

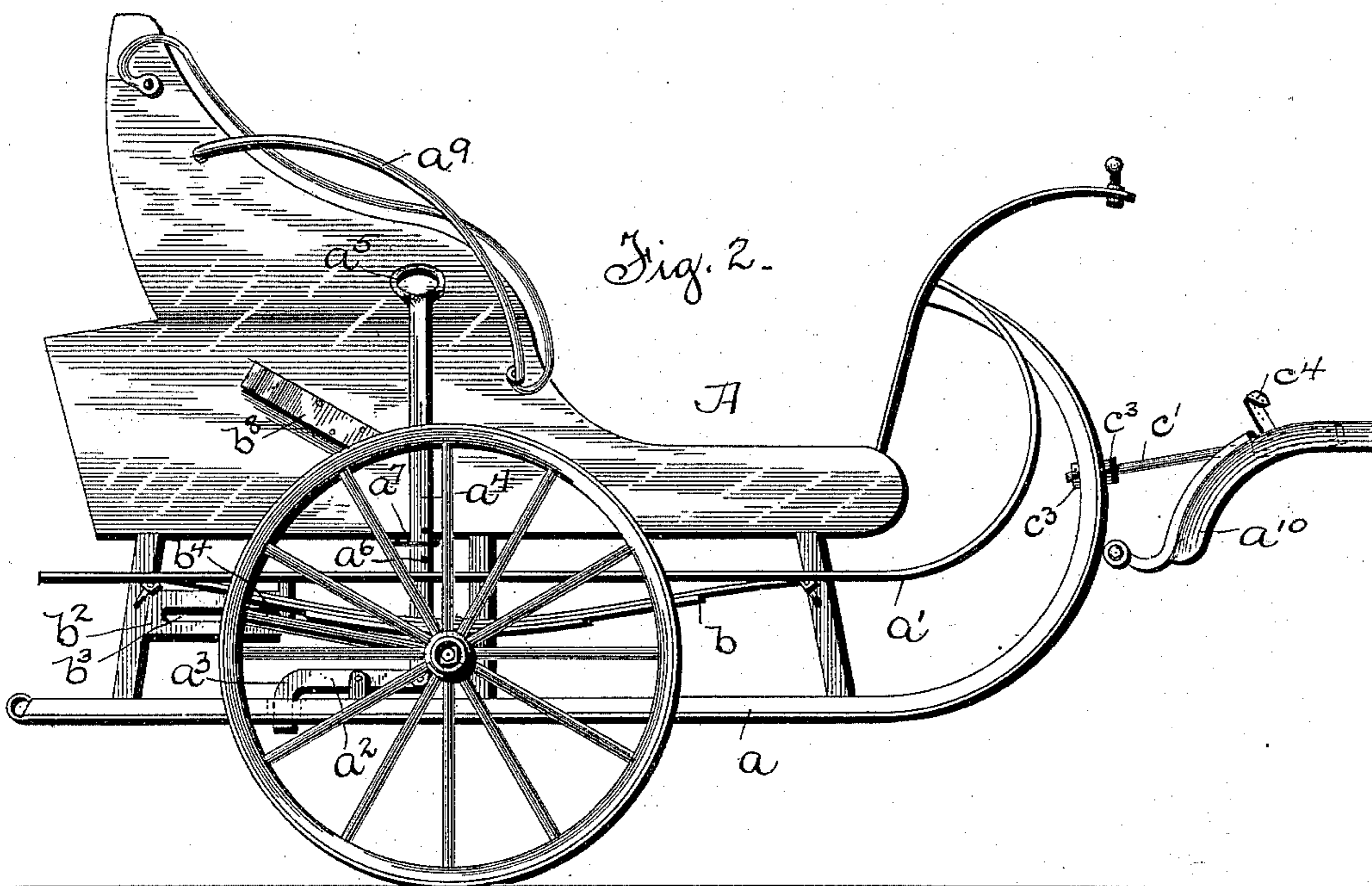
