(No Model.)

C. PFANNE.

Toy Doll.

No. 237,897. **Patented Feb. 15, 1881.**

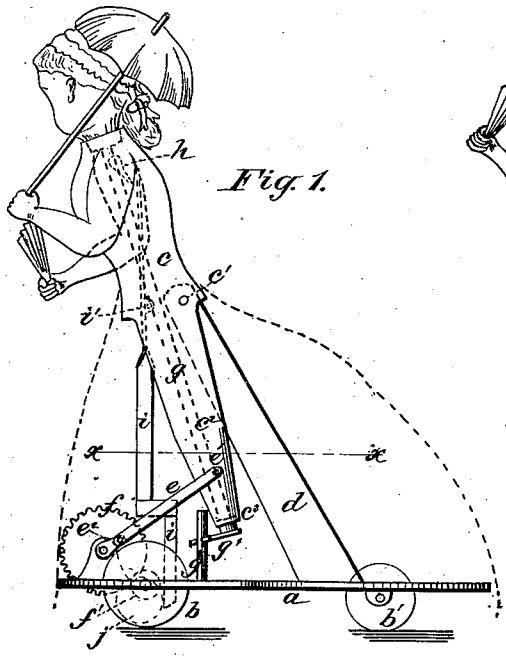


Fig. 1.

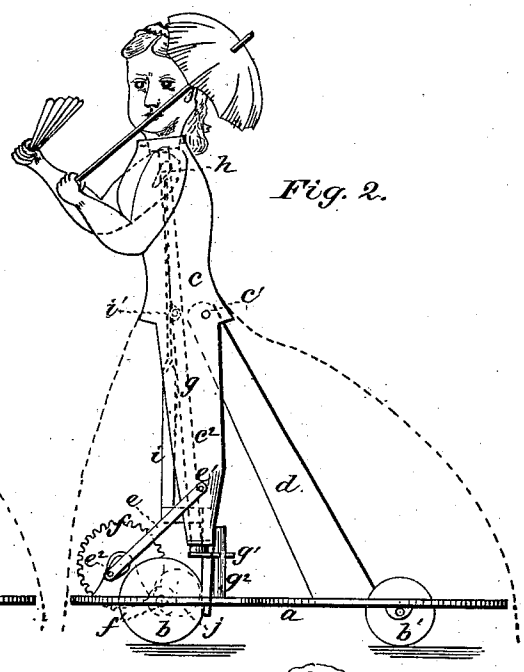


Fig. 2.

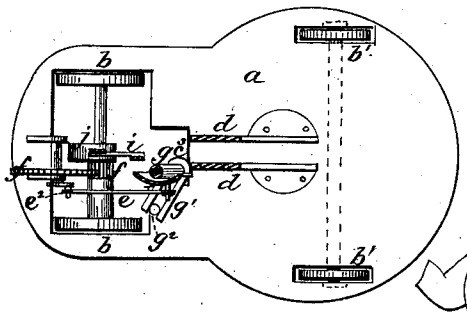


Fig. 3.

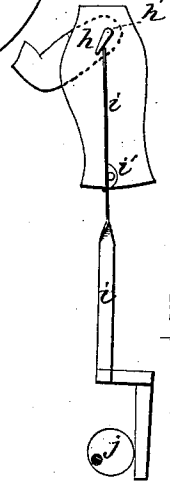


Fig. 5.

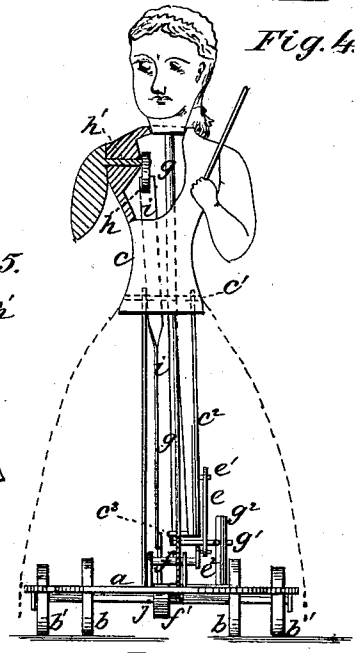


Fig. 4.

Witnesses
Fred F. Church.
Floyd Norris

Inventor:
Charles Pfanne
by his Attys
Johnson and Johnson

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES PFANNE, OF WASHINGTON, DISTRICT OF COLUMBIA.

TOY DOLLS.

SPECIFICATION forming part of Letters Patent No. 237,897, dated February 15, 1881.

Application filed December 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES PFANNE, a subject of the German Emperor, who has declared his intention to become a citizen of the United States, residing at Washington, in the District of Columbia, have invented new and useful Improvements in Toy Dolls, of which the following is a specification.

The object of my invention is the production of a toy doll which will make bows, give a side turning of the head in doing so, and fan itself with a fan carried in the right hand by mechanism connected with and operated by carrying-wheels.

Referring to the accompanying drawings, Figure 1 represents a side elevation of a toy doll as undressed and in the position of making a bow; Fig. 2, a similar view of the doll, the arm being raised as in the act of fanning; Fig. 3, a horizontal section on the line *x x* of Fig. 1; Fig. 4, a front sectional elevation; and Fig. 5, a detail sectional view, showing the devices for vibrating the arm in giving the fanning action.

