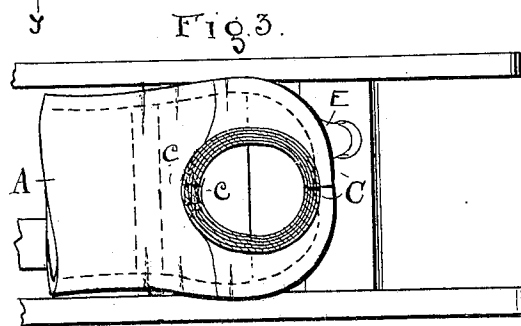
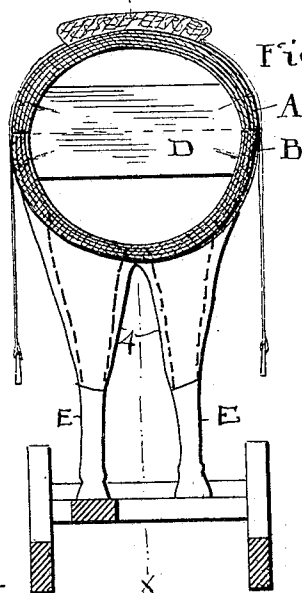
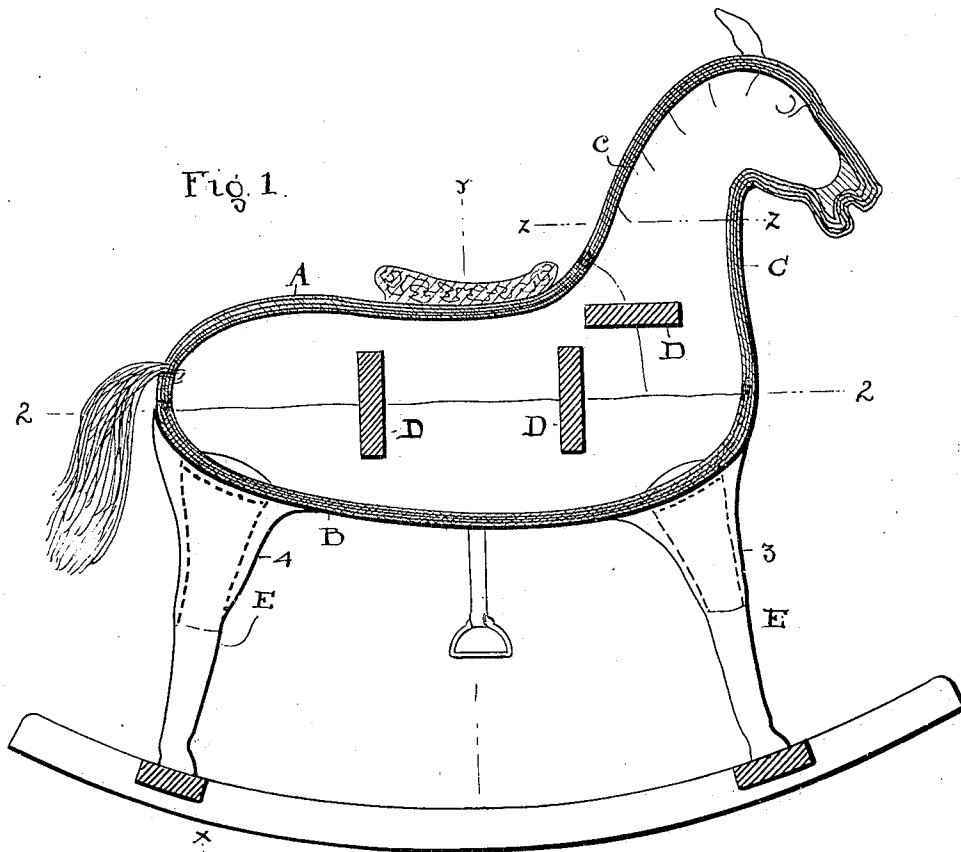


No. 830,762.

PATENTED SEPT. 11, 1906.

M. BELLIAN.  
PAPER HOBBY HORSE.  
APPLICATION FILED FEB. 12, 1906.



ATTEST.

*C. A. Bell*  
*R. B. Moore*

INVENTOR.  
*Mathias Bellian*  
By *N. J. Fisler* ATTY.

# UNITED STATES PATENT OFFICE.

MATHIAS BELLIAN, OF CLEVELAND, OHIO.

## PAPER HOBBY-HORSE.

No. 830,762.

Specification of Letters Patent.

Patented Sept. 11, 1906.

Application filed February 12, 1906. Serial No. 300,606.

