Aug. 28, 1923.

1,466,376

V. F. HRACHOVINA

ARTICLE OF FURNITURE

Filed July 22, 1922

3 Sheets-Sheet 1

Fig. 26

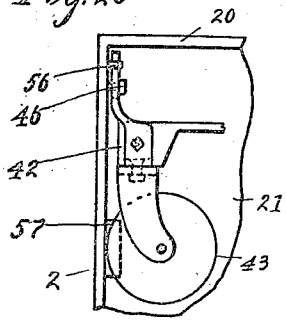


Fig. 4

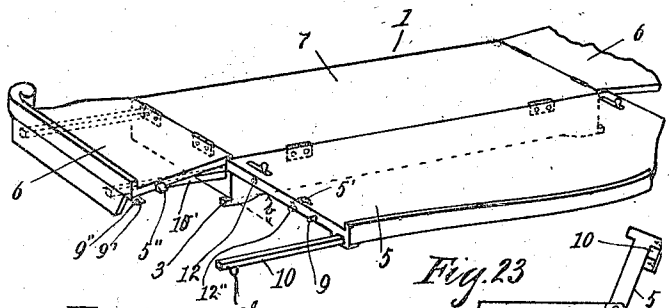


Fig. 2

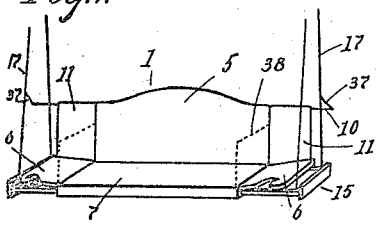


Fig. 24

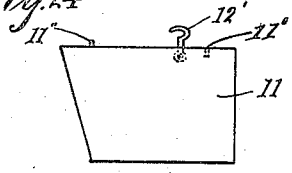


Fig. 23

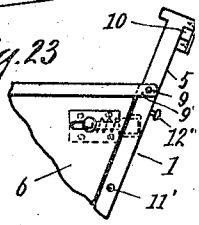


Fig. 1

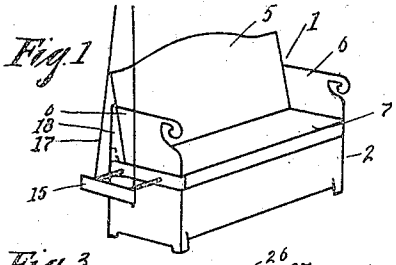


Fig. 5

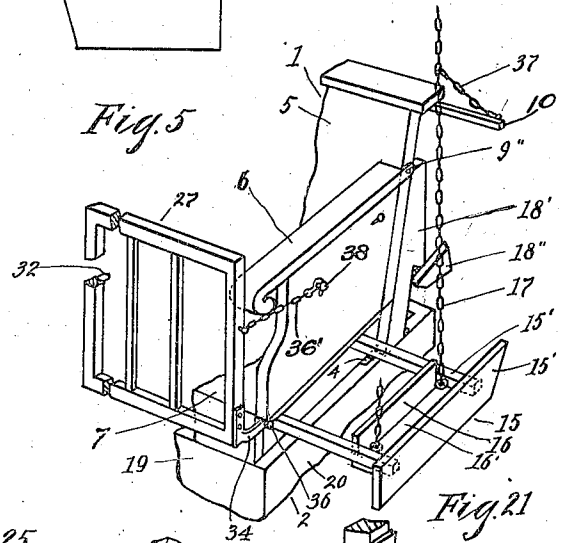


Fig. 3

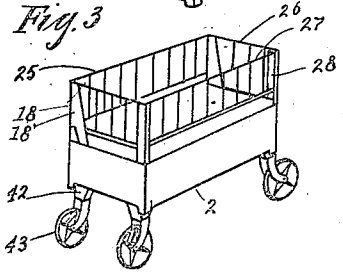


Fig. 25

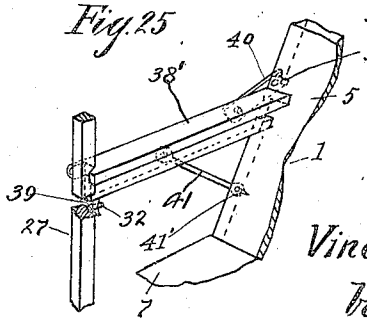
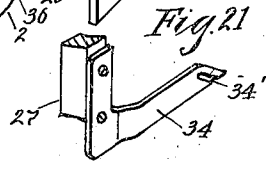


