June 14, 1932. H. C. WETZEL 1,862,558

CONSTRUCTIONAL TOY

Filed Feb. 6, 1931

Fig. 1.

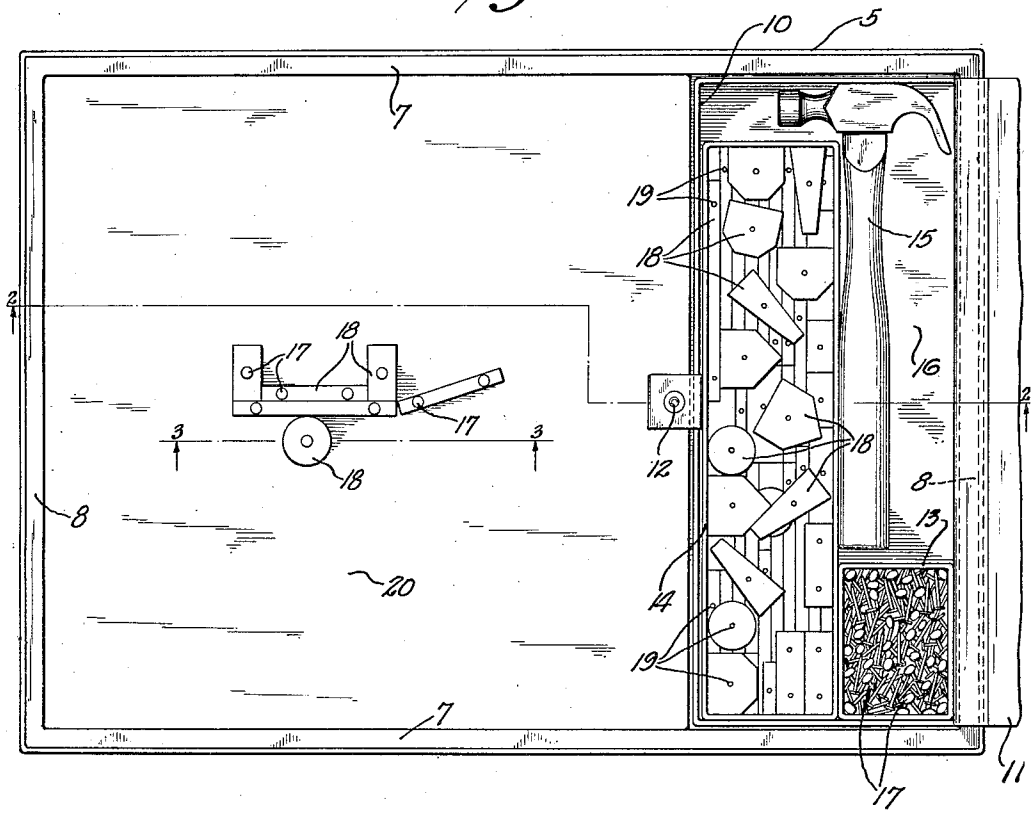


Fig. 2.

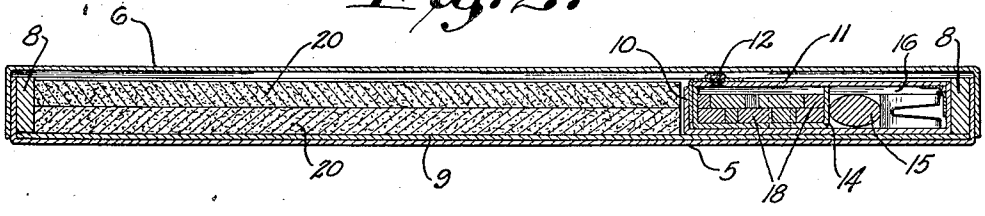
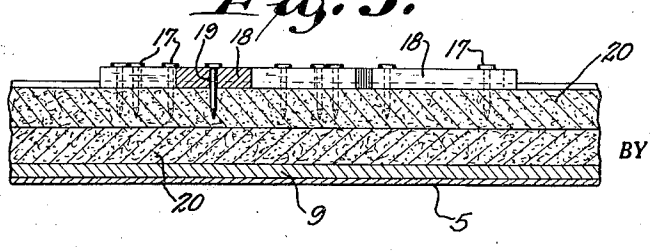


Fig. 3.



INVENTOR.
Harry C. Wetzel,
BY Morsell & Morsell
ATTORNEYS

Patented June 14, 1932

1,862,558

UNITED STATES PATENT OFFICE

HARRY C. WETZEL, OF MILWAUKEE, WISCONSIN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO PLAYSKOOL INSTITUTE, INC., OF MILWAUKEE, WISCONSIN, A CORPORATION OF WISCONSIN

CONSTRUCTIONAL TOY

Application filed February 6, 1931. Serial No. 513,801.

This invention relates to improvements in constructional toys.

It is a recognized fact that children, within a wide age range, derive considerable enjoyment and amusement from the utilization of tools and devices for the construction of specific objects. Heretofore, children, if using certain tools, including hammers and nails, were restricted in their operations, as their operations with the tools were not guided, and operations were necessarily restricted to a zone wherein no damage to the dwelling or furniture would result.

The present invention, while not sacrificing to any extent the enjoyment to be derived from constructional play with tools, overcomes the aforementioned objections, by the provision of a compact, self contained constructional toy, which may be used in any portion of a home or dwelling without the attendant danger of damage being done, and furthermore guides a child in his constructional play and aids in the development of his imagination and creative ability.

A further object of the invention is to provide a toy of the class described which includes a hammer and an adequate supply of nails and small wooden construction elements adapted to be nailed in various figures and relationships onto a base, the toy further including a base member of porous, fibrous, readily penetrable material which will permit the ready withdrawal of nails therefrom.

