

April 8, 1924.

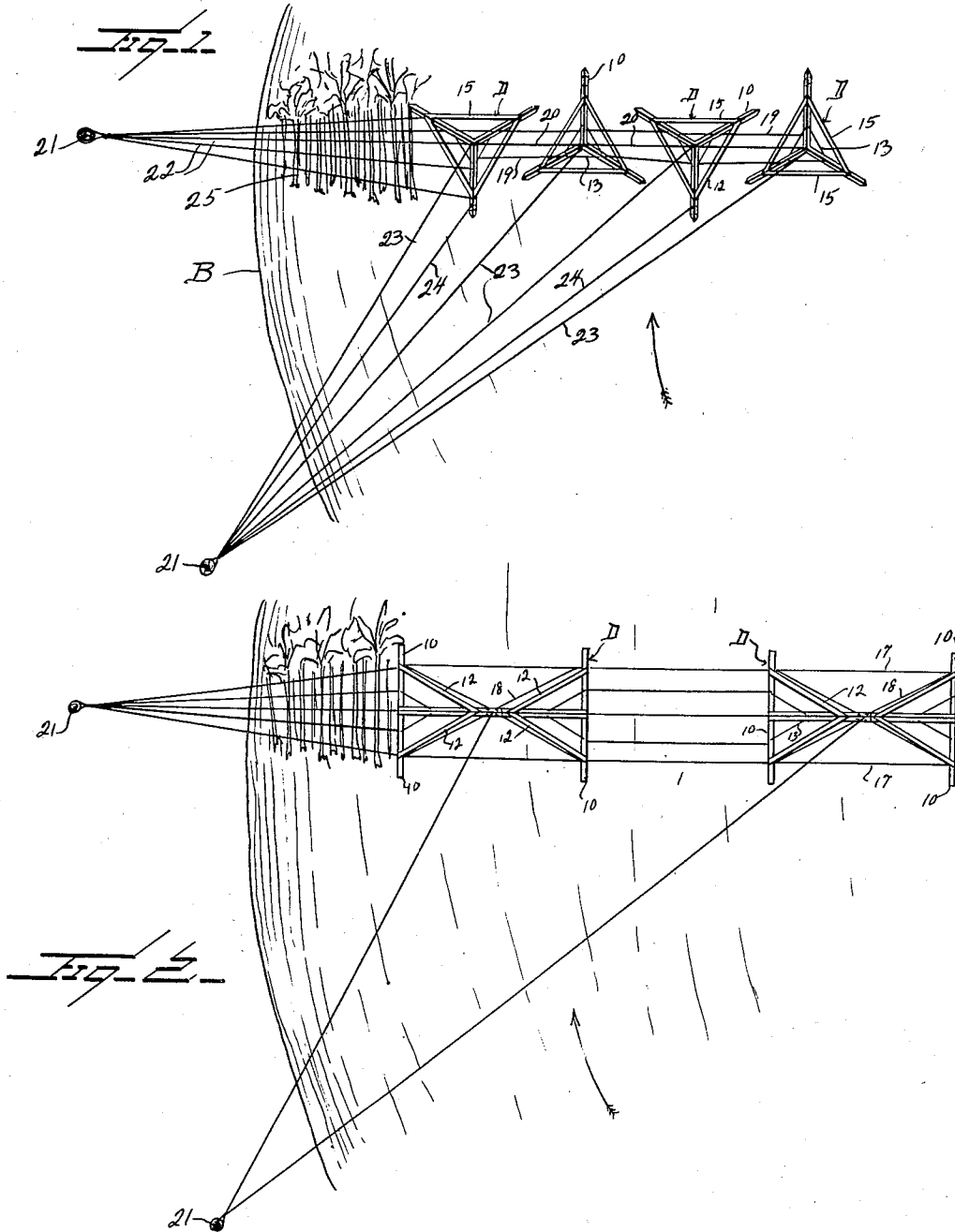
C. L. NOHLEN

1,489,647

JETTY CONSTRUCTION

Filed Feb. 10, 1923

2 Sheets-Sheet 1



INVENTOR.

C.L. Nohlen

BY

Watson E. Coleman
ATTORNEY.

