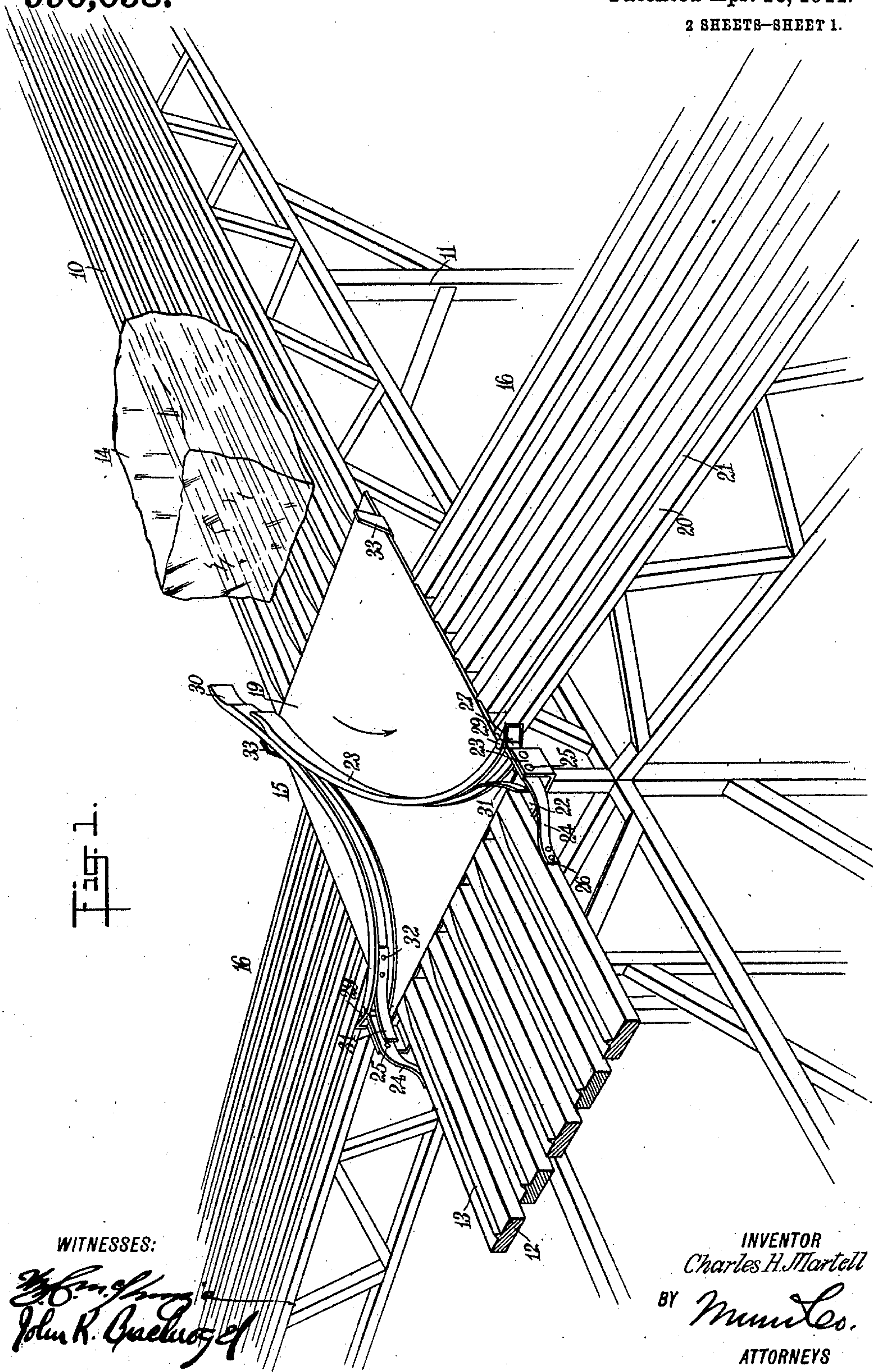


C. H. MARTELL.
ICE SKID SWITCH.
APPLICATION FILED SEPT. 20, 1910.

Patented Apr. 18, 1911.

