J. DEMBINSKI. LUGGAGE CARRIER.

(Application filed May 3, 1900.)

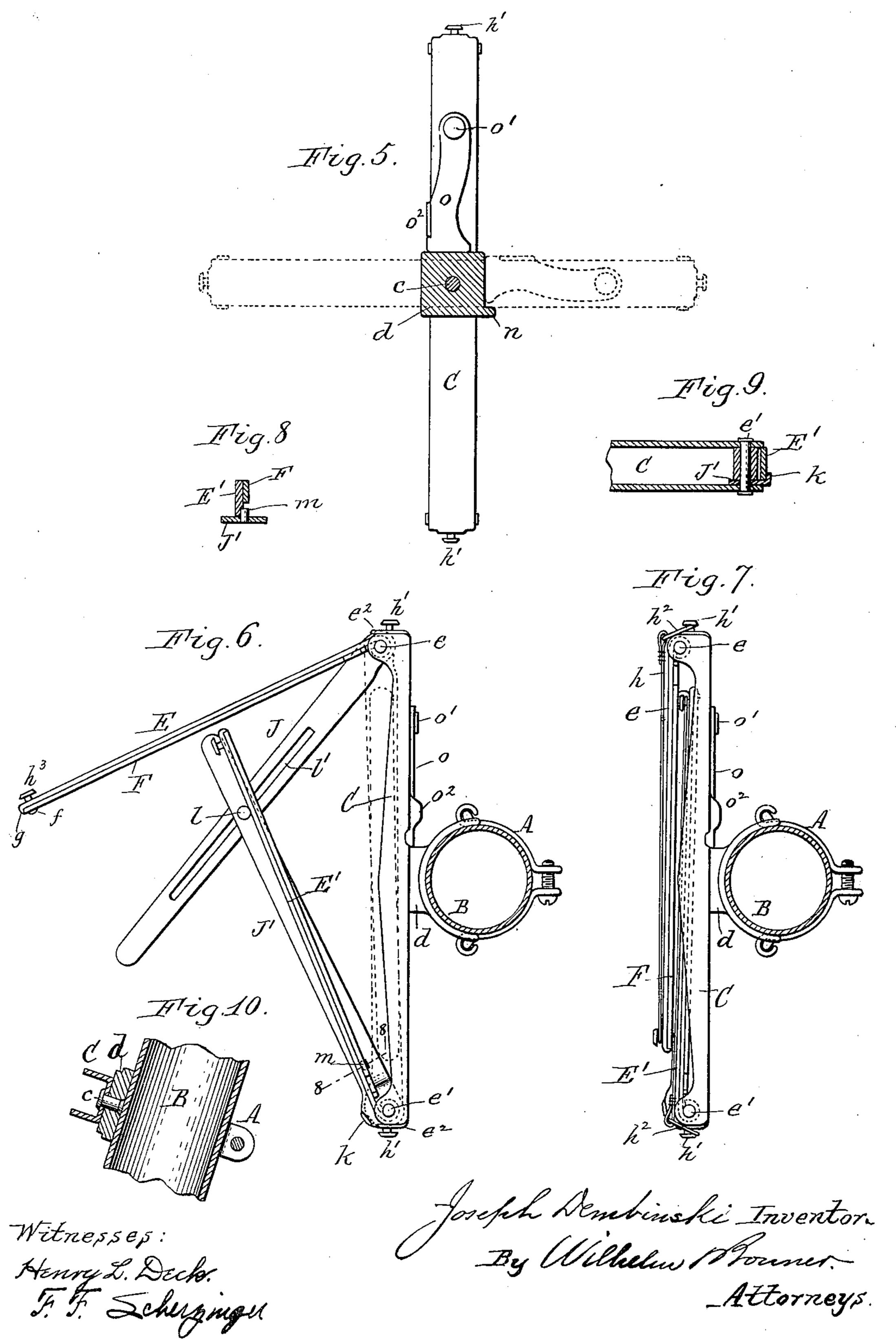
2 Sheets-Sheet 1. (No Model.) Fig. 4. Hig. 3. Hig.1. Hig. L. Joseph Dembius ki Inventor. By Wilhelm Bruner Attorneys.

