A. E. SMITH.

COMBINED TRUNK AND DEMOUNTABLE RIM CARRIER.

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1,179,671. Patented Apr. 18, 1916.

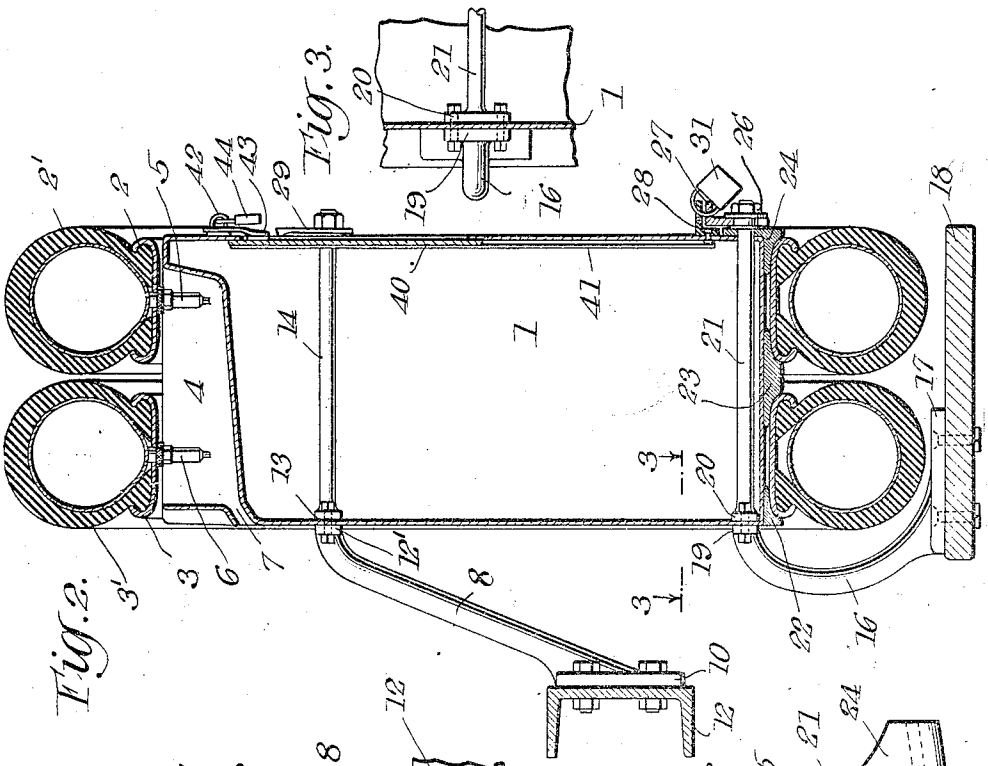


Fig. 2.

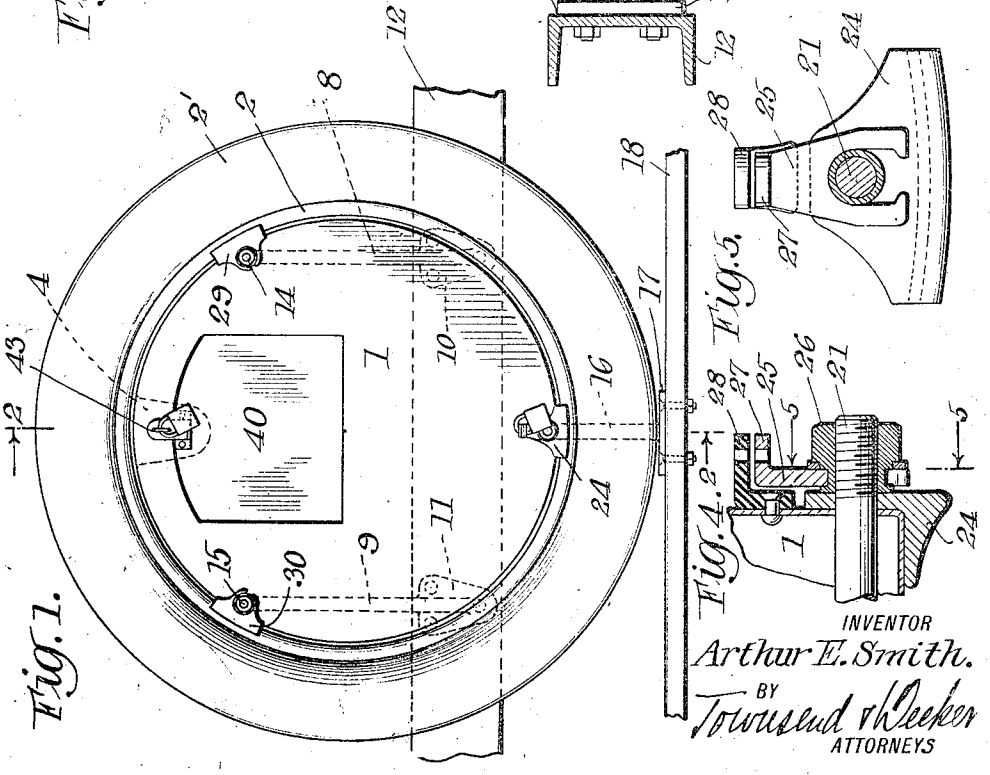


Fig. 1.