2 SHEETS—SHEET 1.

990,058.



WITNESSES:

John R. Gueluz

INVENTOR
Charles H. Martell

BY *Mum & Co.*
ATTORNEYS

C. H. MARTELL.

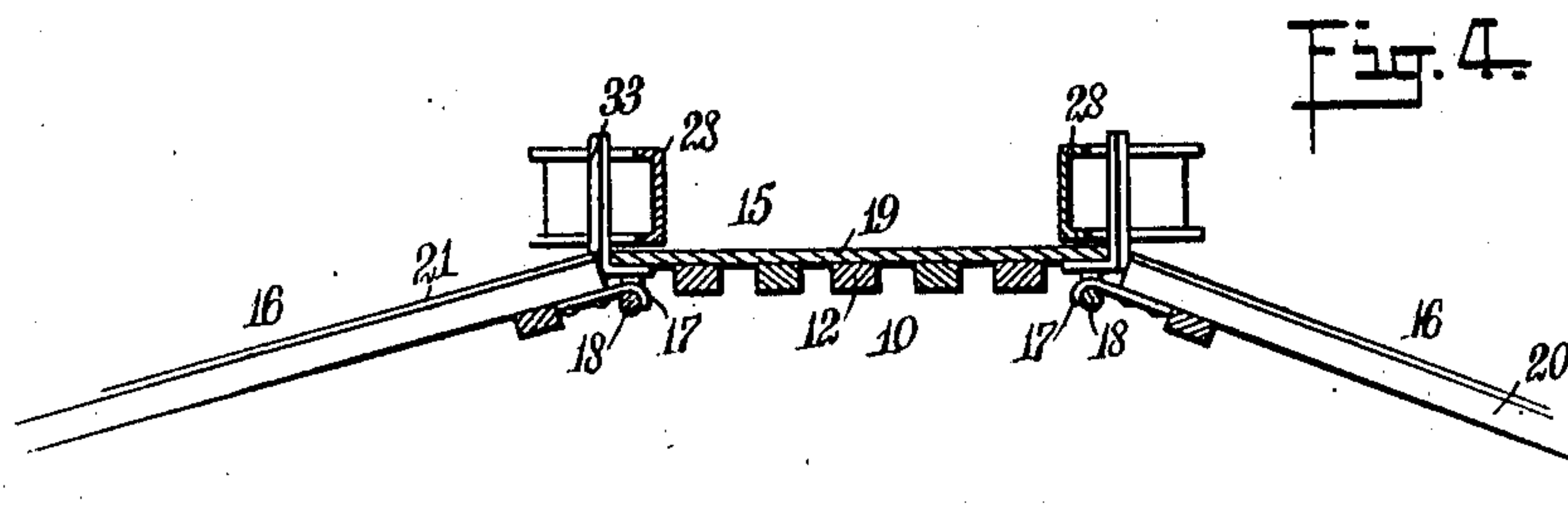
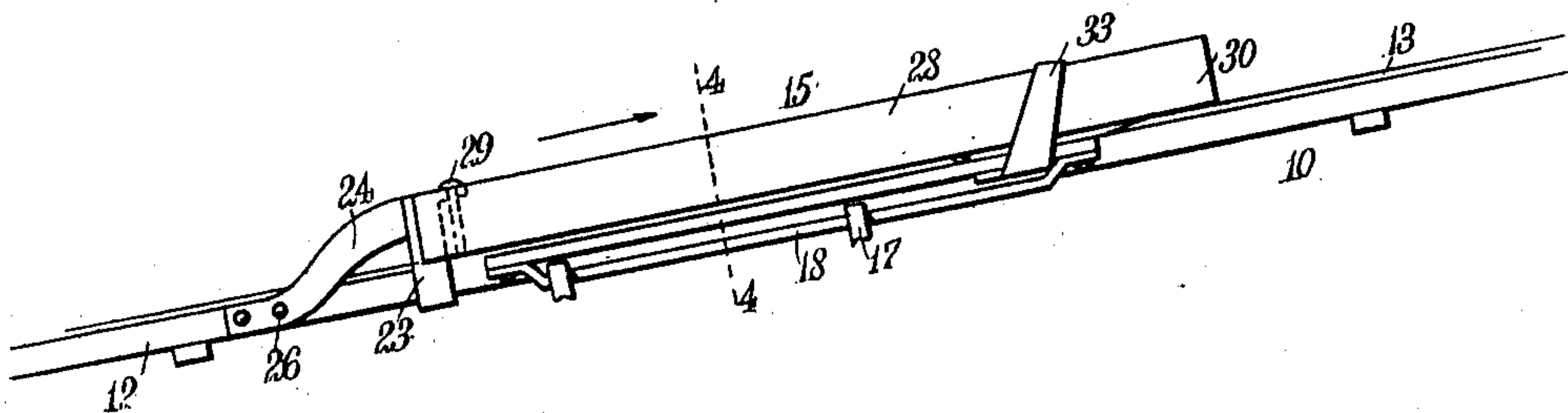
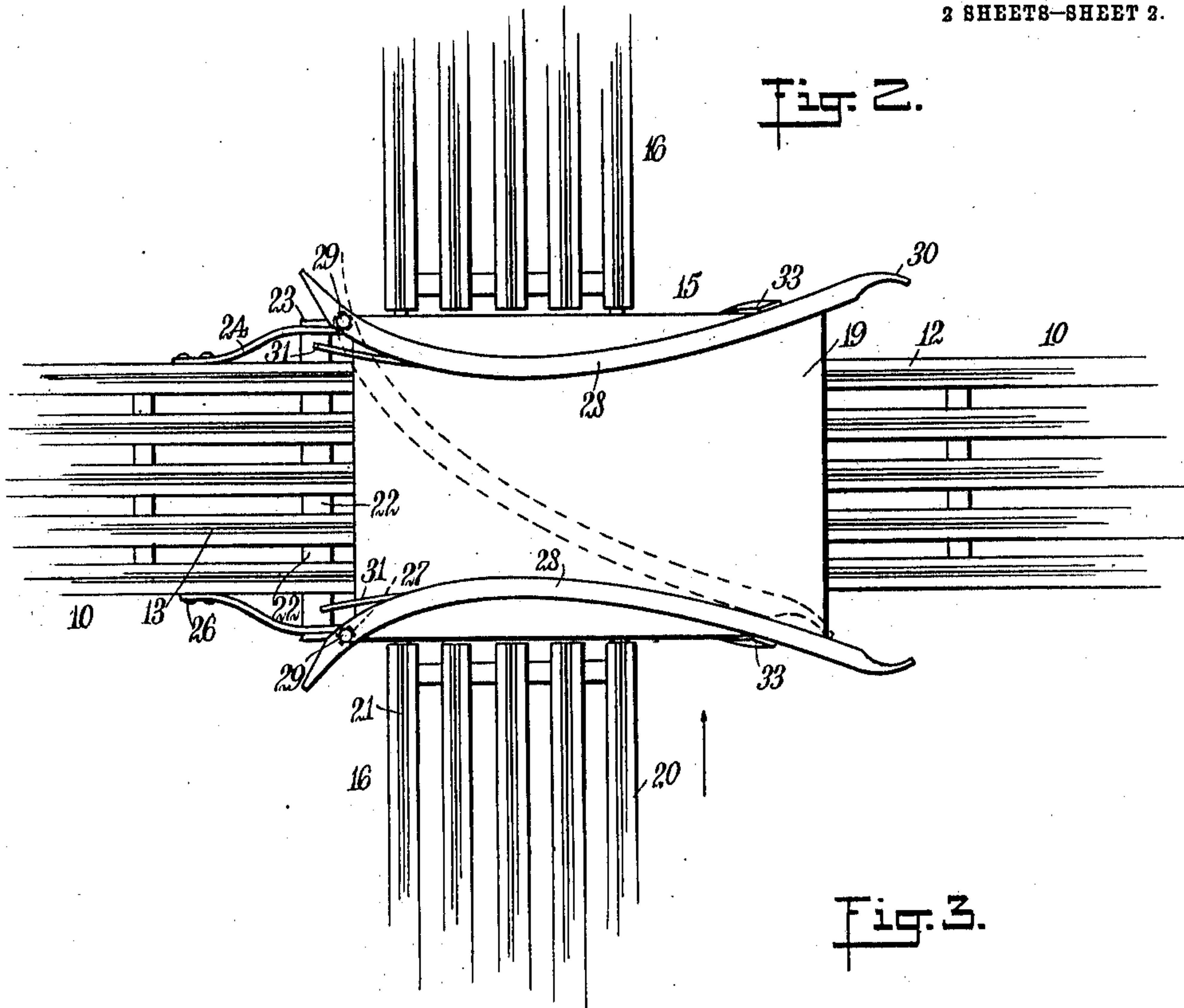
ICE SKID SWITCH.