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2 Sheets—Sheet 2.



United States Patent Office.

JOSEPH DEMBINSKI, OF BUFFALO, NEW YORK.

LUGGAGE-CARRIER.

SPECIFICATION forming part of Letters Patent No. 658,429, dated September 25, 1900.

Application filed May 3, 1900. Serial No. 15,315. (No model.)

To all whom it may concern:

Be it known that I, Joseph Dembinski, a subject of the Czar of Russia, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Luggage-Carriers, of which the following is a specification.

This invention relates to a luggage-carrier for bicycles and similar vehicles, and has for its object to provide a light and strong carrier of simple and inexpensive construction which can be neatly and compactly folded adjacent to the steering head or frame of the

machine when not in use.

In the accompanying drawings, consisting of two sheets, Figure 1 is a side elevation of my improved luggage-carrier applied to the steering-head of a bicycle, showing the carrier unfolded for use. Fig. 2 is a top plan 20 view of the carrier in the same condition. Fig. 3 is a front view of the steering-head and the luggage-carrier, showing the carrier folded and turned in line with the steering-head. Fig. 4 is a fragmentary side elevation of the 25 carrier and its bracket viewed from the side opposite that shown in Fig. 1, the carrier being folded preparatory to turning it into an upright position. Fig. 5 is a detached rear view of the luggage-carrier and its support-30 ing-bracket, which latter is shown in vertical section, showing the means for locking the carrier in its folded and unfolded positions. Fig. 6 is a top plan view of the carrier, showing the same partly folded. Fig. 7 is a simi-35 lar view showing the carrier entirely folded. Fig. 8 is a cross-section in line 88, Fig. 6. Fig. 9 is a similar section in line 9 9, Fig. 2. Fig. 10 is a transverse vertical section in line 10 10, Fig. 2.

Like letters of reference refer to like parts

in the several figures.

A is a clip, clamp, or bracket which is adapted to embrace the steering-head B or other suitable upright member of a velocipede and which forms the support or attachment of the luggage-carrier. This clip may be of any ordinary or suitable construction.

C is the main bar or rear member of the luggage-carrier, which is pivoted centrally to the front side of the clip A by a nearly-horizontal pin or rivet c, as shown in Fig. 10, so that the bar can be turned into a horizontal

or transverse position, as shown in Figs. 1, 2, 4, 6, and 7, or into an upright position, as shown in Figs. 3 and 5. The clip A is prosided on its front side with a boss d, having a flat face, against which the main bar C bears. The latter is preferably channeled or trough-shaped and arranged so that its flanges face forwardly.

E E' represent folding side bars, which are pivoted at their inner ends to opposite ends of the main rear bar C and which extend forwardly from said bar and occupy a position at right angles to the same when unfolded, 65 as shown in Figs. 1 and 2. The pivots e e' of these side bars pass through the upper and lower flanges of the main bar C, and the pivot of one of the bars—say the pivot e—is offset or arranged forwardly beyond the plane of 70 the pivot of the other bar, so that the side bars can overlap each other and be folded substantially parallel with the main bar C, as shown in Fig. 7, the side bars being somewhat shorter than the main bar for this pur- 75

pose. The side bars are prevented from swinging outwardly beyond their normal unfolded position by forwardly-projecting ears e^2 , arranged at the end of the main bar on the outer side of the side-bar pivots.

F F are vertically-swinging arms or posts, which are pivoted at their lower ends to the outer ends of the side bars E E' by horizontal pins or rivets f'and which when unfolded extend upwardly substantially at right angles 85 to the side bars, as shown in Fig. 1. These arms are free to be folded rearwardly and downwardly in line with the side bars; but they are prevented from turning forwardly beyond their proper unfolded position by 90 stops or inwardly-bent lips g, which are arranged at the outer ends of the side bars and against which said arms abut when unfolded, as shown in Fig. 2.

h h are luggage-retaining cords or bands, 95 preferably elastic bands, attached at their lower ends to buttons h', secured to the ends of the main bar C and provided at their upper ends with rings or loops h^2 , which are adapted to be engaged with hooks i, formed too at the upper ends of the folding arms F, so that the bands extend over the package or other luggage placed upon the side bars of the carrier and hold the same in place there-

on. When the carrier is folded, these bands are doubled around buttons h^3 , arranged at the outer ends of the side bars E E', and their rings are engaged with the buttons h'.

