

May 24, 1927.

G. H. PARSONS

1,629,635

TOY

Filed June 18, 1923

2 Sheets-Sheet 1

Fig. 1.

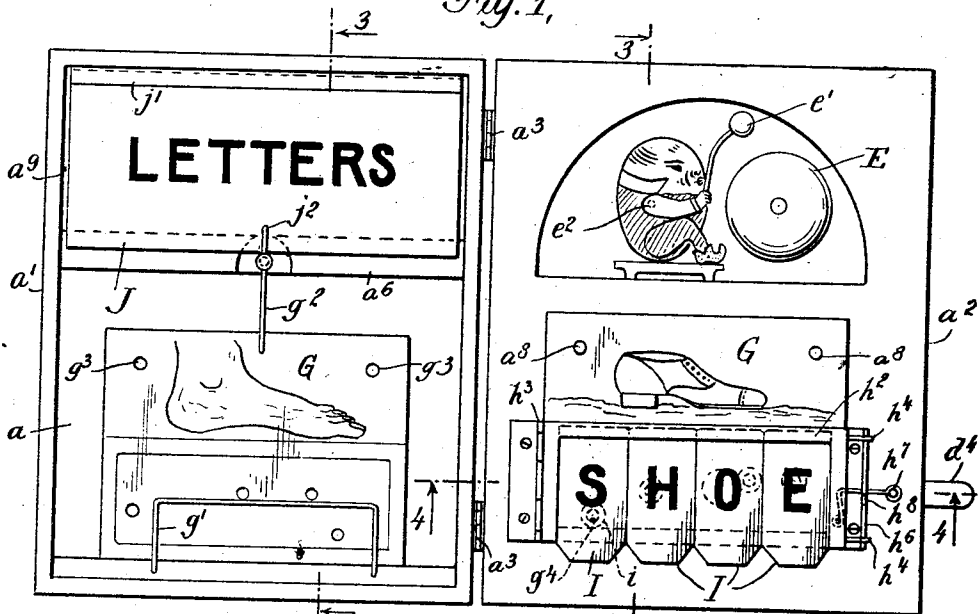


Fig. 2.

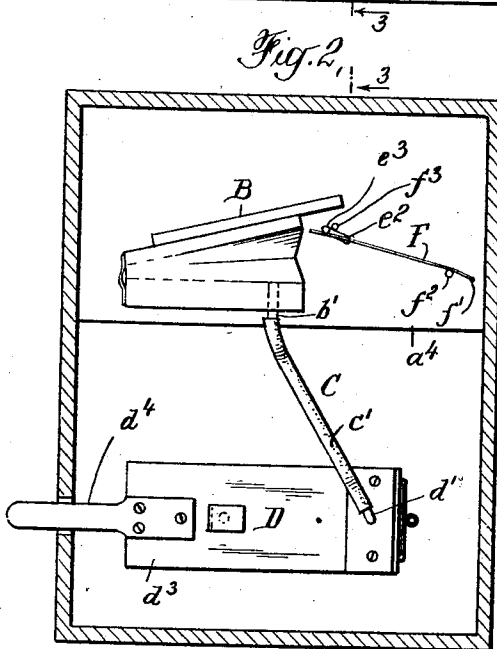
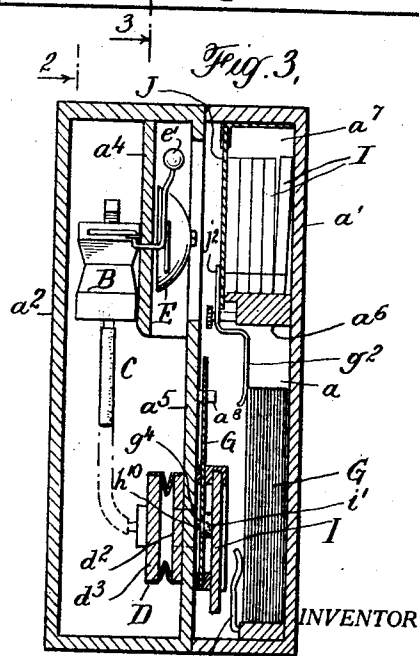


Fig. 3.



Witnesses:-
Helen A. Wray
Nathaniel C. Blomberg

BY George H. Parsons
Charles H. Brown
HIS ATTORNEY

May 24, 1927.

