July 22, 1924. 1,502,599

S. E. TIMMONS

KNOCKDOWN TOY

Filed Oct. 26, 1922

Fig. 1.

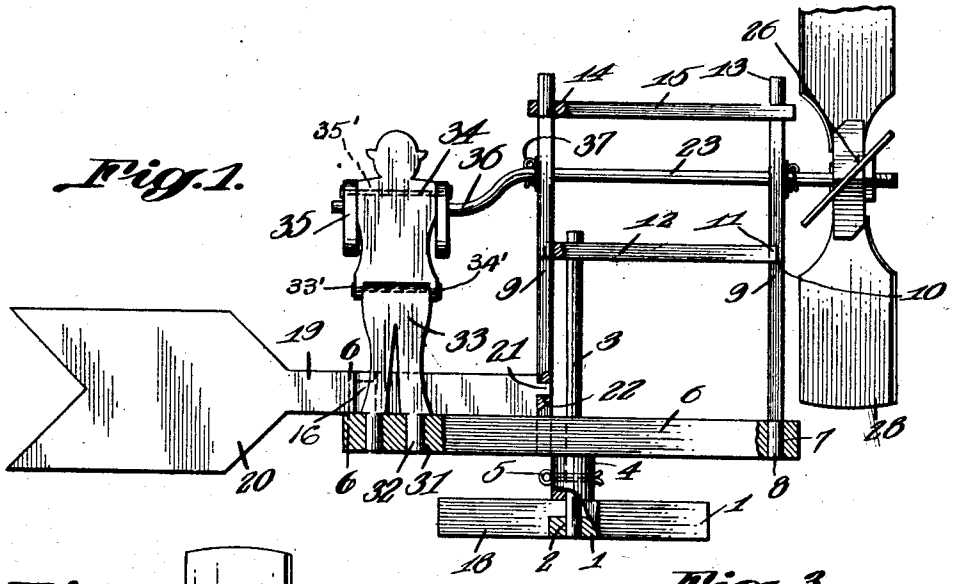


Fig. 2.

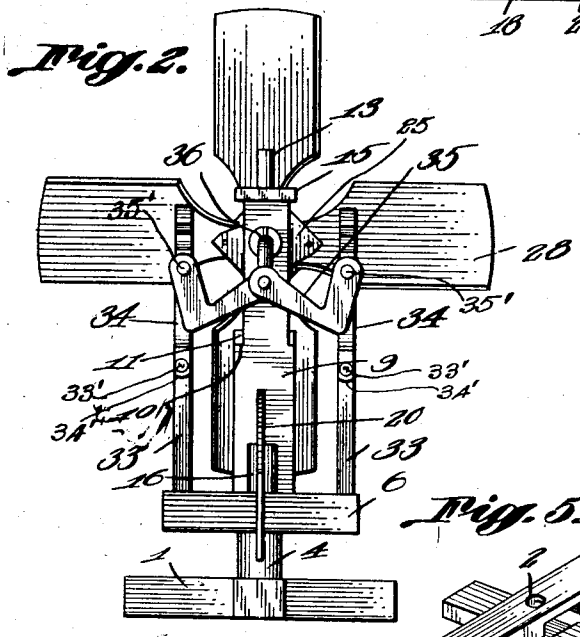


Fig. 3.

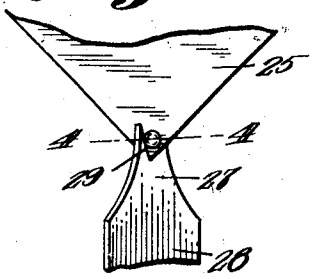


Fig. 4.

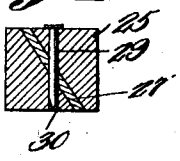


Fig. 5.

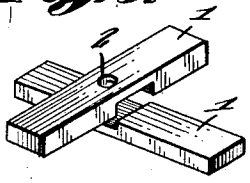
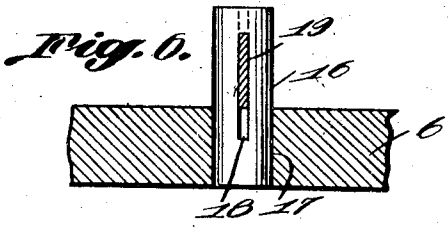


Fig. 6.



Inventor

S. E. Timmons

By Cushman & Co.

Attorneys

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UNITED STATES PATENT OFFICE.

SAMUEL E. TIMMONS, OF LAWTON, OKLAHOMA.

KNOCKDOWN TOY.

Application filed October 26, 1922. Serial No. 597,050.

To all whom it may concern:

Be it known that I, SAMUEL E. TIMMONS, a citizen of the United States, residing at Lawton, in the county of Comanche and State of Oklahoma, have invented a new and useful Knockdown Toy, of which the following is a specification.

