Dec. 19, 1922. 1,439,670.

J. HYDE.

PUZZLE.

FILED OCT. 6, 1921.

Fig. 1,

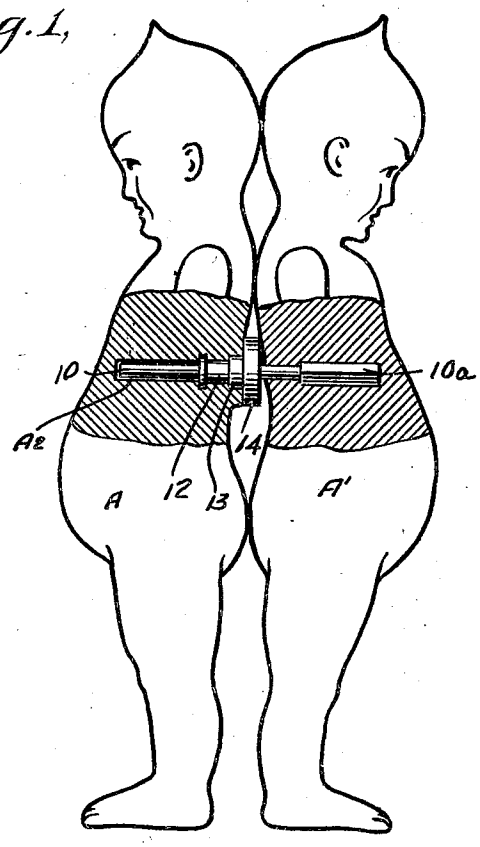


Fig. 2,

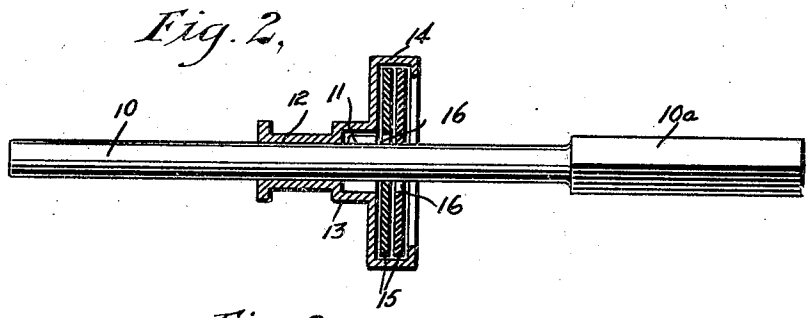
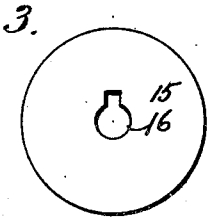


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH HYDE, OF PROVIDENCE, RHODE ISLAND.

PUZZLE.

Application filed October 6, 1921. Serial No. 505,844.

To all whom it may concern:

Be it known that I, JOSEPH HYDE, a citizen of the United States, and a resident of Providence, in the county of Providence and State of Rhode Island, have invented a new and Improved Puzzle, of which the following is a description.

My invention relates to a toy or puzzle and has for its general object to provide a puzzle comprising separable parts or bodies connected by novel means requiring particular manipulation thereof for the separation of the bodies.

The nature of the invention and its distinguishing features and characteristics will appear from the following description.

Reference is to be had to the accompanying drawing, it being understood that the drawing is merely illustrative of one example of the invention.

Figure 1 is a partly sectional side elevation of a puzzle embodying my invention, the novel connecting means being shown in side view;

Figure 2 is a longitudinal sectional view of the connecting means;

Figure 3 is a face view of one of the elements associated with the connecting means and to be hereinafter referred to.

In carrying out my invention in practice two bodies such as A, A′ are provided, adapted to be juxtaposed in a manner to make it appear that the bodies are actually joined one with the other. In the illustrated example twin doll figures are shown but it will be understood that the bodies may take any desired shape to simulate any given article.

The connecting means between the bodies is in the form of a transverse rod 10 permanently held at one end 10^a in one body A′, said end being here shown as enlarged and given an angular cross section to prevent its withdrawal from the molded figure. The rod 10 has a laterally projecting lug or protuberance 11 thereon and the one body A has a transverse elongated recess or pocket A^2 formed therein adapted to receive the adjacent end of the rod 10. In said body A at the recess is a tubular bushing or fitting 12 fixed in the body in any suitable manner. The fitting 12 is of enlarged diameter as at 13 to accommodate that portion of the rod 10 having protuberance 11. The fitting 12 has a still larger diameter at one end to form a housing 14 for disk-like elements 15, a plurality of which are provided. Each element 15 has an eye or opening 16 through which the rod 10 may pass, the opening having a key hole form or its equilvalent to pass also the protuberance 11 of the rod.

The two bodies A or A′ being connected by the described means, it will be necessary in order to separate the bodies, that the one be turned relatively to the other, to bring the lug 11 in line with the opening 16 of the adjacent element 15, whereupon the rod may be entered in said opening. The openings 16 of the respective elements 15 are diametrically opposite or otherwise out of exact register requiring that after the protuberance 11 enters the one opening the rod and the entered element 15 must be turned relatively to the remaining element 15 in order to bring the two openings and the protuberance 11 in line to permit the complete withdrawal of the rod separating the bodies.

I would state in conclusion that while the illustrated example constitutes a practical embodiment of my invention, I do not limit myself strictly to the exact details herein illustrated, since, manifestly the same can be considerably varied without departure from the spirit of the invention as defined in the appended claims.

Having thus described my invention, I claim:

1. A puzzle comprising two bodies adapted to be juxtaposed to have the appearance of being joined and separable connecting means therefor comprising a transverse shaft permanently fastened at one end in one of said bodies, the other body having a recess removably accommodating the other end of said rod, and a housing permanent in said last-mentioned body through which said rod may pass axially, said rod having a lateral protuberance, and a plurality of rotatable elements within said housing and having openings permitting sliding of the rod and its said protuberance through said elements.

2. A puzzle comprising two bodies adapted to be juxtaposed to have the appearance of being joined and separable connecting means therefor comprising a transverse shaft permanently fastened at one end in one of said bodies, the other body having a recess removably accommodating the other end of said rod, an element permanently disposed in the other body, said element and

said rod having a mating formation permitting withdrawal of the rod in a given position of said element relatively to the rod, and a housing in the recessed body and holding said element against displacement.

3. In a puzzle of the class described, a plurality of juxtaposed bodies, a rod provided with a projection thereon permanently secured to one of said bodies, a casing presenting a pair of annular chambers secured to the other body, alignable means within one of said chambers for permitting said rod to slide in or out of said means, said rod occupying the other annular chamber when said rod is positioned within said casing.

JOSEPH HYDE.