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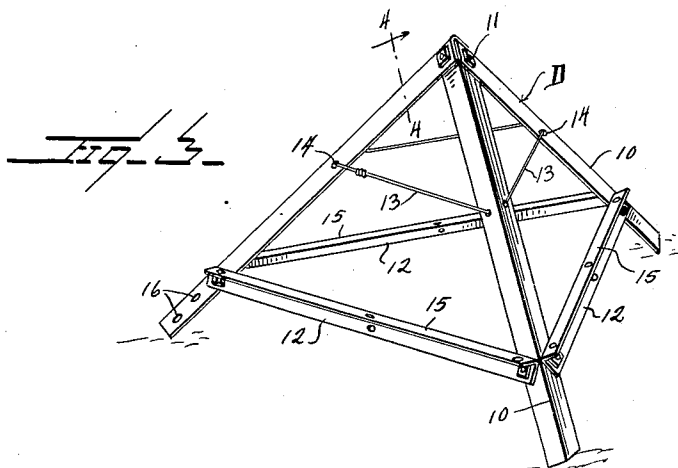
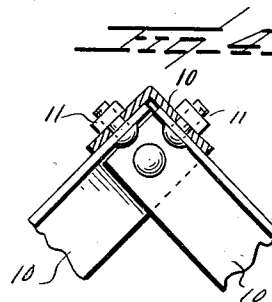
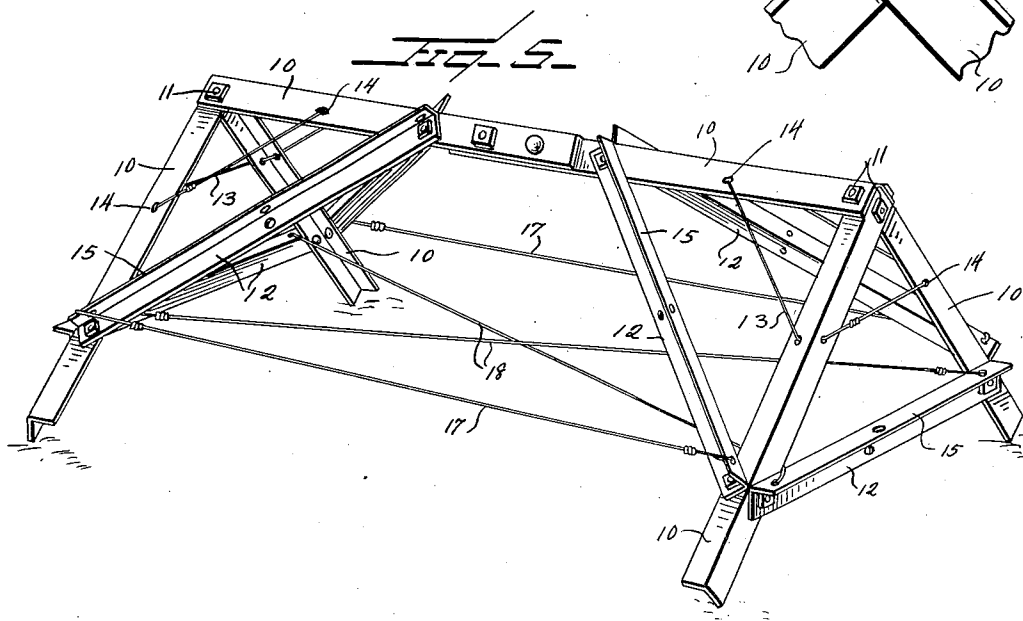
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2 Sheets-Sheet 2



INVENTOR.

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UNITED STATES PATENT OFFICE.

CARL L. NOHLEN, OF CLEBURNE, KANSAS.

JETTY CONSTRUCTION.

Application filed February 10, 1923. Serial No. 618,307.

To all whom it may concern:

Be it known that I, CARL L. NOHLEN, a citizen of the United States, residing at Cleburne, in the county of Riley and State of Kansas, have invented certain new and useful Improvements in Jetty Constructions, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to jetties, and more particularly to a deflector element for use in jetty constructions.

An important object of the invention is to provide a device of this character which 15 will be very firmly supported upon the bank of the stream in which it is placed and which will not sway in a current to which it is subjected.

A further object of the invention is to 20 provide a unit of this character which is capable of assembly in a variety of different forms to suit the needs of the particular situation to be met with in curbing a stream.

A still further object of the invention is 25 to provide a device of this character which may be very readily and cheaply constructed and which will be efficient and durable in service.

These and other objects I attain by the 30 construction and arrangement shown in the accompanying drawings wherein for the purpose of illustration is shown a preferred embodiment of my invention and wherein like reference characters designate like parts 35 throughout.

In the drawings:—

Figure 1 is a plan view showing one arrangement of current deflectors constructed in accordance with my invention;

40 Figure 2 is a similar view showing a different form of arrangement of the deflectors, Figure 3 is a perspective of a deflector unit;

Figure 4 is a section on the line 4—4 of 45 Figure 3; and

Figure 5 is a perspective showing one manner of combining two deflector units.

Referring now more particularly to the drawings, the character D indicates deflector 50 elements each comprising a plurality of legs 10 secured together at their upper ends, as at 11, the legs diverging downwardly and outwardly. The lower ends of adjacent legs 10 are connected by rigid braces 12 maintaining such lower ends in spaced relation and

forming the device as a pyramid having sides corresponding in number to its legs. The legs 10 are connected together intermediate the braces 12 and the connected ends 11 thereof by means of a cable 13 directed 60 through openings 14 formed in the legs.

