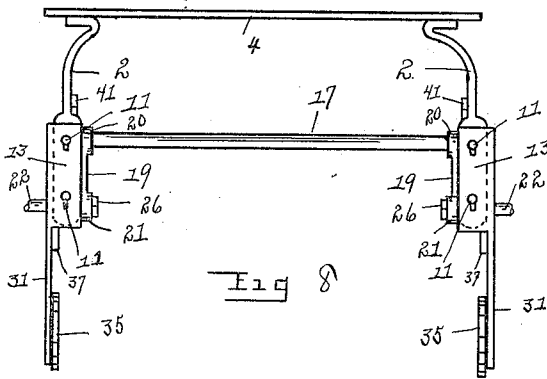
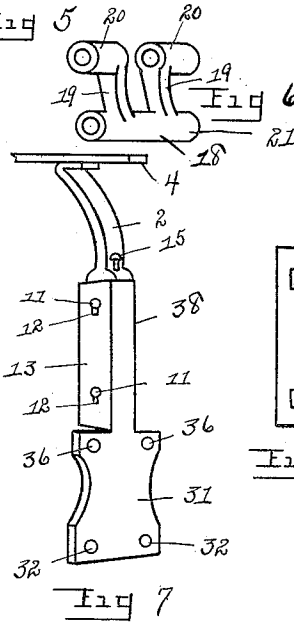
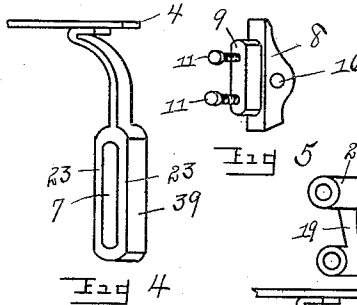
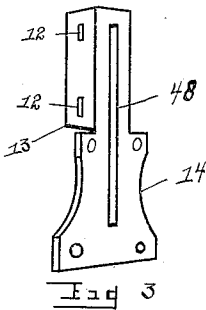
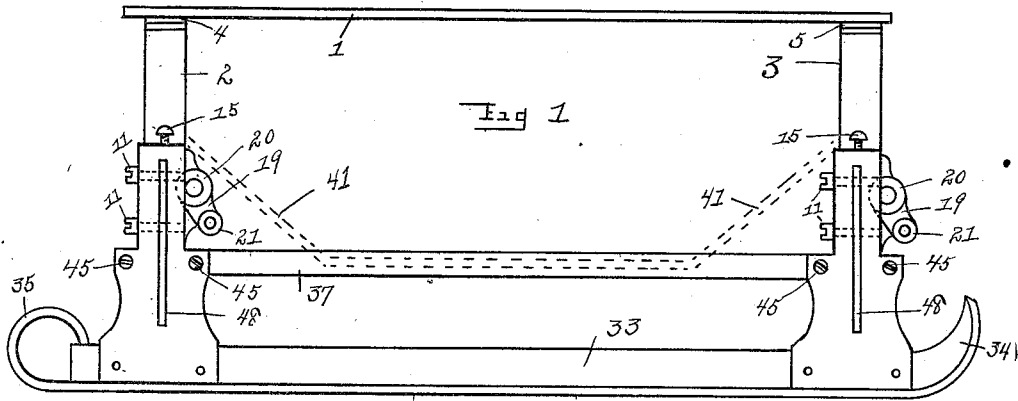


J. G. RAITHEL.
 CONVERTIBLE VEHICLE.
 APPLICATION FILED MAR. 25, 1911.

1,056,939.

Patented Mar. 25, 1913.

2 SHEETS—SHEET 1.



WITNESSES:

