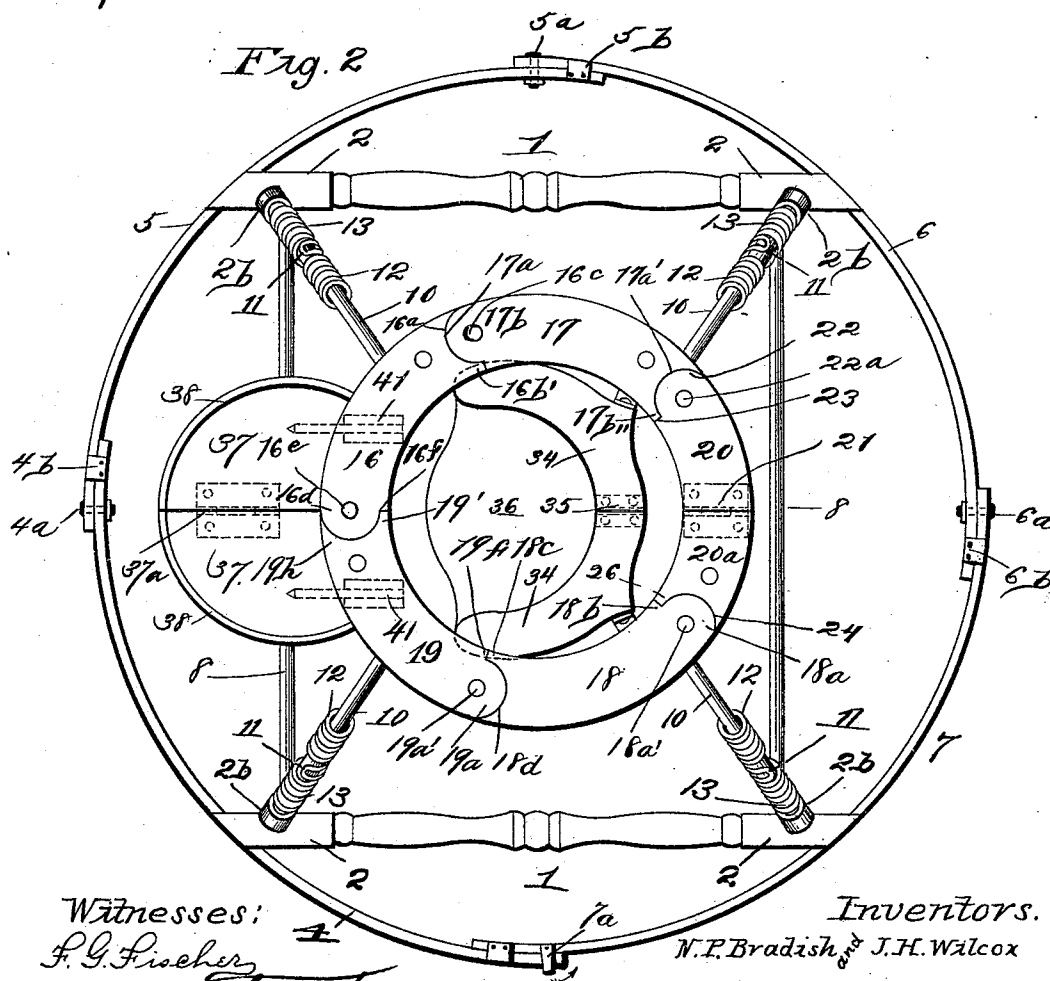
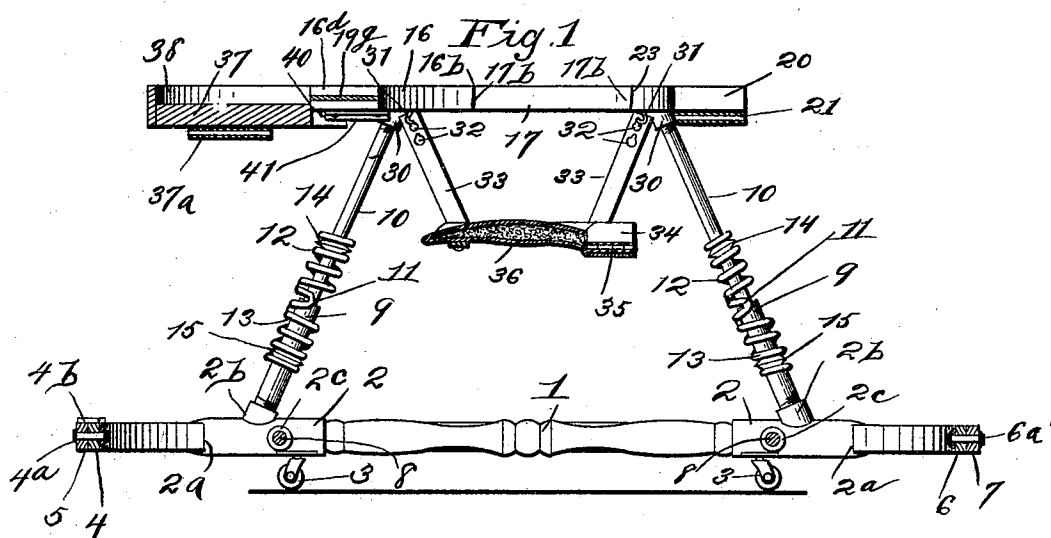