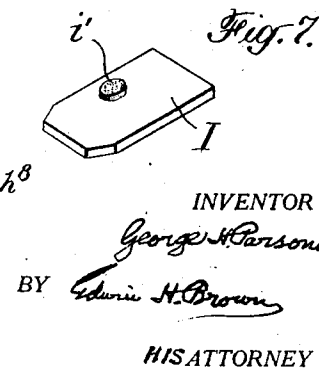
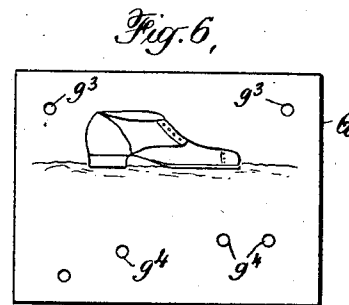
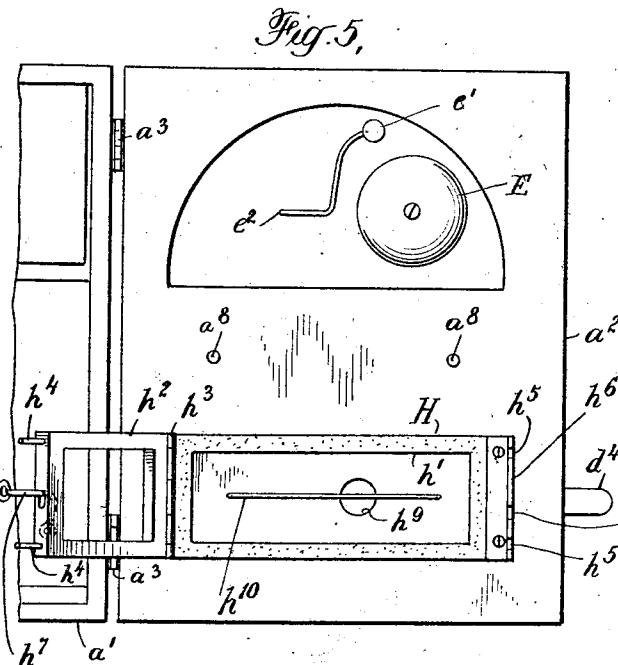
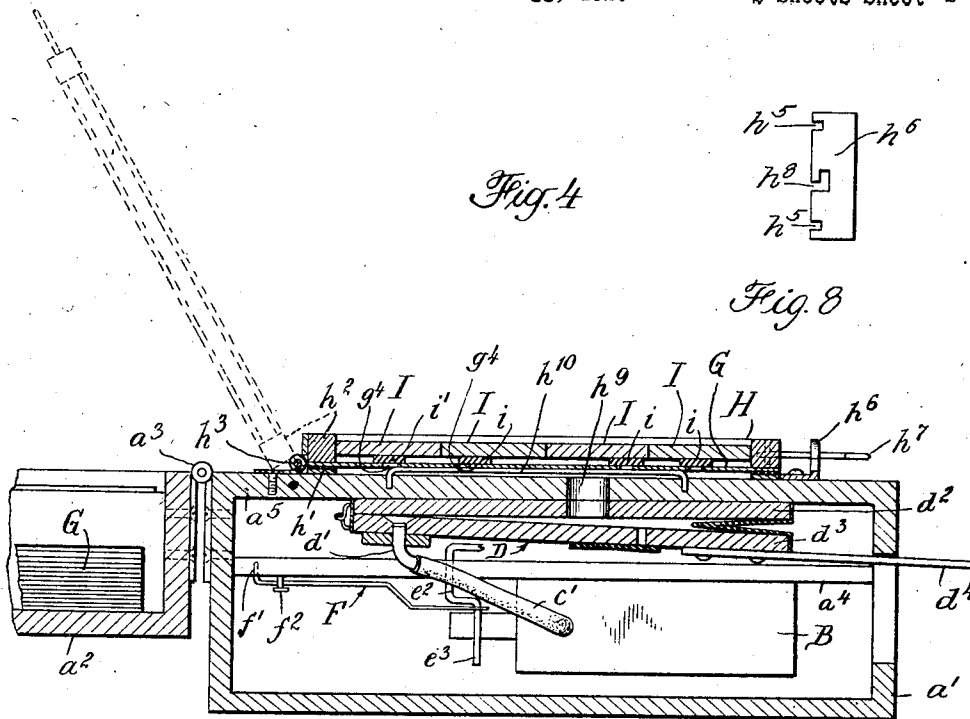
G. H. PARSONS

1,629,635

TOY

Filed June 18, 1923

2 Sheets-Sheet 2



Witnesses:-
Helen L. Wolff
Edwin C. Housh

UNITED STATES PATENT OFFICE.

