Apr. 24, 1923. 1,453,241

A. DUFFIELD

TOY FURNITURE

Filed Aug. 12, 1920 2 Sheets-Sheet 1

Fig. 1.

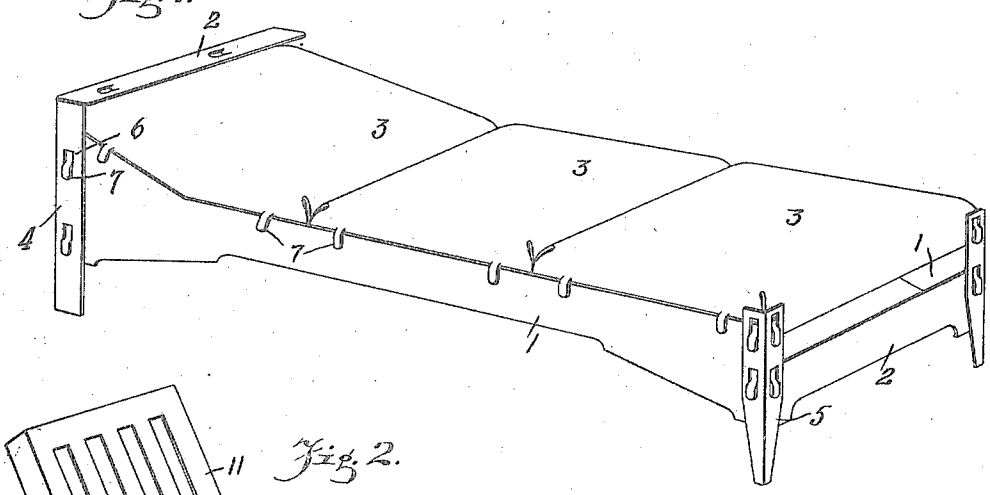


Fig. 2.

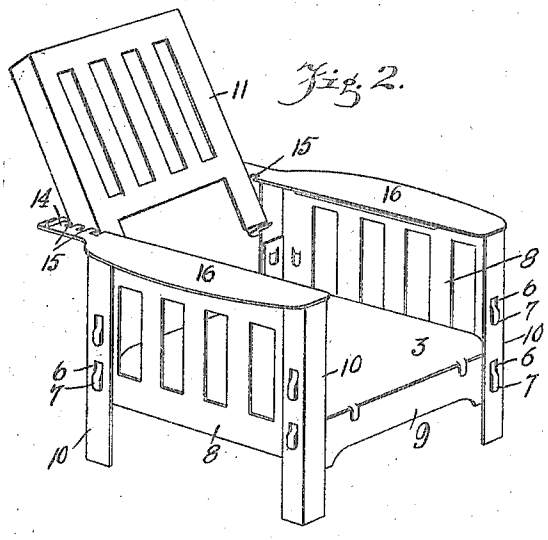


Fig. 3.

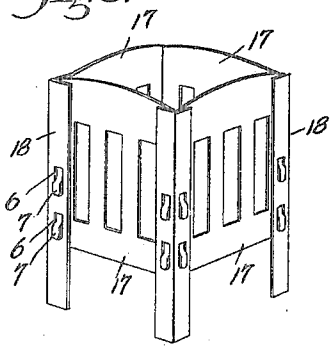
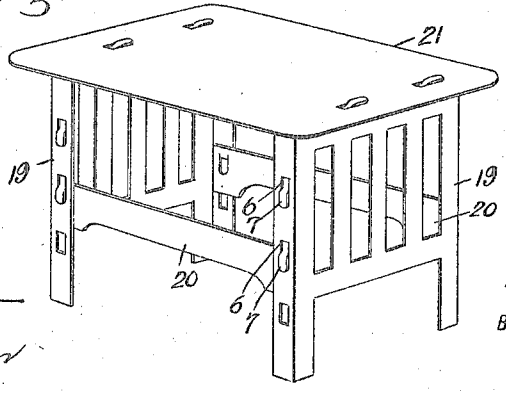


Fig. 4.



WITNESSES

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Apr. 24, 1923.

A. DUFFIELD

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TOY FURNITURE

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Fig. 5.

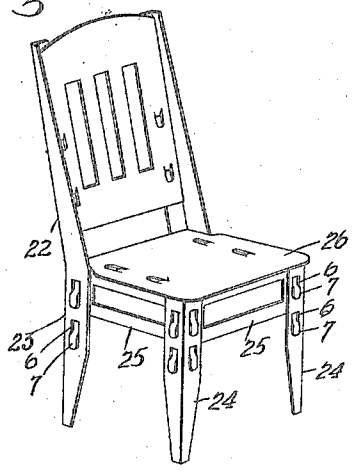


Fig. 6.