2 Sheets—Sheet 1.

BABY WALKER

Patented Mar. 27, 1894.



Witnesses:

F. G. Fischer

Lyb Thorpe. 73

Inventors.

N.P. Bradish, ^{ind} J.H. Walcox

By Higdon & Higdon
Attys.

(No Model.)

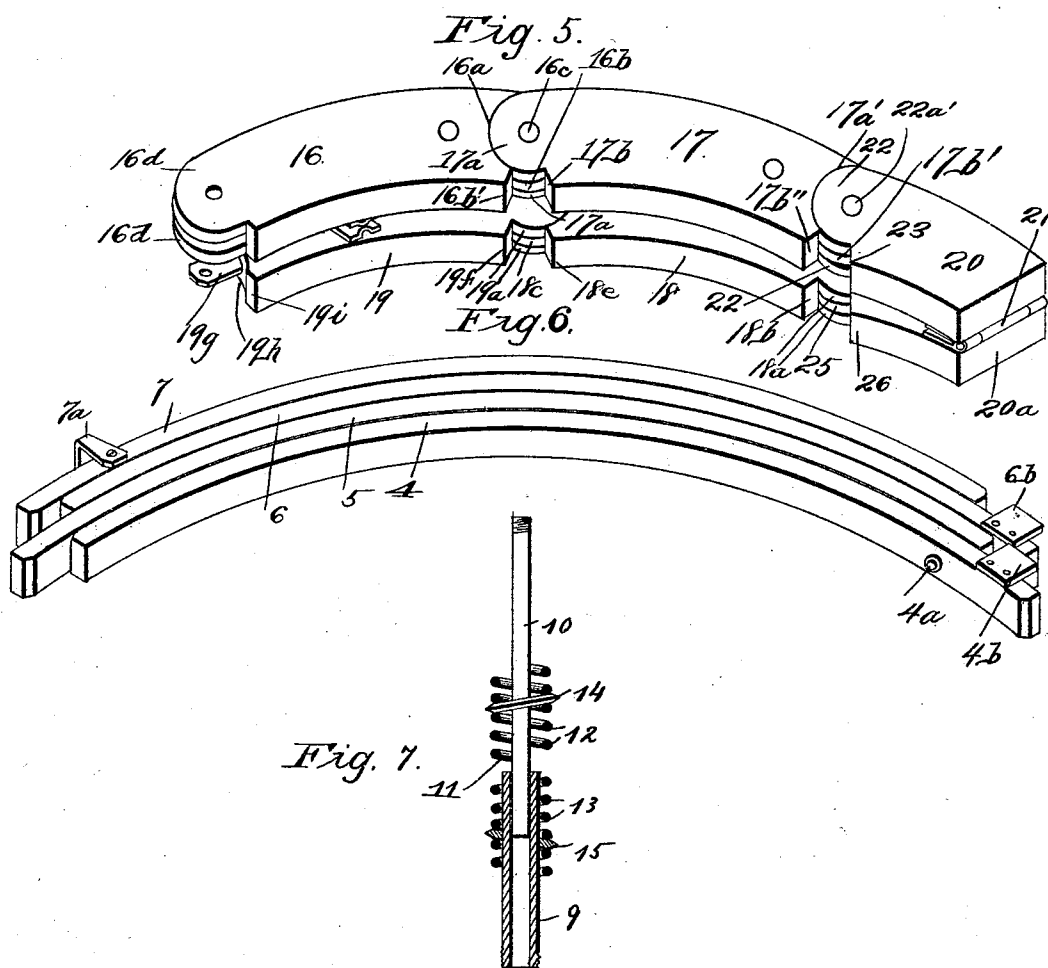
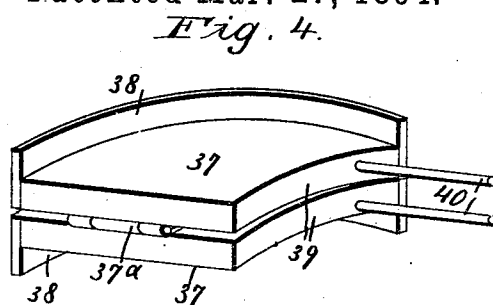
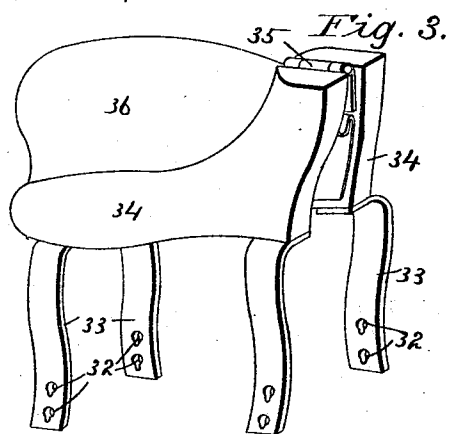
2 Sheets—Sheet 2.

