April 10, 1928. 1,665,981

H. N. RIDGWAY

AMUSEMENT APPARATUS

Filed March 17, 1923 2 Sheets-Sheet 1

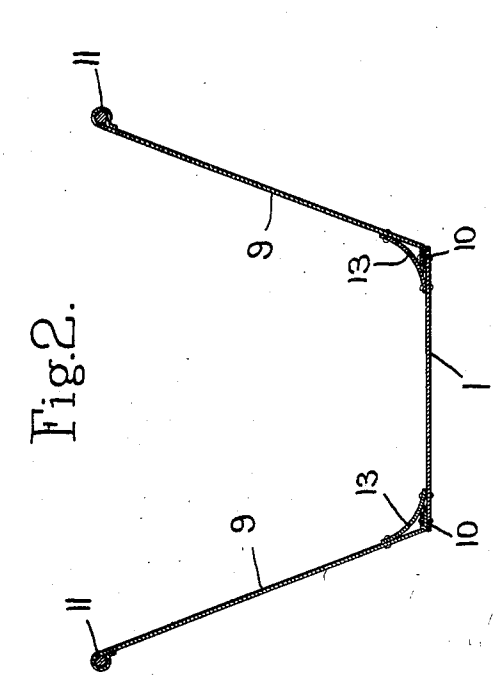

Fig.2.

Fig.1.

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Fig.3.

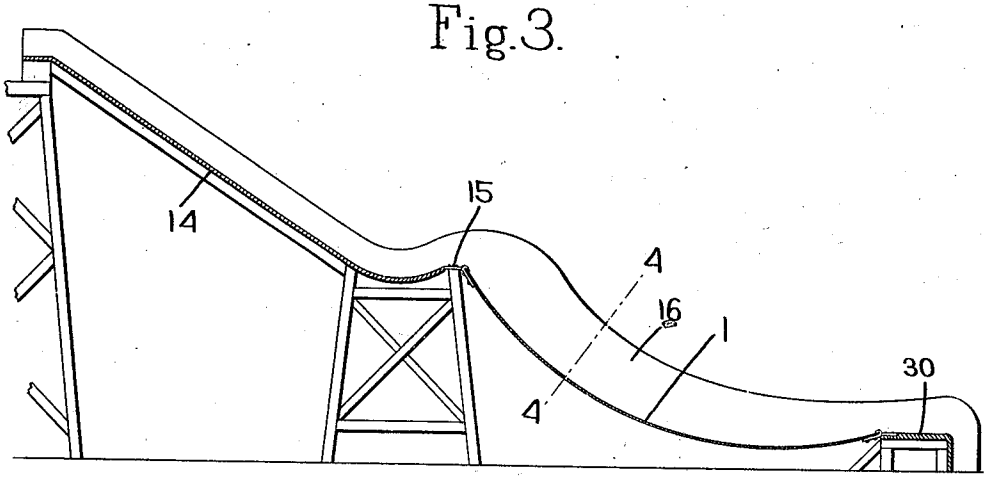


Fig.4.

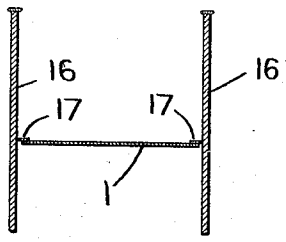
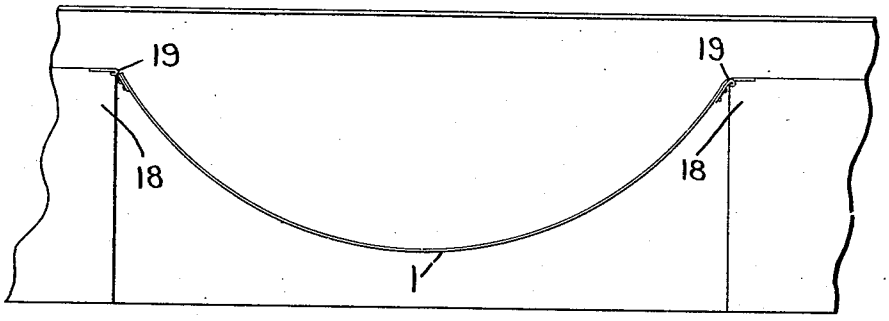


Fig.5.



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Patented Apr. 10, 1928. 1,665,981

UNITED STATES PATENT OFFICE.

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AMUSEMENT APPARATUS.

Application filed March 17, 1923. Serial No. 625,769.

This invention relates to amusement apparatus in the nature of a chute or runway and it has for one of its objects to provide a novel amusement apparatus of this type in which the chute or runway is in the form of a long strip of metal that is flexible longitudinally and is supported at its ends only at points which are a less distance apart than the length of the metal strip so that the latter will hang in a sort of festoon.

A metal strip of this construction and which is thus suspended does not have a fixed determinate shape as it will give or yield whenever weight is applied thereto, the weighted part moving downwardly and other parts moving upwardly. Therefore, as a person moves over the strip whether it be in the form of a chute or runway, the portion of the metal strip supporting the person will be depressed below its normal position and other portions will be raised above their normal position so that as a person progresses along the chute or runway the shape of the latter is continually changing.