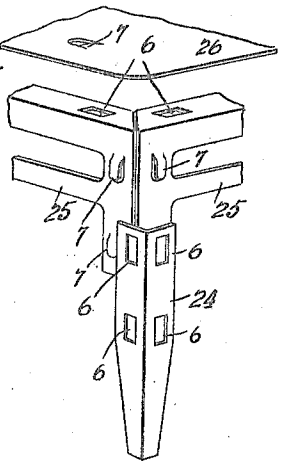


Fig. 7.

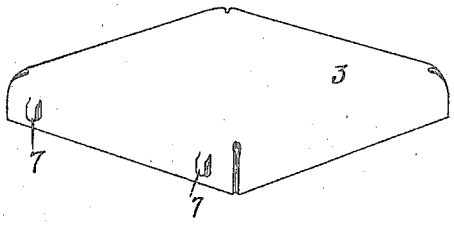


Fig. 8.

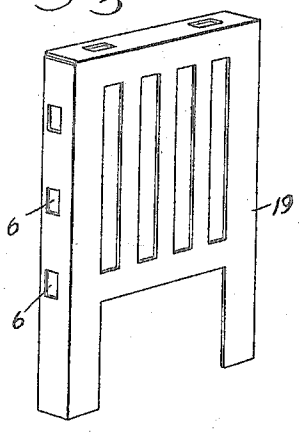


Fig. 9.

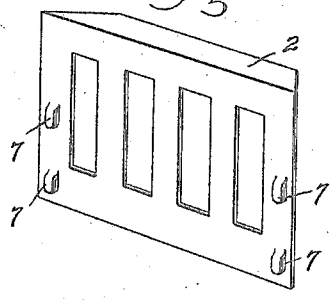


Fig. 10.

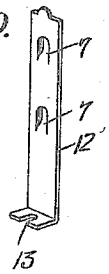
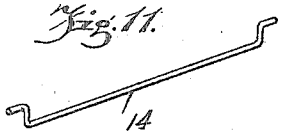


Fig. 11.



WITNESSES

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Patented Apr. 24, 1923. 1,453,241

UNITED STATES PATENT OFFICE.

ARCHIBALD DUFFIELD, OF DERBY, CONNECTICUT.

TOY FURNITURE.

Application filed August 12, 1920. Serial No. 403,016.

To all whom it may concern:

Be it known that I, ARCHIBALD DUFFIELD, a citizen of the United States, and a resident of Derby, in the county of New Haven and State of Connecticut, have invented new and Improved Toy Furniture, of which the following is a description.

This invention relates to improvements in toy furniture, an object of the invention being to provide toy furniture or rather the elements or units of construction which when united will form various articles of furniture.

A further object is to provide toy furniture made up of sheet metal parts having an improved construction and arrangement of coupling or juncture between the points which enable the parts to be readily assembled or separated and which give to the user a wide range of ingenuity in the assembling of different articles of furniture and the like.

A further object is to provide toy furniture which will be extremely strong and durable and which will withstand the rough usage to which it is liable to be subjected by children in handling and assembling the same.

With these and other objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings—

Figure 1 is a perspective view illustrating my improved toy furniture assembled to form a couch;

Figure 2 is a similar view showing the furniture assembled to form a Morris chair;

Figures 3, 4 and 5 are similar views showing the furniture assembled to form a waste-paper basket, a table, and a straight chair, respectively;

Figure 6 is a fragmentary perspective view showing the assemblage of parts at one corner of the chair shown in Figure 5;

Figures 7, 8, 9 10 and 11 are perspective views illustrating details of construction.

