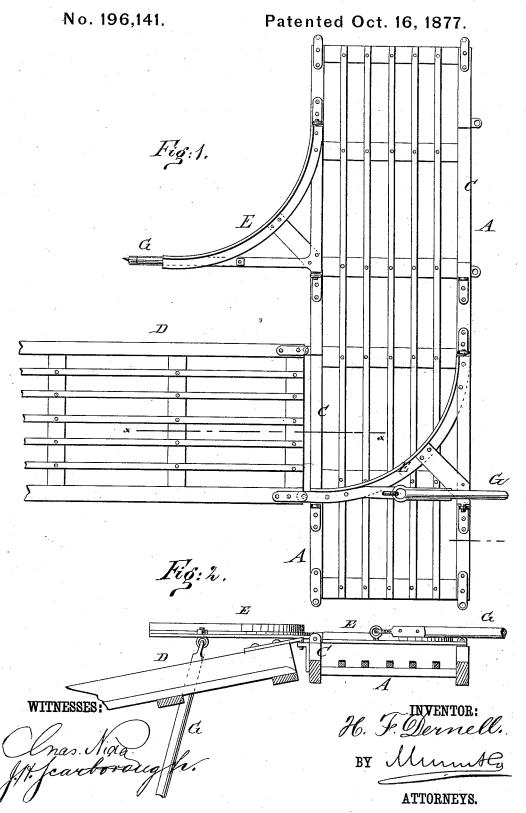
H. F. DERNELL. Adjustable Switch for Ice-Runs.



## UNITED STATES PATENT OFFICE.

HERMAN F. DERNELL, OF ATHENS, NEW YORK.

## IMPROVEMENT IN ADJUSTABLE SWITCHES FOR ICE-RUNS.

Specification forming part of Letters Patent No. 196,141, dated October 16, 1877; application filed September 22, 1877.

To all whom it may concern:

Be it known that I, HERMAN F. DERNELL, of Athens, in the county of Greene and State of New York, have invented a new and useful Improvement in Adjustable Switches for Ice-Runs, of which the following is a specification:

This invention relates to what is known as an "ice-run"; and the nature of my invention consists in the combination of adjustable switches with the run or chute, which switches are located at each lateral outlet, and can be thrown into or out of operation at pleasure, so that the ice descending the main chute can be conducted off into any one of the lateral chutes, as may be required.

In the annexed drawing, Figure 1 is a top or plan view of an ice-run having two lateral outlets, and a hinged switch applied to each one of the outlets. Fig. 2 is a horizontal transverse section taken in the plane indicated by dotted line x x, Fig. 1.

Similar letters of reference indicate corresponding parts.

The letter A designates an inclined trough or chute, composed of flanged sides and intermediate longitudinal bars, that are properly spaced and metal-sheathed.

At suitable points on both sides of this chute A portions of the side flanges are omitted, and at these points I hook or otherwise suitably attach inclined troughs, which are lateral chutes D, designed for conducting the ice into

different houses. These secondary chutes D are constructed with flanged sides and a grated bottom, formed of longitudinal bars, like the main chute A.

Opposite to each space C, I hinge a switch, E, which is the segment of a circle, and which is strongly braced. This switch E is of such size and is so arranged that when it is thrown over or across the main chute A, as shown in Fig. 1, it will guide the descending ice outward laterally into the lateral chute D.

By these simple means the ice which is elevated to the highest end of the main chute A may be conducted to the foot of this chute, or it may be discharged into lateral chutes at different points.

In practice I shall use poles G, which are linked to the switches, for facilitating the work of adjusting them in line with the main chute or turning them back out of the way.

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

In combination with the inclined ice run or chute A, the inclined lateral chutes D and hinged switches E, with or without poles G, substantially as specified.

HERMAN F. DERNELL.

Witnesses:

R. T. CAMPBELL, C. SEDGWICK.