

L. ZUMINO.

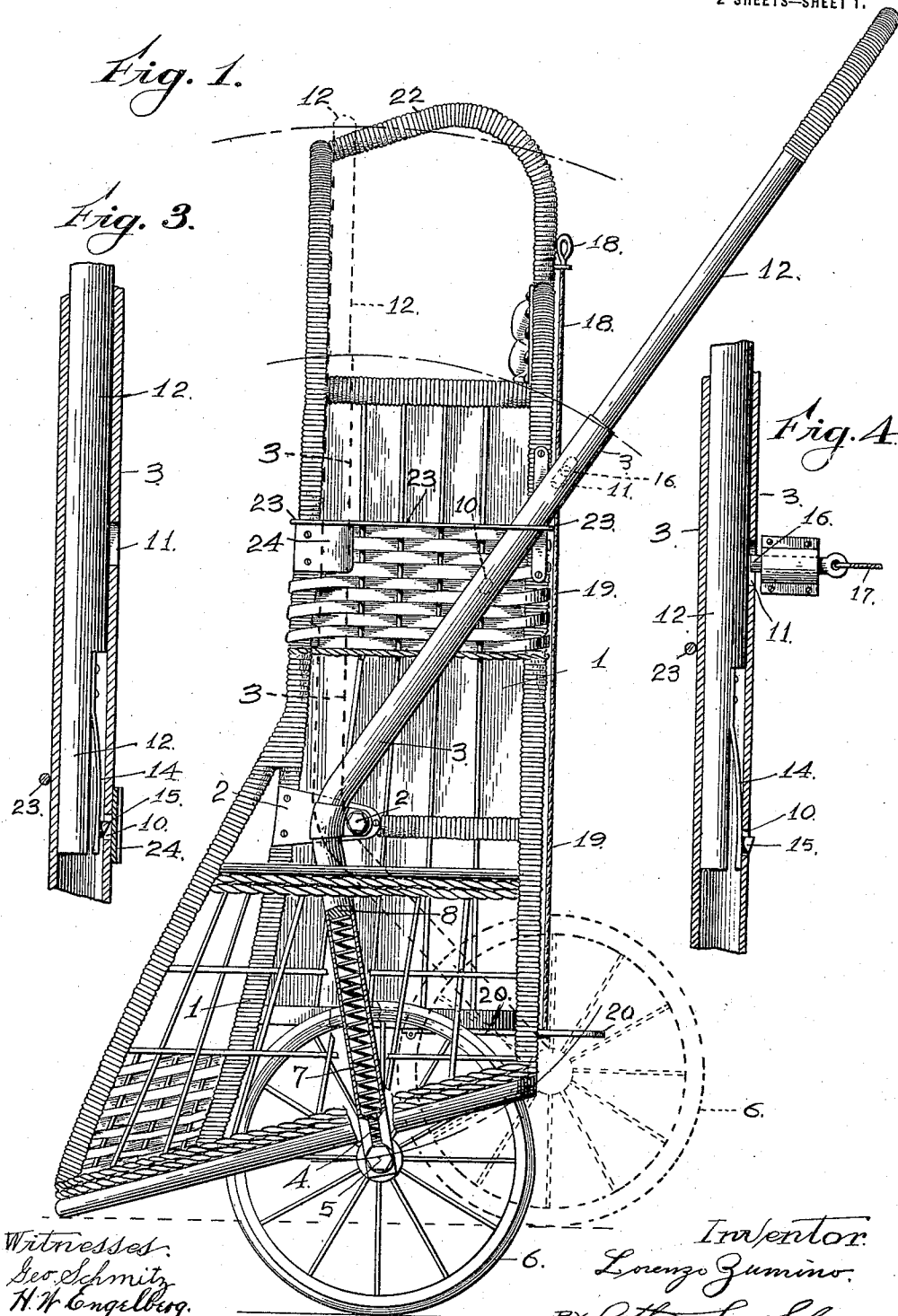
COMBINED BABY CHAIR AND CART.

APPLICATION FILED JULY 21, 1913. RENEWED JAN. 11, 1915.

1,149,972.

Patented Aug. 10, 1915.

