(No Model.)

W. STAATS.

INCLINED FLOOR OR PLATFORM FOR SKATING RINKS.

No. 321,320. Patented June 30, 1885.

Fig. 2.

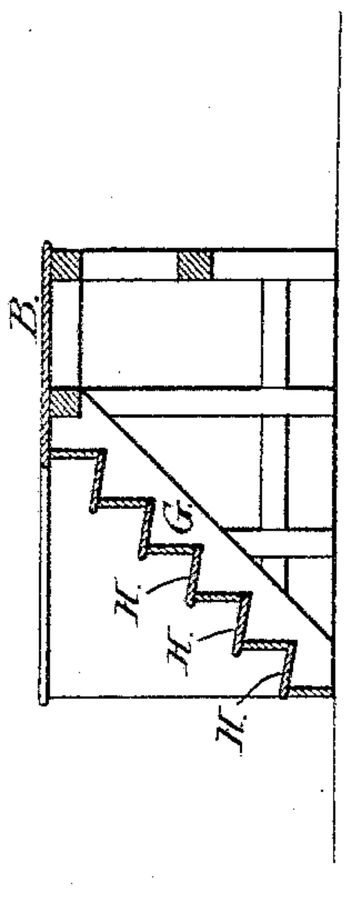
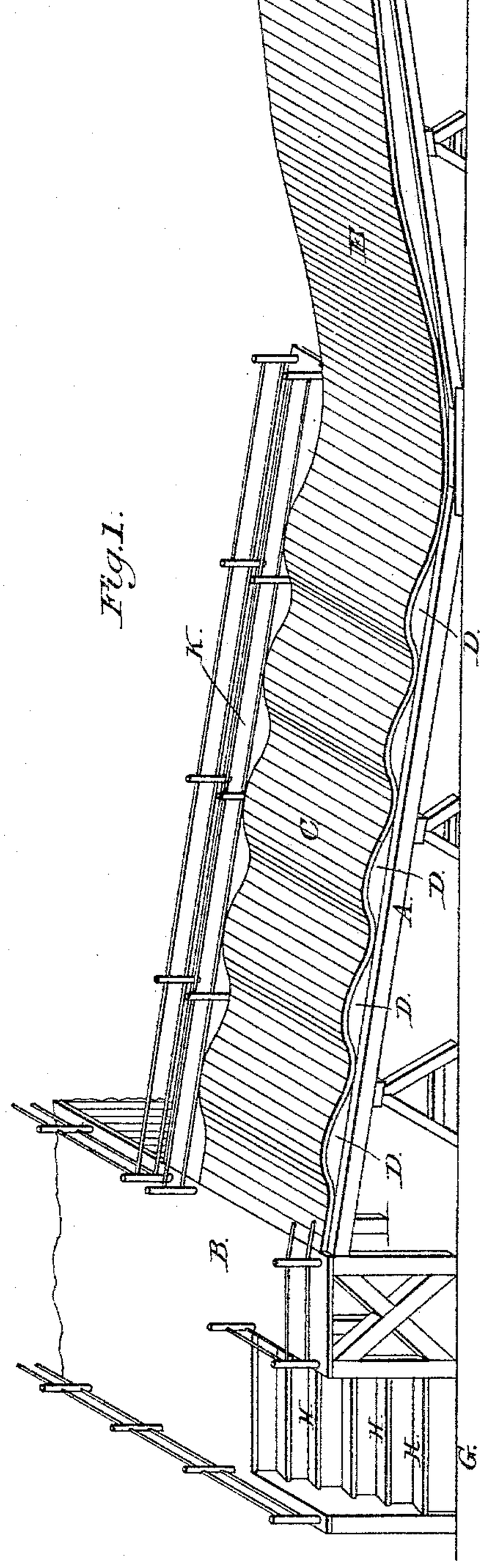


Fig. 1.



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UNITED STATES PATENT OFFICE.

WILLIAM STAATS, OF NEW YORK, N. Y., ASSIGNOR OF FORTY-NINE ONE-HUNDREDTHS TO GEORGE W. STEWART, OF SAME PLACE.

INCLINED FLOOR OR PLATFORM FOR SKATING-RINKS.

SPECIFICATION forming part of Letters Patent No. 321,320, dated June 30, 1885.