J' are horizontally-swinging bottom bars arranged diagonally between the side bars E E' and adapted to extend into or across the space bounded by the main bar C and the side bars, so as to form intermediate supports for the luggage. These bottom bars are arranged underneath the side bars and pivoted at their inner ends to the ends of the main bar, respectively, by the same upright pins e e' which connect the side bars with the main bar, so that the bottom bars can be unfolded to the forwardly-converging position shown in Fig. 2 or folded inwardly parallel with the main bar C, as shown by dotted lines in Fig. 6.

k is an upwardly-projecting lug or ear ar-20 ranged on one of the folding bottom barssay the bar J'—and located near the pivot of said bar and on the outer side of the adjacent side bar E, as shown in Figs. 1, 2, 6, and 9, so that upon unfolding said side bar the same 25 comes in contact with the lug k and swings the bottom bar J' to its unfolded position. As said side bars swing through an arc of about ninety degrees and the bottom bar through an arc of only about half that length, the lug 30 k is so arranged that the side bar does not strike the same during the first half of its unfolding movement, so that the said bottom bar moves outward with the side bar only during the last half of its unfolding move-35 ment. The other bottom bar J is united to the bottom bar J' by a suitable connection which causes both bars to be folded and unfolded in unison by the movement of the bar J'. In the construction shown in the drawto ings this connection consists of a pin l, carried by one of the bottom bars and engaging in a longitudinal slot l', formed in the other bar. These bars are folded or closed in the act of folding the side bar E' by a lug m, ar-45 ranged on the bottom bar J' near its pivot and projecting upwardly into the path of said side bar, as shown in Figs. 2, 6, and 8, so that upon folding the side bar it strikes said lug and swings said bottom bar and the other 50 bottom bar J, connected therewith, into their innermost position. By this construction the bottom bars are automatically unfolded and folded by the corresponding movements of the side bars, and the necessity of separately 55 manipulating the bottom bars is obviated.

The main bar C, which carries the other members of the luggage-carrier, is locked against turning in one direction when in its horizontal position by a lug or stop n, which for projects forwardly from the lower left-hand corner of the boss d and against the upper side of which the main bar bears, as shown in Figs. 1 and 4. The main bar is held against turning in the opposite direction by a latch o, pivoted to the rear side thereof at o' and bearing at its free end against the same side of the boss d at which the stop-lug n is lo-

cated, as shown by full lines in Figs. 2, 4, 6, and 7 and by dotted lines in Fig. 5. The main bar is locked in its upright position by the 70 same means, the bar bearing against the inner side of the stop-lug n, as shown in Fig. 3, and the free end of the latch o bearing against the top of the boss d, as shown in Fig. 5. Upon swinging the latch clear of this 75 boss in either position of the main bar the latter can be turned to its other position. The latch has a laterally-projecting lip o^2 for manipulating it.

In the folded condition of the luggage-car- 80. rier the main bar C stands vertically in line with the steering-head, the arms F are folded beside the side bars E E', and the latter and the bottom bars J J' are folded against the main bar. To unfold the carrier, the main 85 bar is first unlocked and turned to its horizontal position and again locked by the latch o. The side bars E E' are then unfolded, which movement also effects the automatic unfolding of the bottom bars J J', as herein- 90 before described, and the arms F are then swung upwardly and forwardly to the position shown in Fig. 1. After placing the luggage upon the carrier the same is secured in place by detaching the rings h^2 of the elastic bands 95 h from the buttons h' and h^3 and engaging the same with the hooks of the arms F.

In order to fold the carrier, the above-described manipulations are performed in the reverse order, and after folding the arms F and side bars E E' the main bar is turned into its upright position and locked by the latch o. In this position the folded carrier stands in close proximity to the steering-head, and as it occupies a small compass it too does not detract from the sightliness of the velocipede.

