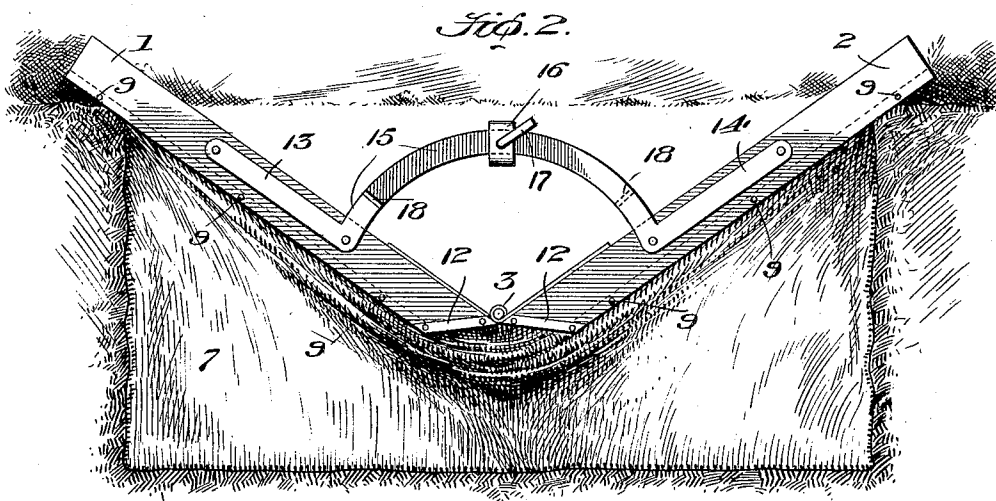
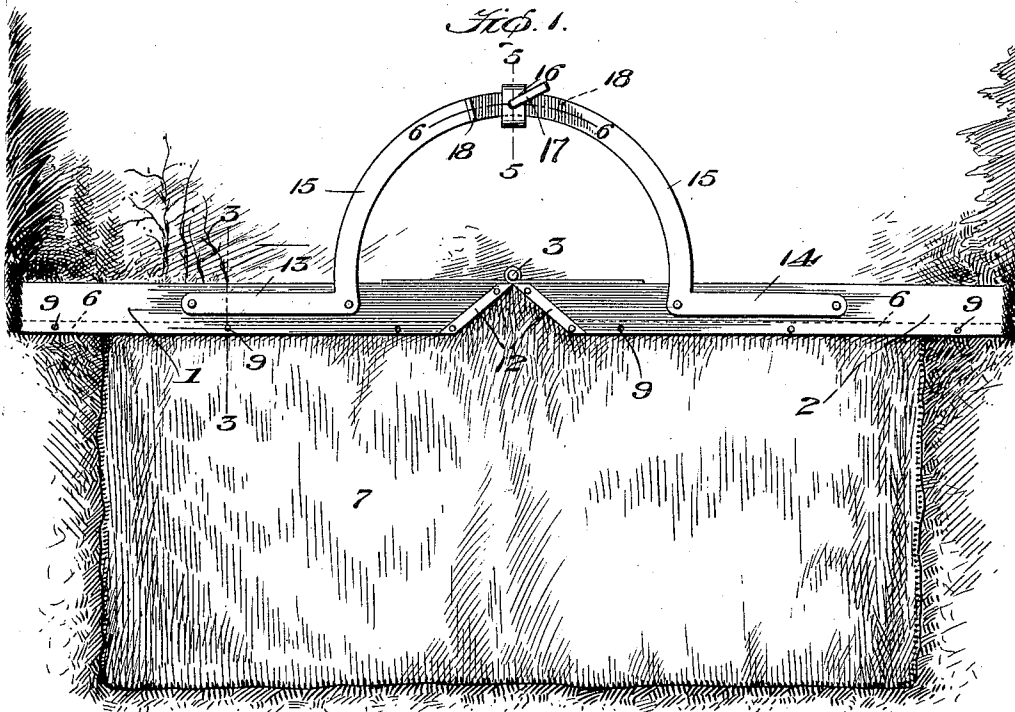


D. V. McILWAIN.
DAM APPARATUS FOR IRRIGATING DITCHES.
APPLICATION FILED JAN. 23, 1912.

1,057,354.

Patented Mar. 25, 1913.