Application filed May 9, 1885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM STAATS, of the city, county, and State of New York, have invented a new and useful Improvement in Inclined Floors or Platforms for Skating-Rinks; and I do hereby declare that the following is a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to an improvement in roller-skating rinks; and it consists in an inclined floor constructed to present a waved or undulated surface over which the skaters glide automatically with a rising and descending movement, and in the combination of the inclined undulating way with an inclined plane at the foot thereof leading upward therefrom, at first with a steep grade, over which the skaters will be carried by the momentum of their descent, and thereafter with a more moderate grade, up which the skaters may skate to the level of the platform.

It consists, also, in the combination, with the inclined undulated way, of a parallel inclined plane and of stairs whose steps are inwardly inclined each from its outer edge to the riser.

In the accompanying drawings, Figure 1 is a view in perspective of my improved "rink wave" or undulated way, for roller-skating, and Fig. 2 a cross-section of the stairway for skaters leading thereto.

My undulated or waved way is constructed upon inclined beams A, extended at a suitable grade—say three inches to the foot, more or less—from the level of a platform, B, down to the floor of the rink. The manner of supporting the beams is not essential to the invention, provided they are fixed in a safe, secure manner, to uphold the weight of the flooring and skaters. To these longitudinal beams lateral planks D D are secured, whose upper edges are cut to form a series of curves along the length of the beam, each of a height usually of from four to six inches and of a length of about four to five feet, although the height and length of the curves may be varied. A flooring, C, made of very narrow stuff with edges beveled so that the joints upon the surface shall be close and tight, is laid and properly secured upon these curved planks D D, so as to present an inclined floor having a perfectly smooth, even, undulated, or wave surface, as shown in Fig. 1. The waves or undulations in the inclined floor may be regular, or each curve may rise more abruptly on its upper than on its lower side; and, in fact, the form of curves may be varied in different structures to produce different effects. From the foot of the inclined waved way an inclined plane is extended upward, with a steep gradient to about one-half of the height of the platform, so that the momentum of the skaters descending over the waved way will be utilized in carrying them automatically toward the upper level of the platform. From the end of the comparatively steep gradient E the inclined plane is continued with a grade sufficiently easy to permit the skaters to skate upward thereon to the level of the platform.

The platform of the waved way is approached by a stairway, G, so constructed as that each step H H shall have an inward slope from the front edge to the base of the riser. This form of step permits an ascent of the stairs by a person on roller-skates without danger of slipping backward thereon.

An inclined plane, K, may be also constructed parallel with the waved way at a gradient sufficiently easy to permit a person to skate upward thereon from the floor to the platform.

I contemplate constructing the waved way in the form of an independent structure or platform admitting of being elevated at one end to different heights, so as to permit of a change in the grade of the undulating incline.

As in the use of the waved way the skates simply roll over the floor in a straight line and are not made to strike the floor as in ordinary skating, I contemplate covering the floor with suitable wooden matting, oil-cloth, sheet-tin or other detachable facing adapted to render it smoother.

It is evident that two inclined undulated ways may be constructed to extend in opposite directions, so that after descending one of them the ascending way therefrom shall lead to the platform at the upper end of the other, and the ways may be thus arranged side by side or on opposite sides or ends of the rink.

I am aware that it is not new to construct inclined-plane railways for coasting, &c., the rails of which are made to present a series of ascending and descending planes or undulations; and I do not claim such inclined railways in any form. My improvement has reference to the construction, in manner as herein described, of an inclined floor over which skaters may glide automatically upon roller-skates; and

I claim as my invention and desire to secure by Letters Patent—

1. The inclined undulated floor for skating-rinks, constructed of a series of inclined supports fashioned to present upon their upper supporting-edges a series of longitudinal curves, in combination with flooring-boards secured transversely upon said supporting-edges, substantially in the manner and for the purpose herein set forth.

2. The combination, with an undulated inclined way, constructed substantially as described, of an inclined plane extending upwardly from the foot thereof with a double gradient, substantially as set forth.

3. The combination, with the upper end of an undulated inclined way in a skating-rink, of a stairway constituting an approach thereto, and constructed with its several steps each inclined from front to rear, substantially in the manner and for the purpose herein set forth.

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

WM. STAATS.

Witnesses:
J. F. ACKER, Jr.,
THEO. C. OTIS.