Fig. 3.

Fig. 5.

Fig. 4.

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COMBINED TRUNK AND DEMOUNTABLE-RIM CARRIER.

1,179,671. Specification of Letters Patent. Patented Apr. 18, 1916.

Application filed November 6, 1915. Serial No. 59,907.

To all whom it may concern:

Be it known that I, ARTHUR E. SMITH, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Combined Trunk and Demountable-Rim Carriers, of which the following is a specification.

My present invention has for its object the production of a combined trunk and demountable rim carrier which shall be durable and simple in construction and readily adapted to be applied to an automobile.

My invention also contemplates the production of a device of the character above described which shall also be equipped with means for rigidly and safely supporting a plurality of demountable rims side by side without employing straps or buckles or other troublesome and cumbersome fastening devices which are apt to get out of order or broken.

With the above and further objects in view which will appear from the subjoined description the invention consists in the construction and novel combination of parts hereinafter more fully described and then specified in the claims.

A practical embodiment of the invention is represented in the accompanying drawing forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

In the drawing: Figure 1 is a front elevation of my improved trunk and demountable rim carrier with two demountable rims and tires applied thereto. Fig. 2 is an enlarged vertical cross-section on the line 2—2 of Fig. 1. Fig. 3 is an enlarged horizontal section on the line 3—3 of Fig. 2. Fig. 4 is an enlarged sectional view of a portion of the device as shown in Fig. 2. Fig. 5 is a vertical cross-section taken on the line 5—5 of Fig. 4.

In the drawings: 1 indicates a hollow drum-shaped member preferably made of metal and having a diameter slightly less than the inner diameters of the rims 2 and 3 to which are fastened respectively the tires 2′ and 3′. The upper portion of the drum 1 is cut away at the top thereof to form a walled recess or compartment 4 adapted to receive the valve stems 5 and 6 of the tires 2′ and 3′ when the rims are carried by the drum 1. The lower wall or the base of the recess 4 is preferably inclined toward the rear of the drum and a pipe or opening 7 leads from the lower end of the recess and preferably extends through the rear wall of the drum. The pipe 7 acts as a drain so that the recess 4 will not become filled with water in inclement weather or under other circumstances and the possibility of the valve stems becoming rusted is thereby obviated.

8 and 9 indicate braces whose lower flanges 10 and 11 are preferably attached to the side frame 12 of an automobile by suitable bolts as shown. The upper flanges 12′ of the braces 8 and 9 are attached to the rear wall of the drum 1 by suitable bolts, which bolts preferably also pass through the flanges 13 of the supporting bolts 14 and 15. The supporting bolts 14 and 15 extend transversely through the drum and protrude slightly through the front wall thereof.

16 indicates a brace whose lower flange 17 is preferably attached by means of bolts to the running board 18 of the automobile. The upper flange 19 of the brace 16 is fastened to the lower portion of the rear wall of the drum by suitable bolts as shown, which bolts also preferably pass through the flange 20 of the supporting bolt 21. The supporting bolt 21 extends transversely through the drum and protrudes slightly through the front wall thereof.

22 indicates a wedge member integrally united with or securely fastened to the drum 1 and against which the rim 3 rests or is forced when the rim is clamped on the drum. The wedge member 22 preferably extends around the periphery of the drum until the ends meet or almost meet the recess 4. A removable wedge 23 is placed between the rims 2 and 3 so that the rims or tires will not be forced against each other when carried by the drum and so that they will be held more securely and rigidly in their respective positions. A combined wedge and clamp member 24 is held by the supporting bolt 21 and a locking piece 25 carries loosely a nut 26 in a well known manner and is adapted to be screwed on the threaded end of the supporting bolt 21. The advantage of having the nut 26 loosely instead of rigidly carried by the locking piece 25 is obvious as it permits the nut to be screwed on the supporting bolt 21 without turning the locking piece. The flange 27 of the locking piece is provided with a hole or

opening adapted to register with a hole or opening in an angle-piece 28 which is securely welded or riveted to the face of the drum 1.