The doll is mounted upon a suitable carriage, which in the example shown consists of a plate, *a*, supported upon four carrying-wheels, *b b'*, of suitable size. The body *c* of the doll is pivoted at or near the waist, at *c'*, to standards *d d* fixed upon the carriage-plate, and upon this pivot the bowing movements are made by means of a rod, *e*, pivoted at *e'* to a rigid extension, c^2, of the body, and which may represent the left leg, the other end of said rod *e* being connected with a crank, e^2, on the arbor of a pinion, *f*, mounted in suitable bearings above the carriage-plate, and operated by a smaller pinion, *f'*, on the axle of the front wheels, *b*. Each revolution of the crank gives a bowing movement, and the frequency of such movements is determined by the size of the pinions. The head is loosely seated, and is carried upon a rod, *g*, which, passing through the body, depends by the side of the body-extension c^2, and, passing through an eye, c^3, at the lower end of said extension, is provided with a horizontal slotted arm, *g'*, which fits over a pin, g^2, rising from the carriage-plate in rear of the front supporting-wheels. This slotted arm and fixed pin form a sort of crank-connection for the head-carrying rod *g*, and serve as the means for giving the head the side-turning movement, the extent of which is determined by the extent of the bowing movement. In vibrating the body the action of the slotted arm *g'* upon the fixed pin g^2 is to turn or swivel the rod *g*, and therefore give the side-turning movement to the head. In this swiveling action of the head-supporting rod the slotted arm changes its position with the pin, moving over it as the lower end of the body-extension c^2 is moved past said pin to the front in the erect position of the body, and to the rear of said pin in the bowing position of the body, and the bowing and the side turning of the head are simultaneous with the vibration of the arm which carries the fan, and which is as follows: The right arm is pivoted in such manner that its weight will tend to maintain it in a position of rest or half-extension, and a crank, *h*, on the inner end of said pivot-bearing *h'* in a depending position, as shown in Figs. 1, 2 and 5, so as to receive the action of the upper end of rod *i*, pivoted at *i'* in the body at or near the waist, and extending down in position to receive the action of a cam or tappet, *j*, on the shaft of the front wheels. The relation of the rod to the arm-crank *h* and to the revolving cam or tappet *j* is such that the cam, as it is revolved by the action of the front wheels, will act upon the lower end of the pivoted rod *i*, and, forcing it backward with a quick action, cause thereby the upper end of said rod to strike the arm-crank *h*, and pushing it frontward will raise the arm with a quick action, and it will fall as quickly by its weight each time the cam or tappet vibrates said pivoted rod, and in this way produce the vibration of the fan-carrying arm. The size and form of the cam or tappet should be such as to give about four vibrations of the arm during the bowing movement.

I propose to make the body and carriage of metal, to give the requisite weight to insure the driving of the front wheels; but the body may be made of any suitable material, and the carriage may be suitably weighted.

A parasol is provided in the left hand, and the dressing of the doll may be made to serve as the means for concealing the carriage mechanism.

I claim—

1. In a toy doll, the combination of a carriage with a doll-body pivoted thereon and

caused to have bowing movements upon said pivot as said carriage is drawn by means connecting an extension of the body below said pivot with the carriage-wheels, substantially as described.

2. The combination, in a toy doll, of a carriage and a doll-body mounted thereon with means for connecting the arm which carries a fan with the axle of the carriage-wheels, whereby to produce the vibrations of the fan-carrying arm as the carriage is drawn, substantially as described.

3. The combination, in a toy doll, of a carriage, a doll-body pivoted thereon, and means for producing bowing movements of said body by the action of the carriage-wheels, with means for effecting the side-turning movements of the head during the bowing action of the body, substantially as described.

4. The combination, in a toy doll, of a carriage and a doll-body pivoted thereon, substantially as described, with means for producing bowing movements of the body, means for giving side movements to the head, and means for effecting the vibration of the arm which carries the fan, substantially as herein set forth.

5. The combination of a doll-body and a carriage upon which it is pivoted with a rod to which the head is attached, having a slotted-arm connection with a fixed pin on the carriage, and the crank-connection of said body, by suitable means, with the axle of the carriage-wheels, substantially as described, for the purpose specified.

6. The combination of a doll-body and a carriage upon which it is pivoted, of a rod pivoted in said body, and means for vibrating it operated by the axle of the carriage-wheels, with the pivoted arm which carries the fan having a crank on its inner end in position to receive the vibrating action of said pivoted rod, substantially as described, for the purpose specified.

7. The combination of a doll-body and a carriage upon which it is pivoted with means for producing bowing movements of the body, means for giving side-turning movements of the head, and means for effecting the vibrations of the arm which carries the fan, the said means consisting of the pivoted rod *e*, the crank e^2, the pinions *f f'*, and the front carriage-wheels, the rod *g*, and the fixed pin g^2, which connects with its slotted arm *g'*, the pivoted rod *i*, its operating cam or tappet *j*, and the crank *h* of the fan-carrying arm, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHARLES PFANNE.

Witnesses:
A. E. H. JOHNSON,
J. W. HAMILTON JOHNSON.