In the present instance I have shown these legs as each composed of a strip of angle iron, the flanges of which at the upper ends thereof are each engaged with the flanges 65 of the two next adjacent legs, the flanges of two adjacent legs which are arranged at a common side of the pyramidal construction being connected together. The braces 12 are likewise formed of angle iron having 70 one flange thereof horizontally directed, as indicated at 15, and the other flange thereof flatly abutting and secured to the flanges of the legs which it connects. One of the legs 10 has formed therein openings 16 at its lower 75 end and below the point of attachment of the braces 12, the construction permitting the attachment of these legs of two similar deflectors D to form a structure such as shown in Figure 5. With a structure 80 such as shown in this figure, bracing cables 17 are employed to connect the legs of the sections at corresponding sides thereof and other bracing cables 18 are provided connecting the leg of one of the sections with 85 the opposite leg of the other of the sections.

The deflectors are preferably employed in a stream as illustrated in Figure 1, and arranging the same within the stream, they are placed transversely of the line of flow 90 adjacent the bank which they are designed to protect, the deflectors being alternated as to positioning. One deflector may be placed with an angle or leg thereof directed upstream, the next deflector with a side face 95 thereof directed upstream, the following with the leg directed upstream and so on in sequence until a desired number of deflectors have been placed. By this construction the deflectors are so arranged that they overlap 100 and provide an efficient obstruction for the current. Each angle of each of the deflectors is connected to the next adjacent deflector by cables 19 and the apices of the deflectors are connected by a cable 20. 105 Upon the bank B of the stream two dead men 21 are employed, one in alignment with the line of reflectors D and the other arranged upstream therefrom a desired distance. From the first of these dead men 110

cables 22 are extended engaging the apex, the lower ends of the adjacent legs and the adjacent legs intermediate the ends and apex thereof of the deflector next adjacent the bank. From the dead man arranged upstream cables 23 are extended engaging the apices of the deflectors D and other cables 24 are employed for connecting the dead man and the forward legs of those deflectors having a leg arranged upstream as distinguished from a side face. In positioning these deflectors, that leg having the openings 16 formed therein is preferably arranged upstream so that these openings serve as a means of cable attachment. The cables 22 are preferably employed as a means for attaching and maintaining in position small trees or brush 25 filling the space between the bank B and the deflector D next adjacent thereto and providing at this point an efficient current break preventing further crumbling of the bank at this point.

It will be obvious to those familiar with the art that a device constructed in accordance with the foregoing may be readily placed in a stream, has a broad base rendering the same firm and not easily moved by the current of the stream and at the same time provides a device which will efficiently break up the current causing a deposit of silt protecting the bank at the desired point. It will furthermore be obvious that the construction hereinbefore set forth is capable of some change and modification without materially departing from the spirit of my invention and I accordingly do not limit myself to such specific structure except as hereinafter claimed.

I claim:—

1. A current deflector substantially pyramidal in form and composed of a plurality of angle bars secured together at one end, each angle bar having the flanges thereof arranged upon side faces of the pyramids and other angle bars secured to adjacent ends of the first named angle bars to connect the same, one of the first named angle

bars being provided at its lower end with a plurality of openings.

2. A current deflector comprising three angle bars of substantially equal length and having corresponding ends thereof secured together, the flanges of each of the angle bars being secured to one flange of each of the other two angle bars, and braces connecting the adjacent angle bars adjacent the free ends thereof.

3. A current deflector comprising three angle bars of substantially equal length and having corresponding ends thereof secured together, the flanges of each of the angle bars being secured to one flange of each of the other two angle bars, and braces connecting the adjacent angle bars adjacent the free ends thereof, one of said angle bars being provided at its free end and beyond said braces from the point of connection of the angle bars with a plurality of openings.

4. A current deflector comprising three angle bars of substantially equal length and having corresponding ends thereof secured together, the flanges of each of the angle bars being secured to one flange of each of the other two angle bars, and braces connecting the adjacent angle bars adjacent the free ends thereof comprising angle bars each having one flange thereof substantially horizontally directed.

5. A current deflector comprising three angle bars of substantially equal length and having corresponding ends thereof secured together, the flanges of each of the angle bars being secured to one flange of each of the other two angle bars, braces connecting the adjacent angle bars adjacent the free ends thereof comprising angle bars each having one flange thereof substantially horizontally directed, and cables connecting all of said angle bars intermediate said braces and the point of connection of the angle bars.

In testimony whereof I hereunto affix my signature.

CARL L. NOHLEN.