Fig. 21



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V. F. HRACHOVINA

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Fig. 8

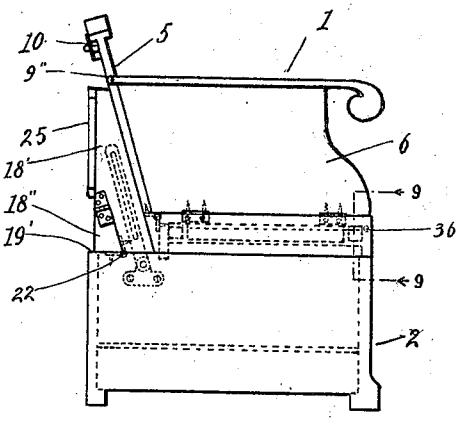


Fig. 9

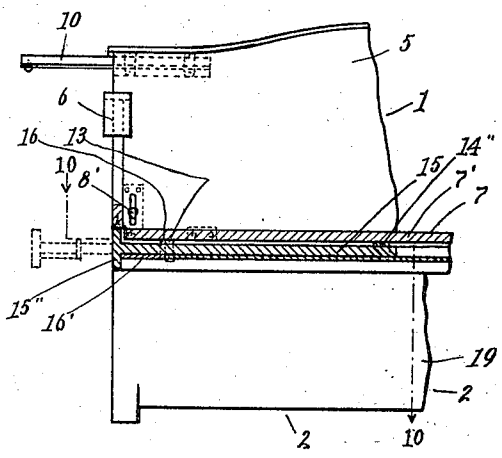


Fig. 13

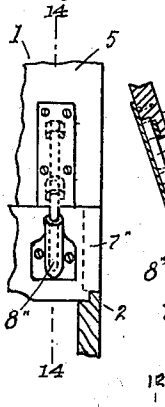


Fig. 14

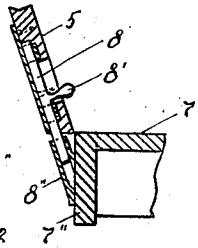


Fig. 10

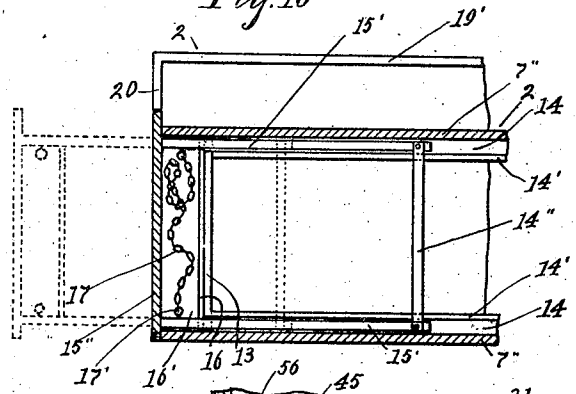


Fig. 11

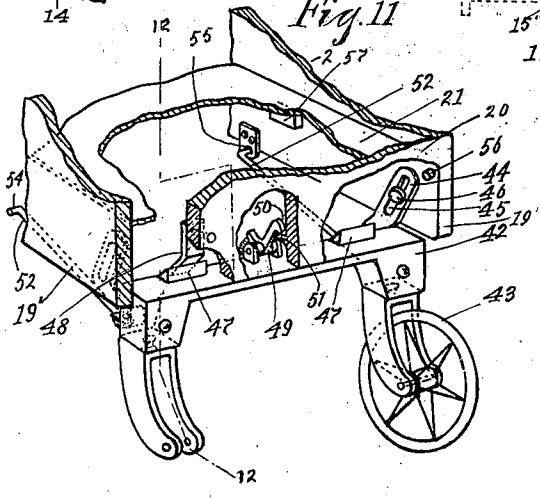
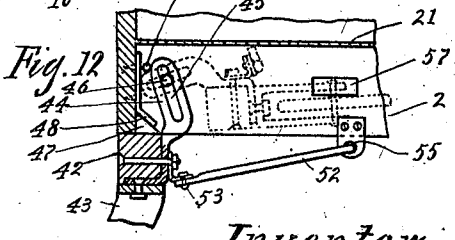


Fig. 12



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ARTICLE OF FURNITURE

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Fig. 15