29 and 30 indicate combined wedge and clamping members held respectively by the bolts 14 and 15. These members carry loosely nuts similar in construction to the nut 26 and which are adapted to be screwed on the threaded ends of the supporting bolts 14 and 15. The wedge portions of the members 29 and 30 are similar in construction to the wedge portion of the member 24. The function of the supporting bolts 14, 15 and 21 is not only to carry or hold the combined wedge and clamping members and the nuts which force them against the rim but they are also designed as strengthening or supporting members for the walls of the drum.

In Fig. 2 the demountable rims carrying their respective tires are clearly shown in clamped position on the drum 1. The wedges 22 and 23 and the combined wedge and clamping members 24, 29 and 30 partially engage the rims on their under side and are also forced rigidly against the rims by tightening the nuts on the ends of the supporting blots. A safeguard against theft of the rims and tires is provided by means of a padlock 31 which is locked through the openings in the flange 27 and angle-piece 28. Thus the rims and tires could not then be stolen even though the wedge and clamping members 29 and 30 were removed from their respective supporting bolts. As is obvious, the removal of the rims and tries can be expeditiously effected by simply unlocking the padlock 31, removing the locking piece 25 and the combined wedge and clamping members 24, 29 and 30, after which the rims and tires may be readily slipped off the drum.

The drum 1 as well as being a demountable rim carrier is also used as a storage space or trunk for tools or automobile parts or anything which it is desired to carry. I have provided a door 40, which is preferably of the sliding type, in the front of the drum and which is adapted to slide in grooves 41 suitably fastened to the inner surface of the front wall of the trunk. A staple 42 is fastened to the drum and a hasp 43 is suitably attached to the door 40 and is adapted to be received by the staple 42. Access to the inside of the drum can be prevented by means of the padlock 44 which is passed through and locked to the staple 42.

It is obvious that various modifications may be resorted to without departing from my invention. The drum for instance could be attached to the automobile at any other convenient place than that shown as at the back of the automobile. The locking piece 25 might also, if desired, be integrally united with the wedge and clamping member 24 and the nut 26 be loosely carried thereby as are the nuts of the wedge and clamping members 29 and 30. Still other and various modifications may be resorted to without departing from the spirit of the invention as set forth in the appended claims.

What I claim as my invention is:—

1. A combined trunk and demountable rim carrier comprising a hollow metallic drum provided with a walled recess cut in the upper portion of the periphery of the drum adapted to receive the valve stem of a tire and having an inclined base, and a drain pipe connecting with the lower end of said inclined base and extending through a wall of said drum.

2. A combined trunk and demountable rim carrier comprising a metallic drum, a bolt fastened to and extending transversely through the body of said drum, a combined wedge and clamping member carried by said bolt, means for forcing said member under and against the demountable rim and means for locking the demountable rim in clamped position on said drum.

3. A combined trunk and demountable rim carrier comprising a hollow drum adapted to be non-removably attached by suitable braces to an automobile, a plurality of supporting bolts secured to the rear wall of the drum extending transversely through said drum, and protruding through the front wall thereof, combined wedge and clamping members carried by said supporting bolts and means for forcing said wedge and clamping members under and against the demountable rim to hold the same rigidly on said drum.

4. A combined trunk and demountable rim carrier comprising a hollow metallic drum adapted to be non-removably attached by suitable braces to an automobile and provided with a recess adapted to receive the valve stem of a tire, a plurality of supporting bolts secured to and extending transversely through said drum and protruding through the front wall thereof, combined wedge and clamping members carried by said supporting bolts and adapted to be forced under and against the demountable rim by nuts screwed on the ends of said supporting bolts to hold the demountable rim rigidly on said drum and means for locking the rim in clamped position.

5. A combined trunk and demountable rim carrier comprising a hollow metallic drum adapted to be non-removably attached by suitable braces to an automobile and provided with a recess in the upper portion thereof adapted to receive the valve stem of a tire, a door in the front wall of said drum, means for locking said door to prevent access to the inside of said drum, a wedge member made integral with said

drum and adapted to have forced thereover and thereagainst the demountable rim when in clamped position on said drum, a plurality of supporting bolts secured to and extending transversely through the body of said drum and protruding through the front wall thereof, combined wedge and clamping members carried by the protruding ends of said supporting bolts and adapted to be forced under and against the demountable rim by nuts screwed on the ends of said supporting bolts to hold the demountable rim rigidly and in clamped position on said drum and means for locking the rim on said drum.

6. A combined trunk and demountable rim carrier comprising a metallic drum, a wedge fastened to the periphery of said drum, a bolt passing through and extending transversely through the body of said drum, a combined wedge and clamping member carried by said bolt and means for forcing said combined wedge and clamping member under and against the rim so that the rim is held securely on said drum and in engagement with said wedge and said combined wedge and clamping member.

Signed at New York, in the county of New York and State of New York, this 5th day of November, A. D. 1915.

ARTHUR E. SMITH.

Witnesses:
F. B. TOWNSEND,
REMINGTON SCOTT.