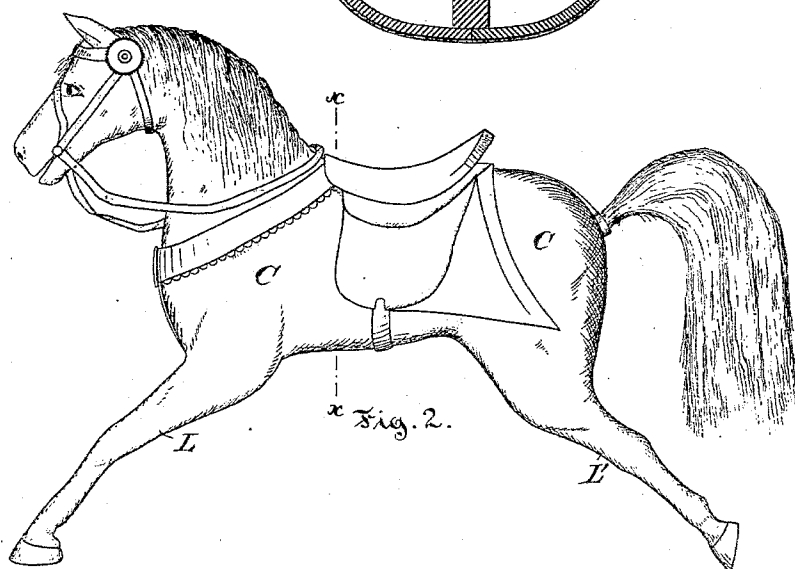
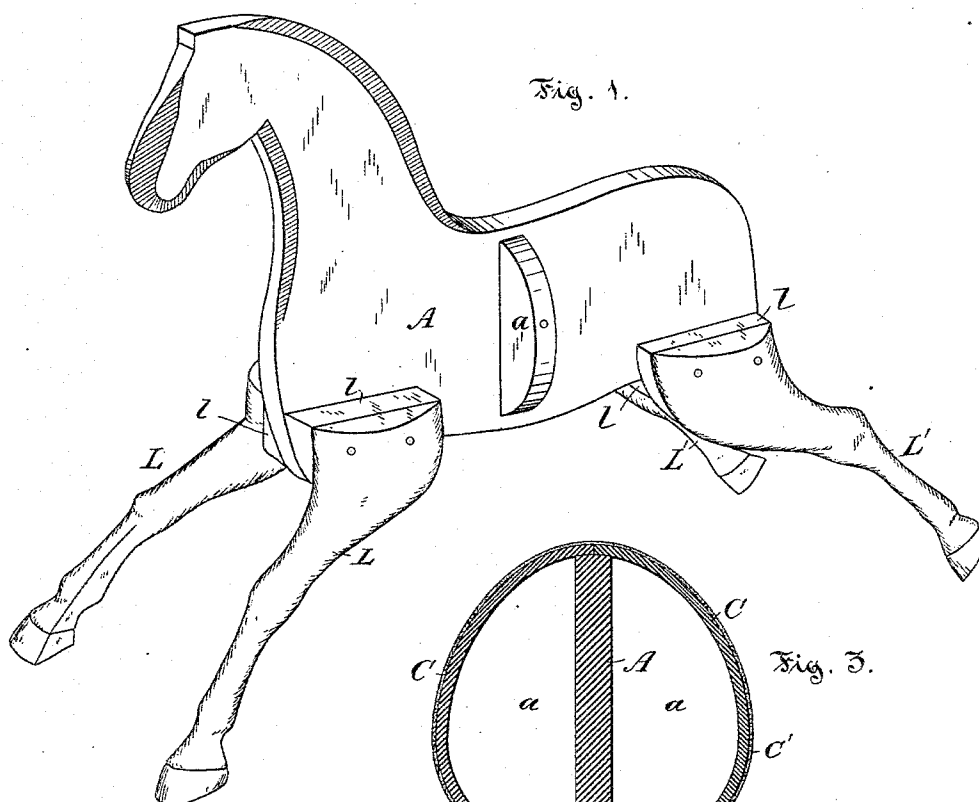


(No Model.)

M. LINDNER.
TOY OR MODEL HORSE.

No. 412,109.

Patented Oct. 1, 1889.



