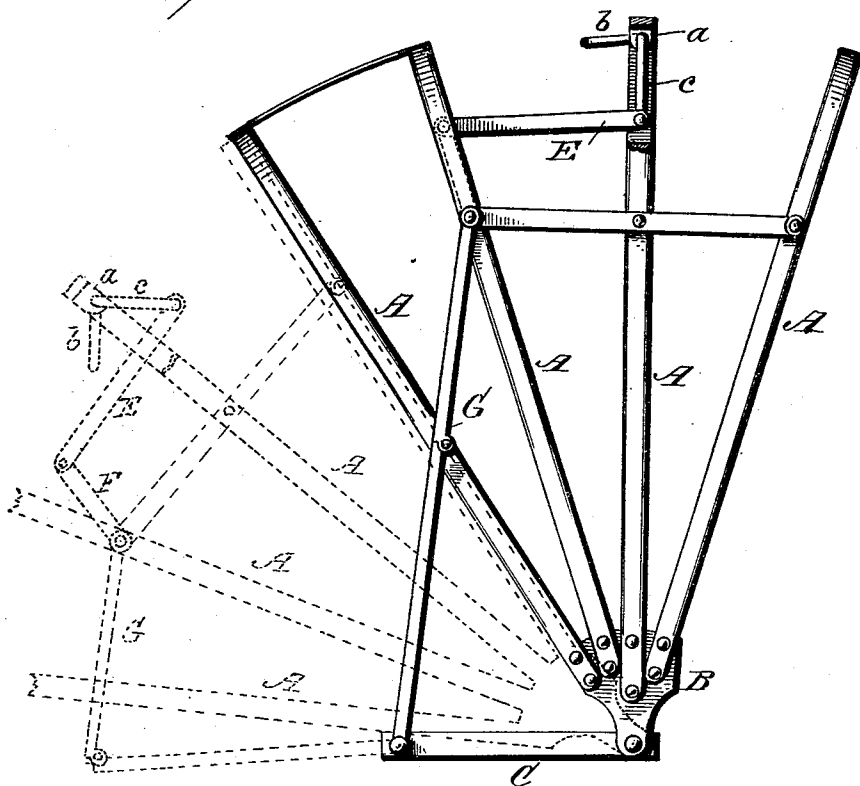


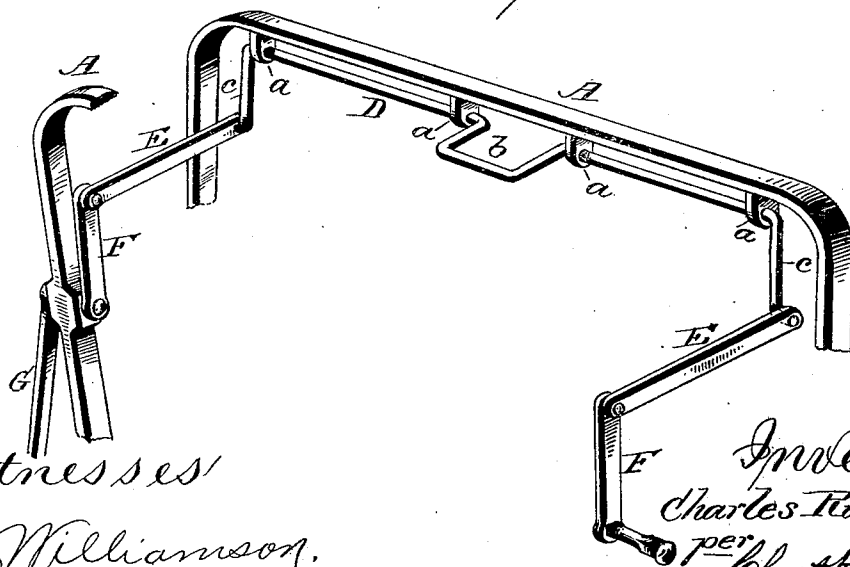
C. RUGGER.
VEHICLE TOP.

Patented Jan. 2, 1894.

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Witnesses
G. J. Williamson,
H. M. Comiskey -

Inventor
Charles Rugger.
per
Chas. H. Fowler,
Attorney.

UNITED STATES PATENT OFFICE.

CHARLES RUGGER, OF LUCKY VALLEY, IOWA.

VEHICLE-TOP.

SPECIFICATION forming part of Letters Patent No. 511,909, dated January 2, 1894.

Application filed August 17, 1893. Serial No. 483,404. (No model.)

To all whom it may concern:

Be it known that I, CHARLES RUGGER, a citizen of the United States, residing at Lucky Valley, in the county of Woodbury and State of Iowa, have invented certain new and useful Improvements in Vehicle-Tops; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has for its object to provide simple and effective means for raising or lowering the tops of buggies or other like vehicles, which means are substantially shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is a side elevation of a buggy top showing my invention applied thereto, and the top both raised and lowered in full and dotted lines respectively; Fig. 2 a detail view in perspective of that portion of the buggy top constituting my invention.

In the accompanying drawings A represents the usual bows of a vehicle top connected in the ordinary manner to a pivoted plate or bracket B upon each side of the base C of the vehicle or to any other portion of the vehicle found most desirable. These ribs or bows over which the canvas or other covering is connected may be of any desirable shape and construction and any suitable top may be substituted for that shown. The means employed for raising or lowering the top is shown more clearly in Fig. 2 and consists in part of a crank-lever D which has its bearings in depending plates *a* upon one of the bows A. This crank-lever at or near its center is bent to form a loop to provide a double crank-handle *b* and at its extremities crank-arms *c* which are pivotally connected to brace-bars E. The brace-bars E at their opposite ends are pivotally connected to one of the bows upon each side of the top through the medium of suitable arms F, or by any other preferred means found most desirable.

To the sides of the top is suitably connect-

ed the usual jointed stay-bars G and by my improved device said bars are brought into position when the top is raised.

The raising or lowering of the top is very readily and conveniently accomplished by simply reaching above the vehicle seat and grasping the crank-handle *b* and by giving it a downward and backward pull the joints of the brace-bars E and bars F will be broken and the top can then be thrown back. The top may be thrown in place again by grasping the crank-handle *b* and pushing upward and forward.

It will be noticed that the crank-lever D extends from one side of the vehicle top to the other and is formed from one piece of metal. The center or middle portion is bent to form a loop whereby a handle with a double crank is provided and the extremities or ends of the lever are bent to form crank-arms, thus providing a very simple and inexpensive device that can be readily applied to any of the ordinary carriage or vehicle tops. Both a simple and very effective device is thereby provided for raising or lowering the top of a vehicle which device possesses both strength and durability and will not readily get out of order.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A vehicle top provided with means for raising and lowering the same, consisting of a lever extending horizontally from one side of the top to the other and terminating in crank-arms and pivoted connections between the arms and usual jointed bars, said lever at or near its center bent to form a loop to provide a handle having a double crank, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES RUGGER.

Witnesses:

E. G. TENNANT,
A. BRUNELL.