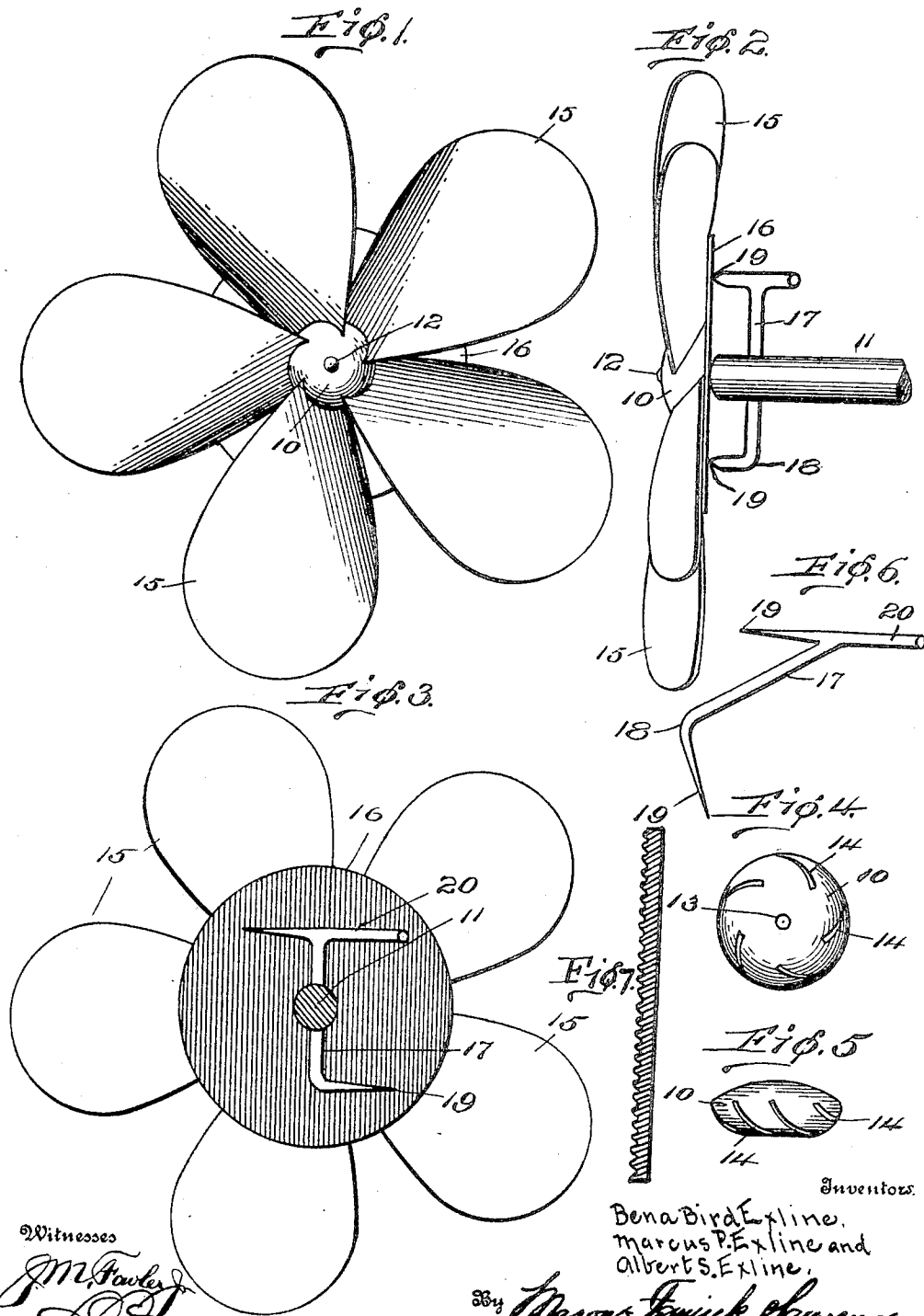


M. P., B. B. & A. S. EXLINE.
SOUNDING TOY.

APPLICATION FILED SEPT. 17, 1908.

943,529.

Patented Dec. 14, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

MARCUS P. EXLINE, BENA BIRD EXLINE, AND ALBERT S. EXLINE, OF DALLAS, TEXAS.

SOUNDING TOY.

943,529.

Specification of Letters Patent.

Patented Dec. 14, 1909.

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To all whom it may concern:

Be it known that we, MARCUS P. EXLINE, BENA BIRD EXLINE, and ALBERT S. EXLINE, citizens of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Sounding Toys; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to sounding toys, and has for an object to provide a toy of the description embodying new and improved features of construction, utility and economy.

In general the toy here represented is similar to the toy forming the subject-matter of co-pending application Serial Number 450,218, filed August 25, 1908, and has for a further object to provide improved construction for accomplishing a similar purpose.