GEORGE H. PARSONS, OF NEW YORK, N. Y.

TOY.

Application filed June 18, 1923. Serial No. 646,162.

This invention consists of an educational toy and has in combination, an annunciator, a pneumatic motor for operating the same, a manually operable device whereby said motor may be operated, an air chamber intermediate of the said device and said motor, a main set of cards and supplementary set of cards; each of the main set of cards being serviceable to cover or extend over the entire length of the air chamber and being provided with a number of distinctively positioned air openings and each of the supplementary set of cards having a cover for one of said air openings in one of the main set of cards.

By this combination of cards, a user of the toy will be obligated to select a card or cards of the supplementary set suitable for an opening or openings of a card in the main set before it will be possible to cause the operation of the annunciator. If the supplementary cards are marked with letters, figures or parts of a picture, the annunciator will indicate whether the proper use of supplemental cards has been made.

In the accompanying drawing, Fig. 1 is an elevation or top view of an educational toy embodying my improvement while open for use.

Fig. 2 is a horizontal section of the same taken on the plane of the dotted line 2, 2 in Fig. 3 looking in the direction indicated by the arrows marked near the ends of said dotted line.

Fig. 3 is a vertical transverse section of the same taken on the plane of the dotted line 3, 3 in Figs. 1 and 2 looking in the direction indicated by the arrows marked near the ends of said dotted lines.

Fig. 4 is a vertical longitudinal section taken on the plane of the dotted line 4, 4 in Fig. 1 looking in the direction indicated by the arrows marked near the ends of said dotted line.

Fig. 5 is a top view of portions of said toy with the appurtenant parts removed.

Fig. 6 is a top view of a card comprised in said toy.

Fig. 7 is a perspective view of a card comprised in said toy.

Fig. 8 is an elevation taken endwise of the toy showing a catch plate.

Similar letters of reference designate corresponding parts in all figures.

As here illustrated, the body of the toy is made in the form of a box comprising two

sections a^1 , a^2 , connected by hinges a^3 so that the section a^1 may be swung over on to the section a^2 to serve as a cover, as shown in Fig. 3 or swung into a position in substantially the same plane, as shown in Figs. 1, 4, 5.

In the section a^2 is a pneumatic motor B, which is connected by a tube C with a bellows D located in the same section. As shown said motor has a tube of metal extending through its fixed board b^1 from the interior of the motor to its exterior and a similar tube d^1 extends through the movable board of the bellows from the interior to the exterior; both of these tubes being connected by a tube of India rubber c^1 slipped over their ends. Thus is made a connection between the motor and the bellows and one which is simple and may be easily taken apart. The fixed board b^1 of the bellows is secured to a partition a^4 arranged inside the section a^2 of the toy body and the fixed board d^2 of the bellows is secured to the front board a^5 of the same section a^2 of the toy body.

The movable board d^3 of the bellows has a handle d^4 which extends through a slot in one of the sides of section a^2 of the toy body. By pressing down upon this handle the bellows D may be made to collapse the motor B when the toy is in condition for such operation.

Upon the partition a^4 in the section a^2 of the toy body is mounted a bell E having a clapper e^1 which comprises a pivot e^2 that extends through said partition a^4 and terminates behind said partition in an arm e^3 . A spring F consisting of a resilient wire fastened at its end f^1 to the partition a^4 , extends over a pin f^2 which is fixed to the partition a^4 , and bearing against the end of the bell clapper arm e^3 in such a manner as to press the latter upwardly towards and, at times, against a pin f^3 fastened in the partition a^4 and constituting a stop.

As here shown the front board a^5 of the section a^2 of the toy body has an arc shaped opening opposite that part of the partition a^4 on which the bell E and its clapper e^1 are mounted. The bell clapper is here shown as made to comprise the representation of an arm of a grotesque figure of a boy, consequently when the motor B operates, the boy will appear to be ringing the bell.