R. L. Wilder
H. M. Clark

INVENTOR
 JOHN G. RAITHEL

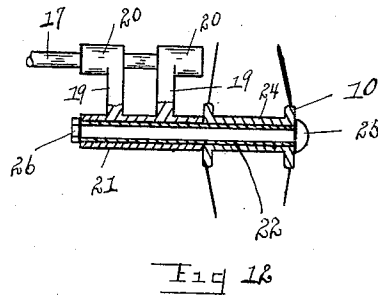
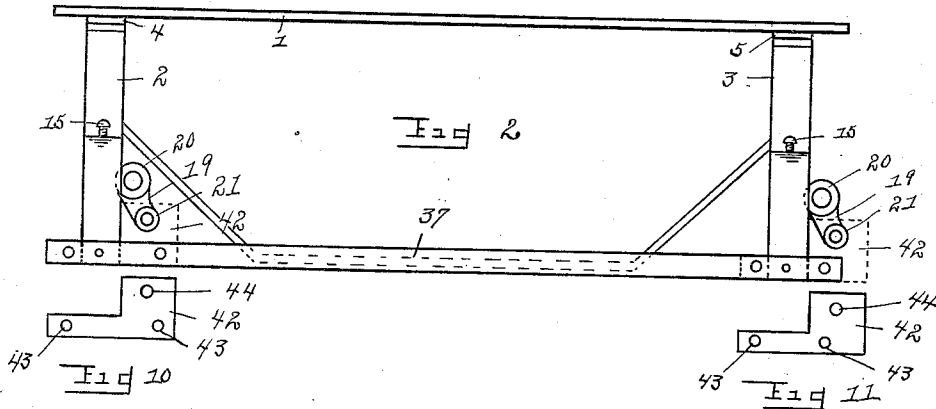
BY *Risley & Love*
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UNITED STATES PATENT OFFICE.

JOHN G. RAITHEL, OF LITTLE FALLS, NEW YORK.

CONVERTIBLE VEHICLE.

1,056,939.

Specification of Letters Patent.

Patented Mar. 25, 1913.

Application filed March 25, 1911. Serial No. 616,990.

To all whom it may concern:

Be it known that I, JOHN G. RAITHEL, a citizen of the United States, residing at Little Falls, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Convertible Vehicles, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to a detachable runner, and I declare the following to be a full, clear, concise and exact description thereof, sufficient to enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings in which like reference characters refer to like parts throughout the specification.

The object of the invention is to provide a carriage more especially a baby carriage or go-cart with convenient means whereby same may be converted from a carriage on wheels into a sleigh, so that same may be in constant use at any season of the year.

The novelty of this invention resides especially in the construction of the knee, whereby the runners may be detached in summer. The application is adapted to supplement certain features of an invention set forth by me in a specification filed Dec. 20, 1909, Serial No. 534,159.

Other objects will appear from the drawings in which—

Figure 1 is a side elevation of the lower portion of the sleigh, showing the assembly of the runner bracket; Fig. 2 is a side elevation showing the runners removed; Fig. 3 is a perspective view of the runner bracket; Fig. 4 is a detail perspective of the knee and immediate parts; Fig. 5 is a perspective detail of a block employed; Fig. 6 is a perspective view of a yoke employed; Fig. 7 is a perspective view of the knee showing the sectional knee assembled thereto; Fig. 8 is an end elevation; Fig. 9 is a detail of a plate employed; Figs. 10 and 11 are details of plates employed; and Fig. 12 is a fragmentary view partially in section of the wheel and immediate parts.

Referring more particularly to the drawings, 1 is the frame of the vehicle upon which may be detachably disposed any suitable box to accord with the season and desire of the user. Frame 1 is supported by knees 2—2 and 3—3 of similar construction and connected at their top portions by bars

4 and 5, respectively, to prevent the springing apart of said knees. Said knees are constructed with a slot 7 to which is mounted a block 8, having member 9, slidably retained in said slot 7 in order to adjust the vertical position of wheels 10 carried by said blocks 8. Member 9 of block 8 is bored for the reception of headed screws 11. Said screws 11 are mounted through slots 12—12 provided in angular wing 13 of runner bracket 14, whereby member 9 of block 8 may be slidably retained in recesses or slots 7 of said knees 2 or 3.

The vertical position of members 9 of blocks 8 is fixed or adjusted by screws 15 mounted in knees 2 and 3 at the upper portion of recesses 7, whereby to bear down on members 9 of blocks 8.

Each pair of blocks 8 has recesses 16 for the reception of a shaft 17 running transverse the frame and at each end supported by a block 8 mounted as above described. Upon shaft 17, adjacent its ends, is pivotally mounted yokes 18 each having oppositely disposed brackets 19—19, spaced apart in order that sleeves 20—20, integral with said brackets 19—19, may be disposed or fit on either side of block 8 and have bearings against the sides 23—23 of recess 7 of knees 2 and 3, when said yokes are in the position indicated in Fig. 1. Brackets 19—19 support sleeve 21 adapted to form a bearing for axle 22, upon which wheel 10 is journaled. Said axle 22 extends outward a sufficient distance for the pivotal mounting of hub 24 of wheel 10, and is headed at one end, as at 25. The remote end of said axle 22 is threaded for the proper mounting of nut 26, whereby the looseness due to wear of parts may be taken up and the wheel 10 kept from rattling.

