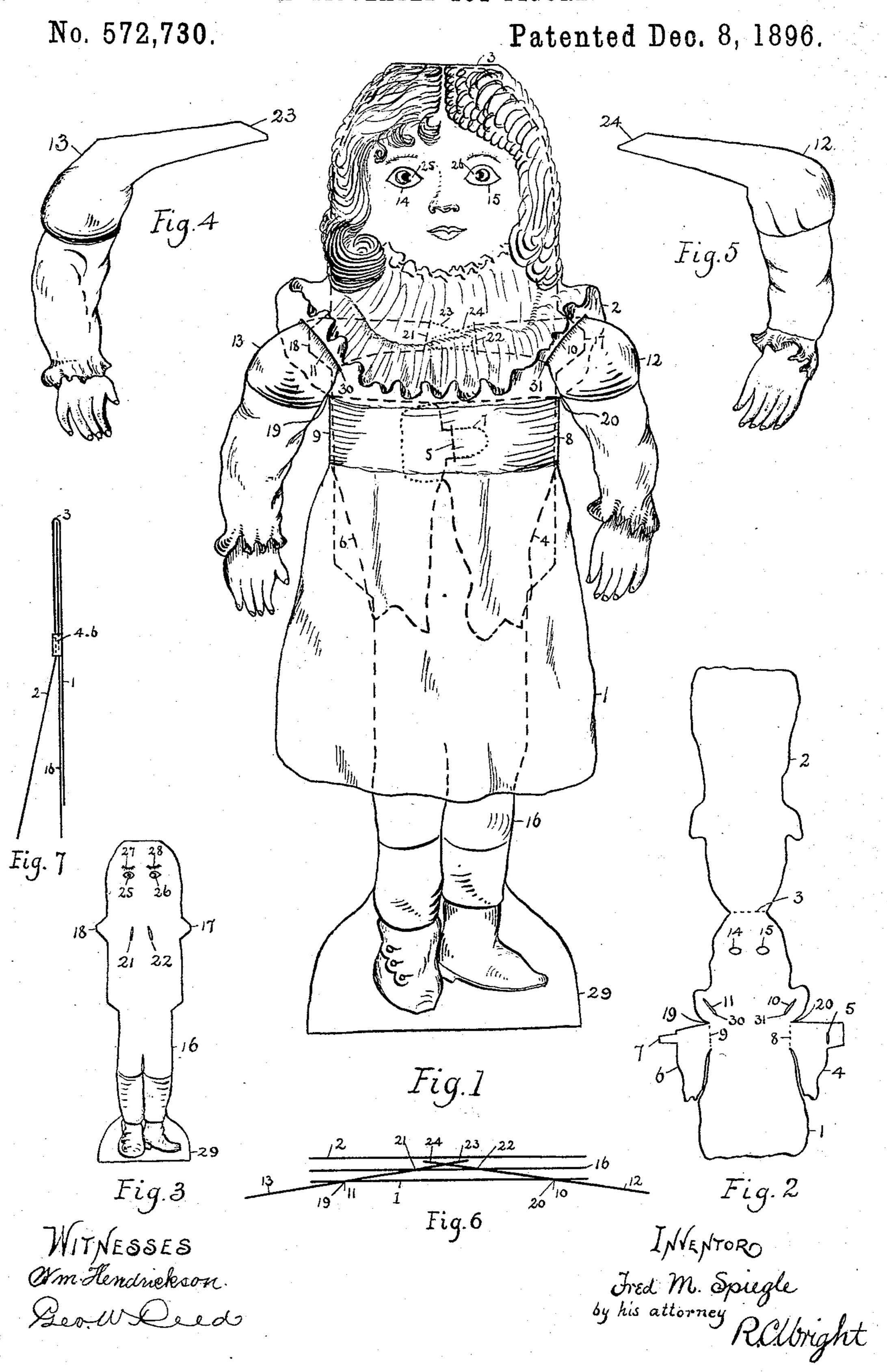
F. M. SPIEGLE.
ARTICULATED TOY FIGURE.



United States Patent Office.

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ARTICULATED TOY FIGURE.

SPECIFICATION forming part of Letters Patent No. 572,730, dated December 8, 1896.

Application filed May 28, 1896. Serial No. 593,380. (No model.)