2 SHEETS—SHEET 1.



Inventor

Daniel V. McIlwain

Witnesses

James K. R. [Signature]

By Victor J. Evans

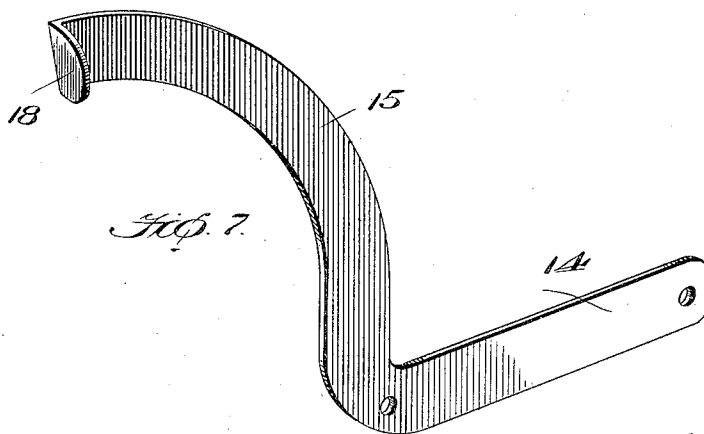
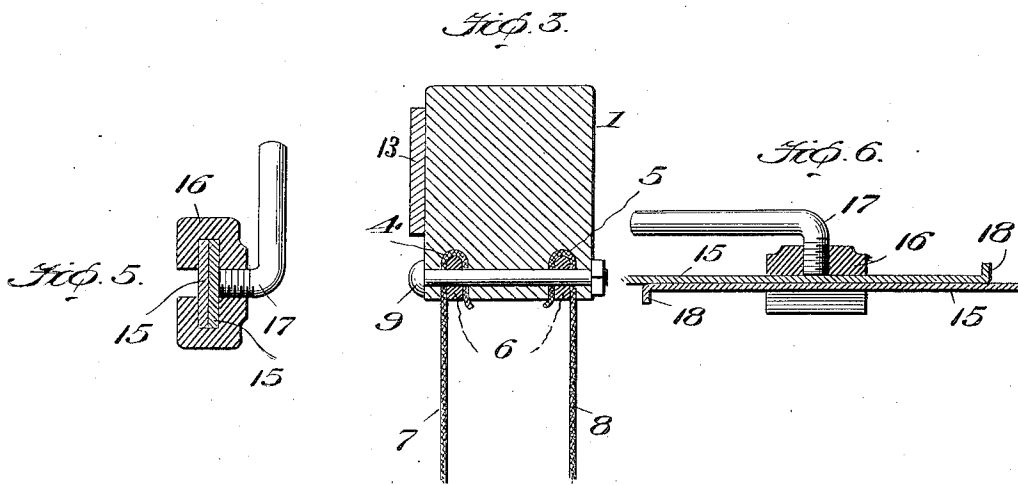
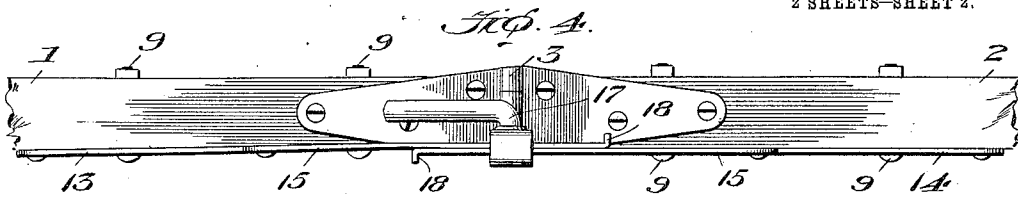
Attorney

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[Signature]
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Daniel V. McIlwain

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UNITED STATES PATENT OFFICE.

DANIEL V. McILWAIN, OF SCOTTSBLUFF, NEBRASKA.

DAM APPARATUS FOR IRRIGATING-DITCHES.

1,057,354.

Specification of Letters Patent.

Patented Mar. 25, 1913.

Application filed January 23, 1912. Serial No. 672,812.

To all whom it may concern:

Be it known that I, DANIEL V. McILWAIN, a citizen of the United States, residing at Scottsbluff, in the county of Scotts Bluff and State of Nebraska, have invented new and useful Improvements in Dam Apparatus for Irrigating-Ditches, of which the following is a specification.