Witness:
 Chas. Haley.
 James. Egan

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UNITED STATES PATENT OFFICE.

MORITZ LINDNER, OF BERLIN, ONTARIO, CANADA.

TOY OR MODEL HORSE.

SPECIFICATION forming part of Letters Patent No. 412,109, dated October 1, 1889.

Application filed December 29, 1888. Serial No. 294,957. (No model.) Patented in Canada May 9, 1885, No. 21,635.

To all whom it may concern:

Be it known that I, MORITZ LINDNER, of Berlin, in the Province of Ontario, Canada, have invented new and useful Improvements in Toy or Model Horses or other Animals, (for part of which I have obtained a patent in Canada, No. 21,635, bearing date May 9, 1885,) and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to the construction and manufacture of imitation animals, such as rocking-horses and toys used for riding either with or without rockers or wheels, or models used by harness-makers and others, or for other purposes.

The better class of these toys and model animals have hitherto, when strength was required, been cut out of solid timber, and consequently been both very heavy and expensive, while it was difficult to shape them true to nature. To produce a rocking-horse out of solid timber requires a piece of wood very large and heavy compared with the size of the finished article, and the weight of the same is a source of expense in transport and of danger in the hands of children when playing with them.

My improvements overcome these objections; and they consist, mainly, in constructing merely a flat wooden skeleton and to cover it with a molded shell or skin consisting of a number of layers of stiffened canvas or other similar material formed and molded in two halves upon a more or less perfectly-shaped model, the legs (or other slender portions of an animal requiring strength or stiffness) being cut out of solid wood and fastened to the skeleton, thus producing substantially a hollow article.

Figure 1 represents in perspective view the wooden skeleton of a rocking-horse ready to receive the covering shell or skin. Fig. 2 is an elevation of a finished horse. Fig. 3 is a cross-section of the same on line *x x*, showing the internal skeleton and the outer shell or skin.

The body A of the skeleton, Fig. 1, is cut out of a board to conform in its longitudinal outline to the general outline of the finished

article, but is flat or of one thickness throughout, except in such places of the edge where the finished article is thinner than the board. In places where pressure is likely to be applied (as, for instance, under the saddle) a rib *a* is secured edgewise upon the flat side of the board, the outline of such rib conforming to the rotundity of the body. The legs L, L', L' are cut out of solid wood, and are secured upon the skeleton in their proper position, blocks *l* being interposed to obtain the necessary distance from each other laterally. This outline skeleton is made the receiver and carrier of the finished shell C. This is produced by cemented successive layers of a stiffened fabric laid and molded upon a more or less perfectly-modeled pattern-horse made in two halves and corresponding, of course, in size and shape to the skeleton A. The two halves of the body-shell thus produced upon the pattern are removed therefrom and secured upon the skeleton and suitably trimmed and finished in any desired manner, as shown, for instance, in Fig. 3.

The shell C may be painted or finished in any other desired manner. For the best class of work, however, I prefer to cover it with felt C' of the desired color, which is secured upon the shell by cement and which produces a natural appearance.

It will be noted that what has been said of horses is equally applicable to other animals.

Imitation animals thus produced are very light, strong, and durable, and as the pattern or model serves for the production of a large number of specimens it becomes worth while to model it with considerable truth to nature, and thus produce goods of great beauty without extra cost. The saving of lumber is also a considerable item.

In the hands of children rocking-horses constructed as above are more harmless, as in the event of one falling on a child no serious consequence can result, owing to the extreme lightness of the article.

I claim as my invention—

1. A hollow imitation figure consisting of a flat vertical wooden skeleton having the bulky portions covered with a shell in two halves molded upon a properly-shaped model, said

shell consisting of cemented layers of stiff-
ened fabric, the parts of the shell subjected
to pressure supported by ribs upon the skele-
ton, and the slender limbs finished in solid
5 material and secured to said skeleton, sub-
stantially as set forth.

2. In hollow toy or model figures, a cov-
ering of felt in imitation of natural skin, in
combination with a molded shell composed of

two halves and consisting of layers of stiff- 10
ened fabric and solid limbs, all secured to a
flat vertical skeleton strengthened by ribs,
substantially as set forth.

MORITZ LINDNER.

Witnesses:

ARNO F. H. LINDNER,
CONRAD BITZER.