No. 818,842. PATENTED APR. 24, 1906.

H. W. MEIER.

ARTICULATION OF DOLLS.

APPLICATION FILED AUG. 15, 1905.

Fig. 2.

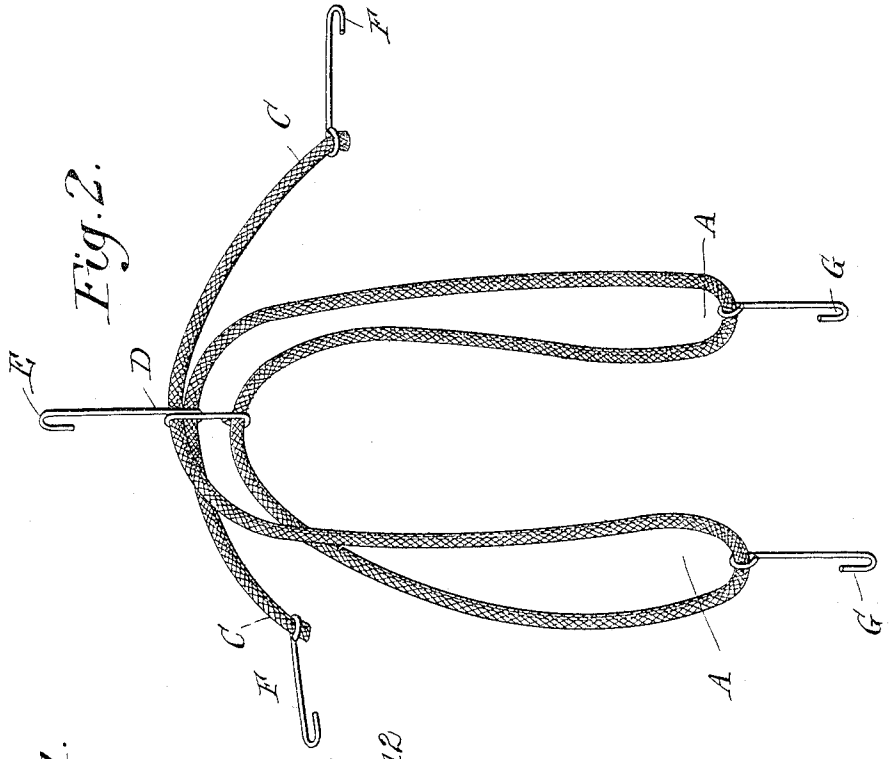
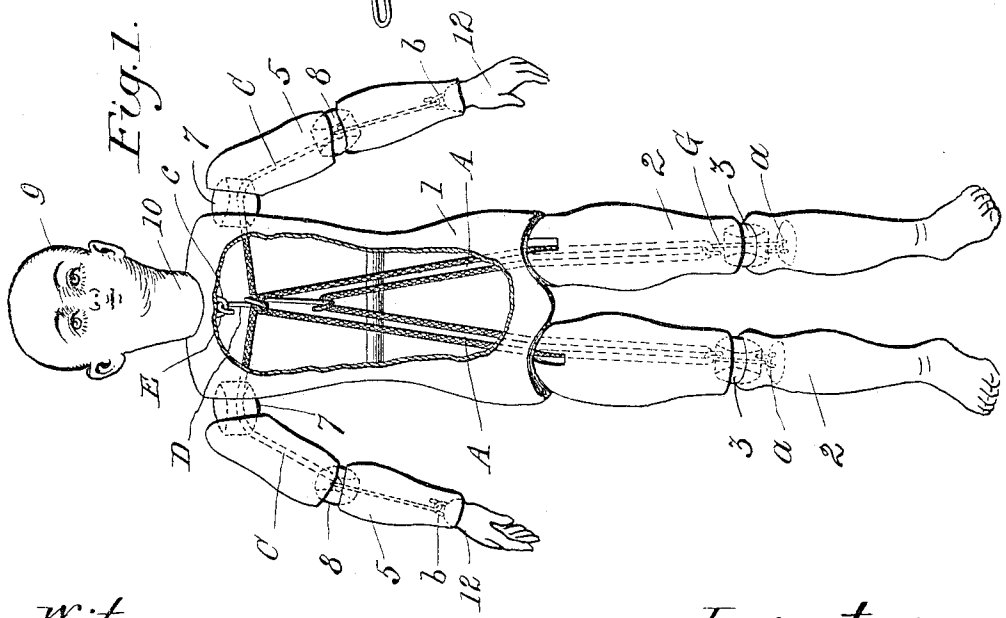


Fig. 1.



