Sept. 18, 1928. **1,684,930**

R. STINSON

BABY CARRIAGE

Filed April 8, 1925 2 Sheets-Sheet 1

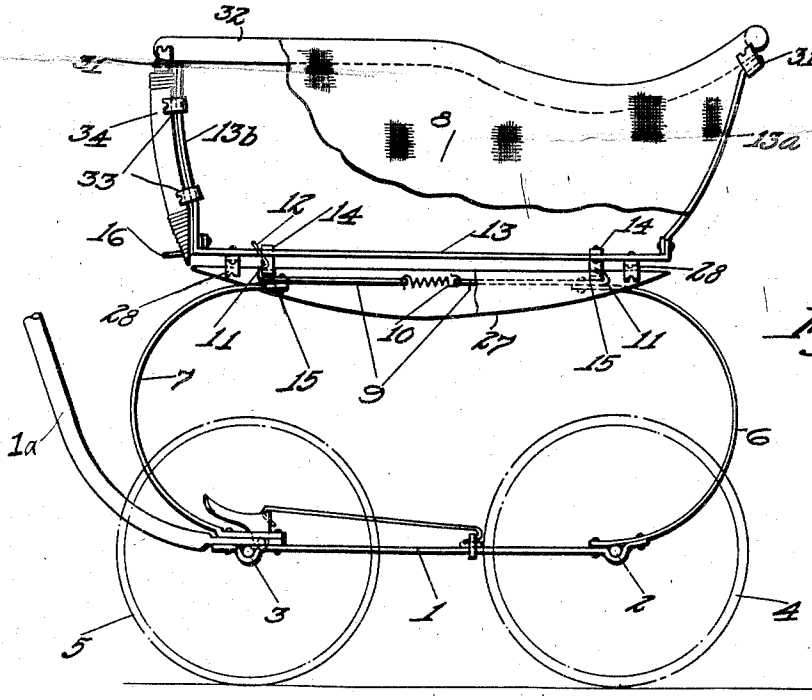


Fig. 1.

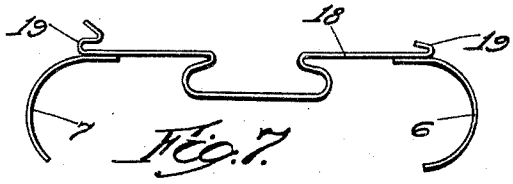


Fig. 7.

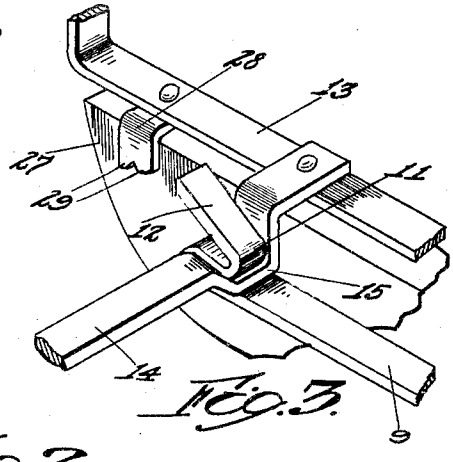


Fig. 3.

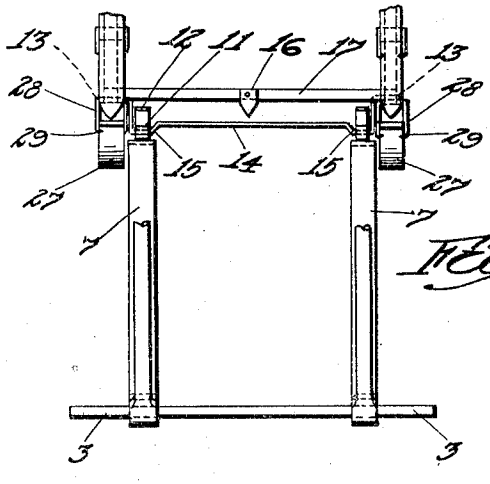


Fig. 2.

