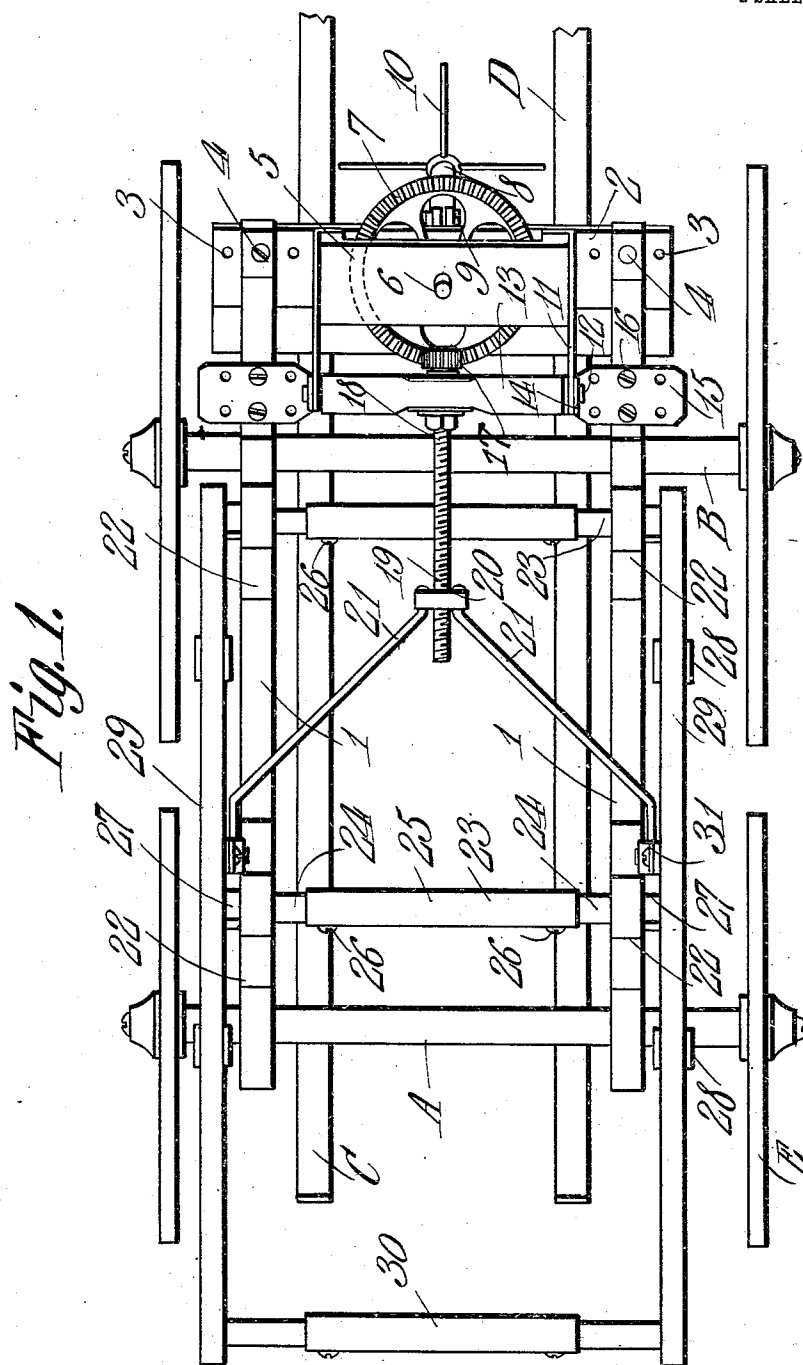


D. H. HUFF.
 COMBINED BABY CARRIAGE AND SLEIGH.
 APPLICATION FILED JUNE 14, 1909.

954,631.

Patented Apr. 12, 1910.

