No. 731,077. PATENTED JUNE 16, 1903.

C. D. W. SMITH.

DAM FOR IRRIGATING DITCHES.

APPLICATION FILED MAR. 26, 1903.

NO MODEL.

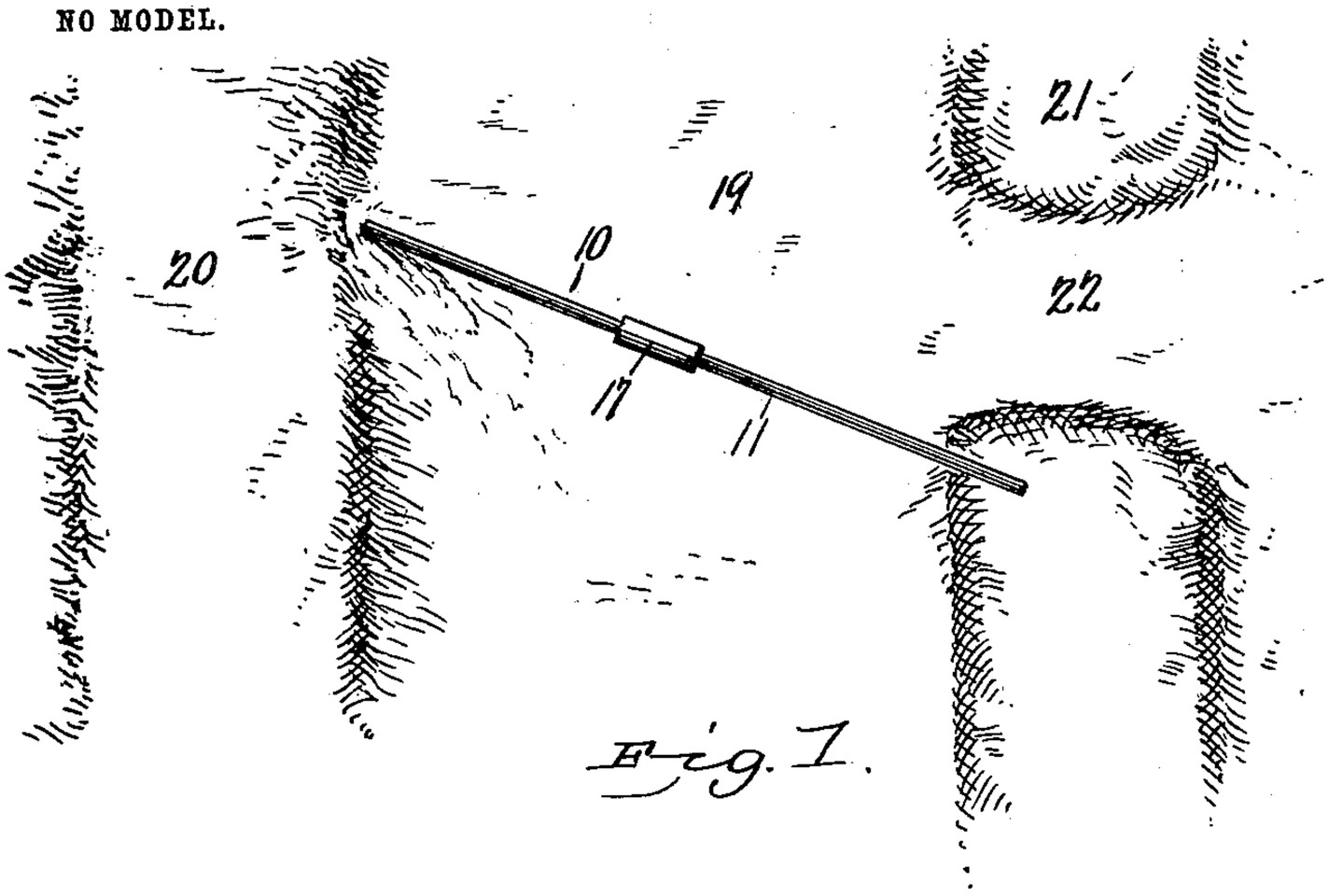


Fig. 1.

