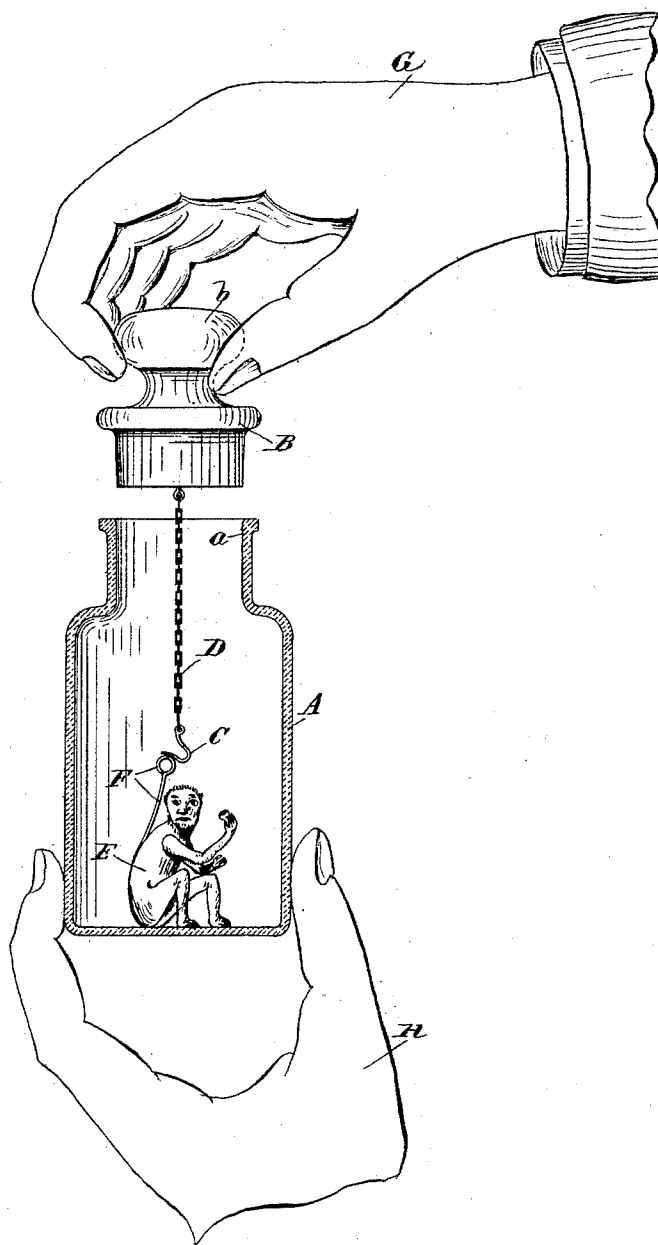


(No Model.)

G. A. GOODSON.
MAGNETIC TOY.

No. 468,274.

Patented Feb. 2, 1892.



Witnesses

A. W. Opsahl.
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UNITED STATES PATENT OFFICE.

GEORGE A. GOODSON, OF MINNEAPOLIS, MINNESOTA.

MAGNETIC TOY.

SPECIFICATION forming part of Letters Patent No. 468,274, dated February 2, 1892.

Application filed March 21, 1891. Serial No. 385,870. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. GOODSON, a citizen of the Dominion of Canada, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Magnetic Toys; and I 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.

My invention has for its object to provide an amusing toy. To this end I employ a grotesque figure, a hand device, and magnetized pieces located, respectively, on the figure and the hand device. The magnetized parts are preferably in the form of hooks or hooks and eyes, and the one of the said pieces which is supported from the hand device is preferably suspended by a flexible connection. To heighten the effect of the trick or action, the grotesque figure is preferably supported within a small transparent case of vial-like form, having an open mouth adapted to pass the figure and a body of sufficient size to give the figure considerable play therein. The stopper of the vial may be used as the hand device from which to suspend one of the magnetized pieces. The figure may be of any desired kind, such as that of a monkey, man, or other animal. The magnetized parts may be conveniently made of tempered steel or case-hardened iron.

The device is illustrated in the accompanying drawing. In the same the single figure is a vertical section through the case, the other parts being represented in perspective.

A is the glass vial, adapted to be held in the hand, having the open mouth *a*. B is the stopper to the same, constructed with a finger-knob *b*. C is the magnetized piece suspended therefrom by the flexible support D. The magnetized piece C is shown as of hook form, and the flexible support is a chain composed of brass or other non-magnetic metal.

E is a grotesque figure, intended, as shown, to represent a monkey, and F is the other magnetized piece, carried by the figure, constructed, as shown, in the form of an eye, represented as part of the tail of the monkey, with which the hook is adapted to engage.

G and H represent the human hands, illus-

trating the way in which the parts are held for performing the trick.

The trick or puzzle is to get the figure out of the case by means of the hand device. This is apparently a very easy thing to do, especially when the magnetized pieces are engageable parts, like hooks and eyes. At first sight any one would say he could make the hook engage with the eye; but the attempt is disappointing, for whenever the two parts are brought within the magnetic field they either attract or repel each other, according to the arrangement of the poles, making it quite difficult to effect the engagement. It can, however, be done by giving exactly the right swing to the hook, so that it will strike the eye and the momentum be sufficient to overcome the magnetism.

The fact that the figure is free to slide about on the bottom of the case and that the hook is suspended by a flexible connection and delicately poised on its pivot all co-operate to make the engagement more difficult.

The inviting simplicity of the act, the difficulty of performance, the mystery afforded by the magnetism, and the lesson afforded by the explanation makes this an attractive and instructive toy. The magnetized parts, instead of being constructed so as to engage with each other, may be adapted simply for contact and reliance placed on the attraction to lift the figure, care being taken in that event to give the magnetized parts such mass with reference to each other that the attraction would be sufficient to lift the figure by a steady motion, but insufficient to hold the same against the slightest jar or impediment, such as might occur from the swing of the chain or the touching of the case by the figure.

It will of course be understood that, while the glass case adds attractiveness to the toy and increases the difficulty of the act, the other parts might be used without the case.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. A magnetic toy comprising a grotesque figure, a hand device, and a pair of metallic interlocking parts carried one by the figure and the other by the hand device, at least one of the said parts being magnetized.

2. A magnetic toy comprising a grotesque

figure, a hand device, and metallic interlocking parts, at least one of which is magnetized, carried one by the figure and the other by a flexible connection suspended from the hand device.

5 3. A magnetic toy comprising a transparent case adapted to be held in the hand, a grotesque figure, a hand device projectible into the interior of the case, and a pair of metallic
10 interlocking parts, one of which is attached to the figure and the other to the hand device, and one or both of which are magnetized, substantially as described.

4. The magnetic toy comprising a grotesque figure provided with the magnetized metallic eye, the transparent case having a mouth adapted to pass the figure, the stopper, the flexible support depending from the stopper, and the magnetized hook pivoted to said flexible support, substantially as described. 15 20

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

GEORGE A. GOODSON.

Witnesses:

JAS. F. WILLIAMSON,
EMMA F. ELMORE.