2 SHEETS—SHEET 1.



Witnesses
H. J. Lawson
N. H. Lawson

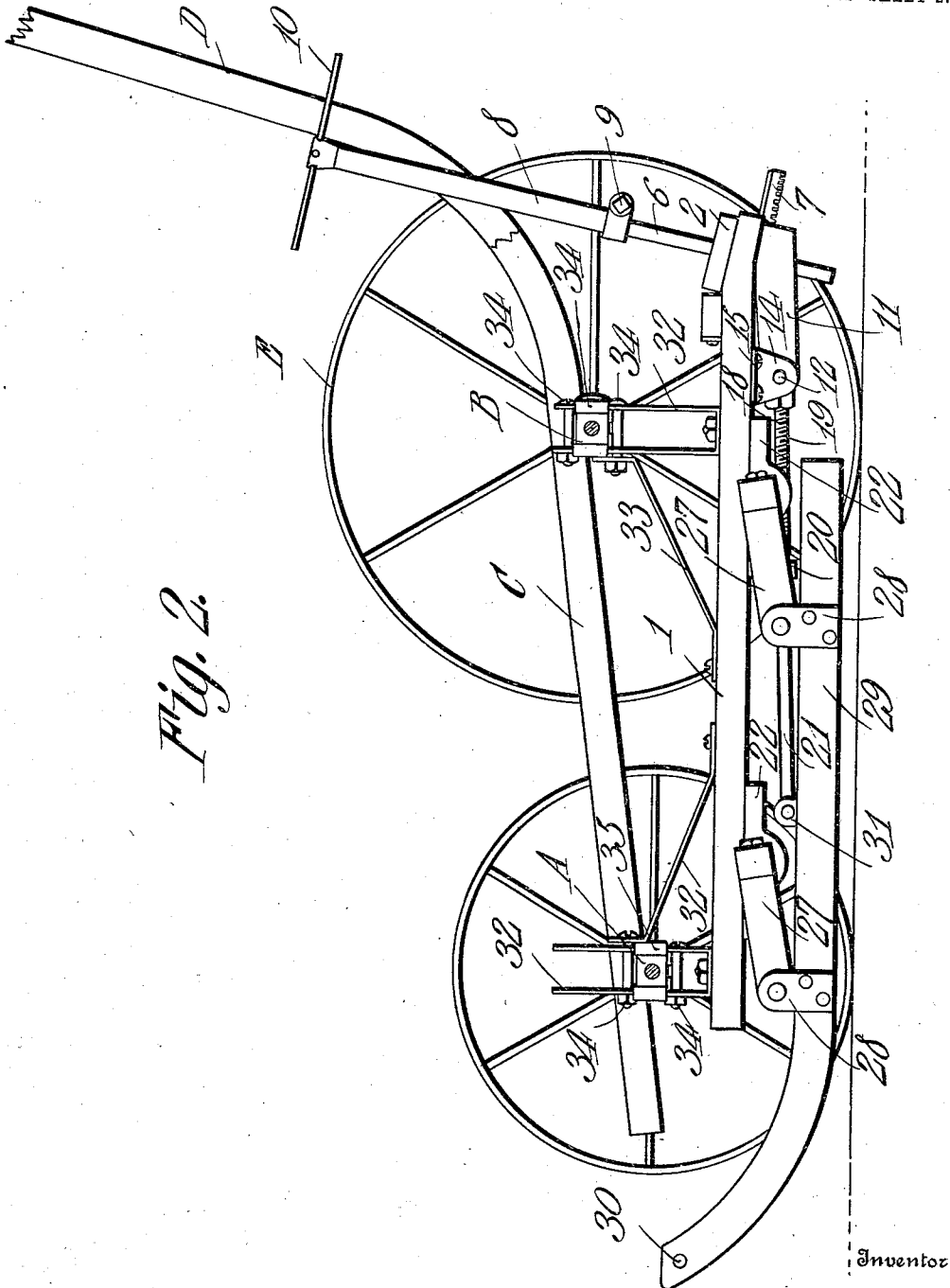
Inventor
Dwight H. Huff
 By *C. Snow & Co.*
 Attorneys

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Fig. 2.



