

Sept. 16, 1930.

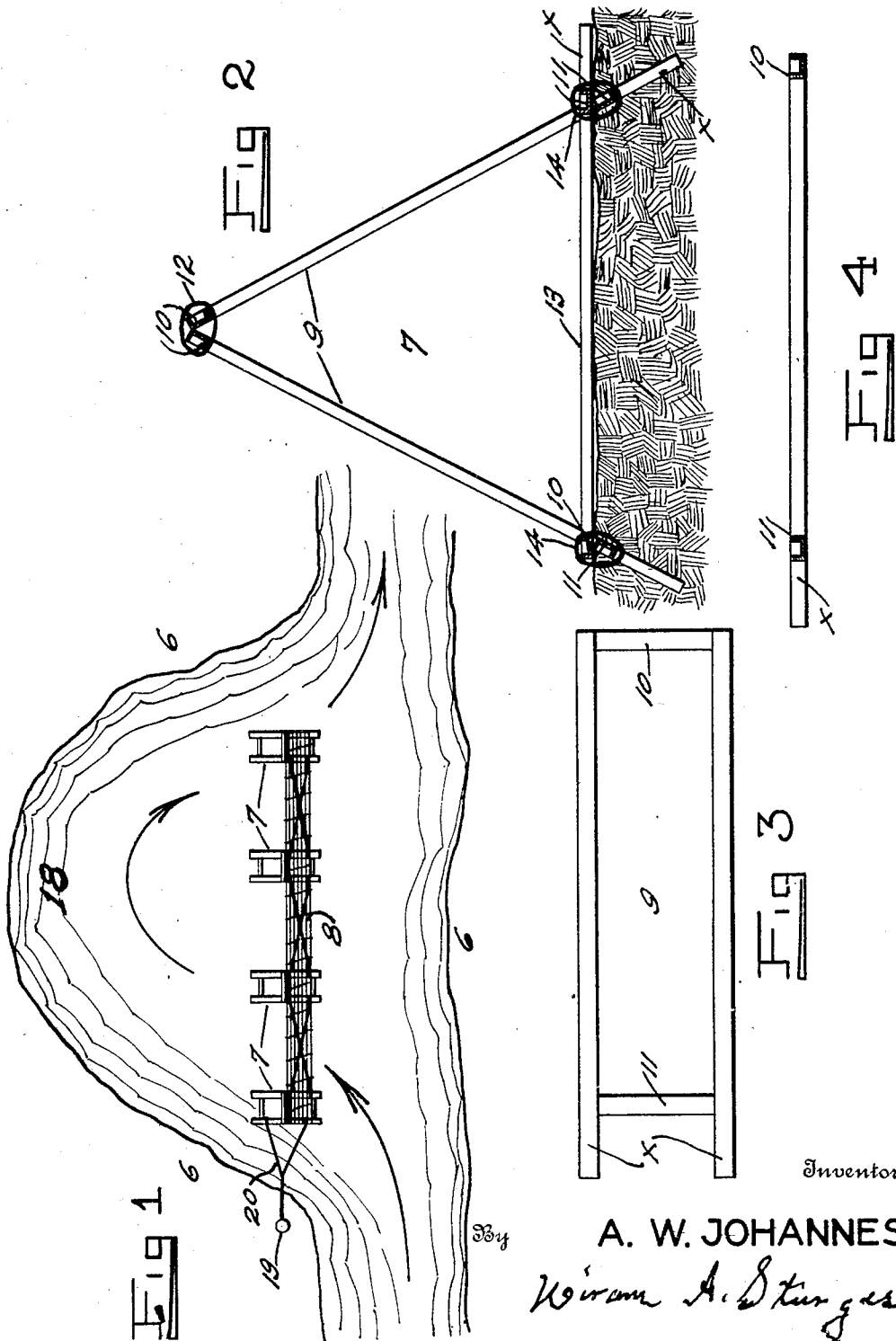
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SILT ACCUMULATOR

