

A. GREGORY.
TOY.

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932,982.

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Fig. 1.

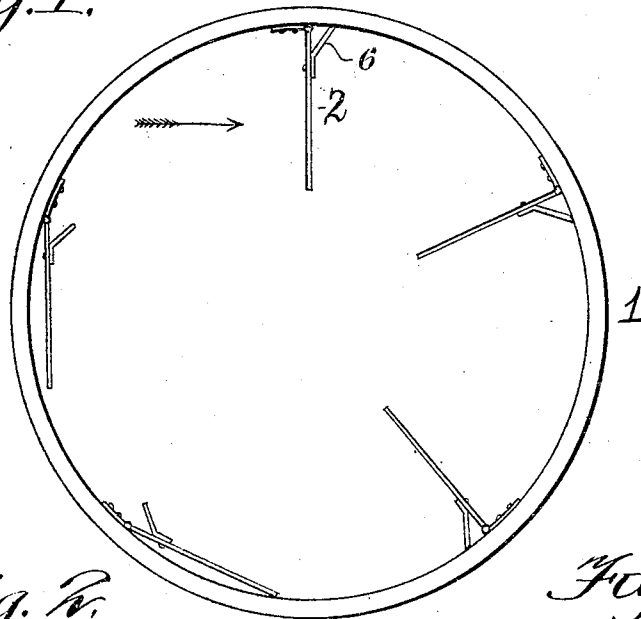


Fig. 2.

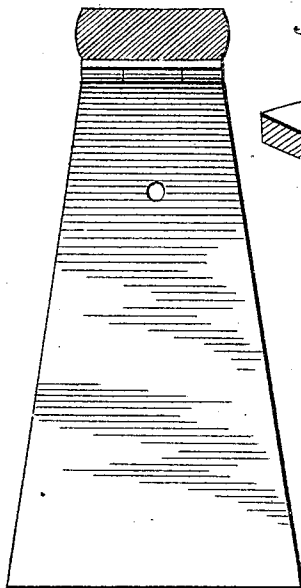


Fig. 4.

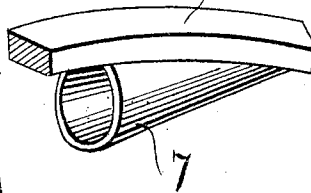
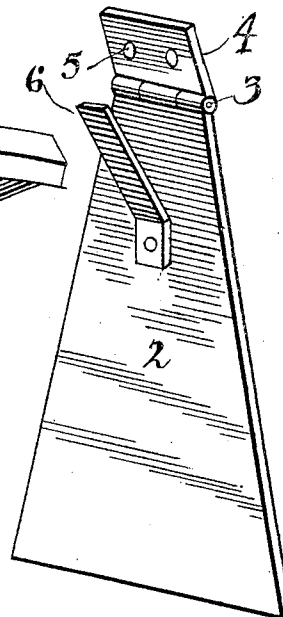


Fig. 3.



Witnesses
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TOY.

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To all whom it may concern:

Be it known that I, ARTHUR GREGORY, a citizen of the United States, residing at Durango, in the Republic of Mexico, have
5 invented new and useful Improvements in Toys, of which the following is a specification.

This invention is an improved toy hoop or rolling hoop, the object of the invention being to provide a rolling hoop with fans or vanes to enable the hoop to be rolled by the wind and the said invention consists in the construction, combination and arrangement of devices hereinafter described and claimed.

15 In the accompanying drawings: Figure 1 is a side elevation of a hoop embodying my invention. Fig. 2 is a detail transverse sectional view of the same. Fig. 3 is a detail perspective view of one of the fans or vanes. Fig. 4 is a detail sectional perspective view illustrating a modification.

In accordance with my invention, the hoop 1 which may be of any suitable size and construction is provided on its inner side with a plurality of fans or vanes so arranged and constructed that those in the upper side of the hoop will receive the force of the wind to a greater extent than those in the lower side rolled and driven by the wind after having
30 been started.

I will first describe the form of the invention shown in Figs. 1, 2 and 3. Each of the fans or vanes is a plane 2 preferably made of sheet metal but which may be made of
35 any other suitable material and preferably substantially triangular in form and narrowed toward its upper end. To the outer end of the fan or vane is pivotally connected, as at 3, a hinge member 4 having openings 5 for the reception of screws or other suitable devices whereby said hinge member may be attached to the inner side of the hoop, preferably, the hinged members extending rearwardly in the hoop. On the front side of
40 each vane or fan is secured an arm 6 constituting a stop device which is adapted, when the vane or fan is disposed radially with reference to the hoop, to engage the inner side of the hoop and hence cause the hoop to be
45 ner side of the hoop and sustain such fan or vane in such radial position against the force of the wind while such fan or vane is in the upper side of the hoop; and the said stop de-

vices as the fans or vanes pass, by the revolution of the hoop, to the lower side of the latter, enable such fans or vanes to be forced
55 by the action of the wind to a folded position in and against the hoop so that they present but a minimum extent of surface to the wind and hence the vanes or fans which are disposed radially in the upper portion of the hoop and have their maximum areas exposed to the direct action thereto, cause the hoop to be rolled and propelled by the force of the wind, the hinge or pivotal connections en-
60 abling the vanes or fans to automatically feather as the hoop revolves. The direction of the wind is indicated by the arrow in Fig. 1 and it is thought the operation of this form of my invention will be readily understood
65 from the foregoing description.

In the form of the invention shown in Fig. 4, the fans or vanes are funnel shape, as at 7, each having its smaller end extending forwardly under the upper side of the hoop
70 1 and its larger open end presented rearwardly to the action of the wind. It is thought the operation of this form of the invention will be readily understood.

Having thus described the invention, what
I claim as new and desire to secure by Letters Patent is:

1. A rolling hoop having vanes on the inner side thereof, each of said vanes being pivotally connected at its outer end to the
85 hoop and thereby adapted to fold in and against the hoop in one direction and stop devices to limit the angular movement of the vanes in the reverse direction and dispose said vanes in a radial position in the hoop.

2. A rolling hoop having vanes on the inner side thereof, each of said vanes being pivotally connected at its outer end to the hoop and thereby adapted to fold in and
90 against the hoop in one direction, said vanes having stop devices to limit the angular movement thereof in the reverse direction and dispose said vanes in a radial position in the hoop.

In testimony whereof I affix my signature
100 in presence of two witnesses.

ARTHUR GREGORY.

Witnesses:

H. J. BENSON,
WALTER JAAP.