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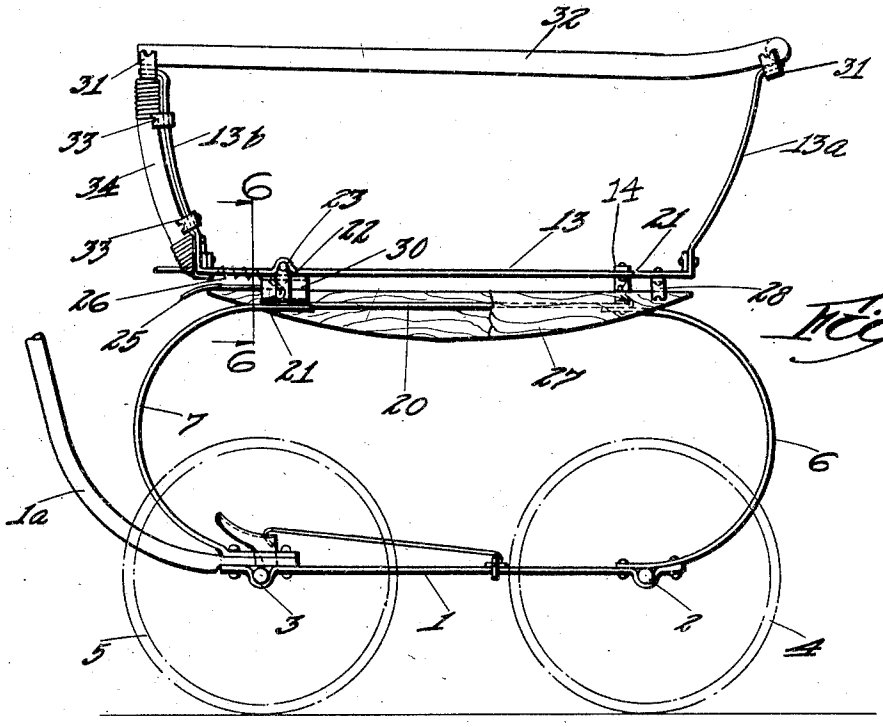


FIG. 4.

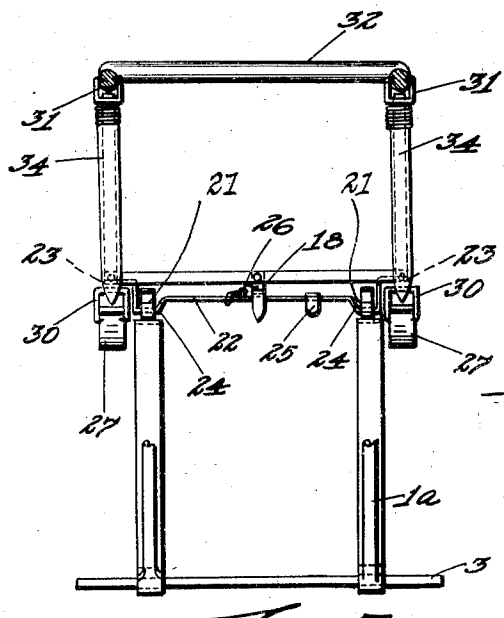


FIG. 5.

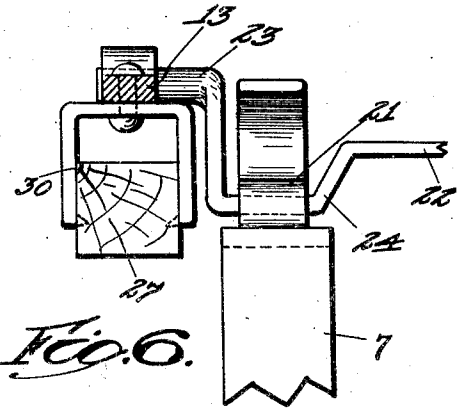


FIG. 6.

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UNITED STATES PATENT OFFICE.

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BABY CARRIAGE.

Application filed April 8, 1925. Serial No. 21,583.

The present invention relates to baby carriages, doll carriages and the like, and has for its object to provide an improved carriage in which the body or basket can be readily attached to, or detached from the running gear, thus facilitating assembly in manufacture and saving space in shipment and storage.

In one form of the invention disclosed in the accompanying drawings, the improved attaching or detaching means is so arranged that the ordinary user will not be aware of the same, the idea being that when a body has been finally attached to its running gear for use, the two parts will appear as one and will not be liable to accidental separation. In the other form of the invention shown, the body and gear may be readily separated by the user, in which case the body can serve as a bassinet, or can be used interchangeably with a wheel gear and a sleigh gear.

Another feature of the invention resides in the manner of constructing the frame of the carriage body, the frame being a combination of shaped wood and strip metal put together without the use of screws and without weakening of the wood, by boring holes, or otherwise.

In the accompanying drawings, Fig. 1 is a side elevation of a carriage with its running gear and body frame attached together, in accordance with my invention.

Fig. 2 is a rear elevation of the carriage shown in Fig. 1, with the wheels removed.

