(No Model.) 3 Sheets—Sheet 1.

A. M. DE SOUCHET.

TOY.

No. 597,519. Patented Jan. 18, 1898.

Fig. 1.

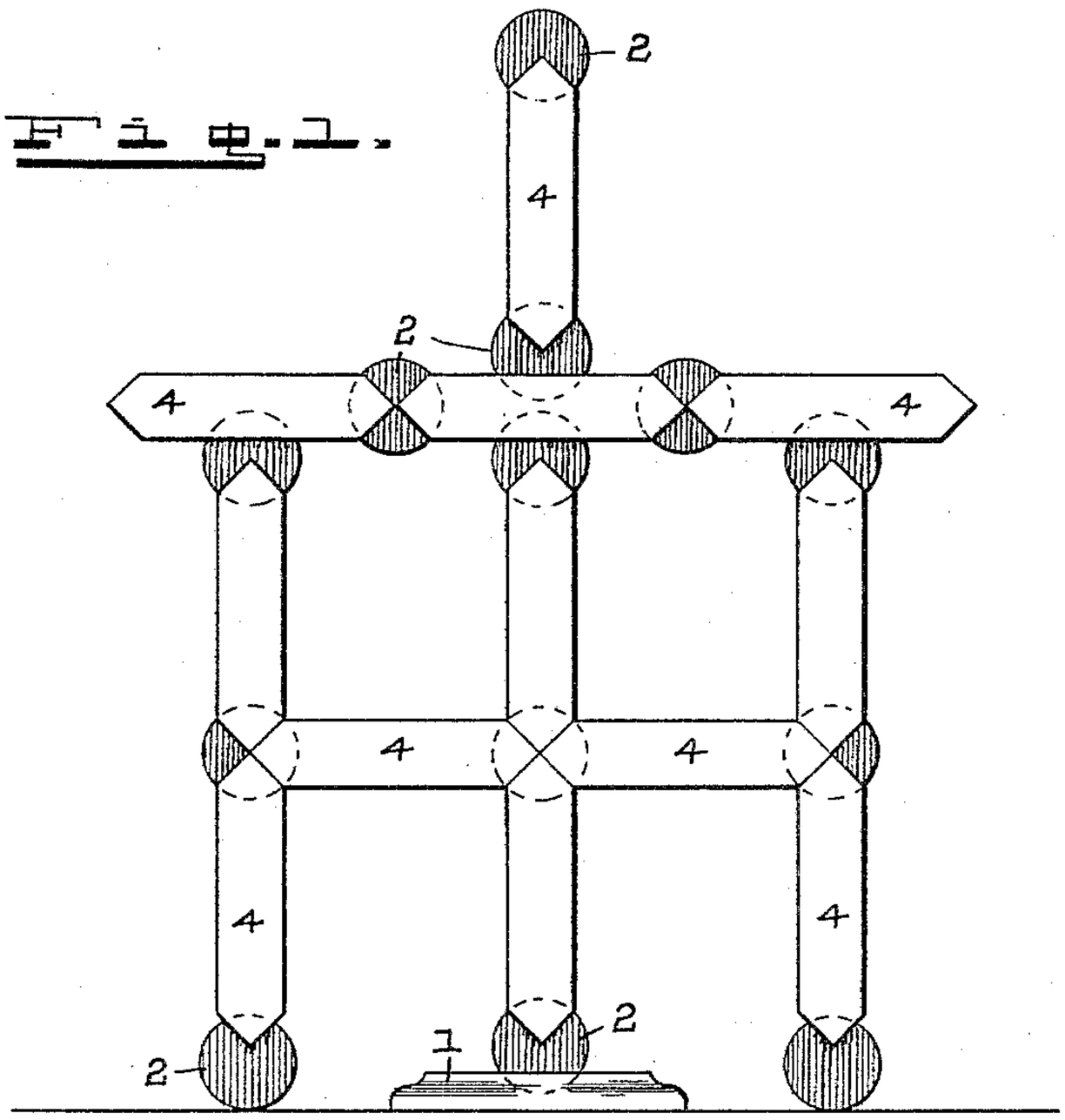

Fig. 2.