N. P. BRADISH & J. H. WILCOX.

BABY WALKER.

No. 517,403.

Patented Mar. 27, 1894.



UNITED STATES PATENT OFFICE.

NELSON P. BRADISH AND JAMES H. WILCOX, OF KANSAS CITY, MISSOURI.

BABY-WALKER.

SPECIFICATION forming part of Letters Patent No. 517,403, dated March 27, 1894.

Application filed June 29, 1893. Serial No. 479,189. (No model.)

To all whom it may concern:

Be it known that we, NELSON P. BRADISH and JAMES H. WILCOX, of Kansas City, Jackson county, Missouri, have invented certain new and useful Improvements in Baby Walkers and Tenders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

Our invention relates to improvements in baby walkers, and the object of the invention is to produce a device of this character which may be folded into a very small package or bundle so as to be easily portable.

A further object is to produce a device of this character which is easily adjustable to accommodate children of various sizes and also to provide a yielding support therefor, and finally to produce a baby walker which is simple, strong, durable and inexpensive of construction.

With these objects in view, our invention consists in certain peculiar and novel features of construction and combination of parts as will be hereinafter described and pointed out in the claims.

In order that our invention may be readily understood, we will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1, is a vertical sectional view of a baby walker constructed in accordance with our invention. Fig. 2, is a top plan view of the same. Fig. 3, is a detail perspective view of the seat portion of the device folded, and Fig. 4, is a detail perspective view of the table or stand also folded. Figs. 5 and 6, are detail perspective views respectively of the sections or links composing the upper and lower rings of the device, and showing them in their folded position. Fig. 7, is a vertical sectional view of one of the telescopic legs and showing the spring having a right and left hand thread secured thereon in operative position.

In the said drawings, 1 designates a pair of horizontal and parallel side bars, these bars being of any ordinary figuration desired, and fitting at their opposite ends in couplings 2, and these couplings 2 are mounted upon caster rollers 3 of the usual construction and ar-

range, so that the tread of the rollers may be presented in any direction desired.

