are anchored to the bank in any convenient way, so as to retain them in place. The flat bottom of the devices prevents their washing away and materially assists the anchoring means in holding the gabions or fascines in place. By having the devices hollow and inclosed by meshed material sand, silt, mud, and the like readily penetrate the interstices and accumulate and facilitate the accretion or building of the wall, dam, jetty, or the like and also prevent the washing away of railroad embankments and cuts. The straight

ends enable a number of the gabions to be closely related. The arched tops present a maximum surface for the mud, silt, and earthy matter to lodge against and fill the devices. Moreover, a number of the gabions may be arranged in rows, and the curved tops provide spaces for collecting and the accumulation of matter.

Having thus described the invention, what is claimed as new is—

1. A gabion or fascine consisting of a skeleton frame and a covering of meshed fabric inclosing the bottom, top and ends thereof, substantially as described.

2. A gabion or fascine comprising a hollow body having its bottom flat and its upper portion arched, substantially as described.

3. A gabion or fascine comprising a hollow body having its bottom flat, its ends straight, and its top arched, substantially as described.

4. A device of the character set forth and for the purpose specified, comprising a skeleton frame having its ends and bottom straight and its top arched, and a covering of meshed material inclosing said frame at its bottom, top and ends.

5. Means for preventing the washing out of embankments and for building wing-dams, sea-walls and the like, the same comprising a series of hollow bodies having flat bottoms and arched tops, links connecting said hollow bodies in series, anchors and means connecting said hollow bodies to the anchors, substantially as described.

6. Means for protecting the opposite sides of a railroad embankment, the same consisting of hollow bodies arranged upon opposite sides of the embankment, and means connecting the bodies upon one side of the embankment with the bodies upon the opposite side, substantially as described.

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

CHARLES KERR. [L. S.]

Witnesses:
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