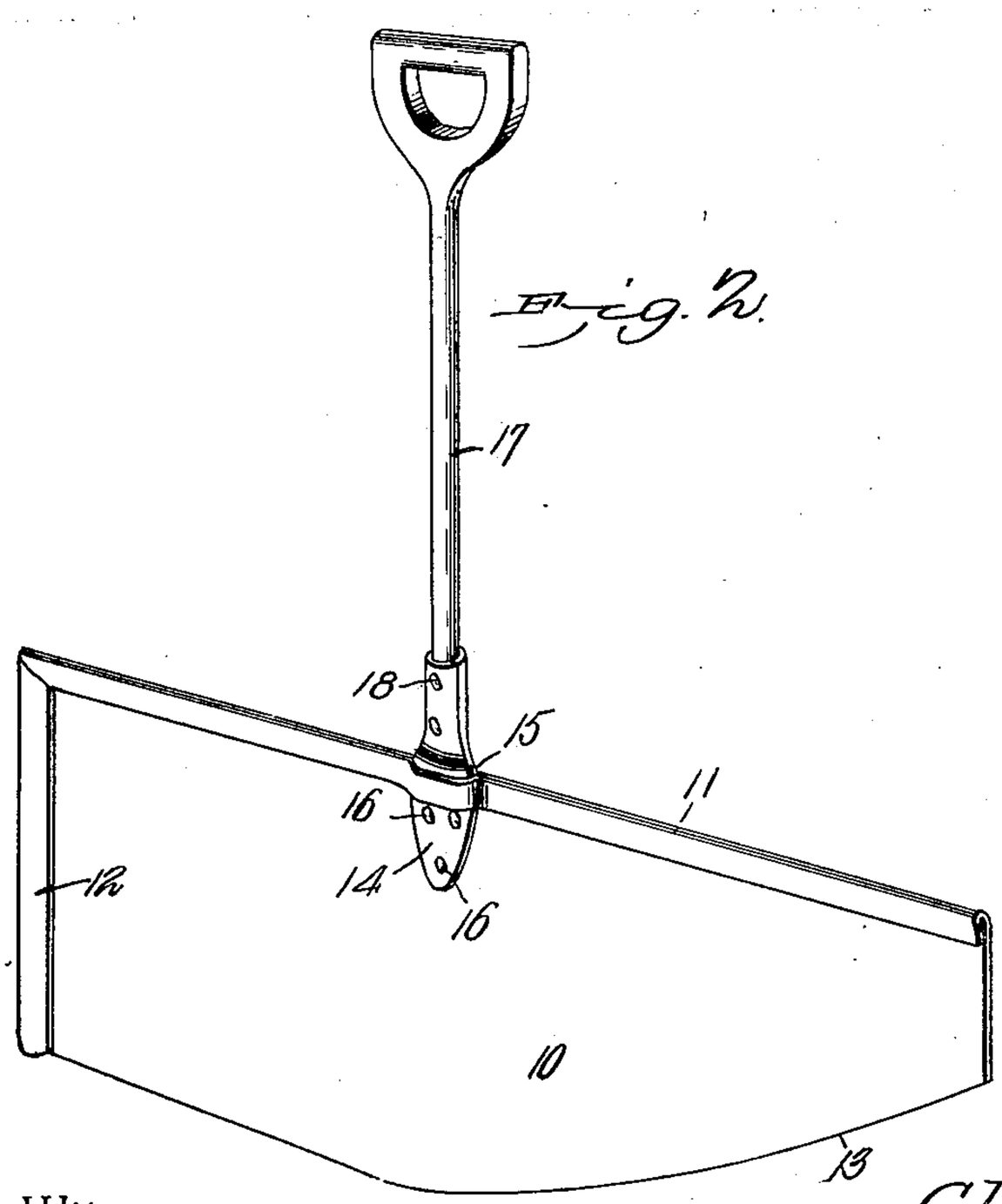
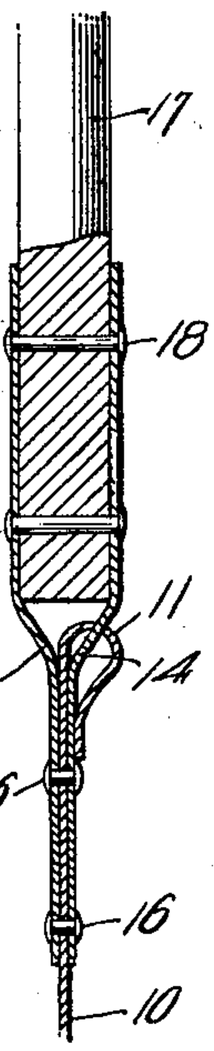


Fig. 2.

Fig. 3.