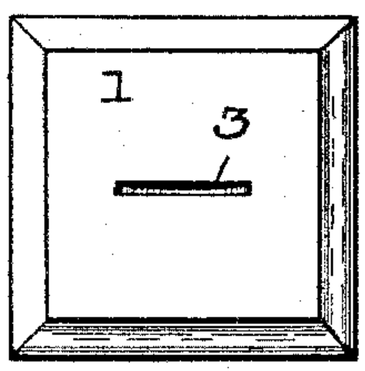

Fig. 3.

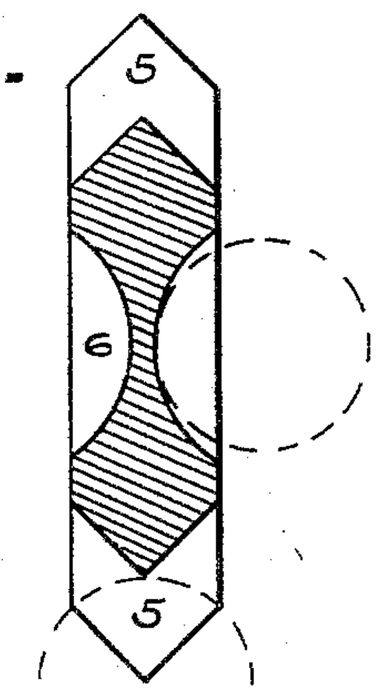

Fig. 4.

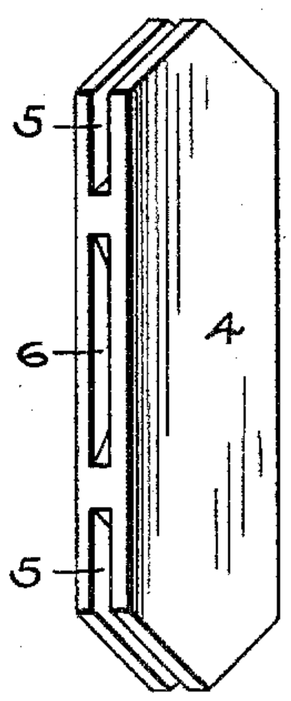

Fig. 5.

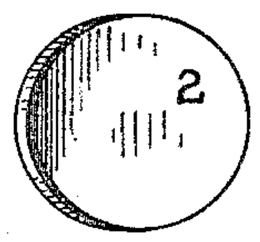

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Fig. 6.

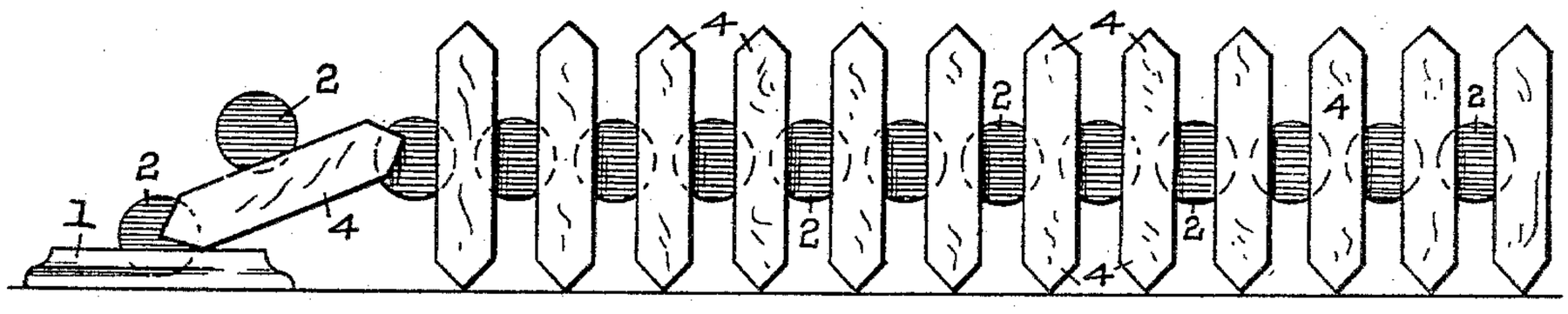


Fig. 8.

