2 Sheets—Sheet 1.

F. SWIFT.
Carriage.

No. 212,282. Patented Feb. 11, 1879.

Fig. 1.

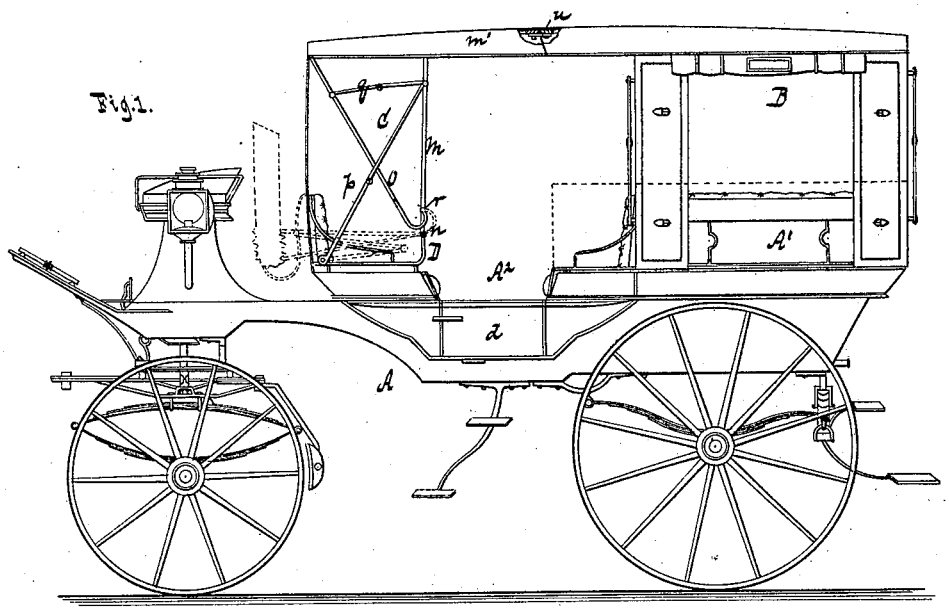
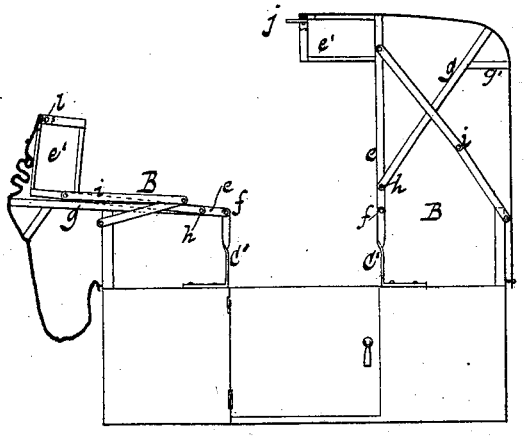


Fig. 2.



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Inventor.
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his attorneys.

2 Sheets—Sheet 2.

F. SWIFT.
Carriage.

No. 212,282. **Patented Feb. 11, 1879.**

Fig. 3.

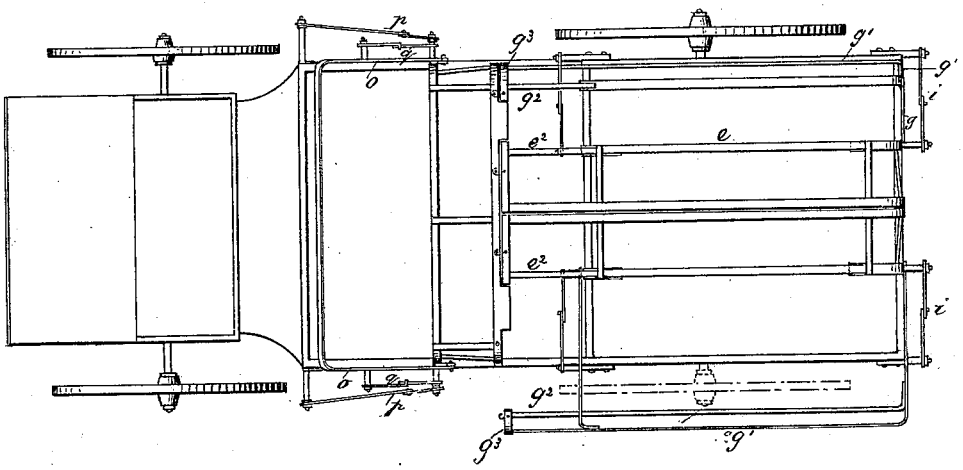
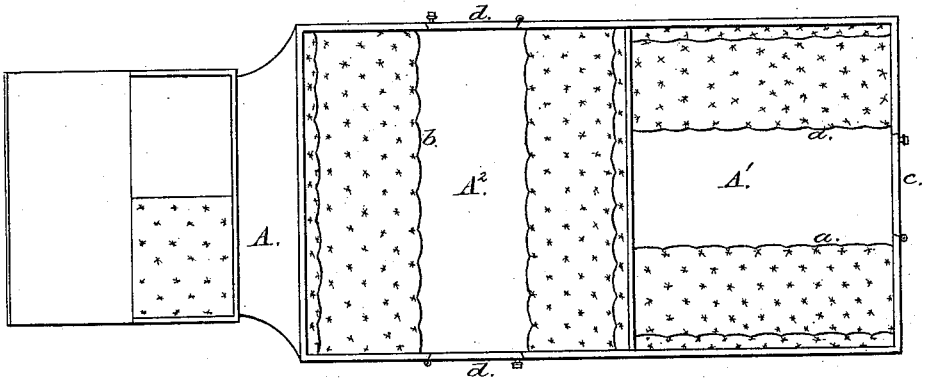


Fig. 4.



Witnesses:
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Inventor:
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Attorneys.