Fig. 3 is an enlarged perspective view of a portion of the attaching mechanism.

Fig. 4 is a side elevation of a carriage embodying a modified form of the invention.

Fig. 5 is a rear elevation of the carriage shown in Fig. 4, with the wheels removed.

Fig. 6 is an enlarged section on the line 6—6 of Fig. 4.

Fig. 7 is a fragmentary view showing a modification in the running gear.

Like reference characters refer to like parts in the different figures.

Referring first to Fig. 1, the running gear shown generally comprises spaced longitudinal frame members 1, connected by axles 2 and 3, upon which are mounted pairs of wheels 4 and 5, respectively, upwardly extending handle portions 1^a being attached to the frame members 1, in the usual manner. The members 1 also carry pairs of springs 6 and 7, upon which the body or basket 8 is resiliently supported, and there will now be described my improved arrangement whereby the body 8 may be attached to, or detached from, the running gear, as a unit.

A pair of strip metal members 9, 9 are suitably attached, as by rivets, to the front springs 6, and a second pair of strip metal members 9, 9 are attached to the rear springs 7. The free ends of the members 9 are drawn together by springs 10, while the other ends of the members 9 are bent over to form oppositely disposed hook portions 11. At least one set of the hook portions 11 is provided with upwardly and outwardly turned wings, as for example the wings 12 on the rear hook portions 11, see Fig. 3.

The body or basket 8 is constructed about a frame which has for its base a pair of longitudinally extending members 13, 13, connected by spaced cross members 14, 14. The cross members 14 are preferably of strip metal bent to provide hook receiving seats 15, spaced apart substantially the same distance as the hook portions 11, and the body or basket 8 is adapted to be disengageably attached to the running gear by cooperation between the hook portions 11 and the cross members 14.

Assuming that the body assembly is detached from the running gear and it is desired to attach it, the body 8 will be placed on the running gear with the seats 15 on the front cross members 14 in engagement with the front hooks 11. If then the body is pressed downwardly, the seats 15 on the rear cross member 14 will engage the upwardly and rearwardly extending wings 12 of the rear hooks 11 and, by a wedging action, force the two sets of hooks 11 apart, against the pull of the springs 10. When the rear seats 15 have been forced beyond the wings 12, the hooks 11 will spring together on the cross members 14 and the carriage body 8 will be locked securely on the running gear. In order that the carriage body may be pressed downwardly with greater force, a rearwardly extending foot piece 16 is attached to a transverse frame member 17 extending between members 13 to provide a foothold for the user.

When it is desired to detach the carriage body from the running gear, it is necessary to apply a pushing force to one of the cross

members 14 and, at the same time, to pull one of the springs 6 or 7 in the opposite direction. This has the effect of separating the opposed hook portions 11 enough to permit the cross member 14 to be forced by the ends of the hook portions, thereby releasing the body assembly from the running gear.

In the above described form of my invention, the hook portions 11 are made of such length that the cross members of the body assembly cannot be jarred out of engagement with the hooks, as will be evident from a consideration of Fig. 3. Furthermore, it is evident that the springs 10, which tend to pull the hooks together, will strongly resist any sudden strain that might tend to spring the body from the frame of the running gear. While the opposed hook portions 11 are shown as being provided on separate members 9 held together by the springs 10, the same results can be obtained by making opposed pairs of hooks on a single member, having sufficient inherent resiliency to offer resistance to separation of the hooks. Such a modification is shown in Fig. 7, in which the ends of the body springs 6 and 7 are connected by a continuous spring member 18, the ends of which are provided with opposed hook portions 19. The member 18 is bent so that the hook portions 19 will resist any tendency to move them apart, consequently the hook portions 19 are adapted to closely engage and hold between them any members received by the hoods, such as the cross members 14 of the body assembly.

Referring now to Figs. 4, 5 and 6, there is shown a modification of the invention in which the carriage body assembly may not only be readily attached to the running gear, but may also be readily detached therefrom without requiring any great skill or effort on the part of the user. As shown in Fig. 4, the running gear assembly is substantially the same as shown in Fig. 1, with the exception that the springs 6 and 7 are connected by straight members 20 provided at their ends with hook portions 21 similar to the hook portions 11. The carriage body of Fig. 4 provides longitudinally extending members 13, connected by a front cross member 14 having seats 15, just as in Fig. 1. The rear cross member 22, however, is pivotally attached to the longitudinal members 13 by pin portions 23, and this member 22 has a pair of seats 24 which may be turned or swung out of position as regards the hooks 21 by means of a foot lever 25, attached thereto. A spring 26 is attached to the pivotally mounted member 22 and normally holds the same in such a position that the seats 24 engage the hooks 21, but downward pressure on the lever 25 will swing the member 22 forward to allow it to be disengaged from the hooks 21. Thus the body assembly shown in Figs. 4, 5 and 6 may be quickly and easily attached to, or detached from, the running gear.