APPLICATION FILED SEPT. 20, 1910.

Patented Apr. 18, 1911.

2 SHEETS—SHEET 2.

990,058.



WITNESSES:

John K. Brachvogel

INVENTOR

Charles H. Martell

BY

Mumford

ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES H. MARTELL, OF SAGINAW, MICHIGAN, ASSIGNOR OF ONE-HALF TO HENRY BRUECK, OF NEW YORK, N. Y.

ICE-SKID SWITCH.

990,058.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Application filed September 20, 1910. Serial No. 582,819.

To all whom it may concern:

Be it known that I, CHARLES H. MARTELL, a citizen of the United States, and a resident of Saginaw, in the county of Saginaw and State of Michigan, have invented a new and Improved Ice-Skid Switch, of which the following is a full, clear, and exact description.

This invention relates to switches for ice-skids or tracks, and has reference more particularly to a switch of this class, comprising a floor over which the blocks of ice can pass, and a pivoted member associated with the floor, and mounted to swing across the same into different positions, and to deflect the ice laterally when it is in a predetermined position.

The object of the invention is to provide a simple, strong and efficient switch for use in connection with the skids or tracks of ice houses or the like, or with similar devices employed under other circumstances, in the harvesting or other handling of ice in blocks, by means of which the ice passing along the skids can be deflected laterally in opposite directions, as desired, which can be so arranged that the blocks of ice can pass over the switch without diverging from their normal line of travel, which can be operated easily and without loss of time, which will not tend to injure the ice in deflecting it laterally, and in which certain of the parts are guarded against possible injury resulting from the impact thereagainst of the ice blocks.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a perspective view showing portions of a number of ice-skids having associated therewith a switch constituting an embodiment of my invention; Fig. 2 is a plan view of the switch; Fig. 3 is a side elevation of the same; and Fig. 4 is a transverse section on the line 4—4 of Fig. 3.

Before proceeding to a more detailed explanation of my invention, it should be clearly understood that while the switch is particularly useful in connection with the

skids of ice-houses in which blocks of ice are stored for future use, it can also be advantageously employed under other circumstances where skids or tracks are used for transporting blocks of ice from point to point. The tracks or skids may be of any suitable construction, being so arranged that the blocks of ice can be moved along them by means of poles or the like, with a minimum of friction.

Certain of the details of construction, shown for example herewith, form no part of the invention, and can be varied in accordance with individual preference and special conditions, without departing from the underlying spirit of the invention.

Referring more particularly to the drawings, I have shown for example, a main skid or track 10 mounted upon suitable supports 11, and having a number of rails 12, each provided with a longitudinal edge 13 along which the blocks of ice 14 slide with ease. At a suitable point of the main skid is located the switch 15. Lateral skids or tracks 16 positioned at substantially right angles with respect to the main skid or track, terminate at the sides of the switch and are downwardly inclined. Each lateral skid has at the upper end hooks 17, which engage an offset supporting bar 18 secured at the under side of the switch floor 19. The latter is mounted upon the rails 12 of the main skid. These have the edges 13 cut away at the floor and tapered off, as is shown most clearly in Fig. 1. The lateral skids 16 have rails 20 provided with edges 21 similar to the rails 12.