In carrying out my invention I provide any desired number of similar parts and all necessary additional parts to enable the user to assembled furniture of different character, permitting an interchange of such parts to form other articles of furniture and serving as a means of amusement as well as exercising the ingenuity of the user. In Figure 1 I illustrate in perspective a couch which is composed of side bars 1, 1, end bars 2, cushions 3, and angle legs 4 and 5. It will be noted that the end bar 2 constituting the head of the couch is appreciably larger and having flanged edges, which element may be utilized for other articles of furniture. The angle legs 4 are longer than the angle legs 5 and the side bars 1 and 2 are connected to the angle legs 3 by my improved arrangement of slots 6 and tongues 7. The tongues 7 are laterally offset from the bars 1 and 2 or other parts to which they are integral and the slots 6 are of a size and length sufficient to accommodate the tongues when the latter are moved laterally and the tongues are offset from their supporting members a distance only sufficient to accommodate the thickness of metal of the slotted portions. Hence, when the tongues are in position in the slots and one member is moved longitudinally, relatively to the other, so as to cause the slots to engage the metal at the end walls of the slots, a firm, strong coupling is had. Furthermore, it will be noted that the end wall of the slot will sustain the strain of the coupling by engaging the tongue at its point of juncture with the body with which it is integral so that only the most excessive strains can injure or break such a coupling. The parts 3, which are referred to as cushions, are, of course, merely imitations of cushions, made of sheet metal and provided with tongues 7 which engage over the edges of the side bars 1. I have used the reference character 6 to indicate the slots in all of the parts and the reference character 7 to indicate the tongues.

In Figure 2 I illustrate my improved assemblage to form a Morris chair. In this chair construction the side members 8 and the end bars 9 are connected to the angle legs 10 by slot and tongue connection 6 and 7 as above referred to in connection with Figure 1 and the Morris chair back 11 has secured thereto angle brackets 12 such as shown in Figure 10 utilizing the same form of tongue and slot connection and these angle brackets 12 have notched legs 13 (Fig. 10) to engage the rear angle legs 10. Furthermore, I provide a rod 14 such as shown in Figure 11 which is bent so that it engages in any of a series of notches 15 in the arms 16 of the Morris chair to hold the back at any desired incline.

Figure 3 illustrates an imitation waste basket in which side plates 17 are connected to angle legs 18 by the slot and tongue connection above described.

Figure 4 illustrates a table in which end frames 19, side bars 20 and top 21 are connected by slot and tongue coupling means as above defined.

Figures 5 and 6 show a straight chair construction in which the back 22 is made integral with the rear legs 23 and the front angle legs 24 are coupled to side frames 25 and the latter to a chair bottom 26 by means of the slot and tongue coupling means as above defined.

Figures 7, 8 and 9 illustrate elements of the different articles of furniture above described.

From the illustration it is obvious that the elements of the different articles of furniture are readily interchanged to form other articles of furniture or to simulate other structures and it is obvious that the different articles illustrated are not the only articles that can be made but serve to point out a wide range of utility of the devices. It is also possible that other forms of coupling means might be employed but I believe the slot and tongue coupling means as above defined is superior to any other form of coupling means not only because of its simplicity and ease of operation but because of its great strength and durability.

To illustrate the utility of the different elements I would point out the fact that the part 11 representing the Morris chair back is a duplicate of one of the ends 19 of the table shown in Figure 4 and the several angle legs and side arms of the different articles of furniture are readily interchangeable and may be furnished in any desired number so that the user can assemble many different articles utilizing the same structural elements with slightly different cooperating elements to form almost any type of furniture. The elements of the different articles of furniture are preferably of sheet metal which can be cheaply stamped and painted or ornamented in any way desired.

While I have illustrated what I believe to be a preferred embodiment of my invention, it is obvious that slight changes might be made in the general form and construction of parts without departing from my invention. I therefore do not limit myself to the precise details set forth but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

Having thus described my invention, I claim:—

1. As a new article of manufacture, toy furniture, comprising side members, end members, and legs having right angular members fitting throughout their width against the adjacent ends of the side and end members and having detachable interlocking engagement therewith, whereby the parts can be readily assembled and taken apart for the purpose set forth.

2. As a new article of manufacture, toy furniture consisting of side and end members and angle legs, said angle legs having longitudinal slots therein and said side and end members having tongues thereon interlocking in the slots, said tongues stamped from the side and end members and laterally offset whereby shoulders are formed by the tongues to bear upon the end walls of the slots.

3. As a new article of manufacture, toy furniture comprising side members, end members, legs having right angular members fitting throughout their width against the adjacent ends of the side and end members and having detachable interlocking engagement therewith, a member, and means for detachably supporting the said member in a horizontal position on the first named members.

4. As a new article of manufacture, toy furniture comprising side members, end members, legs having right angular members fitting throughout their width on the side and end members and having detachable interlocking engagement therewith, a back secured to the rear legs, a seat member, and means for detachably securing the seat member on the said side and end members.

5. As a new article of manufacture, toy furniture comprising side members provided with arms having extensions at their rear ends, end members, angular legs with which the side and end members have interlocking engagement, a seat member having means engaging the end members to support it thereon, a back member having means engaging the rear legs, and a rod engaging the extensions of the arms for supporting the back.

ARCHIBALD DUFFIELD.