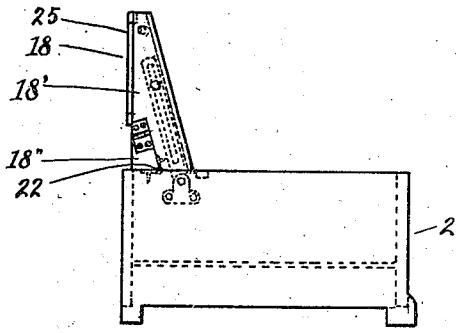


Fig. 17

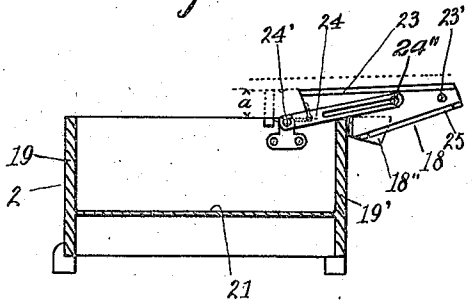


Fig. 19

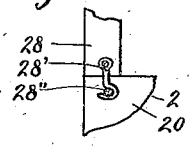


Fig. 22

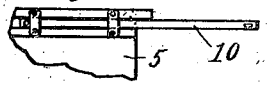


Fig. 16

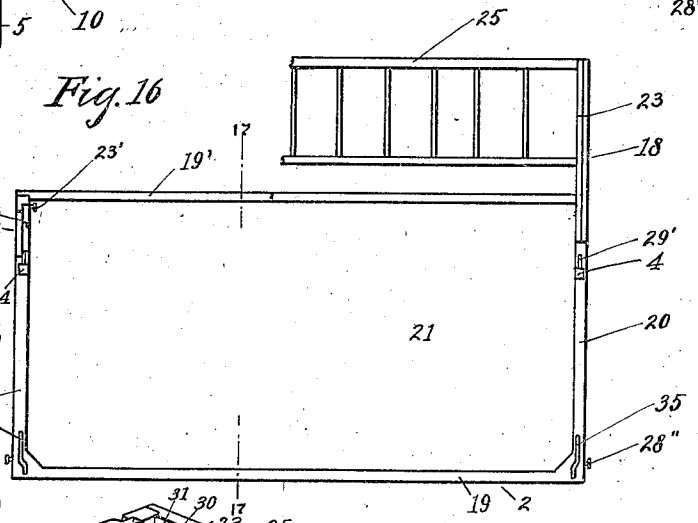


Fig. 18

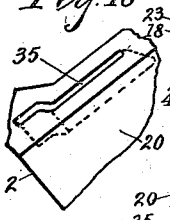


Fig. 7

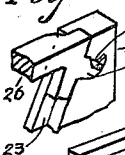
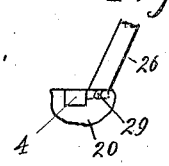


Fig. 6

Fig. 20



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by H. S. Johnson
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Patented Aug. 28, 1923. 1,466,376

UNITED STATES PATENT OFFICE.

VINCENT F. HRACHOVINA, OF ST. PAUL, MINNESOTA.