2 SHEETS—SHEET 1.



Witnesses:
Geo. Schmitz
H. H. Engelberg

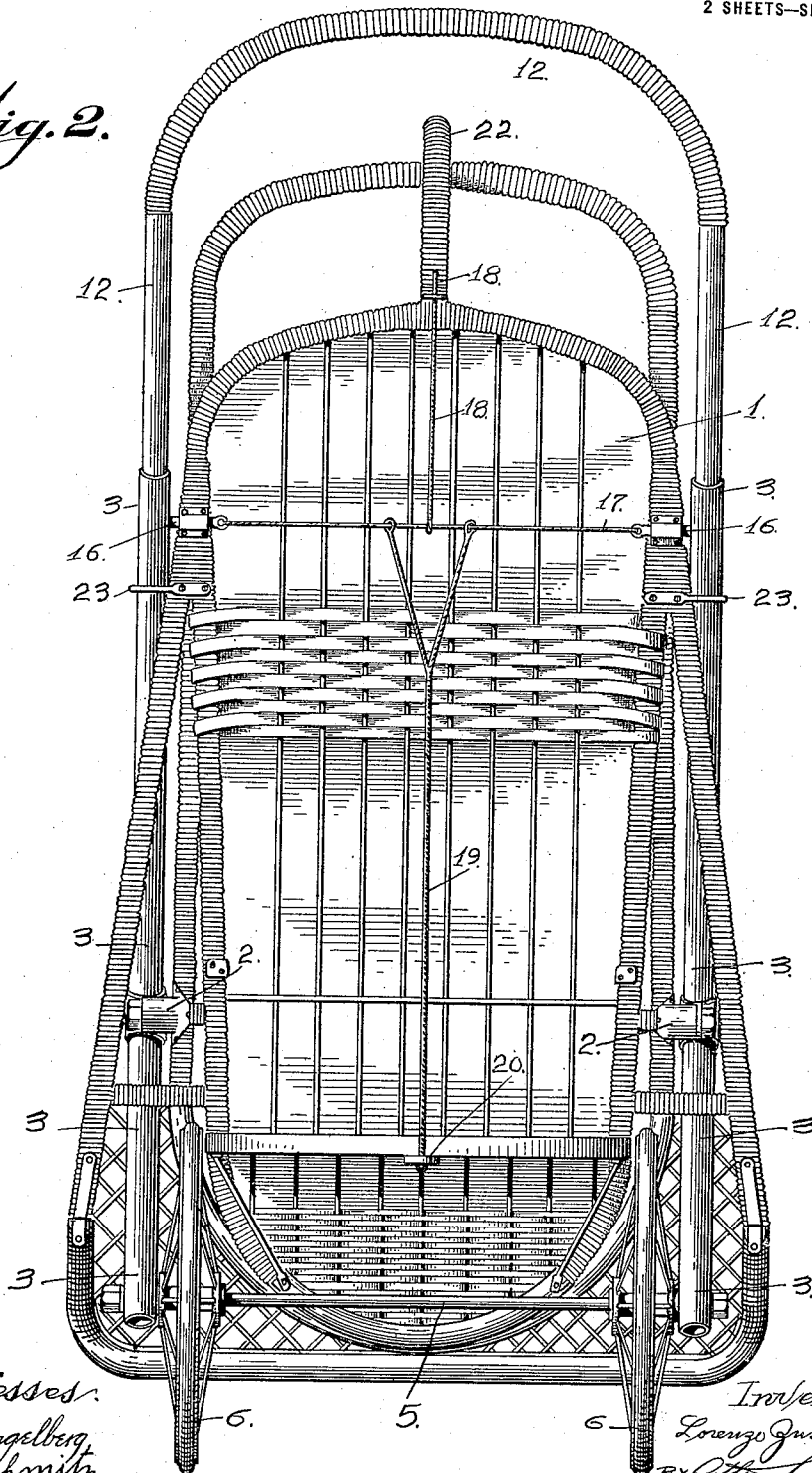
Inventor:
Lorenzo Zumino.
BY Arthur L. Slee
HIS ATTY.

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Fig. 2.



Witnesses:
 H. W. Engelberg,
 Geo. Schmitz

Inventor:
 Lorenzo Zumino.
 BY Arthur L. Slee
 HIS ATTY.

UNITED STATES PATENT OFFICE.

LORENZO ZUMINO, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO THOMAS J. O'LEARY, OF OAKLAND, CALIFORNIA, AND ONE-HALF TO THOMAS P. FENTON, OF LOS ANGELES, CALIFORNIA.

COMBINED BABY CHAIR AND CART.

1,149,972.

Specification of Letters Patent.

Patented Aug. 10, 1915.

Application filed July 21, 1913, Serial No. 781,650. Renewed January 11, 1915. Serial No. 1,712.

To all whom it may concern:

Be it known that I, LORENZO ZUMINO, a subject of the King of Italy, and a resident of the city and county of San Francisco and State of California, have invented a new and useful Improvement in Combined Baby Chairs and Carts, of which the following is a specification.