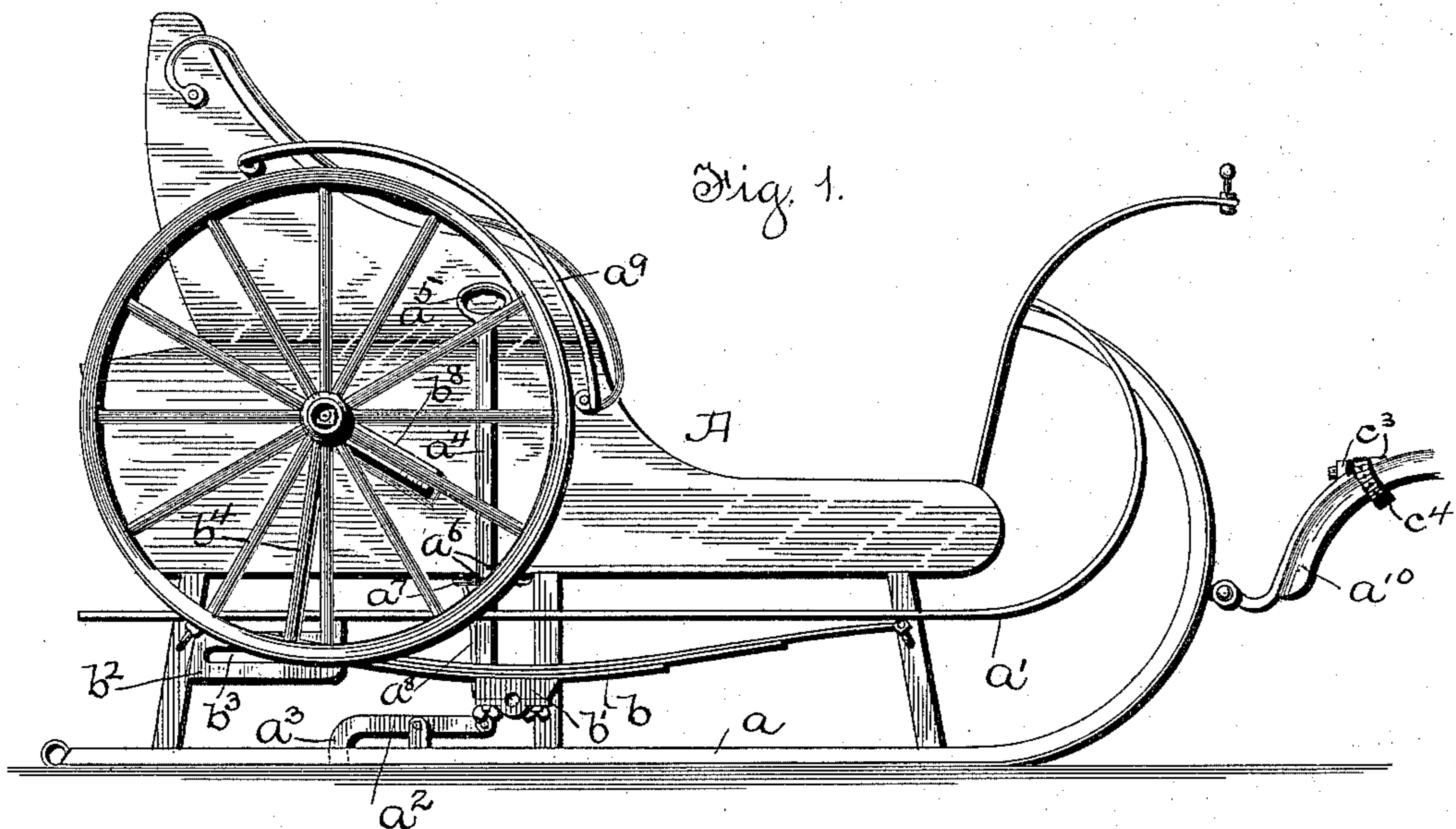
(No Model.)