A further object of the invention is to provide new and improved construction for the wind mill portion of the toy.

A further object of the invention is to provide improved construction for the pointed or engaging arm.

With these and other objects in view, the invention comprises certain novel constructions, combinations and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings:—Figure 1 is a view of the improved toy in front elevation. Fig. 2 is a view of the toy in side elevation. Fig. 3 is a view of the toy in rear elevation. Fig. 4 is a view of the core or button of the improved toy in front elevation. Fig. 5 is a view of the core or button in side elevation. Fig. 6 is a perspective view of the disk-engaging points and carrying means. Fig. 7 is an enlarged transverse sectional view through the disk showing the roughening formed as corrugations.

Like characters of reference designate corresponding parts throughout the several views.

Like co-pending application, No. 450,218, filed August 25, 1908, the present invention comprises a toy in the form of a wind mill whereby the rotation of the mill under the action of the wind produces a sound by the

employment of pointed ends with a rotating or moving roughened surface.

In the present invention the wind mill comprises a core or button 10 journaled upon a handle 11 by means of a pin 12 through a central opening 13 of such button.

The button 10 is provided upon its periphery with a plurality of spirally disposed slots 14 in practice preferably formed by a saw cut, the button being also preferably composed of wood, although the material of such button and the manner of formation of such slots is wholly immaterial to the present invention. Within the slots 14, which may be of any desired number, a similar number of vanes or blades 15 are secured, such vanes for the construction of the toy being preferably constructed of stiff, tough paper, although the material from which such vanes are constructed is wholly immaterial to the present invention. The vanes are preferably curved somewhat transversely as indicated by shade lines in Fig. 1.

At the back of the button 10 and between such button and the handle 11 a disk 16 is secured in any approved manner as by being glued, nailed or otherwise secured to the button 10 and also preferably, though not necessarily, secured to the rearward edges of the vanes 15. The disk 16 is journaled to rotate upon the pin 12, the same as the button 10.

Secured to the handle 11 is a cross piece 17 preferably by means of being inserted through an opening in the handle 11 and bent as at 18 to form pointed extremities 19, in engagement with the rearward roughened surface of the disk 16. The cross piece is also provided with a handle member 20 preferably in alinement with one of the extensions forming the points 19 so that the cross piece 17 and the points 19 may be moved. Such movement may be either by moving the cross piece longitudinally and slidably through the handle 11 or may be rotatably relative to the cross piece 17. It will be noted that the extensions terminating in the points 19 are not in parallelism but are angularly disposed relative to each other so that with the mill rotating in the direction indicated by the arrow in Fig. 3 the roughened disk 17 passes relative to the points in such manner that the points will not dig the material of the disk.

The disk 16 may be made of any approved

material, checked, corrugated or roughened in any approved or convenient manner as, for instance, being constructed of fabric ordinarily employed for book binding or other
 5 fabric, wire gauze, corrugated metal or in fact any material having a roughened or corrugated surface for engagement by the pointed extremities 19.

The employment of the roughened disk and the engaging points broadly are similar to the disclosure in co-pending application No. 450218, and for a like purpose, that is, when the mill is rotated by the action of the wind against the vane 15, the roughened
 15 disk 16 is rapidly rotated in engagement with the points 19 producing thereby atmospheric vibrations which cause sound according to the rapidity of the rotation of the mill and the consequent vibration produced
 20 thereby. By reason of the adjustability of the cross piece 17 and points 19 the points may be disposed at unequal distances from the handle 11 thereby causing different tones as the corrugations will pass such points at
 25 unequal rates of speed.

With the disk 16 corrugated in one direction, as shown in Fig. 3, it is evident that a constant rotation of the mill will produce varying vibrations as the points are brought
 30 into engagement with the corrugations transversely or longitudinally or the varying degrees between such transverse or longitudi-

nal engagement so that the sound produced by parallel corrugations is a constant rise and fall of the tone. 35

What we claim is:—

1. In a device of the class described, a handle, a rotating member carried by the handle, a cross piece carried by the handle, points carried by the cross piece in engage- 40 ment with the rotating member, and means to adjust the positions of the points.

2. In a device of the class described, a handle, a rotating member journaled upon the handle, a roughened disk carried by the 45 rotating member, a cross piece carried by the handle, points carried by the cross piece positioned for engagement with the roughened disk, and means to move the cross piece and points relative to the handle. 50

3. In a device of the class described, a handle member, a rotating roughened member carried by the handle, and adjustable contact points carried by the handle in engagement with the roughened member. 55

In testimony whereof we affix our signatures in presence of two witnesses.

MARCUS P. EXLINE.
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Witnesses:

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