G designates a series of cards normally stored in a compartment a formed in the section a^1 of the toy body and held there

by a wire frame g^1 and by a wire finger g^2 which is pivoted to one of the walls a^6 of a compartment a^7 of the section a^1 of the toy body, so that it may be swung over one of its walls a^6 to permit the removal of one of the cards G, or swung over these cards to retain them in place.

Each of the cards G is provided with two registering holes g^3 which may be slipped over two pins a^8 projecting from the board a^5 of the section a^2 of the toy body.

Whenever a card G is engaged with these pins a^8 it will extend across a frame H composed of two sections h^1 , h^2 the former of which is stationary and the latter of which is connected by a hinge h^3 with the former so that it may swing over or away from the same. After a card G has been engaged with the pins a^8 and the swinging section h^2 of the frame H has been swung across a card G and fastened down it will cause that card to form a cover to a recess or air chamber formed by the section h^1 of the frame H.

The swinging section h^2 of the frame H has at its outer end two pins h^4 which when this section of the frame is swung downward over the section h^1 will engage with notches h^5 in a catch plate h^6 extending transversely from said section h^1 and thus be kept in proper alignment. The swinging section h^2 of the frame H also has a wire pin h^7 extending from it and when this section is swung downwardly, this pin may be engaged with a hook shaped notch h^8 in the plate h^6 by bending said wire transversely to enable it to enter the top of this notch and afterwards allowing it to swing under the hooked end thereof.

After a card G has thus been secured in place to form a covered chamber with the recess in the section h^1 of the frame H an opening h^9 which extends through the front board a^2 to the bellows will be covered.

A wire h^{10} extends across the hole h^9 and supports a card G in proper position.

Each of the cards G bears a picture of some object whose name can be spelled with the use of the toy. In Fig. 1 the fronts of two of these cards G are shown and it will be seen that one is a picture of a shoe and the other that of a person's foot, both therefore representing words of four letters each. This example of my invention is a toy confined to words of such class.

The section a^1 of the toy body has a compartment a^9 and in this are stored cards I each bearing a letter and made of such a size that four of them may be inserted at the same time in the swinging section h^2 of the frame H. Each of these cards bears a letter of the alphabet and has on its underside a projection i^1 which occupies a distinctive position on each of these cards.

While stored in the compartment a^9 these

cards I are retained in place by a large card J shown as marked with the word "Letters" which is hinged in place at its edge j^1 and may be fastened in a closed position by an arm j^2 extending from the pivot of the arm g^2 .

The swinging section h^2 of the frame H is provided along one of its inner edges, between its ends, with a groove of sufficient size to receive the edges of cards I. The user of the toy is intended to insert in such groove those four cards I which will spell the word depicted by the picture of such card G as may be within the frame H.

That part of each of the cards G which, when the card is in use, will be below the swinging section h^2 of the frame H, has a number of holes g^4 which form air openings in the top of the chamber of which the fixed section h^1 is a part. These openings g^4 are differently positioned to correspond with the projections i^1 of the different cards I. For example as illustrated in Fig. 1 the first hole (counting from the left) g^4 of the card G corresponds with the projection i^1 on the underside of the first card I and each hole g^4 corresponds with a projection i^1 throughout the whole number of cards in use. The projections i^1 serve as covers for the air openings g^4 of the cards G when cards G and I are in use. Only when the cards are in proper order to spell a word depicted by the card G, then in use, will all the holes g^4 be closed and not until then will it be possible for the bellows D to operate the motor B and sound the bell E.

It will be seen that the frame H with the cards G and I form an air chamber or passage intermediate of the bellows D and the pneumatic motor B.

A child using the toy will have to insert the proper cards I in the proper order to correspond with the picture of the card G in order to be able to ring the bell. Even if the proper letters are used, it will be impossible to ring the bell unless they are also arranged in the proper order.

What I claim as my invention and desire to secure by Letters Patent is:—

In a toy the combination of an annunciator, a pneumatic motor for operating the same, a device for actuating said motor, an air chamber intermediate the said device and said motor, cards which one at a time will form a cover extending over the entire length of the air chamber and are provided with a number of distinctively positioned air openings and a number of sets of other cards in which each card of a set has a cover for one of the air openings of one of those cards hereinabove named as forming a cover for the air chamber substantially as specified.

Signed at city of New York in the county of New York and State of New York this 21st day of May A. D. 1923.

GEORGE H. PARSONS.