ARTICLE OF FURNITURE.

Application filed July 22, 1922. Serial No. 576,655.

To all whom it may concern:

Be it known that I, VINCENT F. HRACHOVINA, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Articles of Furniture, of which the following is a specification.

This invention relates to convertible articles of furniture and has for one of its objects to provide an article of furniture which is readily convertible to a plurality of uses, and which is partly foldable and partly of knock-down construction, so that in its normal state, it will resemble an ordinary davenport or settee. More particularly, my invention relates to furniture of the class described designed for children's use and therefore miniature in size, to form a part of the furnishings of nurseries and the like.

Other objects and advantages will be pointed out as this specification progresses, the invention consisting in the construction, combination and arrangement of parts hereinafter described and claimed. In the accompanying drawings forming part of this specification,

Figure 1, is a perspective outline of a davenport embodying my invention.

Figure 2, is a perspective outline of the upper section of the davenport showing it converted into a swing.

Figure 3, is a perspective outline of the lower section of the davenport showing it converted into an infant's crib.

Figure 4, is a fragmentary perspective view of the upper section of the davenport showing it converted into a bed.

Figure 5, is a fragmentary perspective view of the upper section of the davenport showing it assembled as a swinging crib.

Figure 6, is a fragmentary perspective view of the lower section of the davenport showing in detail, an end member of the crib railing.

Figure 7, is an enlarged view of a detail of said end member.

Figure 8, is an end elevation of the davenport.

Figure 9, is a sectional view on line 9—9 of Figure 8.

Figure 10, is a sectional view on line 10—10 of Figure 9.

Figure 11, is a fragmentary perspective view of the lower section of the davenport showing the manner of mounting the wheel supports therefor.

Figure 12, is a sectional view on line 12—12 of Figure 11.

Figure 13, is a rear elevation of one of the slide bar connections between the back and seat of the davenport.

Figure 14, is a sectional view on line 14—14 of Figure 13.

Figure 15, is an end elevation of the lower section of the davenport.

Figure 16, is a plan view of Figure 15.

Figure 17, is a sectional view on line 17—17 of Figure 16 showing the back rail in horizontal position.

Figures 18, 19, 20 and 21 represent in detail parts of the locking means, for locking the crib railing to the lower section.

Figure 22, is a typical rear view of the upper corners of the back of the davenport.

Figure 23, is a fragmentary end view of the latch connection between the back and arm portions of the davenport.

Figure 24, is a plan view of one of the auxiliary back members.

Figure 25, is a fragmentary perspective view of one of the secondary arms for the upper davenport section, for supporting the crib front, and

Figure 26, is a view of part of the underside of the davenport, showing one of the casters in folded position.

Referring to Figures 8 and 9, of the drawings, the invention comprises in general, an upper or top section 1, and a lower section 2. The upper section is adapted to interlockingly rest upon the lower, as by means of the lugs 3 (Figure 4) fitting into the cavities 4 (Figure 16). When thus superposed, the two sections form a davenport which is diagrammatically indicated in Figure 1, the top section thereof consisting of a back member 5, substantially similar arm members 6, and a seat 7. The arms and back are hinged respectively to the ends and rear side of the seat in a manner to swing outwardly and downwardly and repose in the plane of the seat, as indicated in Figure 4. The back has cavities 5′, adapted to receive the spring pressed manually operable latch bars 5″, which latter are slidably mounted, one on each arm, to hold the latter in their normal vertical position. Obviously the back overlaps the inner ends of the arms, and is held thereagainst by the

sliding bolts 8, (Figures 13–14) carried by the back, one near each end thereof. These bolts are disposed vertically, and are slidably mounted in the body of the back and arranged to be manually operable from the front thereof as by means of the handle 8′. The bolts slide into the sockets 8″ which latter are mounted on the rear side of the seat.