To all whom it may concern:

Be it known that I, FRED M. SPIEGLE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Articulated Toy Figures; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in figures made in representation of living objects and in a manner to have some of the movements of such objects reproduced in a life-like manner; and the objects of my improvement are to readily produce these representations to enable them to be cheaply produced in large quantities for commercial purposes. The figure I illustrate is a child in which I move the arms and also cause the eyes to assume a waking or sleeping aspect. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front view of one of my figures entire. Fig. 2 is a view of the front and back parts of the figure. Fig. 3 is a view of the central or interior part of the figure. Fig. 4 is one of the arms. Fig. 5 is the other arm. Fig. 6 is a section on line X Y, Fig. 1; and Fig. 7 is an edge view.

Similar reference-figures refer to similar

parts throughout the views.

The front 1 and the back 2 of the figure are composed of an integral piece, the material being paper or other suitable material well adapted to the purpose, the front and back being folded or doubled over at 3, and at one side of the front is a flap 4, having a slit 5 therein, and at the opposite side is another 45 flap 6, having a tongue 7 thereon, the parts 1 2 4 6 7 being integral. The flap 4 folds at dotted line 8 and the flap 6 folds at dotted line 9.

At 10 a diagonal slit is made, and at 11 an-50 other and oppositely-diagonal slit is made.

Through these slits the limbs 12 13 are inserted.

At 14 15 are openings through which the

eyes are exposed.

The central member of my figure is composed of a single piece 16, having a projection 17 on one side and another projection 18 on the other side. These projections extend over the fold-lines 8 9 and abutting points 19 20 and prevent the part 16 from moving too 60 far down or its coming out.

At 21 22 are slits set diagonally opposite. Upwardly tending through these the ends 23 24 of the arms 12 13 are passed, and thereafter the ends may be doubled down and fastened as doubled, if desired. Above 21 22 are representations of wakeful eyes 25 26, and above these are representations of the

eyes 27 28 as closed in sleep.

My central figure 1 shows the assembled 70 parts, and the manner of assembling is as follows: The parts 1 and 2 are first doubled at 3. The part 16 is then inserted between them. Then arm 12 is inserted into slit 10, and 13 is passed through 11. Then 24 of limb 12 is 75 passed through slit 22, and 23 of limb 13 is passed through 21. Flap 4 is now doubled down on line 8, and flap 6 is doubled down on line 9, and tongue 7 is inserted in slit 5. The figure is now complete, as seen in Fig. 80 1, and if the part 29 be grasped and pulled down the body 16 will come down, bringing the closed eyes 27 28 in view through the apertures 14 15. The ends 23 24 of the limbs 12 13 will also descend, and the limbs being 85 moved over the ends 30 31 of slits 1011, which act as fulcrums, the outer ends of the limbs will swing outward. A pushing upward of 16 by means of 29 will reverse the motion of the limbs and expose to view the open eyes. 90

I do not confine myself to the proportions or exact objects shown in the drawings or to the use of a front and back body part, as the back body part, while capable of ornamentation, is not otherwise essential, as the flaps 95 from the front part inclose and secure the body part and at less cost. Therefore I may in some instances omit the back body part, as my mechanism is as readily adapted and equally as well represents animal figures hav-

ing moving external parts of the figure and eyes as it represents a human being, as seen in Fig. 6. The figure may be made to stand by slightly bending the part 2, below the flaps 4 6, outward.

Í claim—

1. In an automaton figure, the combination of an exterior, folded upon and secured together by flaps, tongues and slits, a central part adapted to be moved within the exterior, arms inserted through the exterior and secured to the inner part and so formed as to fulcrum upon the end of the slit where inserted through the exterior, means for limiting the movement of the inner part and means whereby representations of open and closed eyes are exhibited through the same apertures, substantially as described and set forth.

2. In an automaton figure, a front part having flaps and slits to fold and fasten at the back, a body part embraced by said flaps, slits in the front part for the insertion of limbs fulcrumed upon the ends of the slits, slits in the body part for securing said members, ap-

ertures in the front part and a double set of 25 eye representations on the body part and means to present them for observation through said apertures, substantially as described.

3. In a figure representation of a living object, a front or exterior part having flaps thereon, slits and tongues for the flaps, means to join the flaps and embrace a movable body part, fulcrum-slits in the front part adapted to have arms inserted therethrough and fulcrumed at an end thereon, slits in the body part for securing said arms or moving members, apertures through the front part eye representations upon the body part and means to present such representations before said 40 apertures, substantially as described.

In testimony whereof I affix my signature

in presence of two witnesses.

FRED M. SPIEGLE.

Witnesses:
GEO. W. REED,
R. C. WRIGHT.