The novel feature of the present application is the addition of the runner bracket 14 of which there are four employed, and adapted to be attached to the knees 2 and 3, in each instance. More specifically, the runner brackets 14, all four being alike, comprises a lower portion 31 having holes 31—32, for the mounting of bolts or rivets adapted to secure a runner 33 having a curved forward end 34 and a curved rearward end 35, upon which the sleigh may slide in the event of the same being tipped backward on its end. Holes 36—36 are adapted for the mounting of bolts or screws 45 to secure said runner bracket to brace beam 37, which is

permanently fastened at either end to knees 2 and 3 respectively, whereby to give sufficient brace effect to said knees. Portion 38 of the runner bracket 14, when assembled, lies against surface 39 of knee 2 and of 3. Angular wing 13 lies against the end surface of the knee, so as to completely cover and overlap recess 7 thereof. The assembling of the runner bracket 14 is adapted to be supported in an efficient manner by its position in relation to knee 2 and knee 3, as the case may be.

To effect the detachment of runners 33, it is necessary only to remove screws 11 and bolts 45, whereby the runner bracket 14 may be removed completely and stored for the summer. The function of wings 13 of runner bracket 14 is assumed by plates 40, which are adapted to be disposed in the same position that wings 13 were taken from.

In the summer time when it is desirable to employ wheels 10, yokes 18, which support said wheels, may be held in downward position by plates 42, or other suitable means, which said plates have holes 43—43 to secure same to beam 37, and holes 44 to receive axles 22.

At 41—41, there is shown additional bracing rods, connected with brace beam or bar 37 at one end and at the remote end with knees 2 and 3, respectively.

Runner bracket 14 may be corrugated as at 48 for the purpose of strengthening same, whereby to prevent same from bending inward or outward.

In winter time, if desired, block 8, shaft 17 and yokes 18 may be removed by removing screws 11.

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

1. In a convertible vehicle, the combination with a frame and knees permanently attached thereto, of wheel carrying mechanisms adjustably mounted in the said knees, the knees being slotted for said purpose, runner brackets with runners permanently attached thereto each bracket having angularly disposed portions receiving the knee in the angle of such portions, one of said portions bearing against said wheel-carrying mechanisms, and means whereby removably to attach the bracket to the same.

2. In a convertible vehicle, the combination of slotted knees, wheel supporting mechanisms supported in the slots of the knees, runner brackets removably secured to bear on the knees and plates, upon the re-

moval of the brackets, to secure the wheel supporting mechanisms in vehicle carrying position.

3. The combination in a convertible vehicle having knees each slotted to receive a block and means for adjusting the block vertically and a yoke swung on the block, of a runner-bracket shaped to bear against the knee, means securing said bracket in place, and plates adapted to be substituted for the runner-bracket and to be secured to the knee by means of which to secure the yoke in given position in the knee.

4. The combination in a convertible vehicle, of knees provided with slots, blocks in the slots and yokes pivotally mounted in the blocks, wheel-carrying members adapted to be carried in the yokes and plates formed to engage the said yokes and hold the wheel-carrying means in working position.

5. In a device of the character described, the combination of a frame having knees and a bar connecting the knees at their free ends, a bracket mounted on the frame and having two portions angularly disposed to each other and whereby to bear against the knee on two faces thereof, runners mounted on the said brackets and means securing the brackets to the knees.

6. In a device of the character described having a frame with wheel-carrying members swingably mounted thereon, the combination of sets of plates, each plate of one set being formed to be secured to the frame and engage one of the wheel-carrying members and hold it in position to support the vehicle on its wheels, and the several plates of the other set being formed to be secured to the frame in place of the other plates and having runners attached to the same on each side of the vehicle.

7. In a convertible vehicle having a frame with knees, and the knees having slots opening front and rear, a block in each slot and a yoke swung on each block, the combination of a detachable runner provided with upwardly extending brackets, each bracket having a portion bearing against the side of the knee and an angularly disposed portion bearing against the said block, and means for securing the bracket in said position.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses.

JOHN G. RAITHEL.

Witnesses:

JAMES CLINGEN,
ARTHUR WILLARD HYDE.