

(Model.)

O. & W. GUTHRIE.

ICE SLIDE.

No. 264,455.

Patented Sept. 19, 1882.

Fig. 1.

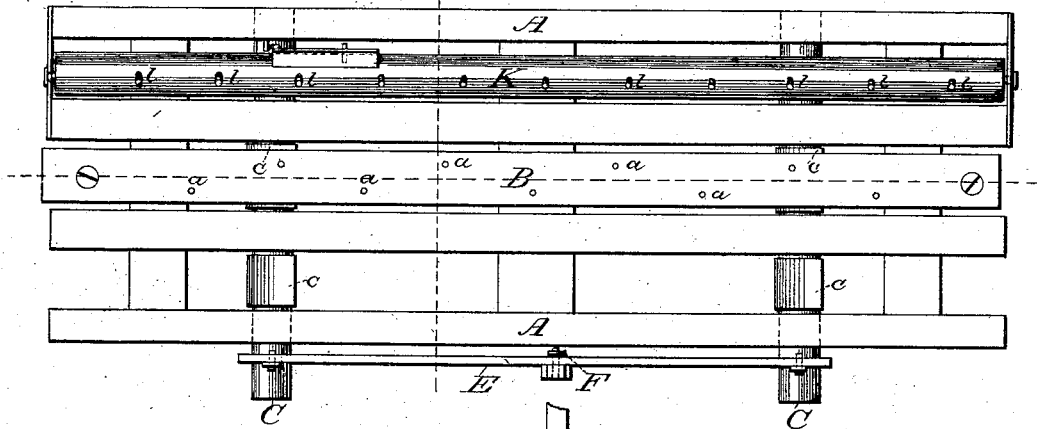


Fig. 2.

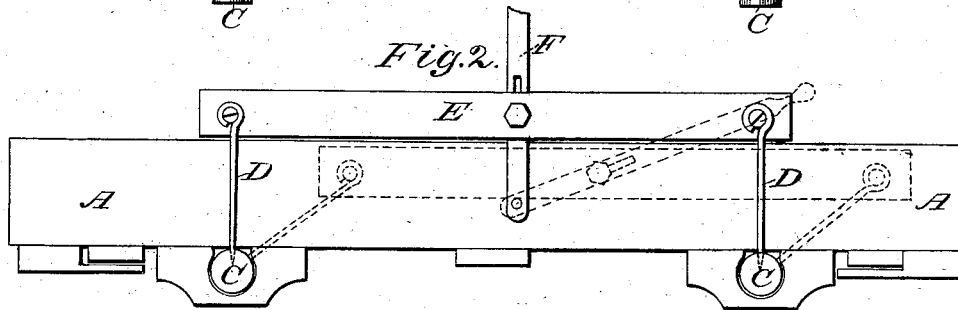


Fig. 3.

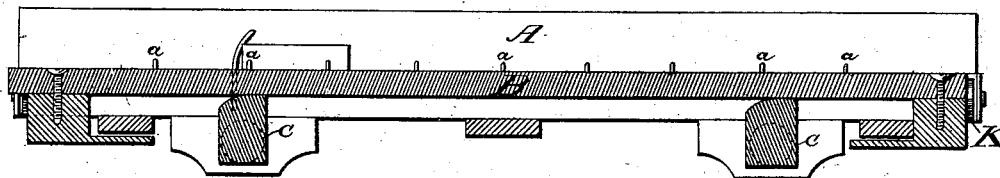
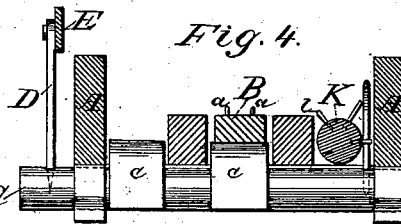


Fig. 4.



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# UNITED STATES PATENT OFFICE.

OSSIAN GUTHRIE AND WARDELL GUTHRIE, OF CHICAGO, ILLINOIS.

## ICE-SLIDE.

SPECIFICATION forming part of Letters Patent No. 264,455, dated September 19, 1882.

Application filed April 20, 1880. (Model.)

*To all whom it may concern:*

Be it known that we, OSSIAN GUTHRIE and WARDELL GUTHRIE, of the city of Chicago, county of Cook, and State of Illinois, have invented a new and useful improvement in the machinery for regulating and controlling the velocity of running blocks of ice down inclined slides into ice-houses, which we have termed "Friction-Slides," which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

It is well known to ice men generally that in raising ice blocks for storing in ice-houses they have necessarily to be raised to considerable elevations before breaking off from the elevating-slide to go down the inclined slide into the ice-chambers, that these heights are almost constantly varying, and that the ice-blocks often attain a velocity on the down-slides that breaks them in pieces and renders them unfit for packing. What we propose to accomplish by our invention is to regulate and control the velocity of these sliding blocks and prevent their being broken in their descent.

An essential feature of our invention is the ready adaptation to control at will any or whatever velocity the blocks may attain. For this purpose we provide a friction-brake over which the ice-blocks pass. This friction-brake is attached to suitable levers, eccentrics, cams, or cranks, by which the friction to the ice may be increased or diminished, as desirable.

In order that our invention may be more fully understood, we will refer to the drawings. Figure 1 is a top view; Fig. 2, a side view; Fig. 3, a sectional side view; Fig. 4, an end view.

Letter A shows an ordinary ice-slide. B

shows a false bottom in slide A, studded with friction-points, of iron or other suitable metal, along its length, *a a*, &c.

C C show two rock-shafts, one at either end of the slide, made somewhat eccentric by arms or protuberances *c c*. These shafts run crosswise of the slide, and are provided with cranks or arms D D, connected by the coupling-bar E.

F shows a lever-handle for working the rock-shafts C C. It will be plain that by working the lever-handle the false bottom may be raised up, bringing the friction-points *a a* in contact with the bottom of the sliding ice, retarding its velocity at pleasure. By another device—the rolling friction-brake K, with its friction-teeth *e e*—the same purpose may be attained.

We claim—

1. In ice-slides, a variable brake, so as to change the relative position of the brake and the slide either by depressing the slide or elevating the brake, in either case bringing friction-teeth in contact with a descending body of ice, as herein described, and for the purpose set forth.

2. The combination and arrangement of the friction-brake B and the rock-shafts C C with the coupling-bar E, as herein described, and for the purposes set forth.

3. The rolling friction-brake K, studded with friction-points, for rolling into contact with sliding masses of ice, as herein described, and for the purposes set forth.

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Witnesses:

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