

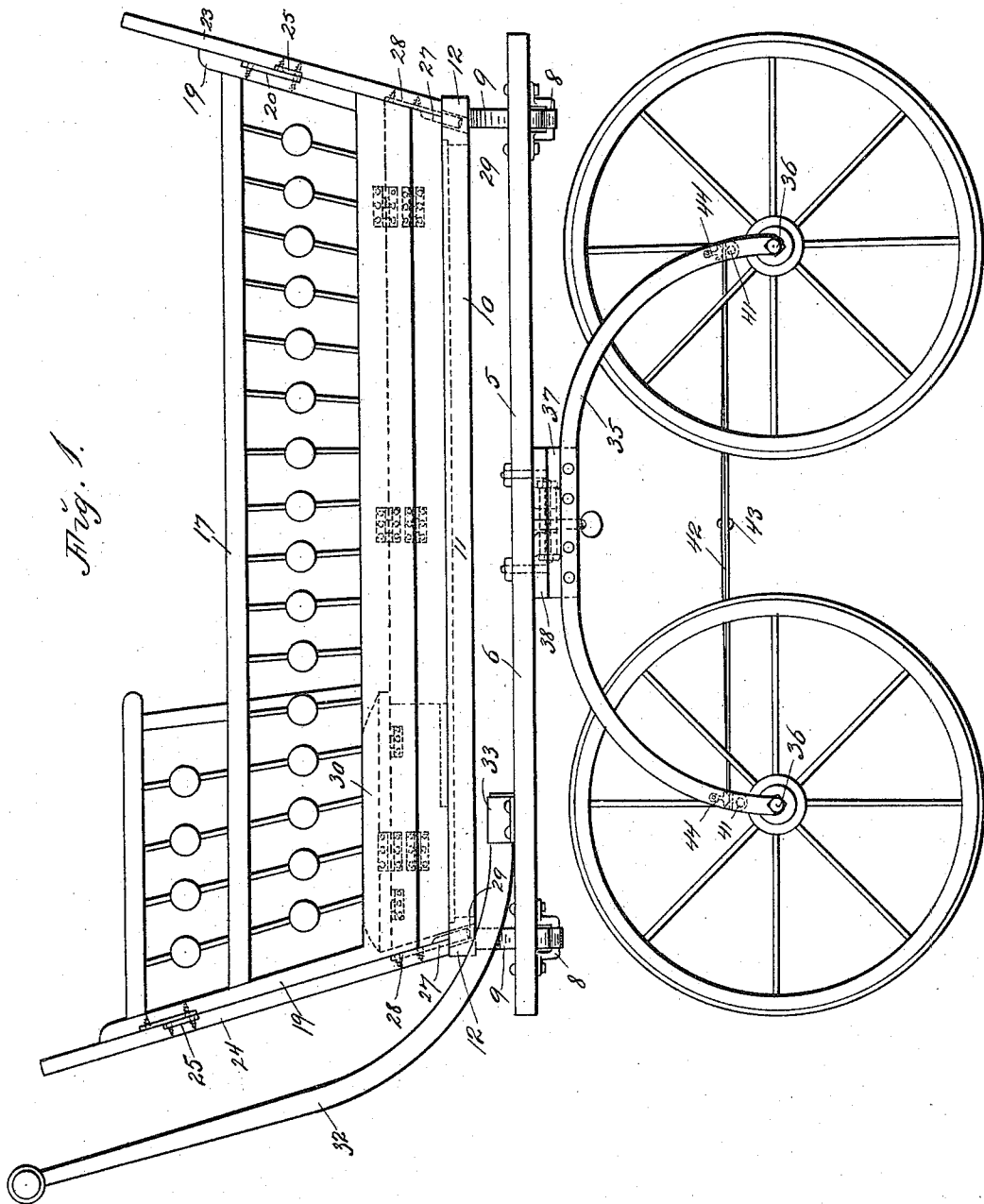
(No Model.)

2 Sheets—Sheet 1.

W. E. WILLIS.
BABY CARRIAGE.

No. 579,528.

Patented Mar. 23, 1897.