A further object of the invention is to provide a constructional toy of the class described in which all parts are housed within a unitary container including a base housing compartment, a construction element compartment, a hammer compartment, and a nail compartment, whereby all portions and elements of the outfit are kept together, minimizing the danger of parts becoming mislaid and scattered, and further providing a housed zone of operations immediately adjacent the tools and elements required for operations.

A further object of the invention is to provide a constructional toy which is very simple, is educational and does not become monotonous, which is strong and durable, which is attractive in appearance, and which is well adapted for the purposes set forth.

With the above and other objects in view, the invention consists of the improved constructional toy, and its parts and combinations as set forth in the claim, and all equivalents thereof.

In the accompanying drawing in which the same reference characters indicate the same parts in all of the views:

Fig. 1 is a plan view of the constructional toy with the main container cover removed and the tool and element compartment cover opened;

Fig. 2 is a sectional view of the device taken on line 2—2 of Fig. 1, with the main cover in position; and

Fig. 3 is an enlarged fragmentary detail sectional view taken on line 3—3 of Fig. 1.

Referring now more particularly to the drawing, it will appear that the numeral 5 indicates a main outer container or box adapted to be closed by a cover 6 removably fitted thereover. Said outer container and cover are preferably formed of cardboard, pasteboard, or the like. Fitted snugly within the outer container is a wooden frame, comprising wooden side and end rails 7 and 8 respectively, and a veneer bottom 9. A tray 10, of rectangular contour, is removably fitted within one end portion of said frame, and said tray is adapted to be closed by a cover 11 hinged to the tray along one edge and adapted to have its other side edge detachably secured to the other side of the tray by complementary snap fastener means 12. Within the tray 10 are auxiliary trays 13 and 14, the tray 13 being relatively small and being removably disposed in one corner portion of the tray 10. The tray 14 is elongated and is positioned along one side of the tray 10 and is spaced from one end thereof. The disposition of the trays 13 and 14 within the tray 10 provides an L-shaped compartment 16 for the convenient reception therein of a hammer 15. The tray 13 compactly holds a plurality of small nails 17, while the tray 14 holds therein a plurality of sets of small wooden construction elements 18 of various shapes and sizes. All of the elements 18

have formed therethrough one or more nail receiving apertures 19, and all of said elements are attractively colored.

Positioned within the frame adjacent the tray 10 are one or more base members 20, of substantially square shape. Where several base members are provided, the same are superimposed, as shown in Fig. 2. The composition of said base members is important and it has been found to be very satisfactory to have said base members formed of pressed refuse of yellow pine wood to form fabricated fiber board sheets, which, as utilized in the present invention, are about seven-sixteenths of an inch in thickness so as to permit substantial embedding therein of shanks of the nails 17. Said boards or bases 20 are relatively porous and slightly yieldable so that nails may be driven thereinto without too much resistance, but at the same time affording sufficient support for the nails. The texture of the bases is such that the fibers are irregularly disposed therein so that nails may be driven thereinto without causing splitting, and may also be easily withdraw therefrom and the irregularly disposed fiber of the board has a tendency to fill up the nail holes so that the board will not be easily marred by nail holes and can be subjected to a relatively long period of use.

In the use of the improved constructional toy a child may assemble various of the elements 18 onto the top surface of the outermost base board 20 in any desired designs, configurations and relationships, as illustrated particularly in Fig. 1. For the child's guidance, a sheet of suggested assemblies may be provided for him to follow, or he may use his own ingenuity and imagination in working out designs or figures. Each element 18 is nailed onto the base by inserting a nail or nails into the aperture or apertures 19 provided therein and then hammering the nails into the base as shown in Figs. 1 and 3. The nails may be easily withdrawn from the base and the various elements may be removed and replaced in their respective containers within the tray 10 for future use. Obviously, the elements may be used over and over again, indefinitely. Also, because of the porous nature of the base 20 utilized, it is not easily marred by nail holes and may be used for a relatively long period. When one surface of the base ultimately becomes undesirable for further use, it may be reversed, and eventually the base which has been subjected to use may be replaced by an unmarred base.

When the toy is not in use the various elements and tools are disposed compactly as shown in Fig. 1 and the main tray may be closed by the cover 11 therefor. Also when the toy is not being used the entire outfit is contained within the outer container 5 which may be covered by the cover 6.

It will therefore be seen that in the improved constructional toy all parts thereof are maintained in close proximity and proper relationships within a subdivided container therefor, whereby all elements are immediately ready for convenient use at any time. The elements are susceptible of indefinite use and in the assembly of nailed elements onto the base a child not only satisfies his desire for the use of a hammer, but indulges in constructive play and amusement. Furthermore, the toy or outfit is attractive, is of simple and novel construction, and is well adapted for the purposes set forth.

What I claim as my invention is:

A constructional toy, comprising a composition base formed of compressed fibrous material in which the fibers are matted and are irregularly disposed and having the characteristic of offering less resistance to the insertion of a nail than ordinary wood, but offering sufficient resistance to compel the application of a percussive force for the insertion of a nail thereinto, a plurality of perforated construction elements of varied shapes, and nails loosely positionable through the perforations of said elements and adapted to be readily withdrawably driven into said base to removably attach the elements thereto in any desired constructional arrangement, the base being of a substantial thickness to form a recipient for percussions and to provide for the reception of nails of substantial length, and the irregularly disposed fibers of the base preventing the base from being split by nails entering thereinto, and yielding to fill nail holes occasioned by withdrawal of the nails.

In testimony whereof, I affix my signature.

HARRY C. WETZEL.