Sept. 25, 1928. **1,685,592**

T. R. ARDEN

CHASSIS

Filed May 10, 1926

Fig. 1.

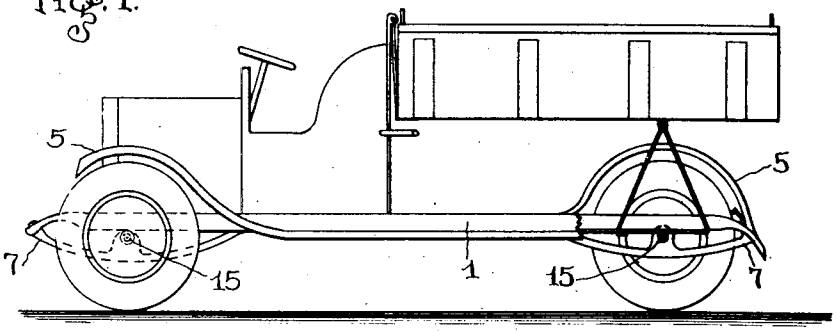


Fig. 2.

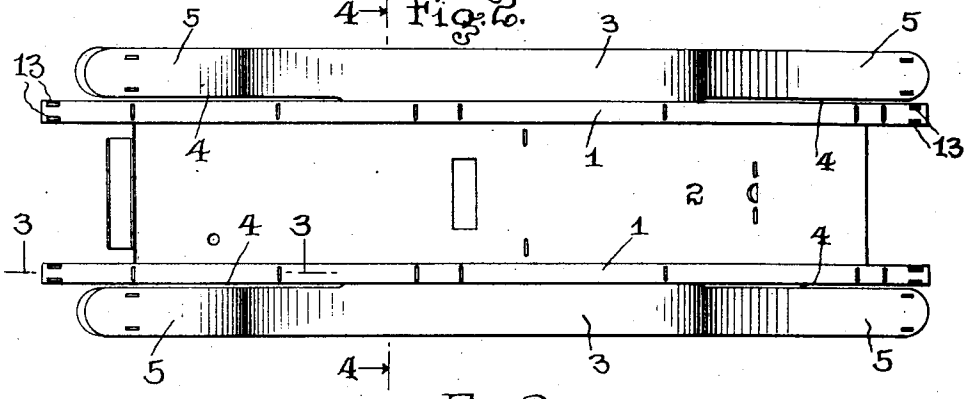


Fig. 3.

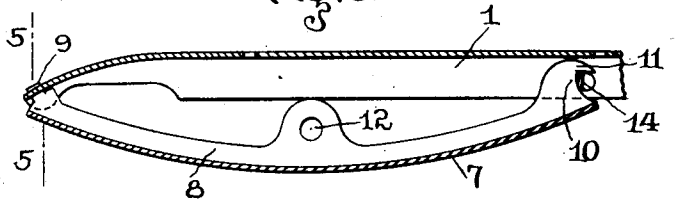


Fig. 4.

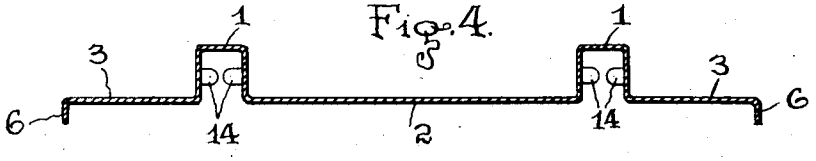
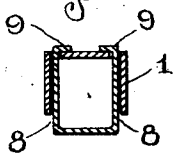


Fig. 5.



INVENTOR
Thomas Raymond Arden
BY
ATTORNEY

Patented Sept. 25, 1928. 1,685,592

UNITED STATES PATENT OFFICE.

THOMAS RAYMOND ARDEN, OF FOREST HILLS, NEW YORK, ASSIGNOR TO JULIUS CHEIN, OF NEW YORK, N. Y.

CHASSIS.

Application filed May 10, 1926. Serial No. 107,806.

My invention is for an improvement in chassis for toys.

The objects of my invention are to provide a chassis to receive a plurality of types of bodies and which is formed from a single blank of sheet material, and a novel means of fastening the wheel supporting springs to the chassis blank.