WITNESSES

C. Vordforn
C. Ernst
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INVENTOR

William E. Willis
BY
Edgar Tate & Co.
ATTORNEYS.

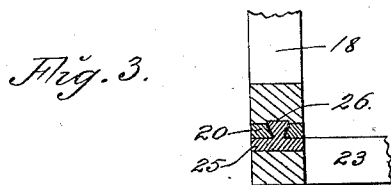
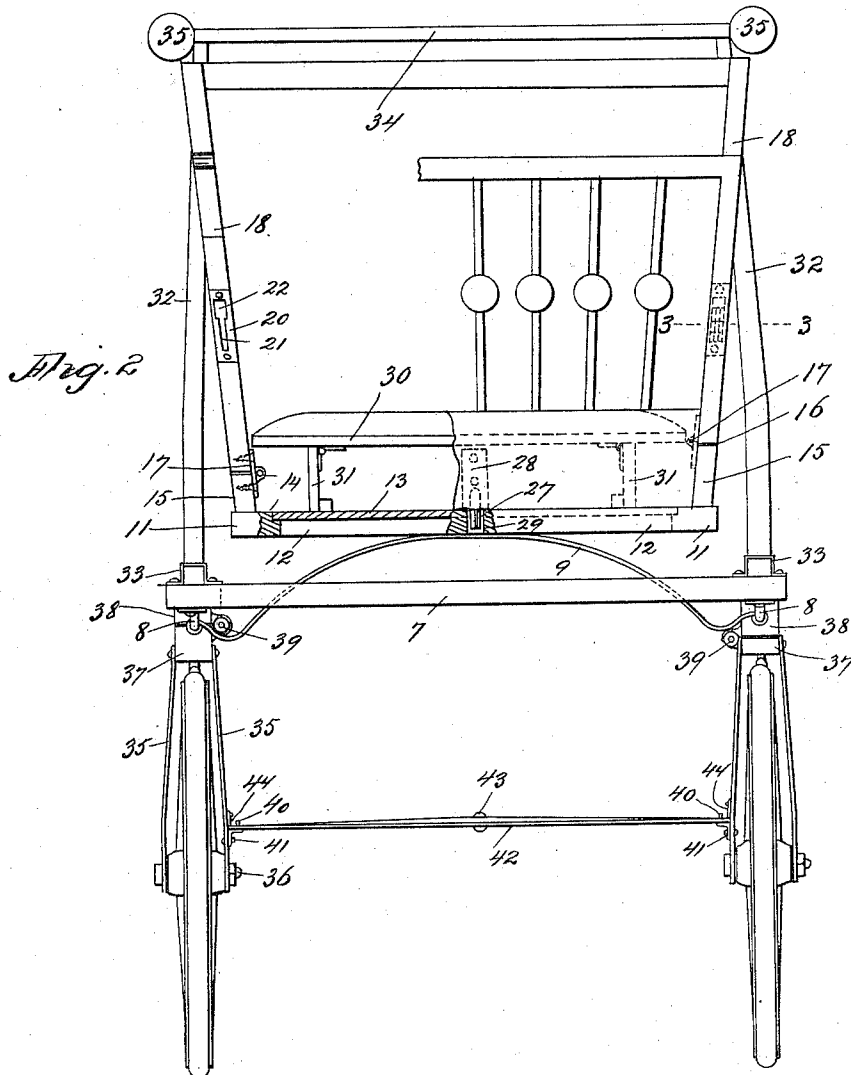
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2 Sheets—Sheet 2.

W. E. WILLIS.
BABY CARRIAGE.

No. 579,528.

Patented Mar. 23, 1897.



WITNESSES

C. Nordfors
E. Christ

INVENTOR

William E. Willis
BY
Esplanade & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM E. WILLIS, OF BROOKLYN, NEW YORK.

BABY-CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 579,528, dated March 23, 1897.

Application filed July 16, 1896. Serial No. 599,437. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. WILLIS, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Baby-Carriages, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar numerals of reference indicate corresponding parts wherever found throughout the several views.