This invention relates to a knockdown toy, one of its objects being to provide a toy of the windmill type the parts of which can be readily assembled and taken apart and, when assembled, will operate by the action of an air current so as to set in motion some figures combined therewith.

Another object is to provide a toy of this character the parts of which are of substantial construction, the said toy being both instructive and entertaining.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that, within the scope of what is claimed, changes in the precise embodiment of the invention shown can be made without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings

Figure 1 is a side elevation of the toy, parts being broken away.

Figure 2 is an end elevation.

Figure 3 is a front elevation of a portion of the wind wheel.

Figure 4 is an enlarged section on line 4—4, Figure 3.

Figure 5 is a perspective view of the base members, the same being shown separated.

Figure 6 is a section through the vane on line 6—6, Figure 1.

Referring to the figures by characters of reference 1 designates crossed interfitting strips constituting the base of the toy, these strips being provided at their centers with registering openings 2 adapted to receive a pivot pin 3 projecting upwardly from the base. A collar 4 is mounted on the pin and is supported by the base and if desired this collar can be held to the pin 3 by a cotter pin 5 as shown in Figure 1. The collar 4 constitutes a bearing for the bottom member 6 of the toy. This member is preferably in the form of a strip of wood having spaced openings 7 therein for the reception of the reduced lower ends 8 of standards 9. The upper portions of the standards are reduced in width to provide side shoulders 10 and these reduced portions are straddled by the forked ends 11 of a bearing strip 12, said ends being supported by the shoulders 10. The upper extremities of the standards are further reduced to form dowels 13 adapted to project through openings 14 in the ends of a top strip 15. The bearing strip 12 receives the upper end of the pin 3 and this strip as well as the top strip 15 serves to hold the standards properly assembled with each other.

A dowel 16 is removably seated in an opening 17 formed in the bottom member 6 and this dowel has a longitudinal slot 18 adapted to receive the flat shank 19 of a vane 20. This shank rests on the bottom strip 6 and has a projection 21 insertible into an opening 22 formed in one of the standards 9.

Journaled within the standards 9 is a shaft 23 to one end of which is secured a block 25 preferably rectangular. Each corner of this block is intersected by a diagonal slot 26 extending into the block and adapted to receive the narrow inner end 27 of a blade 28. Thus all of the blades are held at angles so as to cause rotation of the wind wheel when an air current comes against them. The blades can be held to the block by pins 29 insertible through registering openings 30 formed in the block and blades.

Formed in the bottom member or strip 6 at opposite sides of the dowel 16 are pairs of openings 31. These openings are adapted to receive pegs 32 projecting downwardly from the lower members 33 of figures mounted on the bottom strip 6. The upper end of each of the members 33 projects between ears 34′ depending from an upper member 34 which can simulate the trunk portion and head of a fanciful human figure. A pivot pin 33′ is extended transversely through these ears and the body portion 34 to complete a hinge connection between the parts. Angle arms 35 are connected to the sides of each member 34 by a pin 35′ and simulate the arms of the figure referred to, the angle arms of the opposed figures being in lapped relation as shown in Figure 2 and being pivotally mounted on a crank arm 36 formed by bending one end of the shaft 23. Shaft 23 can be held against longitudinal movement by cotter pins 37 or the like as shown.

It will be apparent that the vane 20 will hold the wind wheel properly positioned to be actuated by an air current and such actuation will cause shaft 23 to rotate. Thus crank 36 will oscillate the portions 34 of the figures so that these figures will have the appearance of operating the shaft and rotating the wheel.

It will be noted that all of the parts are detachably connected and the toy will afford not only considerable amusement but will also be instructive because it provides a problem of construction to be solved by the user.

What is claimed is:—

1. A knockdown toy including a pivot pin, a bottom strip mounted to rotate thereon, a standard detachably mounted on the bottom strip and having an opening therein, a slotted dowel detachably engaging the bottom strip, a vane having a shank extending through the slotted dowel, a projection on the shank detachably seated in the opening in the standard, a crank shaft journaled in the standard, a wind wheel on the shaft and a jointed figure detachably connected to the bottom strip and pivotally connected to the crank of the shaft.

2. In a knockdown toy the combination with a structure mounted for rotation and including a standard, jointed figures mounted on the structure, a wind wheel, and means operated by the wind wheel for simultaneously actuating the jointed figures, of a longitudinally slotted dowel detachably mounted within the rotatable structure, a vane having a shank extending through the dowel, and a projection on the shank detachably seated in the standard, said projection and dowel cooperating to hold the vane fixed against movement relative to the rotatable structure.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

SAMUEL E. TIMMONS.

Witnesses:
L. E. SPARLIN,
G. M. BROOKS.