A circular guard ring is composed preferably of four segmental sections, these sections being designated by numerals 4—5—6 and 7, and sections 4 and 5 at their adjacent ends are pivotally connected by a bolt 4^a, the sections 5 and 6 are pivotally connected by a bolt 5^a and the sections 6 and 7 are pivotally connected by a bolt 6^a, these several bolts being retained in position by retainer nuts upon their inner ends. The free end of the section 7 carries a pivotal loop 7^a which is adapted to engage and hold securely the adjacent end of the section 4. When desired as hereinafter referred to, the sections 4 and 7 may be disconnected by the operation of the loop 7^a in the proper direction. In order to support these sections so that their upper surfaces shall be in the same horizontal plane, the section 4 carries an outwardly projecting ear or plate 4^b which rests upon the upper edge of the section 5, and the section 5 carries an outwardly projecting plate or ear 5^b which rests upon the upper edge of the section 6, and the section 6 carries an outwardly projecting ear or plate 6^b which rests upon the upper edge of the section 7, and the section 7 carries an outwardly projecting plate or ear 7^b which rests upon the upper edge of the adjacent end of the section 4. It will thus be seen that these several sections carrying the plates or ears fitting against the upper edges of the adjacent sections a suitable distance from their pivotal point, prevent any pivotal movement of any of the sections and hold them so that their upper surfaces shall be flush with each other, and their lower surfaces shall be flush with each other, respectively. The several sections are engaged respectively in the recesses or notches 2^a formed in the outer ends of the couplings 2, and being thus supported in a horizontal position near the floor, form a guard which, should the device be tilted sufficiently, would come in contact with the floor and prevent its entire overthrow. The section 4 is then brought against the outer edge of the adjacent end of the section 7, so that the loop 7^a thereof may be engaged therewith so as to clamp the sections 4 and 7 firmly together. In order to brace this frame thus constructed,

a pair of rods 8 are arranged horizontally and parallel with each other, and are connected each to a pair of couplings 2—2 in any suitable manner, preferably by engaging tubular off sets 2^c projecting from the inner sides of said couplings. These rods may be of hollow gas-pipe or simply solid rods as desired. The couplings 2 are also formed with the upwardly converging tubular projections or studs 2^b which are preferably internally screw-threaded to receive the externally screw-threaded ends of the gas-pipes 9, and fitting telescopically in said gas-pipes and extending upwardly in the same direction for a suitable distance are the cylindrical rods or pipes 10. In order to adjust these rods longitudinally a rod of spring wire is bent at 11, and then has its opposite ends turned to form oppositely disposed or right and left hand screws 12 and 13 respectively, the right-hand threads 12 spirally encircling the lower portions of the rods 10, and the left-hand portions spirally encircling the upper portion of the gas-pipes 9. The right-hand portion also engages shoulders 14 fixed upon the rods 10, and the left-hand portions engage shoulders 15 fixed upon the gas-pipes 9. It will thus be seen by grasping the middle portions 11 of these springs they may be revolvably operated to raise the rods 10 or to lower them as desired, and the object of this will be hereinafter referred to.

The upper or body-ring of the device is formed of a series of segmental sections 16—17—18—19, and a section which is composed of a pair of similar segmental plates 20—20^a secured together at their middle and under side by a hinge 21. The rear end of the section 16 is reduced in its upper and lower sides to form a circular tongue or projection 16^b, and concave shoulders 16^a, at the inner end of said tongue, and is also formed at the inner side and about centrally of said tongue or projection with a shoulder 16^{b'}, this shoulder being arranged radially toward the center of said body-ring. The tongue or projection 16^b is pivoted upon the vertical pin 16^c between the semi-circular and forwardly projecting ears 17^a, these ears 17^a being arranged at their outer ends to fit snugly against the inner ends of the concave shoulders 16^a of the section 16, and the section 17 is also formed with a radial shoulder 17^b which is adapted to abut against the shoulder 16^{b'} of the section 16. The section 17 is formed at its rear end in its upper and lower sides with recesses, the inner ends or shoulders 17^{a'} of which are concaved to form a circular and outwardly projecting tongue 17^{b'} and at the inner side and about centrally of said tongue the section 17 is formed with a radially arranged shoulder 17^{b''}. This tongue 17^{b'} is fitted between a pair of semi-circular projections 22 at the outer end of the section 20 and is pivotally connected thereto by a vertical pivot pin 22^a, so that the outer margins of the projections 22 shall rest against the concave