My invention relates to a baby chair that may also be used as a baby cart wherein novel means are used to elevate the chair upon the wheels and to provide an extended handle for pushing the said cart and the objects of my invention are, first, to provide improved means for elevating the chair on wheels so that it may be used as a baby push cart, second, to provide means for locking the chair in an elevated position, third, to provide means that may be either hand or foot operated, for releasing the chair from an elevated position, fourth, to provide a collapsible handle that may be extended for the purpose of pushing the cart, fifth, means for locking the extension handle in an extended position when the said chair is elevated, sixth, means for releasing the said lock so that the said handle may be collapsed when the chair is resting on the ground, seventh, means for preventing the chair from being elevated when the handle is collapsed, and eighth, to provide suitable springs for the purpose of securing resiliency for the chair when being used as a cart. I accomplish these several features by means of the device illustrated in the drawings forming a part of the present specifications wherein like numerals are used to designate similar parts throughout the said specifications and drawings and in which—

Figure 1 is a side elevation of the chair disclosing the handle extended and the chair elevated and being supported upon the wheels secured thereto, the dotted lines indicating the position of the collapsible handle and the wheels, also the ground line, when the said chair is resting on the ground. Fig. 2 is a rear elevation of Fig. 1 disclosing the means whereby the chair may be unlocked from an elevated position by either foot or hand. Fig. 3 is a broken detailed sectional view of one of the side tubes disclosing one end of the handle therein and the manner in which the handle is released

before being collapsed into the tube. Fig. 4 is a similar view disclosing the manner in which the handle is secured in an extended position and also the means whereby the said handle is secured in a position that will retain the wheels in the position indicated in full lines in Fig. 1.

It is the purpose of my invention to provide a baby chair with convenient and easily operated improved means for converting the chair into a push cart and for locking the chair in that position. Also to provide means of the character described that may be easily unlocked so as to restore the chair to a position where it will rest on the ground and be securely locked in that position.

Referring to the drawings the numeral 1 is used to designate a chair having suitable plates 2 secured to each side thereof. To each plate 2, as at 2', is pivotally secured the bent tubes 3 having slots 4 in the lower extremities thereof within which is secured the axle 5 of the wheels 6.

A spring 7 is housed within the lower portions of the tubes 3 and between the axle 5 of the wheels 6 and a suitable stop 8 fixedly secured within the said tube 3. The sides of the tube 3 above the pivot 2' and adjacent to the chair 1 are provided with apertures 10 and 11. An inverted U shaped handle 12 has the ends thereof inserted in the upper ends of the tubes 3, the said ends being provided with springs 14 having beveled lugs 15 thereon which are adapted to engage the apertures 10 of the tubes 3 and to prevent the ends of the said handle from being collapsed farther into the tube. Spring bolts 16 are secured to the back of the chair 1 and are adapted to engage the apertures 11 in the tubes 3 for the purpose of retaining the said tubes in the position indicated in full lines in Fig. 1 of the drawings. A horizontal cord 17 is connected to each spring bolt 16. A cord 18 is secured at its lower end to the approximate center of the cord 17 while the upper end of the said cord 18 is loosely secured to the back of the handle 22 of the chair 1. A cord 19 is provided at its upper end with two eyelets which loosely engage the cord 17 on either side of the cord 18, the lower end of the said cord 19 being secured to a lever 20 which is hinged to the bottom of the chair 1.

Retaining rods 23 are secured to each side of the chair for the purpose of retaining the tubes 3 against the bolts 16 and the releasing plates 24 secured to each side of the chair 1 near the front edge thereof.

The chair will be locked in the position indicated in full lines in Fig. 1 of the drawings in the following manner: The bolts 16 will engage the apertures 11 of the tubes 3, and the retaining rods 23 will retain the said tubes 3 against the said bolts 16 and thus maintain the wheels 6, rotatably mounted upon the axle 5, under the chair 1. The handle 12 will be prevented from collapsing into the tubes 3 by means of the lugs 15 which engage the apertures 10 within the said tubes 3. While in this position the chair may be used as a cart and propelled or pushed along by means of the handle 12.

The cart may be restored to a position where it may be used as a chair by pulling upward on the cord 18 which will draw the bolts 16 toward each other and out of the apertures 11 of the tubes 3. The handle 12 and the tubes 3 will then be free to swing on the pivot 2' to a vertical position which will move the wheels 6 to the position indicated in dotted lines in Fig. 1 of the drawings which will bring the bottom of the said wheels on a horizontal level with the front lower edge of the chair 1, as indicated by the dotted line in Fig. 1. The chair 1 will then be supported by the front lower edge of the chair 1 and the wheels 6 at the back of the chair.

If only one hand of the operator is free at the time it is desired to restore the chair the same is accomplished by pressing downward on the lever 20 with the foot which, by means of the cord 19 secured thereto, will release the bolts 16 from the apertures 11 in the tubes 3 and permit the said tubes to swing forward as hereinbefore described for the operation when the cord 18 is operated by the hand.