This invention relates to baby-carriages; and the object thereof is to provide an improved carriage of this class the body of which is provided with detachable front and back ends or portions and the sides of which are adapted to fold inwardly one over the other on the bottom of the body independent of the running-gear, a further object being to provide a running-gear consisting of separate hinged sides, which also collapse or fold independent of the body or handles, whereby the entire carriage may be folded together into a compact space in order to economize space in storing and transporting the same.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of my improved baby-carriage; Fig. 2, a front end view thereof with a part of the detachable front end of the body portion broken away and also a part of the bottom portion of the body, and Fig. 3 a sectional detail of said construction on the line 3 3 of Fig. 2.

In the practice of my invention I provide a body for a baby-carriage, consisting of a main frame 5, which consists of side-bars 6, which are connected at their ends by cross-bars 7, and said side-bars 6 are provided near each end with brackets or yokes 8, which are secured thereto and with which are connected upwardly-curved transverse plate-springs 9, the connection of said springs with the yokes or brackets being made by loops or rings formed in the ends of the springs.

The body portion of the carriage comprises a bottom 10, which consists of side-bars 11, end bars 12, which are secured thereto in any desired manner, and a central board or frame

13, which is countersunk in the sides and ends, as shown at 14, and the end bars 12 are mounted centrally on the springs 9 and secured thereto in any desired manner, as shown in Figs. 1 and 2.

The side-bars 11 of the bottom portion of the body are provided with upwardly-directed side plates 15, which form part of the body, and one of which is higher than the other, as shown at 16, and hinged thereto at 17 are the sides 18 of the body, which are of the form shown in Fig. 1, the ends thereof being inclined outwardly and upwardly at each end, and said sides are each provided with end bars 19, to which are secured plates 20, in which are formed slots or openings 21, which are largest at their upper ends, as shown at 22, and the removable front and rear ends 23 and 24, respectively, are also provided with plates 25, having headed lugs or projections 26 formed thereon, the heads of which are adapted to be inserted into the enlarged portion 22 of the slots 20 and then drop downwardly, so that said lugs or projections will lock the ends to the sides, and said ends are also provided with bolts 27, which are formed on plates 28, which are secured thereto, and said bolts are adapted to enter sockets or openings 29, formed in the end bars 12 of the bottom portion of the body, as shown in dotted lines in Fig. 1 and in full lines in Fig. 2, and the method of connecting the detachable ends with the sides of the body is best shown in Fig. 3.

The seat 30 is also provided near each end with a hinged support or leg 31, and these legs or supports are adapted to be folded inwardly, and said seat may be removed from the bottom of the body whenever desired and the legs or supports thereof folded, so as to facilitate the packing and shipping thereof, and the handle consists of two outwardly and upwardly curved arms 32, which are connected with the side-bars 6 of the main frame by being passed through loops or keepers 33, with which they are detachably connected in any desired manner, and the upper ends of said arms 32 are connected by a cross-rod 34, having end knobs or heads 35, and the lower ends of the arms 32, where they pass through the loops or keepers 33, are angular in form, so as

to prevent the turning thereof, and the upper ends thereof are inwardly curved or contracted, as shown in Fig. 2.

The running-gear consists of two wheels on each side, which are connected by upwardly-curved braces 35, two of which are employed in connection with each set of wheels on each side, and the shafts or axles 36 of the wheels are passed through the lower ends of these arms or braces, and said arms or braces are connected at the central upper portion by blocks 37, to which they are bolted or otherwise secured, and secured to the under side of the side-bars 6 of the main frame and centrally thereof are corresponding blocks 38, and the blocks 37 are hinged to the blocks 38, as shown at 39, and are adapted to fold inwardly, and the block 38 on one side is thicker than the block 38 on the other, and the block 37 on one side is thicker than the block 37 on the other, and by reason of this arrangement the separate side frames, consisting of the curved braces or arms 35 and the wheels mounted therein, may be folded inwardly adjacent to the main frame 5 and rest thereon and in parallel positions.

