(No Model.)

G. A. SPENCE.

TOY APPARATUS.

No. 457,593. Patented Aug. 11, 1891.

Fig. 1.

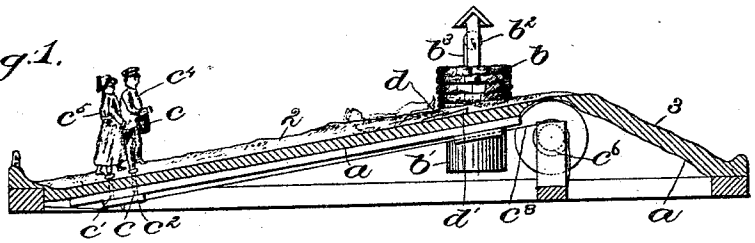


Fig. 2.

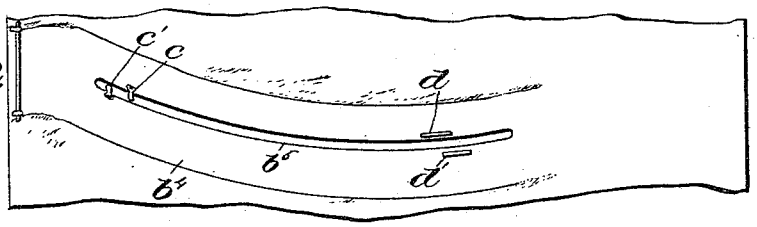
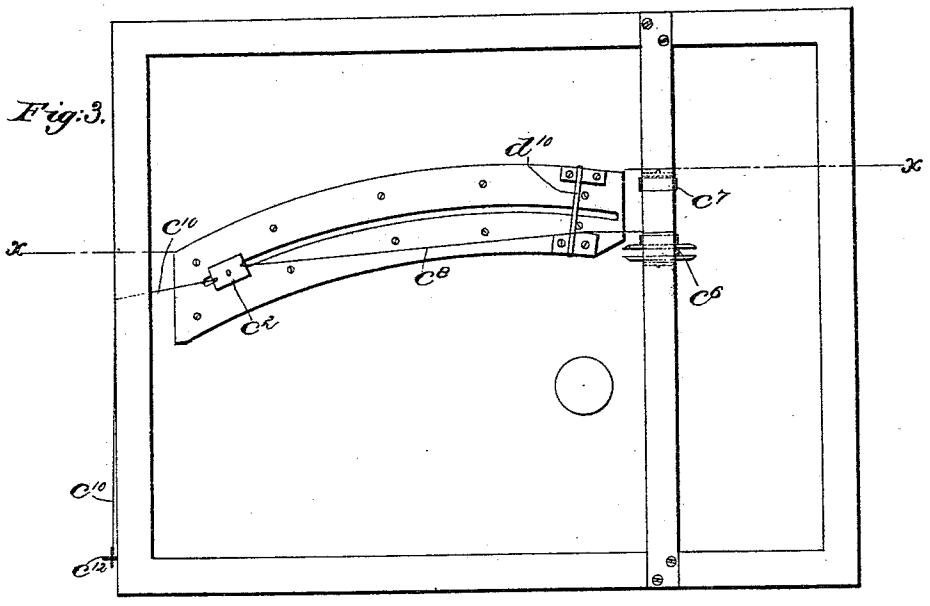


Fig. 3.



Witnesses.
Fred S. Grundy
Edward F. Allen.

Inventor:
George A. Spence,
by Crosby & Gregory
Attys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE A. SPENCE, OF SALEM, MASSACHUSETTS.

TOY APPARATUS.

SPECIFICATION forming part of Letters Patent No. 457,593, dated August 11, 1891.

Application filed January 27, 1891. Serial No. 379,290. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. SPENCE, of Salem, county of Essex, State of Massachusetts, have invented an Improvement in Toy Apparatus, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention has for its object to provide a novel toy apparatus by which a story or tale may be mechanically illustrated.

My invention is herein shown as embodied in an apparatus constructed, as will be described, whereby the story of "Jack and Jill" may be mechanically represented.

In accordance with my invention I employ a toy-carrier adapted to be moved as by a spring or in any other desired manner, and a device located in the path of movement of the toy-carrier to disengage or dislodge the toy from its carrier to mechanically carry the story into execution.

My invention in a toy apparatus therefore consists in the combination, with a base having an inclined portion and a structure supported by the base near the top of the inclined portion, of a toy and toy-carrier, means concealed within the base to move the carrier and toy up the inclined plane, and a disengaging device attached to and near the upper end of said incline to act on the under side of the toy and lift it from its carrier, substantially as will be described.

Other features of my invention will be pointed out in the claims at the end of this specification.

