

DETACHABLE MULTI-FUNCTION BABY BED

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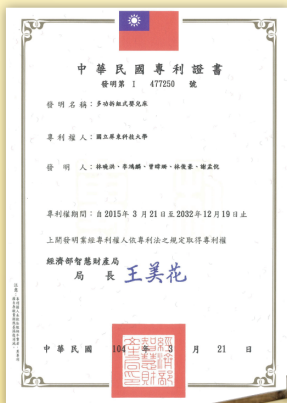
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DETACHABLE MULTI-FUNCTION

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2 、 Design Concept

The design of the system works in a baby bed is designed primarily made think, through a combination of a variety of furniture features to extend the useful life of its crib, cot compared to traditional single-function, because with the growth of infants and young children to limit their use of object with age, when reached after crib purpose, it is placed facing the fate of discarded debris from time to time. Therefore, the function of the diversity of design works to reduce unnecessary waste of parents repeatedly replacement of furniture and money to achieve the best use of home space, space-saving design of the infant and material resources of the multifunction furniture.

1 、 Introduction

Children are the future masters of the nation, it is a parent's heartstrings, and hope that their child can live under a safe and comfortable environment to grow. Since ancient times, mostly infants born with parents to sleep in an adult bed, so that there can be around to take care of any emergency situation, but that a different schedule of adult life with the baby, the baby cries at night cause parents physically and mentally exhausted, but with parents sleeping there is a significant risk exists, such as when the parents asleep, unaware of the baby accidentally covered with thick quilts, cause the baby to suffocate surprises when heard. Also, when the baby about six months there will be separation anxiety symptoms, hard to succeed housing distribution sleep with their parents, so it is best to develop the outset separate sleeping habits.

Modular furniture in the children's best design research a paper presented, many of today's commercial products can be modified portions remain, such as space, too much of children's furniture for the small family is certainly a burden, according to Wang and Guo(2008) . Common market, only a single function of the crib, but a child growing rapidly, so that the age restricted use of cribs, reach a certain age can no longer continue to use, both the space and waste, is a very annoying problem, in order to avoid this happens, this multi-functional product development formula children's furniture is developed, all this can be seen in the current market has started to sell multifunction children's furniture or modular furniture characteristics, and focus on safety and learning of the come attract parents to buy.

3 、 Technical Development

This work is mainly use wood as raw material, referring to the CNS 11676 Note To crib prescribed items, crib safety regulations must be met:

1. With wood or similar materials to glue when gluing - should be well-ventilated area at least four weeks, so that the magnitude of formaldehyde release in 0.5 mg / L or less.
2. When cribs with four casters, of which at least two wheels shall have fixtures locked. Internal side height 600 mm above need to pitch 60 mm or less.
3. For direct connection of interlocking screws (such as self-tapping screws), can not be designed as a combination-type fitting crib for the disassembly when carrying or storing, remove or loosen.
4. Events door mechanism shall be automatically engages the locking device shall operate up to 50 N or more, shall be at least two different operating principle of the system.

5. Edge and protruding parts should be radiused, without burrs or sharp edges. Rollaway bed, equivalent system should have a locking device, the baby can not pull up the floor under the bed or on their own bed when the bed, lifted the minimum force equivalent system should be up to the locking means 50 N, with two consecutive actions need to unlock the device.

Based on the above elements of the overall shape of simple and neat, with a medium-sized crib, child care cots, small chairs, tables, racks glove combination of functions for use in infants and school age children, the combination is used dowel joints then the structure, did not add any adhesives, both combined strength and dexterity disassembly.

4 、 Technological Competitiveness

Technological competitiveness of this work to include :



Fig.1 The overall shape : Infant multifunction furniture overall shape, body frame to replace glued mortise, reducing the risk of the use of glue and release of free formaldehyde.



Fig.2 Children and medium-sized crib : The children removed from above the crib, it becomes a medium-sized crib, crib and children are split into two small chairs.



Fig.3 Side of the fence : The medium-sized crib sides of the fence, surrounded by dismantling the design of the next available slot, fight glove combination form a frame, provided compartment space.



Fig.4 Tables and glove combination shelf : A schematic diagram of the split group after completion of a desk, a glove combination frame, two small chairs, bed to be mobile, will move to the top of the bed mattress frame, it becomes a table and desktop.

5 、 R&D Result

The present invention is a multi-functional change as much power as a multipurpose apart and cribs. Cots and more generally for the necessities of children growing up, but with the steady growth in babies, most of whom cribs are no longer used; this way, crib has become an accumulation of waste at home, not only occupy the home storage space is more cause the waste of useful while most baby bed with storage function can be contained, but it can only solve the problem of storage space problem, after all, can not make cribs re-utilized. The main object of the present invention to provide a multi-functional removable crib, change its system with multiple functions and and with better convenience, usability and storage of those.

In order to achieve the aforementioned object the invention, the present invention is much demolition work group crib, comprising: a bed body, with several masts, the number of the bar, a bottom plate and side plate number, the mast and the rail line to each other mortise constitute the main frame of the bed, and the bottom number is placed on the bar, the number of plates each disposed between any two adjacent pole, and its

two opposite side edges, respectively, the mast mutual latching, and the number plates are each provided with several mounting groove, one end of which is located a few assembly groove of the side edge forming an opening shape; A carrier set, detachably housed within the bed body, the carrier kit contains two carrier, the two carriers are engaged with each of the crossbar, and the two vectors each consisting of a receiving portion and a bottom frame composition, each of the receiving opening portion of the second carrier relative to the communication system was formed a nursery space.

Multi-function type of the present invention depacking crib, the Department may, by mortise structure and carrying kit with detachable to make versatile use changes, such as: infants beds, cots, chairs, racks, tables and so on.

In summary, many power system of the present invention can be disassembled crib structure by means of mortise and bearing kits and matched it with a variety of functional changes, thereby achieve both better convenience, usability and storage of other effects.



DETACHABLE MULTI-FUNCTION BABY BED
Completed diagram



DETACHABLE MULTI-FUNCTION BABY BED
Assembly into children table and chair



DETACHABLE MULTI-FUNCTION BABY BED
After assembly, become medium and small sized crib and three cabinets



DETACHABLE MULTI-FUNCTION BABY BED
After assembly, become children table and chair, cabinet or growing bed

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References

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