shoulders 17^a of the recesses of the section 17. The section 20 is also formed at its inner side with the radially arranged shoulder 23 which abuts against the shoulder 17^{b''} of the section 17. The outer end of the section 20^a is recessed in its upper side to form the concave shoulder 24 and the forwardly projecting and circular tongue 25, and is also formed at its inner side with a shoulder 26, this shoulder being arranged to extend radially toward the center of the body-ring. This tongue 25 engages a circular recess formed between the projecting ears 18^a, and is pivotally connected thereto by the vertical pivot pin 18^{a'}, of section 18, and arranged so that the segmental ends of said projections 18^a shall lie snugly against the inner concave shoulders 24. This section 18 is also formed at its inner side with the radially arranged shoulder 18^b which abuts against the shoulder 26 of the section 20^a. The outer end of the section 18 is reduced in its upper and lower sides to form a circular tongue 18^c, and concave shoulders 18^d at the inner ends of said tongue and at its upper and lower sides, and is also formed about midway of said tongue and at its inner side with the radial shoulders 18^e. The tongue 18^c fits in a circular recess formed between the projections 19^a of section 19, and is pivotally connected thereto by the vertical pivot pin 19^{a'}, and arranged so that the segmental end of said projections 19^a shall fit snugly against the shoulders 18^d of sections 18. The section 19 is also formed with a radially arranged shoulder 19^f which abuts against the radial shoulder 18^e of the section 18. The opposite end of the section 19 is recessed at its upper and lower sides to form the tongue or projection 19^g, and at the inner end of said tongue the segmental shoulders 19^h, and about midway of said tongue the radially arranged shoulder 19ⁱ. This tongue 19^g is adapted to engage the circular recess formed between the projections 16^d of the sections 16, and is pivotally connected thereto upon the vertical pivot pin 16^c so that the segmental ends of said projections 16^d shall lie snugly against the concave shoulders 19^h of section 19, and so that the shoulder 16^f formed at the inner side of said section shall abut against the shoulder 19ⁱ of section 19. It will thus be seen that these several sections pivotally connected together as described form a complete circle or body-ring, and that the radial shoulders thereof bearing against each other prevent any twisting movement of said body-ring. The front sections 16 and 19 and the side sections 17 and 18 adjacent to their rear ends are formed with diverging and downwardly projecting tubular studs 30, and these studs are preferably internally threaded to receive the upper threaded ends of the rods or pipes 10. It will thus be seen that when desired, by operating the springs the body-ring may be raised or lowered in a horizontal plane when desired. Depending from said body-ring are a suitable number of hooks

31, and these hooks are adapted to engage one of a series of openings 32 formed in a corresponding number of straps 33, these straps being secured at their lower ends to a pair of segmental brackets or plates 34, these brackets or plates being hinged together at their middle at 35 and forming together at their inner margins approximately a semi-circle, the open side of which is toward the front or diametrically opposite to the hinge 21 of sections 20 and 20^a of the body-ring. A flexible seat 36 of leather preferably filled with hair or other suitable cushioning material is secured to the brackets or plates 34. It will thus be seen, that we have provided a seat in which the child may twist or turn to a certain degree and at the same time a seat the position of which may be changed relative to the body-ring when desired, by means of a series of openings or holes 32. In order to provide a table or stand in front of the child two segmental plates or boards 37 are provided, each of which is provided at its outer and curved vertical edge with the upwardly projecting flange or retainer wall 38. These sections are adapted to fit and are hinged at 37^a closely together at their under side upon a line radial to the center of the body-ring. The inner edges of these plates are formed concave at 39—39 to correspond with and fit against the outer curved edges of the sections 16 and 19, and in order to secure the table or stand firmly in position a pair of horizontal and rearwardly projecting pins 40 are provided, one of these pins 40 projecting from the concaved edge 39 of each plate 37 and fitting in a bearing or loop 41 secured to the undersides of the sections 16 and 19.