Referring now to all the figures, the frame of the carriage body is built of wood and metal, and the present invention provides novel means of attaching the wood and metal together. It is to be understood that the particular design or shape of the body is not material, for this portion of the invention contemplates the construction of any carriage body frame out of bent wood dowels and strip metal, without the use of any wood screws. As shown in Figs. 1 and 2, a pair of wooden reinforcing members 27 extend just below and parallel to the longitudinal members 13, the reinforcing members 27 being desirably shaped as shown, in order to impart strength and grace to the completed carriage body.

As best shown in Figs. 1 and 3, each metal member 13 provides spaced U-shaped clips 28, which clips are attached to the members 13 for engagement with the wooden members 27 adjacent the ends thereof. Each clip 28 provides on either side thereof one or more sharpened prongs 29, and in the assembly of the carriage body, the clips 28, after being placed over the wooden members 27, are forced together to embed the prongs 29 in the sides of the members 27. Thus the wooden members 27 are firmly secured to the metal frame members 13 in a simple and effective manner. In the modified carriage structure shown in Fig. 4, the frame members 13 are provided with front clips 28 just as in Fig. 1, while the rear clips 30 are made somewhat longer, in order to provide bearing surfaces for the pivotal portions 23 of the rear cross member 22, as shown in Fig. 6.

As shown in both Figs. 1 and 4, the longitudinal frame members 13 are continued upwardly at each end to provide front and rear basket supporting portions 13^a, 13^b, each of which portions provides at its end a clip 31. The clips 31 are similar to the clips 28 and provide means whereby a bent wood frame member 32 may be securely attached to the metal frame members 13. The member 32 is preferably made of dowel stock, so bent as to determine the desired shape and form of the upper edge of the completed basket. The rearwardly extending metal frame portions 13^b are also provided with spaced pairs of clips 33, which serve to attach bent wood end members 34 to the metal members. The end members 34 are also preferably of dowel stock and are grooved, as shown, to resemble wicker fabric or other similar material which is used to cover the basket. It is evident that the several wooden frame members 27, 32 and 34 can be quickly and effectively attached to the metal frame members 13 by means of the metal clips, thus eliminating

the use of any wood screws in connection with the wooden members. The use of the clips also eliminates the boring of holes in the dowel stock, which has heretofore been customary when joining frame members such as 32 and 34, with resultant weakening of the stock. The combination of metal and wooden members as described, results in an extremely light and durable frame for the carriage body, and it is evident that such carriage bodies can be completely assembled and handled as separate units with respect to the running gear, as previously pointed out.

From the foregoing, it is apparent that by my invention I have provided an improved construction for baby carriages and the like, by means of which carriage bodies and running gears may be assembled as separate units and subsequently attached to, or detached from, each other. By constructing carriages in accordance with my invention, assembly in manufacture is facilitated and a great saving in storage and shipping space results, from the fact that the bodies and running gears can be handled as separate units. In one form of my invention the bodies are adapted to be more or less permanently attached to the running gears, by reason of the strong holding force exerted by the hook portions on the frame of the body, while in the other form of my invention, the bodies may be quite readily detached by depressing the pivotally mounted portion of the body frame in order to disengage it from the hooks. In this form of my invention, it is evident that the readily detachable body can be conveniently used as a bassinet, or can be used in connection with different types of running gear, such as a wheel gear and a sleigh gear.

I claim,

1. In a vehicle of the class described, the combination with a running gear assembly and a carriage body assembly, of oppositely facing hooks carried by said running gear assembly, transverse members carried by said carriage body assembly, downwardly depending portions formed in said transverse members to engage said hooks, one of said transverse members being pivotally mounted, operating means to swing said pivotally mounted transverse member to disengage said carriage body from said running gear assembly, and spring means to return said transverse member to original position.

2. In a vehicle of the class described, the combination with a running gear and a carriage body, of a pivotally mounted member carried by said body, hook members carried by said gear, the said pivotally mounted member being adapted for cooperative engagement with said hook members, spring means normally holding said pivotally mounted member in engagement with said hook members, and foot operated means to swing said pivotally mounted member out of engagement with said hook members.

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