Witnesses:

Alice G. Harris.

M. Barton.

Inventor:

Harry W. Meier,

by Chas. W. J. Howard,

Attys.

ANDREW B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HARRY W. MEIER, OF BALTIMORE, MARYLAND.

ARTICULATION OF DOLLS.

No. 818,842. Specification of Letters Patent. Patented April 24, 1906.

Application filed August 15, 1905. Serial No. 274,300.

To all whom it may concern:

Be it known that I, HARRY W. MEIER, of the city of Baltimore and State of Maryland, have invented certain Improvements in Means for the Articulation of Dolls, of which the following is a specification.

This invention relates to improved means for connecting to the trunk the various movable parts of a doll; and it consists in a branched elastic articulating device provided with hooks or similar appliances, which as an entirety is placed in the trunk of the doll and extended therein, so that its various hooks may be attached to staples on the extremities of the doll, as will hereinafter fully appear.

In the further description of the said invention which follows reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure 1 is a front view of a doll with certain parts of the trunk torn away to disclose the articulating device, and Fig. 2 a front view of the said articulating device as it appears before it is inserted in the doll.

Referring now to the drawings, 1 is the hollow body or trunk of the doll, and 2 2 are the hollow legs, the upper ends of which are hemispherical and set in sockets in the trunk, so that the legs may be easily moved independently of the trunk. The knee-joints are formed of hollow spheres 3, which rest in sockets and connect the two parts of the leg. The arms 5 are hollow and constructed in a manner similar to that of the legs, the shoulder-joints being formed of hollow spheres 7 and the elbow-joints by similar spheres 8.

9 is the head, and 10 the neck, which is rounded at its end and rests in a socket in the trunk. The hands, which are movable independently of the forearms, are denoted by 12.

The lower portions of the legs 2, the hands 12, and the head 9 are provided with staples *a*, *b*, and *c*, respectively, to admit of the articulation of the doll, as hereinafter specified.

The doll thus far described is of well-known construction and does not in itself embody any part of the present invention.

The articulating device above briefly referred to is shown detached and on an enlarged scale in Fig. 2, and it consists in part of a single elastic cord formed into the pendent leg-loops A and with its ends C extended in opposite directions. A change in shape of this portion of the articulating device except that resulting from the elongation of the same in its application to the doll proper is prevented by the wire D, which is fastened to the three parts of the cord and its upper end formed into a hook E, adapted to unite with the head-staple *c*, and the loops A have hooks G, which connect with the leg-staples *a*. The ends of the cord are fitted with hooks F, which unite with the hand-staples *b*.

In the bending of the wire D to effect its attachment to the elastic cord the crossed ends of the cord are shown as separated from the central portion of the cord, and such connection is preferred, as the flattening of the wire to prevent the slipping of the crossed ends is more effective with two cords than when three cords are grouped.

Supposing all the movable parts of the doll to be detached from the trunk 1, the articulating operation consists as follows: The articulating device in the condition shown in Fig. 2 is placed in the trunk 1 through the neck-opening in the trunk, with the ends of the cord extending through the armholes in the trunk. The hooks G are then united to the leg-staples *a*. The hook E is then pulled upward through the neck-opening and attached to the head-staples *c*. The head and legs are thus drawn tightly in contact with the trunk. The ends of the cord are then run through the arms and its hooks F united with the hand-staples *b*.

It will be understood that to effect life-like attitudes in the doll a greater strain is requisite to hold the head and legs to the body or trunk than is required to keep the arms in place, and this difference in strains is accomplished by means of the articulating device described, as in the attachment of the head and legs to the trunk two cords are stretched, while in the connecting of the arms one cord only is stretched in each. Further, in most dolls the opening in the shoulder-joints is not large enough to admit of the free passage through them of a double cord.

I claim as my invention—

1. An articulating device adapted to be placed in a doll, which consists of a single piece of elastic cord formed into leg-loops provided with hooks, and having its ends crossed and extending in opposite directions, combined with a hook at each end of the elastic cord, means to fasten the crossed ends of the said cord to the central portion of the

cord, and a hook leading upward from the central portion of the cord, substantially as specified.

2. An elastic articulating device for a doll which comprises a head-hook, two arm-hooks, two leg-hooks, and an elastic cord whereby all of the said hooks are connected, the whole forming an entirety adapted to be placed as an entirety in the body or trunk of the doll, and the said hooks being applicable for attachment to the movable parts of the doll, and thereby effect a yielding connection between the same and the trunk, substantially as specified.

HARRY W. MEIER.

Witnesses:
WM. T. HOWARD,
THOS. H. FITCHETT.