UNITED STATES PATENT OFFICE.

FREDRICK SWIFT, OF MOUNT VERNON, NEW YORK, ASSIGNOR TO HIMSELF AND FRANKLIN T. DAVIS.

IMPROVEMENT IN CARRIAGES.

Specification forming part of Letters Patent No. **212,282**, dated February 11, 1879; application filed November 19, 1878.

To all whom it may concern:

Be it known that I, FREDRICK SWIFT, of Mount Vernon, in the county of Westchester and State of New York, have invented a new and useful Improvement in Carriages, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a side view of a carriage containing my invention. Fig. 2 is a rear view of the top. Fig. 3 is a top view of the carriage and top frame with the cover removed, one of the side frames being raised and the other lowered. Fig. 4 is a top view of the carriage-body with the top frame removed.

Similar letters indicate corresponding parts.

My invention relates to tops for carriages and other vehicles; and consists in combining with a carriage-body two independent bow-frames, which are pivoted to the body in a plane parallel to the line of draft, so as to swing or fold laterally of the body and in opposite directions to each other, whereby I am enabled to cover or shade both sides of the carriage-body, or to expose one side thereof, leaving the other side covered; also, in combining with the carriage-body and said two laterally-swinging frames a third bow-frame, which is pivoted to the body forward of said laterally-swinging frames, and in a plane at right angles to the line of draft, so as to swing or fold longitudinally of the body, whereby I am enabled to shade or cover the forward end of the laterally-swinging frames, and at the same time obtain a cover for the forward part of the carriage-body. With the several bow-frames are combined hooks or other similar devices for connecting the same together when they are raised.

In the drawings, the letter A designates the body of a carriage to which my top is applied. B B are the laterally-swinging frames, and C is the forward or longitudinally-swinging frame. I make the body A in two divisions, A^1 A^2, (best seen in Fig. 3,) and provide the rear division, A^1, with longitudinal seats *a a*, and the forward division, A^2, with transverse seats *b b*, the division A^1 being moreover provided with a rear door, *c*, while the division A^2 has side doors, *d*.

The frames B B are intended to cover the rear division, A^1, of the carriage-body, and they are each constructed of a main bow, *e*, which is pivoted, in a plane parallel to the line of draft, to standards C′, rising from the body, as at *f*; and said bows are supported in an elevated or closed position by the jointed braces *i*, which are connected at each end to the top-prop irons, in the usual manner. To these main bows *e* are pivoted secondary bows *g*, which support the outer portions of the cover. The tops of the main bows *e* have forward extensions, e^2, and the secondary bows *g* have also forward extensions, g^2, similar to the forward extensions of the main bows, and these extensions g^2 are provided at their front ends with downward-curved arms g^3. To the lower ends of these arms g^3 are secured rods g^1, which extend rearwardly to the end of the top, and are then bent inwardly at right angles, or nearly so, and secured to the rear legs of the bows *g* near their tops, a suitable cover being drawn over the frames and fastened in any appropriate manner. These frames B B can be readily raised up or lowered, so as to rest on the sides of the carriage-body, and by lowering one of them and raising the other one side of the body can be shielded from the sun and the other exposed. Each of the frames B is provided with an extension, e^1, at its top and inner edge, as increased in length by the extension e^2, in order to cause the two frames to meet when they are raised, and to the extension of one of the frames I pivot hooks *j*, while on the extension of the other frame I arrange pins *l*, over which the hooks are made to catch when the frames are raised, so that they are firmly held together.

The forward frame, C, is constructed of a main bow, *m*, which is pivoted to a standard, D, rising from the wagon-body A, as at *n*, of a secondary bow, *o*, and jointed braces *p q*, the secondary bow *o* being pivoted at its ends to the standards D, as at *r*, and being connected to the main bow at intermediate points by means of the brace *q*. If the secondary bow *o* is taken hold of for the purpose of lowering the forward frame, C, the main bow *m* is drawn after it by the brace *q*, and hence the material composing the covering of said frame is relieved of strain. The brace *q*, moreover, serves to retain the forward frame in an intermediate position between its upper and lower positions.

When the forward frame, C, is raised, it serves to shade or cover the forward ends of the rear frames, B B, and also the forward seats, *b b*, of the carriage-body.

The main bow *m* of the forward frame, C, like the main bow of the rear frames, B B, has an extension, *m'*, which is provided with pins to engage with hooks *u*, arranged on a suitable part of the rear frames, so that the several frames can be connected together, whereby their retention in their upper positions is insured.

If desired, the rear frames, B B, may be constructed in a similar manner to the forward frame; but I do not wish to be restricted to the use of frames of any particular construction, and any suitable fastening devices for connecting the frames to each other can be substituted for the hooks and pins here shown.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a carriage-body, of two independent bow-frames pivoted to the body in a plane parallel to the line of draft, so as to swing or fold laterally of the body, and in opposite directions to each other, substantially as described.

2. The combination, with a carriage-body and two independent bow-frames, pivoted to the body so as to swing or fold laterally thereof, in opposite directions to each other, of a bow-frame pivoted to the body forward of said laterally-swinging frames, and in a plane at right angles to the line of draft, so as to swing or fold longitudinally of the body, substantially as shown and described.

3. The combination, with a carriage-body having two independent bow frames pivoted to the body in a plane parallel to the line of draft, and with a bow-frame pivoted to the body forward of said laterally-swinging frames, and in a plane at right angles to the line of draft, of hooks and pins or other suitable fastening devices for connecting the several frames together when they are raised, substantially as shown and described.

In testimony that I claim the foregoing I hereunto set my hand and seal this 2d day of September, 1878.

FREDRICK SWIFT. [L. S.]

Witnesses:
J. VAN SANTVOORD,
BURR DAVIS.