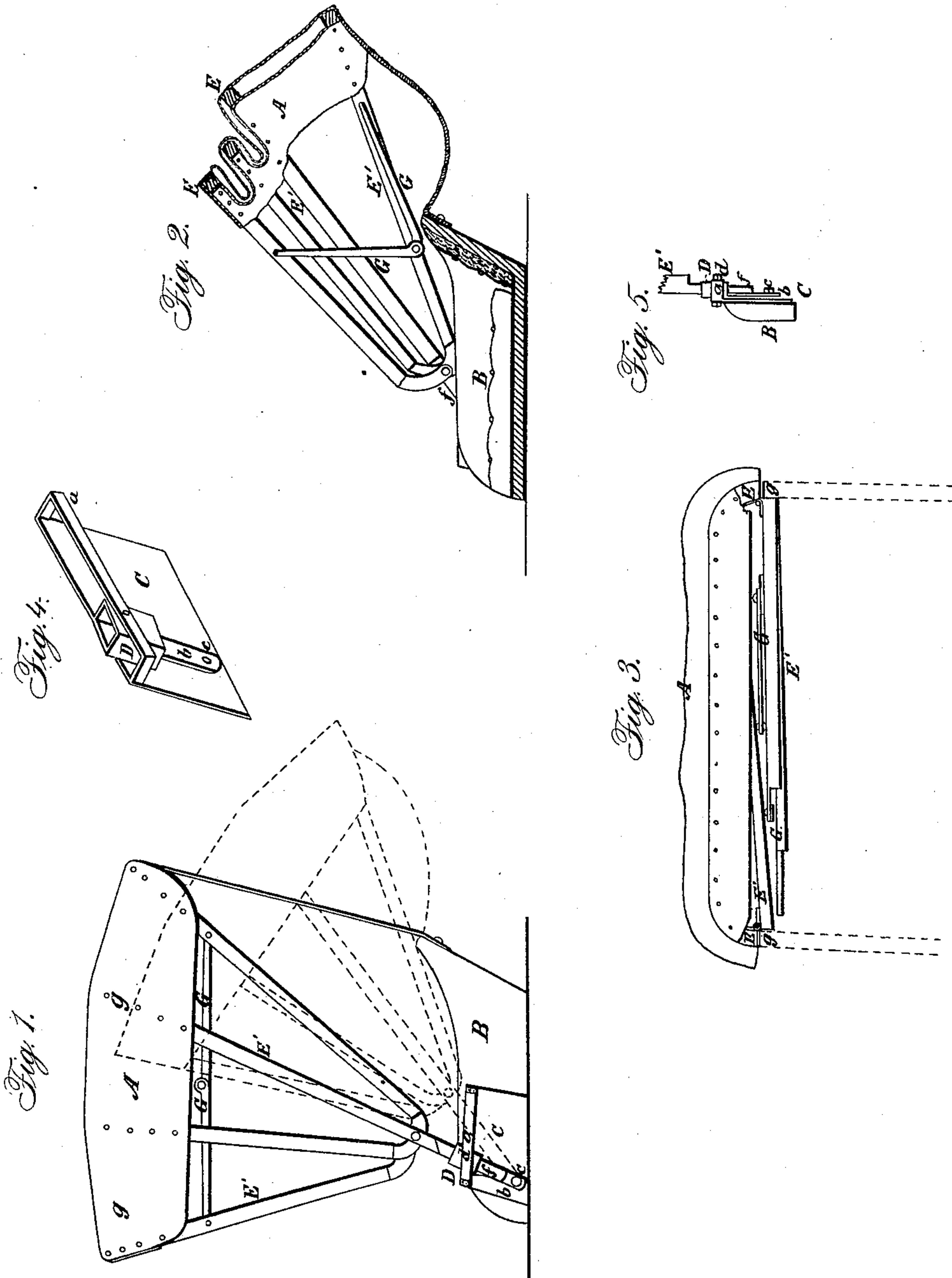


K. T. HURLBURT.

Carriage-Top.

No. 48,688.

Patented July 11, 1865.



Witnesses:

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Inventor:

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Atty.

UNITED STATES PATENT OFFICE.

K. THOS. HURLBURT, OF LYONS, NEW YORK.

IMPROVED CARRIAGE-TOP.

Specification forming part of Letters Patent No. 48,688, dated July 11, 1865.