2 Sheets—Sheet 1.

J. L. P. HOUDE.  
COMBINED SLEIGH AND CARRIAGE.

No. 598,291.

Patented Feb. 1, 1898.



Witnesses:

Horace G. Deitz

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Jean Louis Philippe Houde, Inventor

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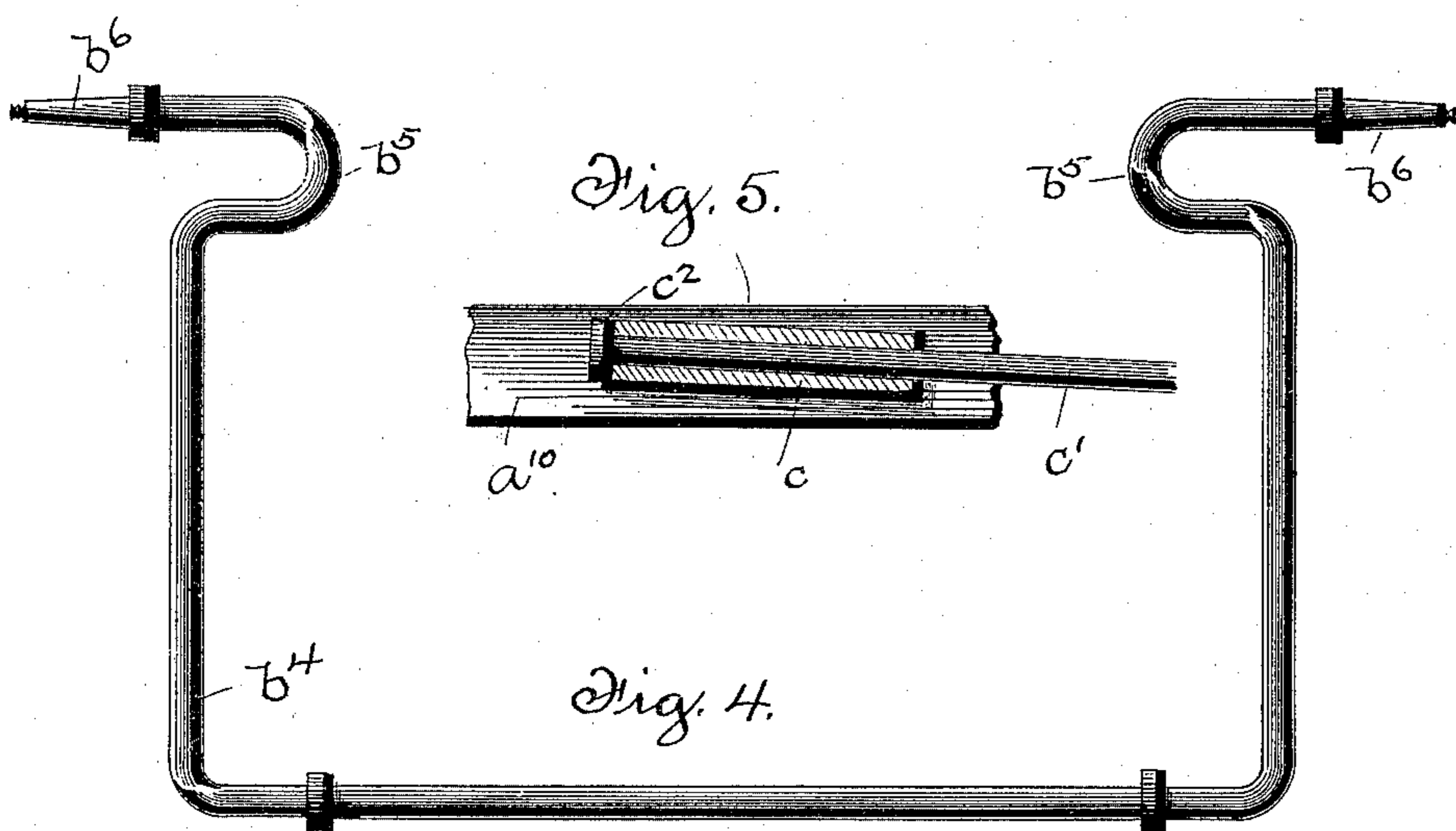
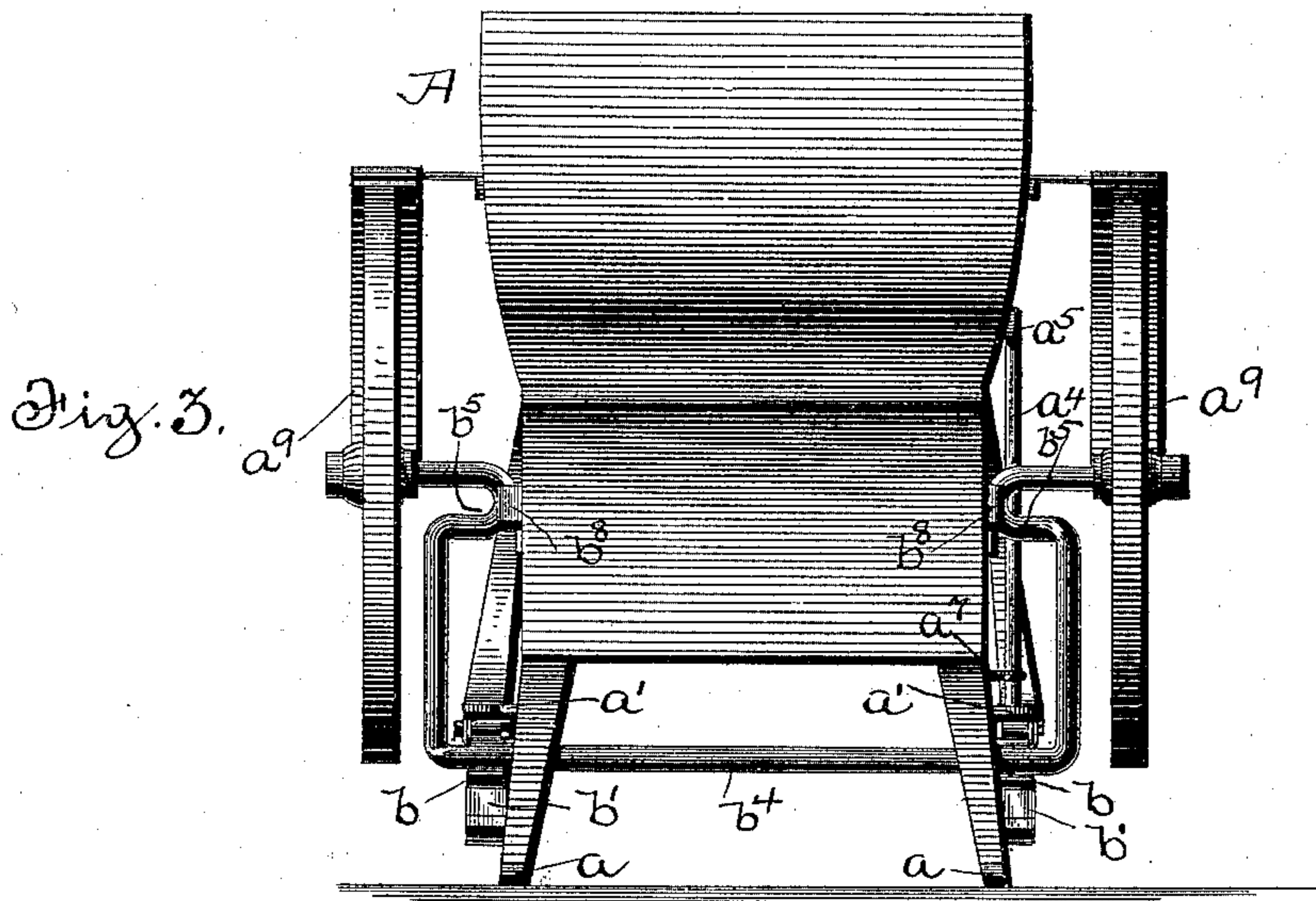
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# UNITED STATES PATENT OFFICE.