The lower ends of the inner braces or arms 35 are each provided with inwardly and upwardly directed hooks 40, which are secured to or formed on plates 41, which are bolted or screwed to said arms or braces, and I also provide a central brace 42, which consists of two rods connected at the center, as shown at 43, and which extends diagonally across from the rear wheel on one side to the front wheel on the other and which are provided at their ends with openings through which the hooks 40 pass, and secured above each hook is a pivoted dog 44, which is adapted to be turned downwardly and to bear upon the ends of the rods of which the central brace is composed, so as to hold the same in position. This central cross-brace may be removed whenever desired by turning the dogs 44 upwardly, and the object in forming one of the side plates or bars 15, to which the sides of the body portion are hinged, higher than the other is to provide means for folding said sides inwardly over the bottom, so that one will rest upon or over the other and in positions parallel with said bottom.

It will thus be seen that by detaching the central cross-brace 42 the separate sides of the running-gear, including the wheels on each side, may be folded inwardly adjacent to the main frame 5 and at the lower side thereof, and that the front and back portions of the body may be detached and the sides thereof folded together over the bottom thereof in the same manner, and said ends may then be placed thereon, and the handle, consisting of the parts 32 and 34, may also be detached from the main frame, and the cross-rod 34 may be detached from the side arms 32, and the entire carriage may be then folded into a compact form, so as to occupy but very little space.

It is evident that changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages, and I reserve the right to make all such alterations therein as fairly come within the scope of the invention.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A baby-carriage consisting of a main frame, a body suspended thereover, by means of springs, said body consisting of detachable front and rear ends, and hinged sides which are adapted to be folded inwardly, and the main frame being also provided at each side with hinged side frames in which the wheels are mounted, which are also adapted to be folded inwardly, said hinged side frames being also provided with a detachable center cross-brace, by which they are held in position for use, substantially as shown and described.

2. A baby-carriage comprising a main frame, a body suspended thereover, by means of springs, and composed of a bottom portion, sides hinged thereto, one of said sides being hinged at a point higher than the other, detachable end pieces which are adapted to be connected with said sides, and the bottom of the body, and said main frame being also provided at each side with blocks which are secured thereto, centrally thereof, and other blocks which are hinged thereto, one of which is hinged lower than the other, and said last-named blocks being provided with curved side arms or braces, between which the wheels are mounted, and a detachable center cross-brace which is adapted to be connected with the lower ends of the inner curved side arms or braces, substantially as shown and described.

3. A baby-carriage comprising a main frame, a body suspended thereover, by means of springs, and composed of a bottom portion, sides hinged thereto, one of said sides being hinged at a point higher than the other, detachable end pieces which are adapted to be connected with said sides, and the bottom of the body, and said main frame being also provided at each side with blocks which are secured thereto, centrally thereof, and other blocks which are hinged thereto, one of which is hinged lower than the other, and said last-named blocks being provided with curved side arms or braces, between which the wheels are mounted, and a detachable center cross-brace which is adapted to be connected with the lower ends of the inner curved side arms or braces, and said body being also provided with a detachable seat which is provided with legs or supports which are hinged thereto, substantially as shown and described.

4. A baby-carriage comprising a main frame, a body suspended thereover, by means of springs, and composed of a bottom portion, sides hinged thereto, one of said sides being hinged at a point higher than the other, de-

15 detachable end pieces which are adapted to be
connected with said sides, and the bottom of
the body, and said main frame being also
provided at each side with blocks which are
5 secured thereto, centrally thereof, and other
blocks which are hinged thereto, one of which
is hinged lower than the other, and said last-
named blocks being provided with curved
side arms or braces, between which the wheels
10 are mounted, and a detachable center cross-
brace which is adapted to be connected with
the lower ends of the inner curved side arms
or braces, and said body being also provided
with a detachable seat which is provided with
15 legs or supports which are hinged thereto,

and with a handle which consists of upwardly
and outwardly curved side arms which are
detachably connected with one end of the
main frame, and the upper ends of which are
connected by a cross-rod, substantially as 20
shown and described.

In testimony that I claim the foregoing as
my invention I have signed my name, in pres-
ence of the subscribing witnesses, this 10th
day of July, 1896.

WILLIAM E. WILLIS.

Witnesses:

W. W. HILL,

CHARLES S. ROGERS.