In the drawings wherein I have illustrated a selected embodiment of my invention, Fig. 1 is a sectional view showing the invention as applied to a chute;

Fig. 2 is an enlarged section on the line 2—2, Fig. 1;

Fig. 3 is a view showing a different embodiment of the invention also arranged in a chute;

Fig. 4 is a section on the line 4—4, Fig. 3;

Fig. 5 shows the invention as arranged for a runway.

My invention is applicable to an amusement apparatus either in the nature of a chute or a runway, the principal difference being that when the device is embodied in a chute one end thereof will be suspended at a point higher than the other end so that persons can slide down the chute by gravity.

Referring to Fig. 1, which shows the device as embodied in a chute, 1 indicates a long strip of sheet metal which is flexible longitudinally and which is supported or suspended at its ends 2 and 3 only. Where the device is in the nature of a chute one end 2 will be supported at a higher level than the end 3 and in the construction herein shown said end 2 is connected to and supported from a tower 4 having a platform 5 at its upper end which may be reached in any suitable way as by means of stairs 6. The lower end 3 is shown as connected to any suitable abutment or support 7. The distance between the supporting points 2 and 3 is less than the length of the flexible member 1 so that the latter will assume the curved shape illustrated in Fig. 1.

The chute 1 is preferably pivotally connected to the supports at its ends and for this purpose each end of the metal strip 1 has a hinge 8 secured thereto and by which it is secured to its support. Where the device is used as a chute it is desirable that side walls should be provided so as to prevent the persons using the chute from sliding off the latter at the side and one form of side walls is illustrated in Fig. 2. This comprises strips 9 of canvas or other flexible material which are secured at their lower edges to the edges of the metal strip 1 as shown at 10 and at their upper edges are secured to supporting cords or flexible members 11. These flexible members 11 are yieldingly connected to supports 23 at their ends through the medium of springs 12.

If desired, I may employ guard or protecting members 13 of leather or other suitable material which cover the corners between the edges of the sheet metal member 1 and the sides 9. These protecting members 13 serve to protect the canvas from wear and also make a smooth corner.

I have illustrated in Fig. 1 a bumper or pad 14 at the lower end of the chute and which constitutes a stop for persons sliding down the chute. In using this chute a person may slide down in sitting position or in any other desired position and as the person moves down the chute the portion of the chute bearing the weight of the person will continually tend to be depressed so that when the person is half way down the chute for instance the flexible member 1 will assume somewhat the position shown in the dotted lines and as the person approaches the lower end of the chute said lower end will sag under the weight of the person and will be depressed somewhat below the point 3 at which the lower end of the chute is connected to the support. Hence if the person sliding down the chute has sufficient momentum to be carried clear to the bumper or pad 14 the last portion of the journey just before arriving at the pad will be at a slight upward inclination which will have a marked effect in retarding the momentum of the person.

The shape of the bottom of the chute is

thus continually changing as the person moves over it.

Another way in which the chute may be used is for a person to stand on the platform 5 and then jump off from the latter and land on the chute at a point below the upper end 2. The flexibility of the chute makes this possible because the member 1 will yield as the person strikes it thus cushioning the fall and at the same time causing the member 1 to give at this point.

In Fig. 3 another embodiment of the invention is shown wherein the flexible chute 1 is situated at the lower end of a fixed chute 14 which has a bump or jump off 15 at its lower end. In using this embodiment of the invention a person will slide down the chute 14 and as he passes over the jump off 15 he will be thrown into the air slightly and will land on the chute 1 at a point below its upper end thus securing the same effect as is secured when he jumps from the platform 5 onto the chute. In this embodiment of the invention the lower end of the chute 1 is open and leads onto a fixed platform 30 so that persons sliding down the chute 1 will slide across the platform 30 after they leave the chute 1.

In this embodiment of the invention the side walls 16 for the flexible chute are fixed and the steel member 1 has a vertical movement between the side walls as it flexes. In this embodiment the member 1 will preferably be provided with flexible strips 17 at its edges to make a tight joint with the fixed side 16.

Another embodiment of the invention is shown in Fig. 5 in which the two ends of the flexible member are supported at substantially the same level thus making a runway. In this embodiment too the ends of the member 1 are pivotally supported by the abutments 18 as shown at 19 and the distance between the points 18 is less than the length of the member 1 so that it will hang in a sort of festoon. As a person tries to pass across the runway the latter will keep changing its shape because of its flexibility and will thus make it difficult for a person to make the passage.

I claim:

An amusement apparatus comprising two supports separated from each other and one of which is situated at a higher level than the other, a long sheet of metal flexible longitudinally, and a pivotal connection between each end of the sheet and the corresponding support, said sheet having such a length relative to the distance between the supports that normally the end of the sheet attached to the lower support extends in a substantially horizontal direction, and said sheet being sufficiently flexible so that when a person sliding down the chute arrives at the horizontal portion thereof the weight of such person will cause the sheet to sag below the lower pivotal connection so that the momentum of the person sliding down the chute will be checked by movement up the upwardly inclined lower end of sheet.

In testimony whereof, I have signed my name to this specification.

HERBERT N. RIDGWAY.