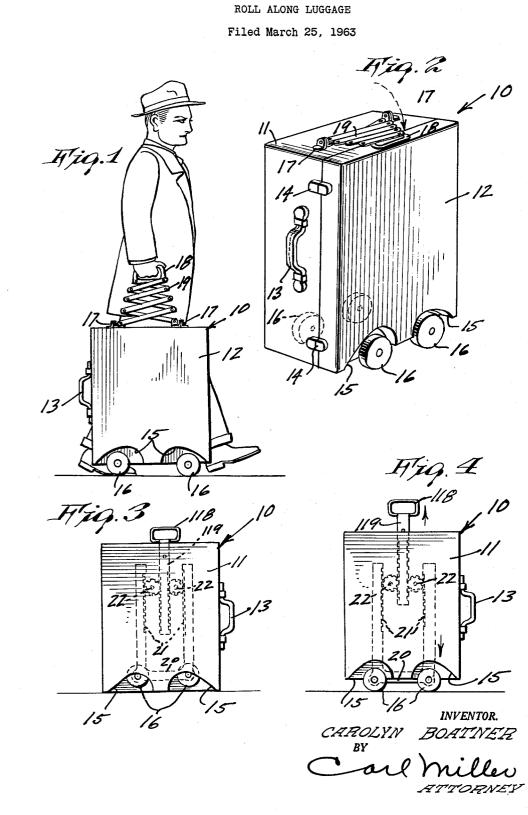
## April 13, 1965

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## C. BOATNER

3,178,197



# United States Patent Office

### **3,178,197** Patented Apr. 13, 1965

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#### 3,178,197 ROLL ALONG LUGGAGE Carolyn Boatner, 288 Prospect Ave., Brooklyn 38, N.Y. Filed Mar. 25, 1963, Ser. No. 267,624 2 Claims. (Cl. 280—37)

This invention relates to luggage and particularly to means for transporting such luggage which alleviates the necessity of the bearer from supporting the full weight of the luggage.

The general concept of providing wheeled attachments or retractable casters to luggage is generally not new as evidenced by U.S. Patents No. 1,028,178 granted June 4, 1912, to W. J. Batchelor; No. 2,002,836 granted May 28, 1935, to P. Rossai; No. 2,439,660 granted April 13, 15 1948, to R. Keil; No. 2,562,686 granted July 31, 1951, to J. D. Altemus; and No. 2,596,578 granted May 13, 1952, to G. H. McIntyre. By referring to the foregoing patents as examples of present day arrangements, it is readily understood that luggage with wheeled means is 20 subject to extensive loss of storage capacity, excessive weight due to such means, and rudimentary construction which is very difficult to use.

Accordingly, an object of this invention is to provide luggage with wheeled means which is relatively light in 25 weight, of rugged construction, and is simple to use.

Another object of this invention is to provide luggage with wheeled transport means and having height adjustable grip means.

And another object of this invention is to provide the <sup>30</sup> aforementioned luggage in which the wheels or casters are retractable.

Still another object of this invention is to provide the aforementioned luggage wherein the retraction and extension of the casters or wheels is controlled by adjustment <sup>35</sup> of hand grip means.

These and other objects and advantages will become apparent to those skilled in the art by referring to the accompanying drawings wherein:

40 FIGURE 1 is an elevational view of a piece of luggage 40 made in accordance with the present invention in opera-

FIGURE 2 is an enlarged perspective view of the novel luggage of FIGURE 1, 45

FIGURE 3 is an elevational view of a piece of luggage with modified transport means in retracted position in accordance with the present invention; and

FIGURE 4 is an elevational view of the modified luggage of FIGURE 3 with the transport means in extended 50 position for use.

Referring now to the drawings and particularly to FIG-URES 1 and 2, a case 10 has the usual base 11 with a cover 12 hinged thereto. A grip or handle 13 is connected to the base 11 and locks or clasps 14 are provided to keep the cover 12 from swinging open. The base 11 and the cover 12 each have a pair of formed recesses 15 at the same end as the other to house wheels or casters 16. At the other end of the case 10, a pair of spaced brackets or fittings 17 pivotally support a lazy tongs 19 having a grip or handle 18 at its free end. As shown in FIGURE 1, it will be noted also that the height of the lazy tong handle is regulated to a constant height by the fixed fittings or brackets 17. When not in use, the lazy 2

tongs 19 and the grip 18 may be folded against the end of the base 11 for compactness.

Referring now to FIGURES 3 and 4, the case 10 is provided with retractable wheels in addition to a retractable grip. As shown, a grip or handle 118 is pivotally connected to the end of a rack gear 119 slidable in the bottom of the base 11. A pair of spaced pinions 22 are rotatably supported in the bottom of the base 11 each in mesh with one side of the rack gear 119.

The wheels 16 are now mounted on a carriage 20 having a pair of spaced rack gears 21 each in mesh with a pinion 22. Thus, as shown in FIGURE 3, when the rack gear 119 is in its innermost position, the carriage 20 and wheels 16 are in the retracted position. As the handle 118 is moved away from the end of case 10 extending rack gear 119 as shown in FIGURE 4, pinions 22 are rotated. The rotating pinions 22 in mesh with rack gears 21 extend carriage 20 so the wheels 16 move out of recesses 15 beyond the limits of case 10 to the operative position.

It is to be understood that my invention is not limited to the specific details of construction shown in the accompanying drawings, but that said details may be varied in the practical carrying out of my invention. It is also to be understood that the combinations specifically set forth in the several claims are intended to be separately claimed without limitation to the use in connection therewith of other features and details of construction illustrated.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. An article of luggage comprising, in combination, a case having a base and a cover hinged to the base, the base and the cover each having a pair of spaced recesses at one end of said case, a plurality of wheels rotatably supported at the end of said case each in one of the recesses and extending beyond the limits of said case, and a handle connected to the end of the case opposite from the wheels and extensible therefrom for height adjustment when the case is supported on said wheels, a carriage supporting said wheels being movable relative to the case for extending and retracting said wheels, said carriage being operably connected to said handle such that extension and retraction of said handle effects extension and retraction of said wheels, wherein a rack gear is slidably supported by said case, said handle being connected to one end of said rack gear, a pair of pinions rotatably supported in said case in mesh with said rack gear, and said carriage having a pair of rack gears each in mesh with one of said pinions.

2. An article of luggage in accordance with claim 1 wherein said handle is pivotally connected to the racl gear.

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