I have shown, for example, herewith a switch in which the floor 19 consists of a flat plate of sheet metal or the like. The floor may be of any suitable construction adapted for the purpose. Adjacent to the floor, at one end thereof, the main skid has secured thereto a cross piece 22 fashioned from sheet metal or the like, and extending laterally beyond the skid. It has the ends 23 upwardly disposed. Pivot or hinge bars 24 are secured at the upwardly disposed ends 23, by means of rivets 25, or in any other suitable manner, and extend transversely of the cross member 22. Each hinge bar has one end inwardly offset and secured by means of bolts or rivets 26, to one of the outside rails 12 of the skid. At the other end, each bar extends beyond the end 23 of the cross mem-

ber 22, and terminates in a hinge sleeve 27, for a purpose to appear hereinafter. I employ switch points or members 28, fashioned from cast metal or the like, and of channel-shaped cross section. The members are inwardly curved, as is clearly shown in Figs. 1 and 2, and each has at one end a hinge pin 29 which passes through the flanges thereof and is received in the hinge sleeve 27 of one of the bars 24. The hinge sleeves 27 are positioned between the flanges of the switch points. The opposite or free ends 30 of the switch points are formed so that they can be easily grasped to move the points, and are adapted for engagement with an ice hook or other implement. Each switch point has secured between the flanges thereof a spring buffer bar 31 held in place at one end by means of rivets or bolts 32 and curved outwardly beyond the corresponding hinge bar 24. The buffer bars thus serve to protect the hinge bars, the hinge pins and the associated parts. At the end of the switch floor, remote from the hinges of the switch members the floor has at the sides, upwardly disposed stops 33, which limit the outward movement of the switch points.

When both switch points are outwardly disposed against their respective stops, the blocks of ice can pass straight along the main skid 10, over the switch floor, and the switch points serve to prevent the blocks from entering upon the lateral skids. If it is desired to deflect the blocks to one or the other of the lateral skids, the corresponding switch point is moved inwardly against the other, as is shown in Fig. 1. The blocks of ice thus come into engagement with the curved side of the point as they pass upon the switch floor, and are deflected out upon the lateral skid. The curvature of the switch points is preferably of decreasing radius from the free end to the hinged end; consequently, the shock of the impact of the ice blocks against the switch points is gradually resisted, and thus there is little danger of injury to the switch itself. The curvature is such however, that the blocks are deflected at right angles by the time they pass from engagement with the switch points.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

1. A switch of the class described, comprising a floor over which the ice can pass, and a pivoted switch point at each side of

said floor, each of said points being mounted to swing entirely across said floor against the other of said points, whereby it serves to deflect the ice laterally when it is in a predetermined position.

2. A switch of the class described, comprising a floor over which the ice can pass, a pivoted switch point at each side of said floor, each of said points being mounted to swing entirely across said floor against the other of said points whereby it serves to deflect the ice laterally when said point is in a predetermined position, stops for limiting the outward movement of said points and buffers associated with said points.

3. The combination with a main ice skid and lateral ice skids, of a switch positioned at the intersection of said skids and comprising a floor over which the ice can pass, a pivoted member mounted to swing across said floor and to deflect the ice laterally when said member is in a predetermined position, permitting the ice to pass along said main skid without diverging from its normal line of travel at said switch, and stops at opposite sides of said floor and each serving to limit the movement of said member.

4. The combination with a main ice skid and lateral ice skids, of a switch positioned at the intersection of said skids and comprising a floor over which the ice can pass, a pivoted switch point at each side of said floor and mounted to swing entirely across said floor against the other of said points, and stops for limiting the outward movement of said points, said points being inwardly curved and of varying radius.

5. In a switch of the class described, a floor over which the ice can pass, hinge members adjacent to said floor, and having hinge sleeves, channel-shaped switch points receiving said sleeves between the flanges thereof, hinge pins passing through the flanges of said points and received in said sleeves, and resilient buffer bars secured between the flanges of said points and extending outwardly beyond said hinged sleeve.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES H. MARTELL.

Witnesses:

MAUDE STOTT,
C. E. MEAD.