This invention relates to dam apparatus for irrigating ditches, and has for an object to provide apparatus of this character which will include an impervious member and adjustable supports therefor for holding the member in any desired position in the ditch to effect a dam of any desired size.

Another object of the invention is to provide means for securely holding the supports in their adjusted positions.

A still further object of the invention is to provide means whereby the dam curtains or impervious members will form guards when operatively arranged in the ditch so as to prevent the breaking away of the banks of the ditch as the water passes from the dam.

In the drawings, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is an elevation of the apparatus showing the same adjusted to full height in the ditch. Fig. 2 is a similar view showing the apparatus adjusted to form a low dam. Fig. 3 is a vertical section taken on line 3—3 of Fig. 1. Fig. 4 is a top plan view. Fig. 5 is a section on line 5—5 of Fig. 1 showing the clamp on an enlarged scale. Fig. 6 is a similar view taken on line 6—6 of Fig. 1. Fig. 7 is a perspective on an enlarged scale of one of the supports.

The apparatus comprises the companion supports 1 and 2 which are hingedly connected together, at 3, whereby the supports can be adjusted angularly to any desired position to permit one to form a dam of any desired depth. The supports 1 and 2 are provided on their undersides with grooves 4 and 5. These grooves are substantially coextensive with the supports, and as shown, the grooves in one support are disposed in line with the grooves of the other support. Cleats 6 are fitted in the grooves 4 and 5, and as shown, the upper edges of the front and back curtains 7 and 8 are wrapped around the cleats and the cleats are then secured in the grooves 4 and 5 by means of fastening bolts 9 or equivalent securing

devices. At the center, the supports 1 and 2 are rabbeted to receive the upper central portions of the curtains 7 and 8, whereby when the supports 1 and 2 are moved to effect the desired adjustment the curtains 7 and 8 will be flexed. The central portions of the curtains are secured in the rabbeted portions of the supports 1 and 2 by the cleats 12.

From the construction described it will be seen that the supports 1 and 2 can be readily adjusted so that a dam of any desired height can be formed. With a view of holding the supports 1 and 2 accurately in their adjusted positions, I provide the brackets 13 and 14, the latter being secured to the support 2 and the former is secured to the support 1. The brackets are provided with arcuate portions 15 which are adapted to slide against each other and between the clamp 16. This clamp is provided with a set screw 17 which is adapted to engage against one of the arcuate portions 15 to hold the same securely confined against the companion arcuate portion. The upper ends of the portions 15 are provided with stop flanges 18 which are adapted to engage against the clamp 16 so as to prevent the accidental displacement of the said arcuate portions therefrom.

The front curtain 7 may be formed of canvas or the like and it is used to stop or check the flow of the water in the ditch. This curtain may be made in any desired length and breadth according to the dam desired. The back curtain 8 is also formed of canvas and, in use, it is adapted to hang loosely behind the dam in a manner that will prevent the water from breaking the banks of the ditch as the water passes over the dam. The curtain 8 is preferably coextensive with the curtain 7. By placing the clamping means herein described above the plane of the supports 1 and 2, said supports can be wholly supported in the ditch at a point above the water, and the supports can be very readily adjusted without fear of the operator wetting his hands.

I claim:

1. A dam comprising hingedly connected supports having grooves formed on the under faces thereof, the grooves in one support being disposed in line within the grooves of the other support, curtains secured in said grooves, and thereby suspended from said supports, and means located

above the plane of the hinged connection of said supports for holding the supports against relative movement.

2. A dam comprising hingedly connected supports, a pair of curtains secured to the under faces of said supports adjacent the respective longitudinal edges thereof, brackets carried by the respective supports, and secured to one of the side faces thereof adjacent said hinged connection, the terminals of said brackets being provided with angularly disposed stops, and means embracing said brackets operable to hold said supports against relative movement.

3. A dam comprising hingedly connected supports, curtains suspended from the un-

der surface of said supports, a bracket secured to each of said supports, each of said brackets being provided with an arcuate portion, the terminals of said arcuate portions being provided with oppositely disposed angularly arranged stops, and means embracing said arcuate portions operable to hold the supports against relative movement.

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

DANIEL V. McILWAIN.

Witnesses:

J. H. CASSELMAN,

V. B. KIRKHAM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."