Witnesses
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No. 731,077. Patented June 16, 1903.

UNITED STATES PATENT OFFICE.

CHARLES D. W. SMITH, OF HASSEL, MONTANA.

DAM FOR IRRIGATING-DITCHES.

SPECIFICATION forming part of Letters Patent No. 731,077, dated June 16, 1903.

Application filed March 26, 1903. Serial No. 149,721. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. W. SMITH, a citizen of the United States, residing at Hassel, in the county of Broadwater and State of Montana, have invented a new and useful Dam for Irrigating-Ditches, of which the following is a specification.

This invention relates to portable dams employed in connection with irrigating-ditches, and has for its object to simplify and improve devices of this character and render them more easily operated and transported and to cheapen the construction without decreasing the efficiency.

The invention consists in certain novel features of construction, as hereinafter shown and described, and specified in the claims.

In the drawings illustrative of the invention, in which corresponding parts are denoted by like designating characters, Figure 1 is a plan view of the device applied. Fig. 2 is a perspective view, enlarged, of the improved implement. Fig. 3 is an enlarged sectional detail illustrating the manner of connecting the handle to the blade.

The improved device consists of an oblong blade 10 of sheet-steel of sufficient gage to withstand the strains to which it will be subjected and will generally be of about the same gage as that employed for ordinary shovels; but any suitable gage of metal may be employed. The upper edge and one end of the blade will be folded over, as indicated at 11 12, to stiffen and strengthen the blade, while the lower edge next the unfolded end will be curved upwardly, as shown at 13. The blade will generally be about three feet long for use in ordinary lateral irrigation-ditches; but this size may be varied as circumstances and the sizes of the ditches may require. The rolled edge 11 is provided with a longitudinal aperture, through which a clamp-plate 14 projects, and a similar clamp-plate 15 engages the blade upon the opposite side, the two plates secured by transverse rivets 16, as indicated. The plates 14 15 extend above the plate 10 and embrace opposite sides of the handle 17, to which they are secured by rivets 18. The clamp-plates and handle will be positioned to "balance" the blade 10 to facilitate its action when being used and to prevent unequal action at its opposite ends.

In Fig. 1 the implement is shown applied to the representation of a ditch, the central sunken portion indicated at 19 and the walls at 20 21, respectively.

In using the device the wall of the ditch is cut through at the point where the "flow" is desired, as indicated at 22, and the improved device placed in the ditch just below the "cut," preferably at a slight transverse incline downstream, and the lower unrolled edge forced into the soft earth, the curved end 13 being next to the cut 22. By this means the water is effectually "dammed" and caused to flow through the cut, and when it is desired to stop the flow the removal of the dam so lowers the water passing through the cut as to render the restoration of the wall 21 an easy matter, and the improved implement may be employed as a shovel in cutting and restoring the ditch-walls.

By the use of this simply-constructed implement the ditch may be very quickly and easily dammed and without disturbing the surrounding soil or destroying or mutilating the ditch.

The dam may be arranged to divert only a portion of the flowing water by setting the damming blade only partially across the ditch or increasing its angularity so that the end 12 will be farther away from or nearer to the opposite bank. Thus the flow may be quickly and easily controlled and without waste of the water or the necessity for taking soil from the adjacent land to form the "dam." Thus the surrounding land is not disturbed during the irrigating period, resulting in increased cropping area, as no part will be required to furnish soil to build the dams.

When the dams are formed of soil, the land adjacent to the point where the dam is to be located is "robbed" to furnish the material, and this frequently results in serious loss and damage to portions of the growing crop, as will be obvious; but by using the improved damming device this is entirely obviated, as no part of the surrounding soil is employed to form the dam.

Having thus described the invention, what I claim is—

1. A device for damming ditches comprising an oblong blade having its upper edge and one end rolled to stiffen the blade and

with its lower edge curving upwardly toward the unrolled end, and a handle extending from the upper edge and positioned to balance the blade, substantially as described.

2. A device for damming ditches comprising an oblong blade having its upper edge and one end rolled to stiffen the blade and with the lower edge curving upwardly toward the unrolled end, a clamp-plate extending through an aperture in the rolled upper edge and an opposing clamp-plate embracing the opposite side of the blade, said plates secured together and to the plate by transverse rivets, and a handle secured between said clamp-plates above the upper edge and positioned to balance the blade, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES D. W. SMITH.

Witnesses:

GEORGE M. DE WOLF,

ARCHIE LAME.