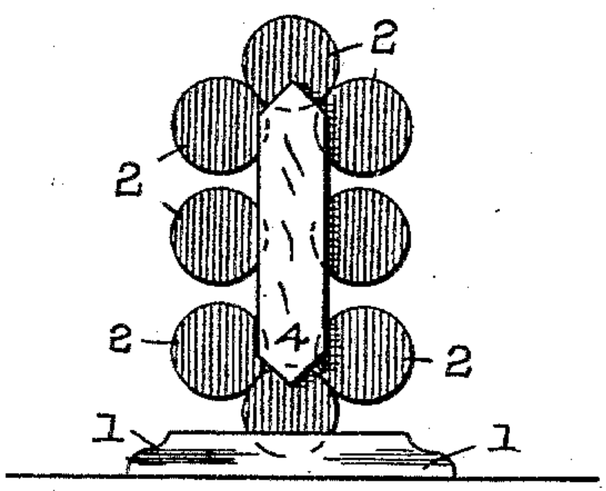


Fig. 9.

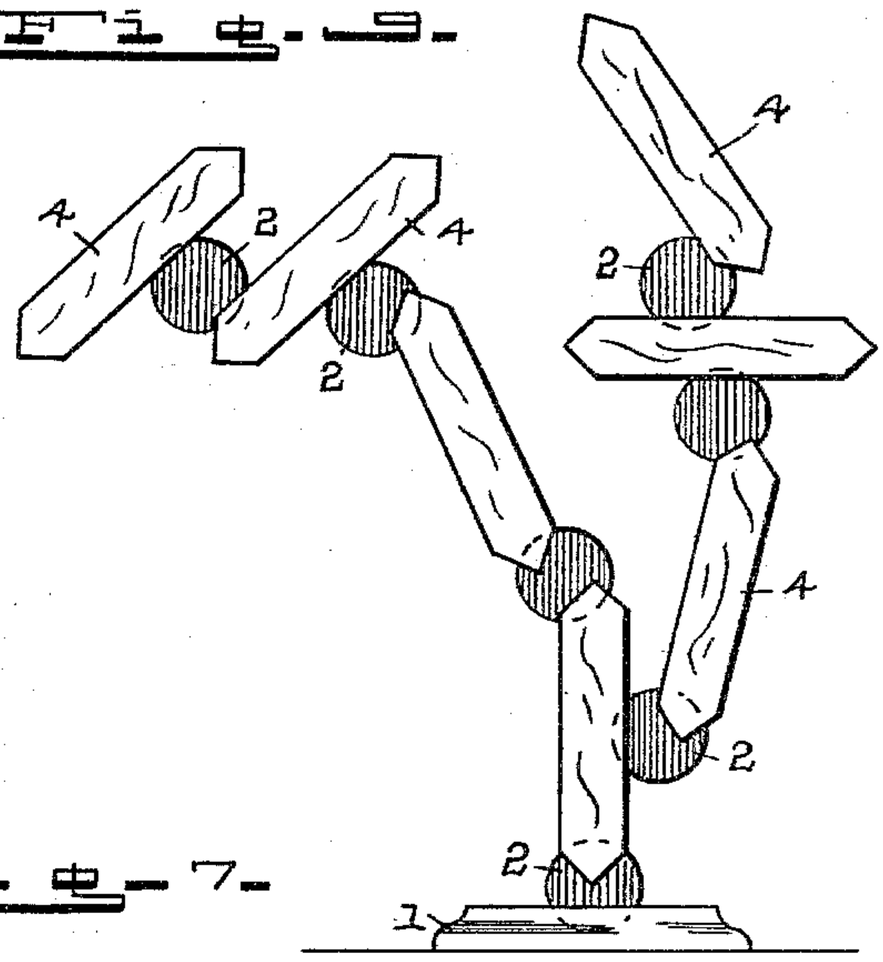
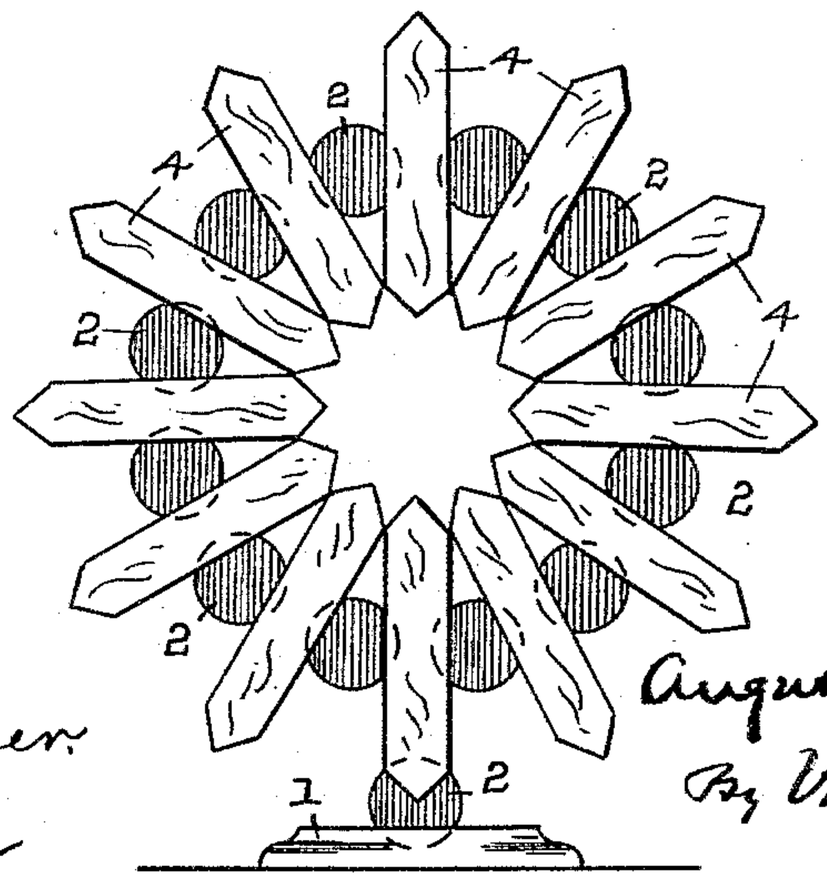