*To all whom it may concern:*

Be it known that I, MATHIAS BELLIAN, a subject of the Emperor of Austria-Hungary, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Paper Hobby-Horses; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to hobby-horses and to the method or process of manufacturing the same, all substantially as shown and described, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a vertical central sectional elevation of a horse embodying my invention, both in method of making and in the mechanical structure thereof, on a line corresponding to *x x*, Fig. 2. Fig. 2 is a cross-section of the horse, looking to the rear, on line *y y*, Fig. 1. Fig. 3 is a cross-section on line *z z*, Fig. 1.

As thus shown, the mechanics of the horse are comprised in upper and lower sections of the body lengthwise (indicated by A and B, respectively) and head and neck sections C and legs E. The division-line of the body is centrally from side to side on the line indicated by 2 2. This means that the upper section or half of the body is molded in one piece and the lower section or half thereof in another piece or part, and the said lower part is also molded or formed with upper leg or thigh extensions 3 and 4, respectively front and rear, and which come down with a taper to about the knee-joints of the natural leg. The entire body of the horse, therefore, is hollow from end to end, including neck and head, excepting that at the middle and at the shoulders or base of neck there are cross-pieces or boards D, which extend across the division-lines of the sections of the body and neck and upon both sides thereof, so as to form a union medium for the constituent parts. These cross-divisions might be multiplied, if deemed necessary, and they might be extended, so as to run both higher and lower in the body; but for the present this does not seem to be required. Thus in the manufacture of the two sections or parts of the horse the head and neck are formed in side sections and the body in "upper" and "lower" halves, so to speak, and the lower section has the thigh extensions 3 and 4 formed in and with it as a part there-

of. Thus the entire horse practically is made up in four molded parts A, B, and C, excepting the transverse uniting-braces D and lower legs or extensions E, which are supplied as additional parts. These legs or extensions E are preferably of solid wood and are projected into the thighs 3 and 4 to such height as may be necessary to get the requisite strength, and in this instance are shown as extending up to a point just beneath the body of the horse, and the thigh portions are constructed with an internal taper downward, which permits the legs E to be inserted from within or above before the parts of the horse are united, and in which place and relation said legs are firmly fastened and make a perfectly rigid construction. The assembling of the parts of course occurs on the line 2 2 after the pieces D are inserted and fastened in body portion B, when the upper portion A is placed in position and likewise fastened, especially to the parts D, and sealed over the line of union 2 2, so as to both strengthen the parts at these points and to entirely conceal the lines, and sections C are assembled in like manner. This constitutes a body as if it were made in one piece and gives as much strength as if it were so made, with all the necessary strength for even a severe usage.

Now passing from that which is strictly mechanical to the method of manufacture, I first build up the respective parts A, B, and C over suitable molds or forms, according to the shape and size of the parts, the parts A and B being substantially trough-shaped, except as to the extensions or extremities 3 and 4, while the neck and head portion is formed in two parts lengthwise and sealed or cemented on the division-line between them when the parts are assembled. To these ends I make forms having the outline of the interior of the respective parts A, B, and C, excepting that C is split in two lengthwise, as above stated, and develop the wall or body of the horse upon these forms. This building up is a gradual process layer upon layer, in which I use common newspapers or other waste paper and a suitable paste or cement for adhering the paper together and building up the said walls or bodies. To do this, I first place a single sheet of paper within the mold or over a form in such way that it can be separated therefrom, and upon this I apply a suitable kind and quantity of paste or cement. Upon this I place another layer of

paper, and so on, alternating paper and cement, until I have made a composite wall or body of, say, half an inch or more in thickness and which when dry is firm and strong and will hold its shape indefinitely, yet the wall or body thus built up will be found measurably flexible or yielding and have none of that harshness which a perfectly solid body would possess and which I find a very desirable feature for children. The entire body, head, and neck of the horse and the thigh extensions are built up in this way, and when the sections are thoroughly dried or cured and set so as to retain their shape they can be removed from the forms and put together for use, as hereinbefore described.

It will be observed as to this construction that mechanically the horse consists of the two body-sections A and B, the head and neck sections C, and the leg extensions or extremities E, with the cross-braces D; otherwise there is no frame or structure and the body is hollow and light. On the other hand, the invention comprises a process of making hobby-horses which consists in building up their bodies, heads, and necks with layers of

paper cemented together and to such thickness and strength as they require for service.

The arches of the neck portions at *c* are bound more firmly together by overlapping alternate layers of the paper sheets composing said portions, as seen in Fig. 3.

What I claim is—

A shell-formed hobby-horse having a hollow body constructed of separate upper and lower sections A and B and a neck and head C of flexible material, separate rigid braces D uniting said sections within said body and neck across the meeting edges of said sections at their ends, said braces apart from the top of the horse, leg extensions 3 and 4 respectively at the front and rear of the lower section of the horse and integral therewith, and separate rigid leg members projecting down through said leg extensions from within the top thereof and largest at the top.

In testimony whereof I sign this specification in the presence of two witnesses.

MATHIAS BELLIAN.

Witnesses:

R. B. MOSER,  
H. T. FISHER.