JEAN LOUIS PHILIPPE HOUE, OF MONTREAL, CANADA.

## COMBINED SLEIGH AND CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 598,291, dated February 1, 1898.

Application filed October 21, 1897. Serial No. 655,904. (No model.)

*To all whom it may concern:*

Be it known that I, JEAN LOUIS PHILIPPE HOUE, a citizen of the Dominion of Canada, and a resident of the city and district of Montreal, Province of Quebec, Canada, have invented certain new and useful Improvements in Sleighs and Carriages Combined; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in combined sleighs and wagons.

The objects of my invention are to provide a sleigh-body with a running-gear in order that it may be used as a sleigh or as a wagon or jaunting-car and to provide shafts therefor which when used in connection with the sleigh are pivotally connected therewith, but which when used in connection with the wagon are secured against any independent movement whatever.

A further object is to provide a device of this character which will be neat and attractive in appearance and durable in its construction.

To these ends my invention consists in the improved construction and combination of parts hereinafter described, and particularly pointed out in the claims.

In the drawings, in which similar letters of reference indicate similar parts in all of the views, Figure 1 is a side elevation of my improved device when used as a sleigh, the running-gear being shown as thrown up out of position. Fig. 2 is a similar view showing the device used as a wagon. Fig. 3 is a rear elevation, the parts being in the positions shown in Fig. 1. Fig. 4 is a view showing the axle for the running-gear. Fig. 5 is a view showing the manner in which the shafts are secured against movement, the view being a detail one.

A designates a sleigh-body having runners  $a$  and footboards  $a'$ . These are all of the ordinary form of construction and form no particular portion of my invention.

Secured to one side and pivotally mounted on one of the runners  $a$  is a bar  $a^2$ , having its rear end bent downward, as at  $a^3$ , the rounded end being sharpened and adapted to extend downward through an opening formed

in the runner  $a$ . To the front end of the bar  $a^2$  is pivotally secured an upright bar or handle  $a^4$ , adapted to be extended upward a sufficient distance to allow of the upper end being grasped by a person seated in the sleigh, the upper end being formed into a grip  $a^5$ . The front edge of the bar  $a^4$  is provided with notches  $a^6$ , which are adapted to receive one of the ends of an angular clip  $a^7$ , by means of which the bar  $a^4$  may be held at any predetermined position. To firmly keep the bar  $a^4$  in engagement with the clip  $a^7$ , I provide a suitable spring  $a^8$ . This construction forms an efficient brake for the sleigh and is intended to be used to prevent any sidewise movement when the sleigh is being drawn over the ice, especially when it is desired to make a turn. While I have shown and described but one of these attachments, it is to be understood that two may be provided, one on each side, without departing from the spirit of my invention.

Suitably mounted on opposite sides of the sleigh, below the footboards  $a'$ , is a carriage-spring  $b$  of suitable construction, to the center of which are secured bearings  $b'$ . To the rear standards and the under face of the footboards is secured a plate  $b^2$ , provided with a longitudinal slot  $b^3$ . Mounted in said plates  $b^2$  and extending the entire width of the sleigh-body is an axle  $b^4$ , constructed as shown in Fig. 4, to the spindles of which are secured carriage-wheels of the usual construction and mounted in any suitable manner. As shown, the axle is formed in rectangular shape with one side open, the ends being provided with inwardly-extending semicircular portions  $b^5$ , the free ends of which extend outwardly and to which are attached the spindles  $b^6$ .

In using my device as a wagon the axle is mounted in the plates  $b^2$ , the outwardly-extending portions between the semicircular portions  $b^5$  and the spindles being mounted in the bearings  $b'$ , thus securing a firm mounting for the axle.

When it is desired to use the device as a sleigh, the lower portion of the bearings is removed and the axle swung rearwardly in a circular direction, the pivotal point being the portion of the axle in the longitudinal slots  $b^3$  and carried upward alongside of the sleigh-body, as shown in Fig. 1, where it is secured

by means of the spring-catch  $b^8$ , entirely away from any contact with the road and in a position which will not interfere with the free movement into and out of the sleigh-body.

5 Suitable guards  $a^9$  are secured to the sleigh-body to prevent the occupant from coming into contact with the wheels should he reach out over the side of the sleigh-body.