Fig. 7.



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(No Model.) 3 Sheets—Sheet 3.

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Fig. 10.

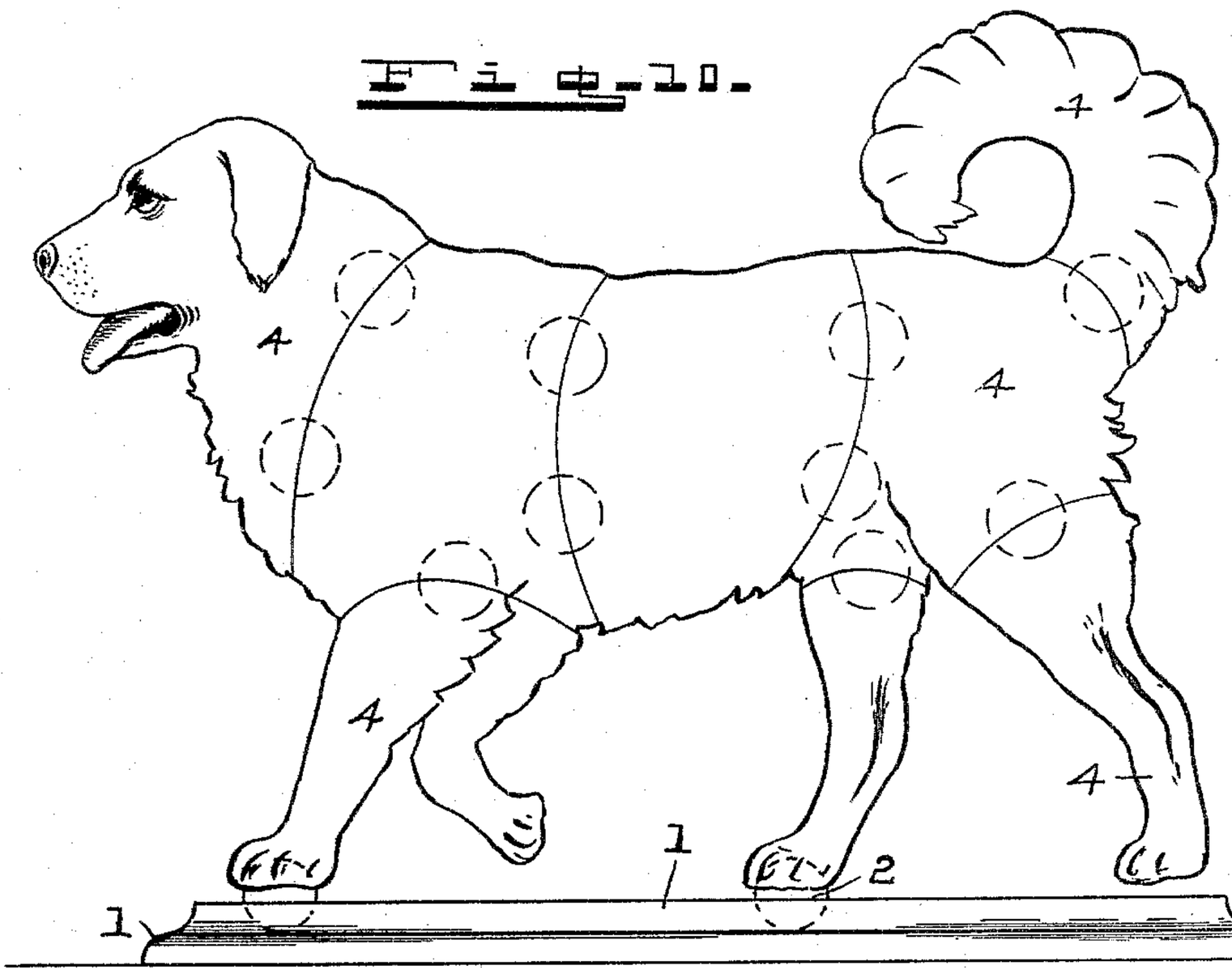
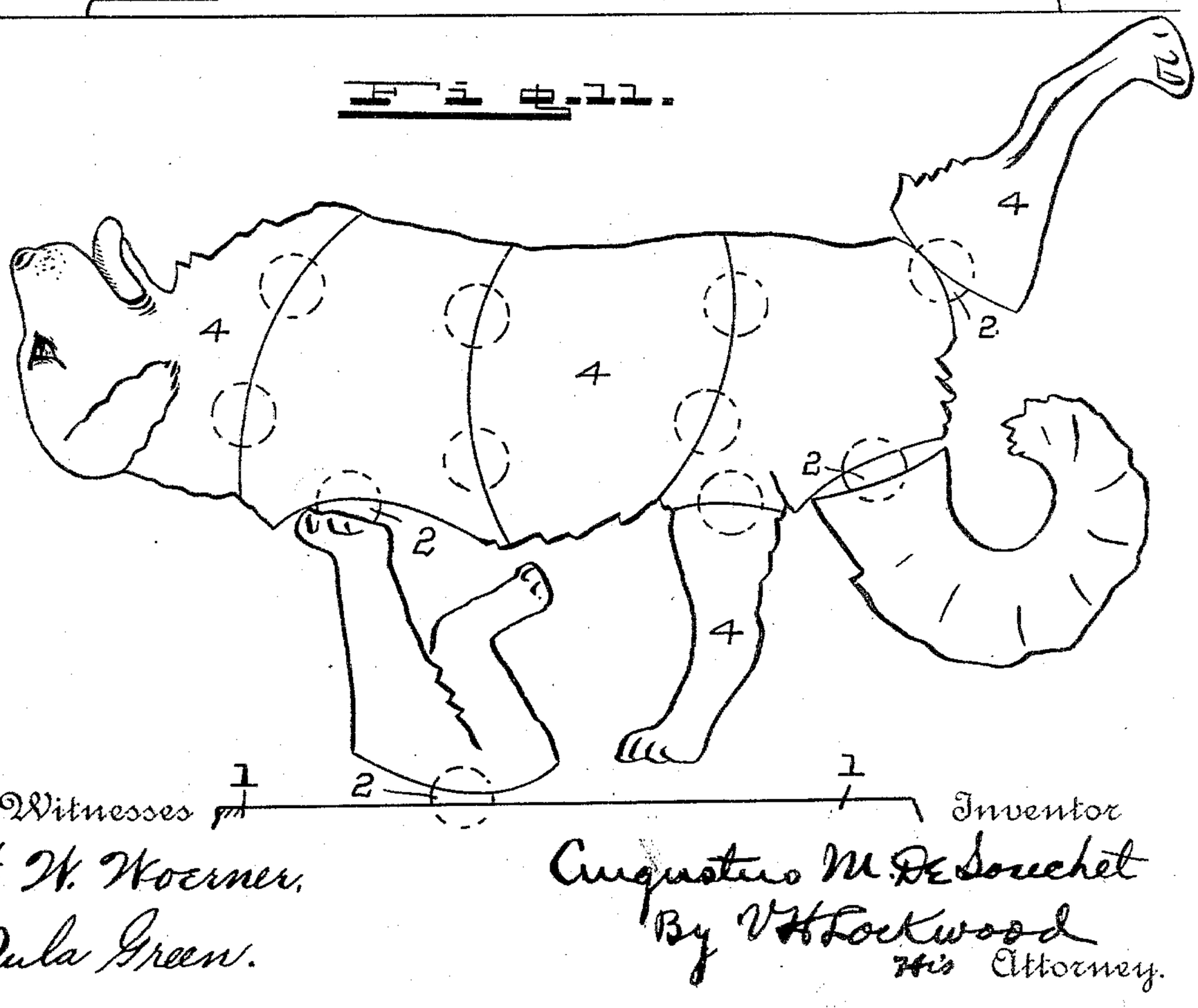