The back is further supported in upswung position by the pins 9, which extend longitudinally of the back, one from each end thereof, and respectively through the openings 9′ of the plates 9″ which latter are carried, one on the outside of each of the arms 6.

Slidably mounted on the back to slide longitudinally thereon, and to extend respectively, beyond the ends thereof, are the extension supports 10.

As in ordinary couches and davenports, the back is inclined rearwardly for the sake of comfort to the user, thus requiring the rear edge of the arms to be correspondingly inclined.

Adapted to rest on the extension supports, and the plate 9″, is the auxiliary back extension plate 11, there being one for each end of the back. Each extension plate is provided with an opening 11′ to receive the pin 9, and a pin 11″ to engage the opening 12 in the end of the back. A hook and pin 12′ and 12″, on the plate and back respectively serve to lock the plate in position, whereby I secure, in connection with the arms, back and seat, an elongated approximately rectangular bed surface, upon which bed-clothes may be placed to serve as a bed. The seat 7 is of hollow construction, and is formed with a top plate 7′, front and rear parallel wall members 7″, and end walls 13 extending between the wall members 7″, said end walls being spaced an appreciable distance short of the ends of the top plate.

Immediately adjacent each of the walls 7″ and extending through the end walls 13 are the slideways 14, the inner walls 14′ thereof being shallow to permit the tie bar 14″ to slide over same. Slidable in said slideways are the seat extension members, being formed of side bars 15′ joined together at their inner ends by the tie bar 14″ and at their outer ends by a head piece 15″, which latter is adapted to be flush with the outside of the arms 6 to form a finished mock end portion for the davenport and prevent the arms from swinging outwardly as is best shown in Figure 8.

Parallel with the head piece and extending between the side bars 15′ is the partition wall 16, which latter is joined to the head piece by a floor 16′ to thereby form a receptacle (one for each end of the seat) to hold the suspension chain 17. As here shown, the ends of the chain are secured respectively to the side bars as at 17′, so that when the seat extensions are extended, (Figure 5) the top section of the davenport may be suspended by said chains to form a swing, as represented in Figure 2, wherein the back is sustained in upstanding position by the slide bolts 8.

It is to be noted, that the auxiliary back plates 11, here serve as back rests for the outswung arm portions 6, which latter are supported by the seat extension members. In Figure 1, one of the seat extension members is shown in extended position, to thereby indicate how the entire top section of the davenport may be converted into a swinging settee.

The bottom section of the davenport is preferably constructed to bring it flush with the arms 6 and the front of the seat 7, but extends an appreciable distance beyond the rear edge of the latter to afford a space for the mounting of, what may be termed, an auxiliary back for the main back 5. This auxiliary back comprises a pair of uprights 18, one for each end of the bottom section, and arranged flush with the ends of the back 5.

The bottom section comprises a hollow base having front and rear walls 19 and 19′ respectively and end walls 20. The walls extend practically from the floor to the underside of the seat 7, and support a floor 21 which is properly located to form a deep rectangular storage space for the knock down parts of the invention hereinafter to be described.

The uprights 18 are of uniform thickness and of a configuration defining preferably a right angled triangle having a short base, and lie respectively in the planes of the end walls 20. The uprights are positioned approximately flush with the rear of the base and fit with their inclined edges against the back 5, to assist in supporting same, as indicated in Figure 8.

Each of the uprights is composed of the parts 18′ and 18″, to thereby divide the length of the base thereof, the part 18′ having hinge connection 22 with the base to swing rearwardly in the plane of its respective end wall 20. The part 18″ is hinged at its top to the part 18′ to swing outwardly thereon away from the end of the base. Thus, the part 18″ normally sustains the upright against a swinging movement but when swung outwardly permits same to be folded against the base, as shown in Figure 17.

The inclined edge of each of the uprights is formed along its inner side, with a rabbet 23, each upright carrying an outstanding pin 23′ on its inner side near the top thereof. As an additional support for the uprights, when they are in horizontal position,

I provide the slotted pivot bars 24, which latter rests on the rear wall of the base and has pivoted connection 24′ with the latter, and slidable connection with the screw 24″ carried by the upright.