I accomplish these objects by the device illustrated in the accompanying drawings, in which

Figure 1 is a side view of the assembled toy, showing the chassis construction with parts thereof broken away,

Figure 2 is a plan view of the chassis blank,

Figure 3 is a sectional detail view on line 3—3 of Figure 2 showing a wheel supporting spring fastened in position.

Figure 4 is a cross section of the chassis on line 4—4 of Figure 3, and

Figure 5 is a detail section on line 5—5 of Figure 4.

Similar characters of reference refer to similar parts throughout the several views.

The chassis proper is stamped from a single blank of sheet material so that substantially parallel side frame members 1, 1 are formed with a platform 2 therebetween. The ends of the frame members 1, 1 are curved downwardly. Running boards 3, 3 integral with the blank, extend laterally in the plane of the platform 2 from the frame members 1, 1. The blank is cut longitudinally at both ends and on either side for substantially one-third of the length of the chassis as at points 4, 4 to permit the mud guards 5, 5 to be bent upwardly in an arc from the plane of the platform 2 and running boards 3, 3. The side frame members 1, 1 are stamped in the form of channels as is clear from the showing of Figure 4. The sides of the running boards 3, 3 and the mud guards 5, 5 are preferably bent over as at 6, 6 in Figure 4 to finish the edges of the blank.

The springs 7, 7 are also made of sheet material and are bent to form arcuate channels havings flanges 8, 8. As the springs are identical in construction, but one will be described. At one end of the spring 7 each flange 8, 8 has a lug or ear 9 projecting therefrom. The other end of the spring member 7 is notched at 10 to provide a finger or lip 11. At substantially the mid-point of each flange 8, 8 there is a journal bearing 12.

The ends of the frame channel members 1, 1 are slotted at 13, 13 to receive the lugs or ears 9, 9. At a point in each flange of the side frame members 1, 1 substantially a distance from the ends of the frame members equal to the length of the springs, a pin 14 is punched from and bent at right angles thereto. The width of the base of each spring 7 is narrower than the base of the frame members 1, 1.

To assemble the springs 7, 7 and frame members 1, 1, the notched end of the spring 7 with the flanges upstanding is inserted in the channel of the frame member 1 and is slid along until each finger 11 projects between each pin 14 and the base of the channel frame member. In this position the pin 14 will be seated in the notch 10. The spring is then rotated on the pin 14 till the ears 9, 9 enter and project thru the slots 13, 13. The ears 9, 9 are then bent over on the frame member and the spring is securely locked in place.

The axles 15, 15 which support the ground wheels are journaled in bearings 12, 12.

Each chassis constructed as above outlined is punched or slotted to receive several different types of bodies. Figure 1 shows the rear end of the chassis blank bent upwardly with the mid-portion cut and bent therefrom to form an inverted V support for the rear end of a dump truck body. It is evident that the rear end of the chassis may be bent downwardly to form a patrol wagon step or may be cut off as shown in Figure 2 for the mounting of a touring or a roadster body.

Having thus described my invention, I claim:

1. In a device of the character described, the combination of a U-shaped frame member, a pin bent inwardly from a flange of said frame, a spring having a finger extending thereform adapted to lie between the base of said frame member and said pin and means to lock the spring to said frame.

2. In a chassis, the combination of a channel frame member, a pin between the flanges and parallel to the base of said channel member, a spring, a finger projecting from said spring between said pin and said base, a slot

adjacent the end of said frame member and a lug extending from said spring into said slot.

3. In a toy chassis of sheet material, the combination of a platform section, parallel frame members and running boards integral therewith having curved ends to form mud guards, springs of sheet material bent to form arcuate channels and set in the channel frame members, journal bearings at substantially the mid-point of the flanges of the spring and formed by apertures therein, and means for binding the springs in the channel frame members.

4. In a top chassis, the combination of an arcuate channel member adapted to represent a spring the sides of the channel member being broadened and apertured at substantially their mid-point to form journal bearings, a side channel in the chassis adapted to receive the ends of the spring and means for binding the ends of the spring in the side channel of the chassis.

In testimony whereof, I have signed my name to this specification this 29th day of March, 1926.

THOMAS RAYMOND ARDEN.