It will be seen from the foregoing, that the child upon the seat 36 by pressing or pushing with its feet upon the floor may move the device in any direction desired, and that by operating the springs referred to the seat may be raised higher or lower to accommodate children of various sizes, and that by providing the stand or table the device may be used as a support for the child during meals and other times.

When it is desired to move this chair from place to place or upon a trip, the table or stand may be detached from the body-ring and folded to the position shown in Fig. 4.

The seat may now be detached from the hooks 31 and folded also to the position shown in Fig. 3, the flexible body-portion 36 allowing said operation to take place, and the straps 33 of course may be folded up against the body-portion. The body-ring may now be disconnected from the upper ends of the rods 10, and the pivot pin 16^a connecting the sections 16 and 19 removed. The portion composed of the sections 18—19 and 20^a may now be swung upon the hinge 21 up against the undersides of the portions composed of the sections 16—17 and 20, and these semi-circular portions may then be straightened out to a certain extent, the peculiar pivotal connec-

tion allowing said movement to take place, as shown in Fig. 5. The loop 7^a may now be swung in the direction of the arrow, Fig. 2, to clear the end of the section 4 so that the lower ring may be disconnected from the recesses 2^a of the couplings 2. The sections 5 and 6 are now swung downward upon the pivot 5^a until the section 5 lies snugly within the section 6. Section 7 is now swung downwardly upon pivot 6^a until it lies snugly against the outer side of section 6, and section 4 is pivotally operated upon pivot 4^a until it lies snugly against the inner side of section 5, as clearly shown in Fig. 6. The couplings may now be removed from the cross bars 1 and the cross bars 8, and if desired the pipes 9 and 10 may also be disconnected. It will thus be seen that the device may be taken quickly and easily apart, and folded into a package or bundle so small that it may easily be carried from place to place with very little inconvenience, and may if desired be placed in a large hand grip; thus obviating the necessity of sending a device of this character by express, where it would be liable to be broken, and also inconvenient to reach until the journey was ended.

From the above description it will be seen that we have produced a baby walker, which is simple, strong, durable and inexpensive of construction, which is easily portable and which may be adjusted to accommodate children of various sizes, and which finally by means of the springs encircling the pipes 9 and 10 provides a yielding support for the occupant. It will also be seen that the lower or guard-ring will prevent the device being overthrown or knocked over.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a baby walker, the combination with a suitable framework, of a guard-ring carried by said framework, and consisting of a series of segmental plates pivotally connected together, and provided with ears or lugs to hold said plates in the same plane, one of said plates being detachably connected to the adjacent end of another section, substantially as set forth.

2. In a baby-walker, the combination with a frame, and a body-ring carried thereby, of a series of upwardly converging pipes carried by said frame, and a series of downwardly diverging pipes carried by the body-ring and fitting telescopically within the first named pipes, and collars rigidly carried by each series of pipes, and springs each bent to form a right and left hand screw, the right hand screws spirally encircling one series of pipes and their collars, and the left-hand screws spirally encircling the other series of pipes and their collars, substantially as set forth.

3. In a baby walker, the combination with a frame mounted upon rollers, of a body ring yieldingly and adjustably supported from said frame and composed of a series of seg-

mental plates pivotally connected together, and having the middle and rear sections hinged together at their lower sides, substantially as and for the purpose set forth.

- 5 4. In a baby walker, the combination with a frame supported upon rollers, and a body-ring yieldingly and adjustably supported from said frame, and a seat having a flexible body portion and having side plates hinged
10 together at their middle, and having flexible straps or connections provided with holes adapted to engage hooks carried by said body-ring, substantially as set forth.

5. In a baby walker, the combination with

a frame mounted upon rollers and a body- 15
ring composed of sections pivoted together and yieldingly and adjustably supported from said frame, and a stand or table composed of sections hinged together at their lower side, and detachably connected to the 20
body-ring, substantially as set forth.

In testimony whereof we affix our signatures in the presence of two witnesses.

NELSON P. BRADISH.

JAMES H. WILCOX.

Witnesses:

MAUD FITZPATRICK,

M. P. SMITH.