Fig. 11.



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UNITED STATES PATENT OFFICE.

AUGUSTUS M. DE SOUCHET, OF INDIANAPOLIS, INDIANA.

TOY.

SPECIFICATION forming part of Letters Patent No. 597,519, dated January 18, 1898.

Application filed March 16, 1897. Serial No. 627,902. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS M. DE SOUCHET, of Indianapolis, county of Marion, and State of Indiana, have invented a certain new and useful Toy; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like figures refer to like parts.

This toy consists chiefly of two species of building blocks or pieces, one of which may be considered the main building-block and the other means for joining such main blocks together.

The purpose of the invention is to furnish children a cheap and simple set of building blocks or pieces with which almost an endless variety of forms and structures may be made, as their fancy may suggest. The forms and structures, too, that are capable of being made are such as children will most appreciate. I have here shown only a few designs or structures to illustrate the capabilities of these blocks or pieces. They are specially adapted for kindergarten use, as the form of almost anything can be represented by them, and they can be easily put together by the child. The full nature of the pieces and their coöperation will be understood from the accompanying drawings and the description and claims following.

In the drawings, Figure 1 is an elevation of a set of my building blocks or pieces joined to show a certain design. Fig. 2 is a plan of the base-block. Fig. 3 is a cross-section through one of the blocks, the joining pieces or disks being shown in place in dotted lines. Fig. 4 is a perspective of one of the main pieces, showing the slots in the two ends and one side thereof. Fig. 5 is a perspective of one of the joining blocks or disks. Fig. 6 represents the blocks set up to show a line of soldiers. Fig. 7 shows the blocks set up to represent a star, wheel, or similar figure. Figs. 8 and 9 show possible figures that may be made. Figs. 10 and 11 show sections of an animal as forming the main blocks.

In detail I use one or more base-blocks 1. This is preferably about six inches square, with its edges beveled, as shown. In the center of it I rigidly secure one of the dowels or joining pieces or disks 2. I do this by sawing a groove 3 in the base-block and inserting the joining piece or disk in such groove with glue or any other suitable fastening. I provide a main block 4 in such numbers as may be desired, twelve being preferably a set. These blocks are preferably about six inches in length, about one and three-eighths inches in width, and about three-eighths inch in thickness. Their ends are preferably beveled or cut pointed, as shown, with the point forming as nearly a true right angle as it is possible to make. The purpose of this is that when four blocks are brought together, as seen in the middle of Fig. 1, the joints will be snug. With a saw of suitable gage I make a slot 5 at each end and a slot 6 on each side, as shown in Figs. 3 and 4. The slots at the end are preferably formed as shown in Fig. 3, being cut in to an extent equal to the radius of one of the circular dowels or joining-pieces 2. This permits four of the blocks to be brought together and joined by one of the dowels or joining-pieces tight and snug, as seen in the middle of Fig. 1. It also permits two dowels to be inserted in one of these end slots, one being on one side and one on the other side, or three at each end, one being in the extreme end and one on each side, as shown in Fig. 9. The slots 6 are made preferably in the form shown in Fig. 3, with a slightly larger curve than the dowel or joining-piece 2. The dowels or joining-pieces 2 are preferably about one and seven-eighths inches in diameter and in thickness are very slightly greater than the width of the slots, so that the dowel will wedge into the slots. These dowels or joining-pieces, as well as the slots, should be sawed and not planed or polished, so that they will have rough surfaces, whereby they will hold together much more securely. The whole toy, therefore, consists of the three pieces shown in Figs. 2, 4, and 5, multiplied as desired. The use of the side slots is illustrated in the upper part of Fig. 1. The pieces are suitably colored or stained, preferably in different colors or combinations of colors. Any desired illustration or picture can be placed on the sides of the blocks 4. For example, on one side of the blocks may be shown a row of soldiers and on the other side the members of a band of musicians, so that when the blocks are set up, as in Fig. 6, they will rep-

resent a row of soldiers when looked at from one side and a band when looked at from the other, or any other desired pictures may be applied, as the fancy may suggest.