When tubes 3 reach the forward position indicated in dotted lines in Fig. 1 of the drawings the beveled lugs 15 projecting through the aperture 10 of the said tubes 3 will be engaged by the plates 24 and pressed into the tubes 3 against the tension of the springs 14 to which the said lugs 15 are secured. The lower beveled edges of the lugs 15 will then be inside of the internal edges of the apertures 10 of the tubes 3 and the downward pressure on the handle 12 will cause the said handle to be collapsed into the said tubes until the said handle 12 assumes the position indicated in dotted lines in Fig. 1. While the handle 12 is in this position it can not be moved to a position which will convert the chair into a cart as any tendency on the part of the handle to move backward will be obstructed by the handle 22 which lies in the path of said

movement as indicated by the upper curved dot and dash line in Fig. 1. The retaining rods 23 also serve to limit the forward movement of the tubes 3 while the device is being used as a chair and thus rigidly secure the wheels from a movement which would cause the said chair to fall backward. The retaining rods also limit the backward movement of the tubes 3 when the chair is being used as a cart and thus prevent the said tubes 3 from passing beyond the bolts 16.

It is obvious from the foregoing that I have provided improved means for easily converting a baby chair to a cart, also means for securely locking the chair in either position.

The springs 7 in the bottom of the tubes 3 provide resiliency while being used as a cart.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is—

1. A baby chair and cart comprising a suitable chair; bent tubes pivotally secured to each side of the chair and having apertures near the upper ends thereof; wheels rotatably secured to the lower ends of the tubes; suitable spring bolts secured to the back of the chair and adapted to engage the apertures in the tubes for the purpose of retaining the bent tubes in a position where the chair will be supported on the wheels and above the ground; and a U-shaped handle having its ends inserted within the upper ends of the tubes.

2. In a combined baby chair and cart, the combination of a suitable chair; bent tubes pivotally secured to the chair and having apertures near the upper ends and slots in the lower ends thereof; a suitable axle slidably mounted within the slots; wheels rotatably mounted upon the axle; fixed stops within the lower ends of the tubes and above the slots therein; springs within the tubes and interposed between the axle within the slots and fixed stops; spring bolts secured to the back of the chair and adapted to engage the apertures near the upper ends of the tubes for the purpose of retaining the said tubes and wheels secured thereto in a position that will support the chair on the wheels and above the ground; means for releasing the spring bolts from the tubes; a U-shaped handle collapsibly secured within the tubes; and means for retaining the handle in an extended position within the tubes.

3. In a combined baby chair and cart, the combination of a suitable chair; bent tubes pivotally secured to the chair and having longitudinal slots in the lower ends and a plurality of apertures near the upper ends thereof; a suitable axle slidably mounted within the slots; wheels rotatably secured to the axle; a fixed stop within the tubes

and above the slots; springs within the tubes and interposed between the fixed stops and the axle within the slots; spring bolts secured to the back of the chair and adapted to engage one of the apertures near the upper end of each tube for the purpose of retaining the bent tubes and the wheels secured thereto in a position that will support the chair on the wheels and above the ground; a horizontal lever hinged to the lower portion of the chair; means operatively connecting the hinged lever to the spring bolts; a U-shaped handle collapsibly secured within the tubes; springs secured to each end of the handle within the tubes and having beveled lugs thereon adapted to engage the other apertures in the upper ends of the tubes and to retain the handle in an extended position; and means for releasing the lugs from the apertures.

4. In a combined baby chair and cart, the combination of a suitable chair; bent tubes pivotally secured to each side of the chair and having longitudinal slots in the lower ends and upper and lower apertures in the upper ends thereof; a suitable axle slidably mounted within the slots; wheels rotatably secured to the axle; a fixed stop in the lower portion of each tube and above the slot therein; a spring interposed between the fixed stop and the axle within the slot in each tube; spring bolts secured to each side of the back of the chair and adapted to

engage the upper aperture in each tube for the purpose of retaining the said tubes and wheels secured thereto in a position that will support the chair on the wheel and above the ground; a lever hinged to the back of the chair near the bottom thereof; means operatively connecting the lever to the spring bolts; a U-shaped handle having the ends thereof inserted within the upper portion of the tubes and having springs secured to the ends thereof; beveled lugs secured to the springs and adapted to engage the lower apertures in the upper portion of each tube and to retain the handle therein in an extended position; plates secured to each side of the chair and adapted to engage the beveled lugs and press the same within the tubes so that the ends of the handle to which the said lugs are secured may be collapsed within the tubes; and suitable retaining rods secured to each side of the chair and adapted to retain the tubes against the spring bolts while the chair is elevated and against the plates when the tubes are adjacent thereto.

In witness whereof I hereunto set my signature in the presence of two subscribing witnesses.

LORENZO ZUMINO.

Witnesses:

JAMES F. McCUE,
GEORGE SCHMITZ.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."