While I have herein shown and described my improvements in connection with a main member capable of turning into an upright or a horizontal position, the folding side bars, the arms F, and the bottom bars J J' could obviously be applied to a main member which is permanently secured to the steering-head in a horizontal or transverse position.

I claim as my invention—

1. In a luggage-carrier, the combination with a bracket having a substantially-horizontal pivot which extends forwardly therefrom, of a rotary main member mounted on 120 said pivot, said bracket being provided with a stop arranged to limit the turning movement of said main member beyond an upright position in one direction and beyond a horizontal position in the opposite direction, and 125 a locking-latch pivoted to said main member and arranged to bear against said bracket in either of its extreme positions, substantially as set forth.

2. In a luggage-carrier, the combination 130 with a bracket and a normally-horizontal main member arranged transversely on the front side of said bracket, of horizontally-swinging side bars pivoted to the ends of said

main member and capable of folding inwardly against the front side thereof, and intermediate horizontally-swinging bottom bars also pivoted to the ends of said main member and capable of being folded inwardly parallel therewith, substantially as set forth.

3. In a luggage-carrier, the combination with a normally-horizontal main member, of horizontally-swinging side bars pivoted to the ends of said main member, the pivot of one of said side bars being offset forwardly beyond the plane of the pivot of the other side

bar, substantially as set forth.

4. In a luggage-carrier, the combination with a normally-horizontal main member, of horizontally-folding side bars pivoted to the ends of said main member, intermediate horizontally-folding bottom bars pivoted at their inner or rear ends to said main member, and coöperating shifting devices on adjacent side and bottom bars of the luggage-carrier, whereby the bottom bars are folded and unfolded by the corresponding movements of the side bars, substantially as set forth.

5. In a luggage-carrier, the combination with a normally-horizontal main member, of horizontally-folding side bars pivoted to the ends of said main member, and an intermediate horizontally-folding bottom bar pivoted at its inner or rear end to said main member and provided on the inner and outer sides of the adjacent side bar with shifting lugs or projections which extend into the path of said bar, whereby said bottom bar is folded and unfolded by the corresponding movements of

said side bar, substantially as set forth.

6. In a luggage-carrier, the combination with a normally-horizontal main member, of horizontally-folding side bars pivoted to the ends of said main member, horizontally-folding bottom bars pivoted at their inner or rear ends to said main member and adapted to occupy a forwardly-converging position between said side bars, one of said bottom bars being provided on inner and outer sides of the adjacent side bar with lugs or projections

which extend into the path of said bar, and a connection between the outer or front portions of said bottom bars which causes the same to fold and unfold in unison, substan-50

tially as set forth.

7. In a luggage-carrier, the combination with a normally-horizontal main member, of horizontally-folding side bars pivoted to the ends of said main member, and horizontally-folding bottom bars pivoted at their inner or rear ends to the outer ends of said main member, one of said bottom bars having a stud or pin which is arranged in a longitudinal slot formed in the other bottom bar, and one of said bottom bars being provided on opposite sides of the adjacent side bar with shifting lugs or projections which cause the bottom bars to take part in the folding and unfolding movements of said side bar, substantially 65 as set forth.

8. In a luggage-carrier, the combination with a bracket and a normally-horizontal main member arranged centrally and transversely on the front side thereof, of horizontally-folding side bars pivoted to the ends of said main member, and vertically-folding arms pivoted at their lower ends to the outer free ends of said side bars, substantially as set forth.

9. In a luggage-carrier, the combination 75 with a bracket, and a normally-horizontal main member arranged centrally and transversely on the front side thereof and provided at its ends with cord attachments, of horizontally-folding side bars pivoted to the ends of said 80 main member, and vertically-folding arms pivoted at their lower ends to the outer free ends of said side bars and each provided at its upper end with an attachment for a luggage-retaining cord, substantially as set forth.

Witness my hand this 26th day of April,

1900.

JOSEPH DEMBINSKI.

Witnesses:
CARL F. GEYER,
BÈVNIS DEMBINSKI.