Connecting the two uprights, is the crib rail portion 25, which forms the rear wall of the crib, as shown in Figure 3, and stabilizes the uprights.

Inasmuch as the distance *a* in Figure 17, equals *b* in Figure 4, the back 5 rests flatly upon the members 18 when the davenport is converted into a bed.

For the purpose of securing a crib in combination with the base and its back 18, I provide the detachable rail members 26 and 27 as shown in Figures 3–5 and 6.

The members 26 which constitute end members are right and left handed, the rear edge of each fitting into the rabbet 23 respectively of the uprights, and the front post 28 thereof carrying a hook 28′ (Figure 19) adapted to engage with the pin 28″ on the outside of the base. The end members are further stabilized by the pin 29, (Figure 20) which extends into the slot 29′, which latter opens into the cavity 4, and by the notched lug 30 which overlaps the inner side of the upright and engages with the headed pin 31 carried by the latter.

The rail member 27 extends between the posts 28, and carries at each end an inwardly extending staple 32 (Figure 5) adapted to receive the vertical member of the hook 33 carried by the post 28 (Figure 6). For the purpose of anchoring the lower corners of the rail member, I provide the inwardly extending metallic arm 34, the free end thereof being cut to slant downwardly and outwardly. A downwardly opening slot 34′ extending parallel with said slanted end serves a purpose to be hereinafter described.

Sunk in the forward corners of the base of the lower section, of the davenport, are the recesses 35, best shown in Figure 18 of the drawings, said recesses adapted to receive respectively the arms 34 of the member 27. Obviously owing to the slanted ends of said arms, the rail member will be locked to the base against vertical movement. Thus in disassembling the crip illustrated in Figure 3, the hooks 28′ are first disengaged and the end members 26 removed. The front member 27, may then be caused to lean inwardly, and then lifted out of engagement with the recesses 35.

For the purpose of converting the swinging upper section of the davenport into a swinging crib, I provide the headed pins 36, one projecting from each end of the seat (Figure 5), these pins being engageable by the slot 34′ in the arms 34. At its top the rail member rests against the front of the arms 6, and is held thereagainst by the hook chains 36′, adapted to engage respectively the pins 38 carried by the arms 6. As the slots 34′ are diagonally disposed, the rail member 27 cannot be removed from the pins 36 until the arms are previously swung outwardly. Thus I secure a readily disassembled swinging crib. To stabilize the swinging crib or the combination illustrated by Figure 2, I provide the tie chains 37, which latter extend from the rear suspending chain member to the extension supports 10, to which latter they are detachably secured as by means of the hook 10′ (Figure 4). When it is desired to convert the device into a swinging crib with end seats, as indicated in Figure 2, shown in part by finely dotted lines, I insert the rail member 27 into the recesses 35 of the base (Figure 16), as hereinbefore explained. To tie the rail member to the back 5, I provide the right and left brace members or secondary arms 38′, each arm having a downwardly directed hook 39 at its forward end adapted to engage the staple 32 of the rail member, and a notched rearwardly extending plate 40 adapted to engage with its notch the pin 9 of the back 5.

A stay rod 41 extending from the brace member to the edge of the back 5, is adapted to be readily screwed as at 41′ to said edge.

It is desirable in children's furniture to have it conveniently transportable, as upon rubber tired wheels, to afford amusement as well as utility, in that the crib may be rolled back and forth to lull the infant to sleep, or the davenport may be rolled about for amusement.

To this end, I provide foldable rolling means for the base of the davenport, which, as here shown, comprises a pair of brackets 42, pivotally mounted one at each end of the base in a manner to be swingable into the hollow of the latter. Each bracket carries a pair of spaced caster wheels 43, and a pair of upwardly extending flat lugs 44 each formed with a slot 45. The lugs are mounted, one at each end of the bracket and extend above the top thereof, and lie flatly, respectively, against the front and rear walls 19 and 19′ of the base.