It is observed that the pieces in this toy are very simple and cheap and they are also strong and durable if made out of the right kind of wood. The slots in the blocks 4 are of such nature that a very strong connection is left, as seen in Fig. 3, so that the parts of said blocks will not split off easily. The purpose of the base 1 is merely to hold the structures upright when that is desired.

The peculiar feature of this toy is the easy yet firm grip or connection between the parts. Any child can easily connect them, and yet it makes no difference how they are arranged they will hang together until disconnected. The whole set of pieces and joining-disks may be put upright and on end, extending six feet high, and yet they would be held upright on the base-block 1, or they may be in such lengthened form curved to form a suspension-bridge, with one end fastened to the block 1, and the structure will still stand, or a tree may be formed with one or two pieces at the bottom on the block 1, as the trunk, and with a branching top and it will still stand. In fact, there is no practical limit to the number and kinds of figures that may be made by one or two sets of these pieces. The joining-pieces are more easily inserted or removed by rolling them into the slots instead of pushing them in directly, and to this end the walls of the slots are preferably curved, as in the middle ones, or inclined, as in those at the ends. A child that could not insert or remove a joining-piece directly can easily roll it in or out of these slots. While circular joining-pieces are preferable, it is evident that square or hectagonal or other formed joining-pieces may be used.

The form of the main blocks may be modified, as desired. In Figs. 10 and 11 the sections of a dog form such blocks. By the same method any other animal or a person may be formed in sections, and by making the grooves in the edges of the blocks on the various sides, as has been described, the animal may be properly or fancifully put together. The connecting-pieces may be small or large disks or otherwise formed to suit, so long as their thickness is enough greater than the width of the grooves to cause them to stick in their grooves firmly when inserted.

I am aware that pins and similar joining-pieces have been used in mortises in timbers for joining them together in various kinds of frames and buildings, the connection being permanent. I am also aware that the parts of picture-frames have been connected by joining-pieces inserted in the parts at their joints and secured there or nailed across the joints at the back; but none of these things or constructions are adapted or capable of use by a child as a toy wherewith he can make an infinite variety of shapes and designs of construction.

I am also aware of the Patent No. 101,179, issued March 22, 1870, to Swift, for toy building-blocks, wherein blocks designed to be united to form a definite structure, like a church-building, are provided at one point with a slit to receive a zinc strip for holding them together in the proper place in the structure; but no structure could be made by such toy excepting what its parts had been previously designed for, no freedom or choice of structure or design being permitted or possible for the child. My toy, by reason of its circular joining-pieces, the series of slots all around the edge of each block, the right-angled pointing of the blocks, and the curved or inclined faces of the slots in the blocks, enables an infinite variety of forms, designs, and structures to be made by the child, as his mind may suggest; also, by reason of these features he can with great ease join the parts in any way he wishes, so that they will retain the position desired, and he can as readily disjoin them.

The pointing of the blocks, in addition to the other advantages of it, increases the contacting surface, whereby a stronger joint is effected between the blocks and joining-pieces, so that they will be capable of making a much more extended structure and a greater variety of structures.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A toy comprising blocks whose ends are pointed and whose ends and sides are slotted, and removable joining-pieces of such thickness as to wedge in the slots and hold the blocks together.

2. A toy comprising blocks whose ends are pointed to a right angle and slotted, and removable joining-pieces of such thickness as to wedge in the slots and hold the blocks together.

3. A toy comprising blocks whose ends are pointed to a right angle and provided with a slot extending across the end and partially down each side of the block, substantially as shown, and removable circular joining-pieces that wedge into the slots and hold the blocks together in any desired position.

4. A toy comprising blocks with a series of slots in their edges, the ends of said slots being curved or inclined from the edges of the block, substantially as shown, and removable joining-pieces substantially circular and thick enough to wedge in the slots and hold the blocks together.

In witness whereof I have hereunto set my hand this 12th day of March, 1897.

AUGUSTUS M. DE SOUCHET.

Witnesses:

ZULA GREEN,

V. H. LOCKWOOD.