As it is necessary that when the device be  
10 used as a sleigh the shafts be mounted pivotally to allow them to move upward and downward with the movements of the animal drawing the sleigh, and as it is also necessary to have the shafts rigidly connected against  
15 movement to the sleigh-body when the device is to be used as a wagon, I have provided the following attachment:

The shafts  $a^{10}$  are pivotally attached to the runners  $a$  in the ordinary manner; but to the  
20 sides of the shafts I secure an elongated eye  $c$ , through which is adapted to be passed a bolt  $c'$ , having a head  $c^2$ , adapted to engage with one end of the elongated eye. The free end of the bolt is screw-threaded and is adapted  
25 to be passed through suitable openings formed in the runners, where the bolt is secured by suitable means, such as nuts  $c^3$ , secured on both sides of the runner. By this construction it will be seen that a rigid connection is  
30 formed between the shafts and the runners, the elongated eyes serving to prevent the shafts from having a pivotal movement on its bearings. When it is desired that the shafts be allowed to move pivotally, the nut on the in-  
35 ner side of the runner is removed, and the bolt  $c'$  pushed out of the opening in the runner and secured along the side of the shaft by means of strap  $c^4$ .

The advantages of this construction are  
40 many and include the ability to change from one style of vehicle to another at all times and wherever it may be found necessary—such as, for instance, in large cities, where after a snowfall the snow is removed from  
45 the streets, but not in the outlying districts. The change from one to the other can be made without much trouble, and no tools are needed beyond the ordinary carriage-wrench. The device is strong and substantial, whether  
50 used as sleigh or wagon, and is of very light weight. The fact that no parts of any kind are removed when the change is made and are always ready for instant use forms a great advantage.

55 While I have shown and described the axle as of but one piece, it is to be understood that I do not limit myself to this construction, but may use a sectional axle or an extensible axle, as may be necessary, and I claim the right to  
60 use such modifications as are necessary.

Having thus described my invention, what I claim as new is—

1. A combined sleigh and carriage comprising a sleigh; an axle pivotally mounted in  
65 said sleigh; wheels pivotally connected to

said axles; said wheels being adapted to be moved into and out of an operative position; bearings for said wheels when in operative position, yieldingly secured to said sleigh; and clips, secured to the side of the sleigh-  
70 body, for securing the wheels when in inoperative position.

2. A combined sleigh and carriage comprising a sleigh; an axle pivotally connected thereto, the ends of said axle extending at an  
75 angle from the main portion; said ends being adapted to be moved into and out of an operative position; spindles secured to the ends of the axle and extending outwardly therefrom in the same plane as said main portion;  
80 bearings connected to said sleigh for the ends of said axle, when in operative position; and wheels pivotally mounted on said spindles.

3. An axle comprising a main portion, having its end portions extending at an angle to  
85 said main portion; an inwardly-extending semicircular portion formed near the end of each of said end portions; and spindles connected to said end portions beyond said semicircular portions, and arranged in the same  
90 plane as the main portion, substantially as described.

4. The combination with a sleigh, having a running-gear connected thereto, said gear being adapted to be moved into and out of an  
95 operative position; of shafts pivotally connected to said sleigh; and bolts located on said shafts adapted to be removably connected to said sleigh when said gear is in operative position, substantially as described. 100

5. A combined sleigh and wagon, comprising a sleigh-body having runners and footboards; an axle, provided with wheels, pivotally connected to said sleigh-body and adapted to be moved into and out of an opera-  
105 tive position; bearings yieldingly connected to said sleigh-body for said axle when the same is in its operative position; shafts pivotally connected to said runners; and bolts, connected to said shafts, adapted to be re-  
110 movably connected to said runners when said axle is in its operative position, substantially as described.

6. The combination with a sleigh; of a brake comprising a bar pivotally mounted on the  
115 runner of said sleigh, said bar having one end adapted to be passed through an opening in said runner; a handle pivotally connected to said bar, said handle being provided with notches; a clip mounted on said  
120 sleigh adapted to engage with said notches; and a spring for holding said clip in engagement with said notches, substantially as described.

In witness whereof I have hereunto set my  
125 hand in presence of two witnesses.

JEAN LOUIS PHILIPPE HOUDE.

Witnesses:

J. A. MARION,

HORACE G. DEITZ.