The brackets have slidable pivotal connection with the base, by means of the pivot pins 46, which latter extend through the slots, at a point intermediate the ends thereof, when the bracket is flush with the end of the base, which may be termed its normal position, as shown in Figure 11.

The bracket carries fillet blocks 47, which fit against the angle irons 48, secured to the inside of the end walls 20, whereby the bracket is held properly positioned against lateral movement. To prevent downward movement of the bracket relative to the base the spring pressed latch 49 is provided, the hook 50 thereof engaging with the lug 51 carried by the end wall.

To stabilize the brackets, I provide the

brace rods 52, which have pivotal connection 53 with the bracket, and are formed with a hook 54 adapted to hook into the opening 55 preferably in a plate carried by the base.

When it is desired to render the rolling means inoperative, as indicated in dotted lines (Figure 12) the brace rods are turned inwardly; the latch 49 is then disengaged and the bracket slid downward on the pins 46 to thereby disengage the angle irons 48; whereafter the bracket may be swung into the hollow of the base. To hold it suspended therein, I provide the stop pins 56, which are so positioned, as to engage the upper edge of the slotted lugs 44, as is clearly indicated in Figure 12. Obviously the wheels of the caster wheels, being swivelled off center, on the brackets, will tend to fall by gravity to a hanging position. This I prevent by providing supporting blocks 57 (Figure 26) against which latter the edge of the wheel rests, to prevent the wheel from swivelling.

The rail members 26 and the members 11 and 38 may be conveniently stored in the base of the davenport.

Thus I secure a combination article of furniture specially adapted for nursery use, and embodying such novel features of construction whereby an infant may be safely placed in the crib illustrated in Figure 25, while end seats shown in Figure 2, may, at the same time be enjoyed by other children. A further advantage resides in the readily applied crib rail 27, to the settee as shown in Figure 5. Thus the swinging settee may be quickly converted into an improvised crib, to swing an infant to sleep. Another advantage of the invention is had, in using the wheel supports for the davenport proper, whereby much amusement is afforded children in rolling it about, the movement thereof being greatly facilitated by the appreciably large caster wheels.

I claim—

1. In a davenport, in combination, a base section, a top section removably supported on said base section, said top section including a hollow seat portion, seat extension members mounted within the hollow of said seat to be slidable outwardly longitudinally thereof, each formed with an externally visible end cross member, there being one extension member for each end of said seat, said top member including a pair of hinged arms adapted to be swung outwardly to rest respectively upon said extension members when the latter are in extended position, the adjacent ends of said top and base section being constructed to permit each of said end cross members to be brought flush with the ends of said base and top section and engage throughout its length with the arm along its upper edge and with the base section along its lower edge to thereby prevent the arm from swinging outwardly.

2. In a davenport, in combination, a bottom section, a top section removably seated upon said bottom section, said top section including outwardly swingable side arms and a rearwardly swingable back, manually releasable means for holding said back in upswung position, manually releasable means for each of said arms for detachably holding them connected to said back, extension members slidably mounted within the body of said top section to slide longitudinally outwardly one from either end thereof to support said arms when the latter are in outswung position, and an auxiliary back abutting against the rear of the back of said top section to support the said back, said auxiliary back having hinged connection with said bottom section in a manner to be supported in a horizontal position when the back is swung outwardly, said auxiliary back including manually operable releasable means for being held in upswung position.

3. In a davenport, in combination, a bottom section, a top section resting upon said bottom section and including a hollow seat portion, hinged side arms and a hinged main back, extension members normally positioned within the hollow of said seat portion and mounted to slide outwardly from the ends thereof to support said arms when the latter are in outswung position, an auxiliary back for supporting said main back hinged to said bottom section in a manner to be swung into a horizontal plane and to be so held to support said main back when the latter is in outswung position, extension supports slidably mounted on said main back near the top thereof to slide longitudinally respectively beyond the ends thereof and extension plates for said main back one for each end thereof resting upon said extension supports and extending to said side arms, supporting means on each of said arms for supporting respectively said extension plates and readily manually releasable locking means for each of said extension plates locking same to the main back.