Filed Nov. 19, 1927

2 Sheets-Sheet 1



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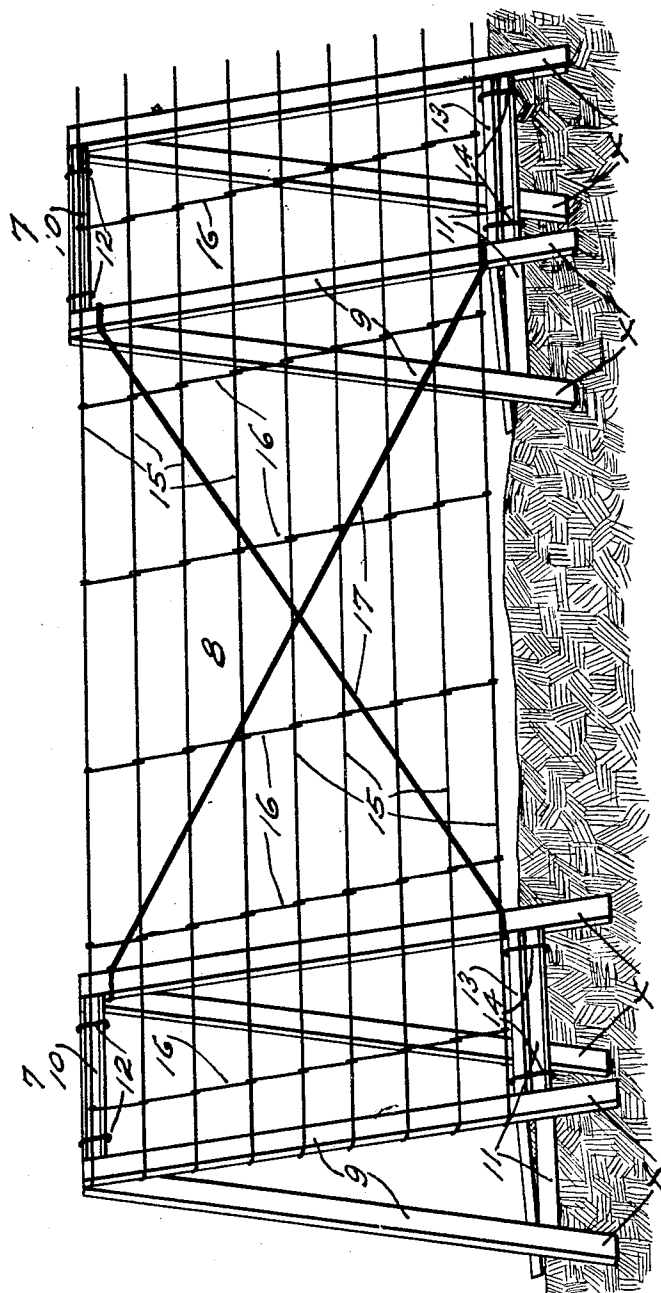
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SILT ACCUMULATOR

Application filed November 19, 1927. Serial No. 234,507.

This invention relates to a silt accumulator for causing alluvial deposits in silt-bearing streams, and has for its object, broadly, to provide such an arrangement of parts for the device, that it may be conveniently placed or installed in swiftly moving streams, will be adequately supported wherever placed, and will deflect the water to advantage for forming the deposits of earth.

One of the specific objects of the invention is to provide sections of inverted V-shape from the frames or chassis of automobiles, this being a feature of economy since they may be obtained from "junk-piles" at a very limited expense, are of suitable shape and of adequate weight.

Another object is to provide a silt accumulator consisting of sections which may be disposed at selected distances from each other depending upon the rapidity of movement of the water current, the spaces between the sections being provided with webs of strands for deflecting the water current.

Other objects of the invention will be mentioned in the following description. The invention consists of the new and useful features of construction, the combination and arrangement of parts, all as more particularly pointed out in the appended claims, and as illustrated in the accompanying drawing, wherein,—

Fig. 1 is a plan view illustrating the silt accumulator disposed in a stream. Fig. 2 is a sectional end view of one of the sections. Fig. 3 is a plan view of a rectangular frame used for one of the sections. Fig. 4 is a view of the same in longitudinal section. Fig. 5 is a perspective view showing two of the sections and a web therebetween.