Witnesses
Herbert D. Lawson

Inventor
Dwight H. Huff
 By *Chas. Snow & Co.*
 Attorneys

UNITED STATES PATENT OFFICE.

DWIGHT H. HUFF, OF FREDONIA, NEW YORK.

COMBINED BABY-CARRIAGE AND SLEIGH.

954,631.

Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed June 14, 1909. Serial No. 502,104.

To all whom it may concern:

Be it known that I, DWIGHT H. HUFF, a citizen of the United States, residing at Fredonia, in the county of Chautauqua and State of New York, have invented a new and useful Combined Baby-Carriage and Sleigh, of which the following is a specification.

This invention relates to combined baby-carriages and sleighs and its object is to provide running-gear of novel construction having means whereby either wheels or sleigh-runners can be shifted into contact with the surface on which the device is mounted, the mechanism utilized for this purpose being simple, durable, and of such a nature as not to materially detract from the appearance of the device.

A further object is to provide means of this character which can be easily actuated by the person pushing the vehicle.

A still further object is to provide runners and connections therefor and means for actuating them, all of which can be readily applied to ordinary forms of baby-carriages.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a bottom plan view of the running-gear of a baby carriage and showing the present improvements applied thereto. Fig. 2 is a side elevation of the sleigh attachment, the running-gear of the carriage being shown partly in section.

Referring to the figures by characters of reference A and B designate the front and rear axles respectively of the running-gear of a baby-carriage or the like, these axles supporting a frame C having handles D at one end, the axles being supported by wheels E as ordinarily.

The sleigh attachment constituting the present invention consists of side strips 1 connected at one end by a cross strip 2, each end portion of which has a series of openings 3 therein, any one of the openings of each series being designed to receive a securing screw 4 or the like. It will be apparent therefore that by providing the openings 3 the strips 1 can be arranged at different dis-

tances apart so as to be adapted to vehicles of different widths. A bottom plate 5 is secured to the bottom surface of the strip 2 and is spaced therefrom at its center, this plate and the strip 2 constituting bearings for a shaft 6 which extends upwardly between the handle strips D and has a gear 7 secured to it between the strip 2 and the plate 5. This shaft 6 has a tubular extension 8 designed to be clamped thereon in any preferred manner as by means of a screw 9 and a suitable hand-wheel 10 is arranged at the upper end of the tube 8. Side plates 11 extend forwardly from the ends of the plate 5 and constitute bearings for trunnions 12 projecting from the ends of a rock-bar 13. These trunnions also extend into ears 14 formed at the inner ends of apertured plates 15, each plate having a series of apertures any one or more of which are designed to receive screws 16 or other fastening devices whereby the plates may be attached to the side strips 1. By providing a number of apertures in each plate 15 it will be apparent that the said plate can be secured to the side strips 1 after said strips have been adjusted to different distances apart. The gear 7 meshes with a smaller gear 17 secured to one end of a spindle 18 revolvably mounted within the middle portion of the rock-bar 13. This spindle extends forwardly from the rock-bar and is screw-threaded for the greater portion of its length as indicated at 19, this threaded portion being engaged by a sleeve 20, from which extend diverging arms 21.

Bearing boxes 22 are secured to each of the side strips 1, and mounted within these boxes are parallel rock-shafts 23, each consisting of alining end portions 24 and a tubular intermediate portion 25, said intermediate portion being secured adjustably upon the end portions by means of set screws 26 or in any preferred manner. It will be apparent therefore that these rock-shafts can be readily elongated or contracted, according to the distance between the side strips 1. The end portions 24 of the rock-shafts are secured to hangers 27, each hanger being pivotally connected to an ear 28 extending upwardly from a runner 29. The two runners may be connected at their front ends by a telescopic connecting bar 30, designed to be extended or contracted in the same manner as the rock shafts 23. Ears 31

extend from the runners 29 and the diverging arms 21 heretofore referred to are pivotally connected to them.