4. In a davenport, comprising a top and bottom section, the top section loosely resting upon the bottom section and having a hollow seat portion, and an extension for each end of said top section adapted to be connected to means for swingingly supporting the top section, each extension comprising a slide mounted to be slidable longitudinally of said seat portion in the hollow thereof, said mounting including a pair of longitudinally disposed parallel slideways extending the length of the seat for slidably receiving said slides, said slides each including a transverse brace member adapted

to form a shoulder, and said top section including a wall member to engage with said shoulder to restrict the outward sliding movement of said slide.

5. In a davenport, in combination, a bottom section, a top section removably seated upon said bottom section, said top section including side arms, and a back adapted to be swung into a horizontal plane of even level, extension members slidably mounted within the body of said top section to be withdrawn from the ends thereof to form supports for said arms when the latter are in outswung position, uprights hinged to said bottom section in a manner to normally support said back in upswung position, said uprights including hand operable releasing means whereby same may be swung into a horizontal plane to support said back in horizontal position, means in connection with said extension members for suspending said top section when lifted from said bottom section to constitute a swing, and independent means for sustaining said back in upswung position when said top section is suspended.

6. In an article of furniture comprising a hollow seat, a back having arms one at either end thereof, said arms being hinged at their lower edges to said seat to be thereby enabled to swing outwardly in a horizontal plane, an extension member slidably mounted in the hollow of said seat, one at either end thereof, to slide outwardly to support said arms respectively when the arms are in outswung position, means at the outer extremity of said extension members for attaching a suspending member whereby the article of furniture may be swingingly suspended, a latch for each arm adapted to engage said back to lock said arm to the latter to prevent an outward swinging movement thereof, a crib rail extending between said arms and having readily detachable connection at its ends with said seat, and a readily detachable flexible connection above the aforesaid detachable connection, one for each end of said crib rail, between the latter and the outside respectively of said arms, to hold said crib rail in position and hold said arms against a lateral spreading movement.

7. In a convertible article of furniture, a base a back hinged thereto at one edge thereof to swing into horizontal plane, said back including manually operable readily releasable means for sustaining it in upswung position, a top section loosely seated on the top of said base and having a back resting against the aforesaid back when the latter is in upswung position to be supported thereby, the back of said top section being hingedly mounted in a manner to rest upon the back of said base when the latter is in horizontal position to be supported thereby, and rail members fitting against the back of said base when said top section is removed, and having readily detachable connection therewith and with said base, and a front extending between the front ends of said rail members and having readily detachable connection with the latter and with said base to thereby form a crib.

8. In a convertible article of furniture, in combination, a base section, a top section seated loosely upon said base section to form a davenport, said top section being readily lifted from said base section and including a back, said base section including uprights for sustaining said back, crib rail members extending across the ends and front of said base to said uprights to form a crib, readily detachable connecting means between said uprights and said rail members, and readily detachable connecting means between said rail members and said base.

9. A convertible article of furniture, in combination, a bottom section, a top section loosely fitting over said bottom section to be readily lifted therefrom, said top and bottom section forming collectively a davenport, said top section comprising a hollow seat portion, side arms and a back hinged to said seat portion, readily detachable connections between said back and arms, slides slidably mounted in the hollow of said seat in a manner to be slid outwardly from the ends thereof to support said arms when the latter are in outswung position, swing chains attached one to the free end of each of said slides whereby said top section may be suspended to constitute a swing when lifted from said base section, detachable secondary arms for said back extending to the front of said seat portion, and a crib rail member detachably connected to said secondary arms and extending therebetween and having detachable connection with said seat portion for the purpose set forth.

In testimony whereof I affix my signature.

VINCENT F. HRACHOVINA.