Figure 1 is a section of a toy apparatus embodying my invention, the section being taken on line $x\ x$, Fig. 3, in a position reverse from that shown in said figure; Fig. 2, a top or plan view of the apparatus broken out to save space in the drawings, and Fig. 3 an under side view of the apparatus to more clearly show the working parts of the same.

The apparatus herein shown is provided with a base a of papier-maché, wood, or other suitable material. The base a is made inclined to represent a hill, one side of the hill (marked 2) being made longer than the other side, (marked 3.) The inclined side 2 substantially near the top supports, as shown, a structure representing a well, the upper portion b of the well being made of papier-maché or of any other suitable or desired material and the lower portion b', located below the base a, being preferably made of metal, or it may be of any desired material. The upper portion b of the well is provided with the usual windlass b^2, upon which is wound a cord b^3, representing the usual chain or rope, and to which is fastened a pail or bucket. (Not shown.) The inclined side 2 of the base is provided with a preferably smooth portion b^4, representing a road leading from the bottom to the top of the hill. The road b^4 is preferably made curved or other than straight, and is provided with a slot b^5, extended through the inclined portion 2 of the base from substantially near the bottom to substantially near the top of the hill. The slot b^5, as herein shown, has extended up through it two uprights or posts $c\,c'$, attached to a carrier c^2, herein shown as a block or piece, which may be of wood or other material. The posts or uprights $c\ c'$, as represented, are provided with sockets in their upper ends, into which may be fitted rods or frames secured to the characters $c^4\ c^5$, representing Jack and Jill.

The toy-carrier c^2 is preferably automatically moved up the hill by a motor, herein shown as a spring c^6, wound upon the shaft of a drum c^7, to which is secured one end of a cord or other connection c^8, having its other end fastened to the carrier c^2. The carrier c^2 may be returned to its normal or starting position (shown in Fig. 2) by means of a cord c^{10}, which is extended preferably through a hole in the base to the outside or front of the base, where it may be fastened to a hook c^{12} or in any other suitable or desired manner.

In order to carry the story mechanically into effect, a disengaging device is located in the road b^4 near the top of the hill in proximity to the well. The disengaging device is herein shown as two inclined projections $d\ d'$ on opposite sides of the slot b^5. The projections $d\ d'$ are adapted to engage lugs or projections on the rod or frame to which the characters $c^4\ c^5$ are secured and disengage the said rods or frames from their carrier. This is effected, as herein shown, by the inclined projections lifting the rods or frames from the sockets in the top of the uprights $c\,c'$. When the rods or frames are disengaged from the uprights on the car-

rier, the characters fall upon the inclined portion 2 of the base, and in practice the said inclined portion will preferably be made steep enough to cause the characters c^4 c^5 to descend to the bottom of the hill. The projection d is placed slightly in front of the projection d', so that the character c^4, representing Jack, will fall before the character c^5, representing Jill. The character c^4 has a pail e hung upon its arm, and, if desired, the character c^5 may also be provided with a pail.

In operation, the characters are fitted upon the carrier and the cord c^{10} released, so as to permit the spring c^6 to wind the cord or other flexible connection c^8 upon the drum c^7 and cause the carrier to ascend the hill until the characters are disengaged by the cams or projections d d', and the carrier may then be returned to its normal position by pulling upon the cord c^{10}.

I have herein shown my invention as embodied in an apparatus for mechanically carrying into effect the story of Jack and Jill; but I do not desire to limit my invention to the mechanical representation of this particular story, as the gist of my invention resides in the carrier for the toy, means to move the carrier, and a device to disengage the toy from its carrier.

In order to obviate shocks to the toy-carrier, a cushioning device is preferably employed, which in the present instance is shown as a rubber band or strap d^{10}, extended across the path of movement of the toy-carrier c^2, it having its ends fastened on opposite sides of the slot b^5.

I claim—

1. In a toy apparatus, the combination, with a base having an inclined portion and a structure supported by the base near the top of the inclined portion, of a toy and toy-carrier, means concealed within the base to move the carrier and toy up the inclined plane, and a disengaging device attached to and near the upper end of said incline to act on the under side of the toy and lift it from its carrier, substantially as described.

2. In a toy apparatus, the combination, with a base having an inclined portion provided with a slot and a structure supported by the base near the top of the inclined portion, of a toy, a toy-carrier located below the base and provided with uprights extended up through the slot to receive the toy loosely thereon, means to move said carrier, and projections d d', secured to the base substantially near the top of the inclined portion adjacent to the slot to engage and remove the toy from the carrier, substantially as described.

3. In a toy apparatus, the combination, with a toy and a carrier to which the toy is loosely attached and means to move said carrier, of a disengaging device to act on the under side of the toy and lift it from its carrier, and a cushioning device or elastic cord located across the path of movement of and to limit the movement of the toy-carrier and resist shock to the said carrier, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE A. SPENCE.

Witnesses:

JAS. H. CHURCHILL,

FRANCES MAY NOBLE.