Mounted upon the end portions of each strip 1 are U-shaped standards 32 having braces 33 connected to the sides thereof and to the strips 1. Each of these standards is designed to receive one of the axles A and B within the upper portion thereof, bolts 34 being utilized for binding the end portions of the standard upon the axle. Guide-plates 35 are preferably secured upon the axle so as to hold the standard against lateral displacement.

When it is desired to secure the attachment to a baby-carriage it is merely necessary to remove the upper bolts 34 and then slip the upper ends of the U-shaped standards 32 upon the axles A and B, after which the upper bolts 34 may be reinserted into the standards and tightened so as to bind the said standards upon the axles. The side strips 1 will thus be supported beneath the axles but above the surface on which the wheels E are mounted. By turning the shaft 6 by means of hand-wheels 10 the gear 7 can be rotated so as to revolve the smaller gear 17, thus causing the threaded stem 19 to push the diverging arms 21 forward. These arms will therefore swing the hangers 27 forwardly and upwardly, thus supporting the runners 29 out of contact with the surface on which the wheels are mounted. Should it be desired to lower the runners on to the ground and elevate the wheels out of contact with the ground, it is merely necessary to reverse the movement of the gear 7 and the spindle 19 will thus be rotated so as to draw the sleeve 20 toward the rock-bar 13. The arms 21 will therefore pull on the runners 29, and they will swing downwardly and rearwardly, the hangers 27 moving into vertical positions, and the runners assuming positions below the level of the lowermost portions of the wheels E. It will be apparent that both of these operations can be quickly effected and after the parts have been adjusted in the manner described they will not become accidentally displaced but will be positively held.

Importance is attached to the fact that the connections between the strips 1 are such as to permit the strips to be adjusted toward or from each other, thus adapting the attachment for use in connection with vehicles of different widths.

It will be obvious that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing the advantages of the invention.

What is claimed is:—

1. A sleigh attachment for baby-carriages and the like comprising adjustably connected side strips, means for attaching said strips

to the axles of the running-gear of a carriage, runners, pivotal connections between the runners and the side strips, a revoluble threaded member between the side strips, a slidable device upon said member and connected to the runners and means for actuating said member to shift the slidable device to move the runners toward or from the side strips.

2. A sleigh attachment for baby-carriages and the like comprising adjustably connected side strips, means for detachably securing the same to the running-gear of the carriage, runners suspended below the side strips and mounted to oscillate with relation thereto, revoluble actuating means parallel with and interposed between the side strips, a slidable member operated thereby, and connections between said member and the runners for shifting the runners toward or away from the side strips during the movement of said sliding means.

3. A sleigh attachment for baby-carriages and the like comprising side strips, means for detachably securing the same to the running-gear of a carriage, hangers pivotally connected to the side strips, runners pivotally connected to the hangers, a threaded spindle revolubly mounted between the side strips, a slidable member actuated thereby, connections between said member and the runners, and revoluble means for actuating the spindle.

4. A sleigh attachment for baby-carriages and the like comprising adjustably connected side strips, hangers pivotally connected thereto, runners pivotally connected to the hangers, a cross strip, a shaft journaled therein, a gear revoluble with the shaft, a screw-threaded spindle, a gear upon the spindle and meshing with the first mentioned gear, a sleeve engaging and movably mounted on the spindle, and connecting means extending from the sleeve and pivotally attached to the runners.

5. A sleigh attachment for baby-carriages and the like comprising side strips, extensible rock-shafts journaled within the strips, means for adjustably connecting the strips, a rock-bar interposed between the strips, a screw-threaded spindle journaled within the rock-bar, a gear carried thereby, a gear for actuating the first mentioned gear, manually operated means for actuating the gears, runners mounted for swinging movement with relation to the side strips, and means actuated by the spindle for shifting the runners toward or away from the side strips.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

DWIGHT H. HUFF.

Witnesses:

GEO. J. TUTTLE,
C. S. SLAGHT.