To all whom it may concern:

Be it known that I, K. T. HURLBURT, of Lyons, in the county of Wayne and State of New York, have invented a new and useful Improvement in Removable and Folding Carriage-Tops; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a side elevation of a carriage top and seat with the top expanded or stretched, the whole being arranged in my improved manner; Fig. 2, a similar view, but in section, and with the top thrown entirely back; Fig. 3, a view of the top removed from the seat and folded up in compact form for transportation; Figs. 4 and 5, perspective and elevation views respectively of the plate and joint arrangement at each end of the seat of the carriage for attaching the top.

Like letters of reference indicate corresponding parts in all the figures.

Removable carriage-tops have long been known. Such, simply, I do not claim.

My invention consists in the means of attaching the top to the carriage-seat, in such a manner that not only may it be easily removed, but also so that the top may be turned half-way back or half-folded without opening the toggle-levers of the top; also, in making the bows over which the leather is stretched with joints at the angles at the top and employing but a single instead of a double set of toggle-levers at each side for stretching the top, the arrangement being such that when removed from the seat the top can be doubled together and folded up in so compact a form as to be placed diagonally under the seat, so as to be out of the way and still always convenient to be applied in case of necessity or when desired.

As represented in the drawings, A is the top, and B the ordinary seat, of an open carriage. To each end of the seat, near the front, is secured a plate, C, having at its top a suitable loop or guide, *a*. Within this guide plays a socket, D, which has a shank, *b*, extending downward a suitable distance, and pivoted at *c* to the plate. Within this socket rests the shank *f* of the main bow of the carriage-top, and the shank is held in the socket and at the same time the socket retained in its upright or forward position by

means of a bolt or pin, *d*, that passes through socket, shank, and the guide and plate.

The bows of ordinary carriage-tops are made entire and unbroken from end to end, being therefore rigid, and not allowing the top to double or fold together otherwise than in throwing back. Instead of this arrangement I make the bows in two parts, E E and E' E', jointed or hinged together at *g g*, Fig. 3, the former constituting the top frame-work and the latter the sides. This allows the sides E' E' to fold inward, overlying each other, as clearly indicated in Fig. 3.

Ordinary carriage-tops also have a double set of toggle-levers on each side to straighten and stretch the top, one set (the vertical) allowing the top to fall half-way back and the other (the horizontal) allowing it to fall clear back. I dispense with the former, using only the single horizontal levers G G, jointed in the center and at the ends, as usual.

The advantages of this arrangement of attaching and folding the top are obvious. The mere attachment of the plates C C to the ends of the seat does not injure or disfigure the latter in the least. On the contrary, it gives an ornamental effect. The top is easily applied or removed. The chief novelty of this feature of the invention, however, is that the extent of motion of the socket D backward is just such as will throw the carriage-top back half-way, as indicated by dotted lines, Fig. 1. In this position the main bow of the top strikes the rear end of the guide *a* and retains the top. This arrangement enables me to dispense with double vertical toggle-levers of the top for accomplishing the same purpose, as before mentioned.

When the top is removed the carriage presents the same appearance as an ordinary open-topped carriage. The top is doubled and folded up, as indicated in Fig. 3, the sides E' E' of the bows turning inward and overlying each other and the tops E E folding together at right angles into the smallest possible space. In this form the top can be placed diagonally under the seat out of the way, so as to be easily transported, and still be ready at any and all times to be applied. I am aware of no other arrangement of this kind especially used in combination with the means of attaching it to

the seat. The use of the single toggle-levers G G enables the top to be thus compactly folded, which could not be the case if the ordinary double toggle-levers were employed. When the top is in the position of the dotted lines in Fig. 1 the opening of the toggle-lever enables the top to be folded or thrown clear back, as shown in Fig. 2. These single levers are also very convenient in folding the front of the carriage-top back a little distance in getting in and out of the carriage, as the same are very easily opened or closed.

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

1. The combination of the pivoted socket D, guide *a*, and plate C, so arranged as to allow the carriage-top to be easily applied or removed,

and to be turned half-way back, substantially as described.

2. The construction of the top, consisting of the jointed bows E E' E', single toggle-levers G G, and suitable covering, A, the whole so arranged as to be compactly folded up, substantially as herein set forth.

3. The arrangement of the pivoted socket D and guide *a* of the seat and of the bows E E', toggle-levers G G, and covering A of the top, substantially in the manner and for the purposes herein specified.

K. THOS. HURLBURT.

Witnesses:

E. C. SMITH,
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