Referring now to the drawing for a more particular description, the invention is shown and described in connection with the shores or banks 6 of a stream, the arrows in Fig. 1 of the drawing showing the direction of movement of the current.

The invention consists of a plurality of sections 7 of inverted V-shape and webs 8 between and secured to the sections.

Each section consists of a pair of rectangular, elongated frames 9, preferably of equal

length, each frame 9 including an end-portion or a cross-bar 10 which is disposed at one of the ends of the side-bars of said frame and a cross-piece 11 disposed near the opposite ends of the side-bars of said frame.

The pairs of frames 9 are disposed inclinedly to present an inverted V-shaped form, their upper ends or cross-bars 10 being securely connected by use of tie-strips 12.

Numerals 13 indicate bracing or stabilizing members which are disposed upon the cross-pieces or cross-bars 11, said members being secured to said cross-bars 11 by tie-strips 14.

As thus described each section may be disposed in the bed of a stream in approximately an upright position, the parts x of the frame which project below the cross-bars 11 being adapted to enter said bed, and when the sections are placed in the stream the stabilizing members 13 may rest on the bed of said stream.

While members 13 may have any suitable construction to operate as braces to maintain the lower ends of the pair of frames 9 in spaced relation, I prefer to use the chassis of automobile frames, these being of lesser proportions than the frames or chassis 9.

In operation, any suitable number of sections 7 may be used, depending upon the movement of the water current. Since the projections x will extend into the bed of the stream, the sections will not be overturned, and since the parts mentioned are metallic their weight will facilitate stabilization. Also since members 13 are metallic and will lie upon the bed of the stream, this feature will be of great advantage in maintaining the sections in approximately an upright position.

The webs 8 may consist of any suitable arrangement of strands adapted to deflect the moving water. Numerals 15 indicate a plurality of strands which extend between two adjacent sections and which are secured thereto. Numerals 16 indicate vertical strands which are secured to the horizontal strands 15. Numerals 17 indicate diagonal strips or strands which are secured to other parts of the webs, and which extend from one section to an adjacent section.

Any suitable material may be used for the strands preferably "fence-wire" or "hog-wire" being employed for this purpose, and in operation grass, bushes and trash will be carried by the current and will be lodged against the webs and water will be deflected for depositing silt at the "down stream" sides of the webs and sections to form desired alluvial deposits.

In Fig. 1 of the drawings numeral 18 indicates a part of a stream where the bank has been cut or washed away, and for reforming the bank at this part of the stream the sections and webs may be disposed as shown, and water moving in the direction of the arrows, as shown, will cause the deposits of earth, by operation of the silt accumulator described.

Numeral 19 indicates a stationary part or anchor on the bank of the stream, a cable or other holder 20 being used for connecting one of the sections to said anchor. However, in some instances this anchor will not be required for the reason that the sections, on account of their construction and form will be embedded in the stream sufficiently to resist all stresses directed thereto by a water current.

I claim as my invention,—

1. In a silt accumulator, a plurality of substantially rectangular frames arranged in pairs to form inverted V-shaped sections, the frames of each section having their upper ends in engagement, a bracing member of substantially rectangular shape connected with the frames near their lower ends, strands extending in a horizontal direction from the frames of each section to the frames of an adjacent section and connected to said frames, strands at right angles, to the first named strands and attached thereto, a third set of strands disposed at an angle to the first strands and secured to adjacent frames and projections on the frames extending below the bracing members and adapted to extend into the bed of the stream.

2. In a silt accumulator a series of sections in spaced apart relation, each section comprising three substantially rectangular frames secured together in triangular shape, the upright members of the sections extending below the base for embedding themselves in the bottom of the stream, strands extending from one section to another and secured to one upright frame of each section, other strands at right angles to the first strands and secured thereto and third strands disposed in angular relation to the two first mentioned strands and fastened to an upright frame of each section.

In testimony whereof, I have affixed my signature.

ANGUS W. JOHANNES.