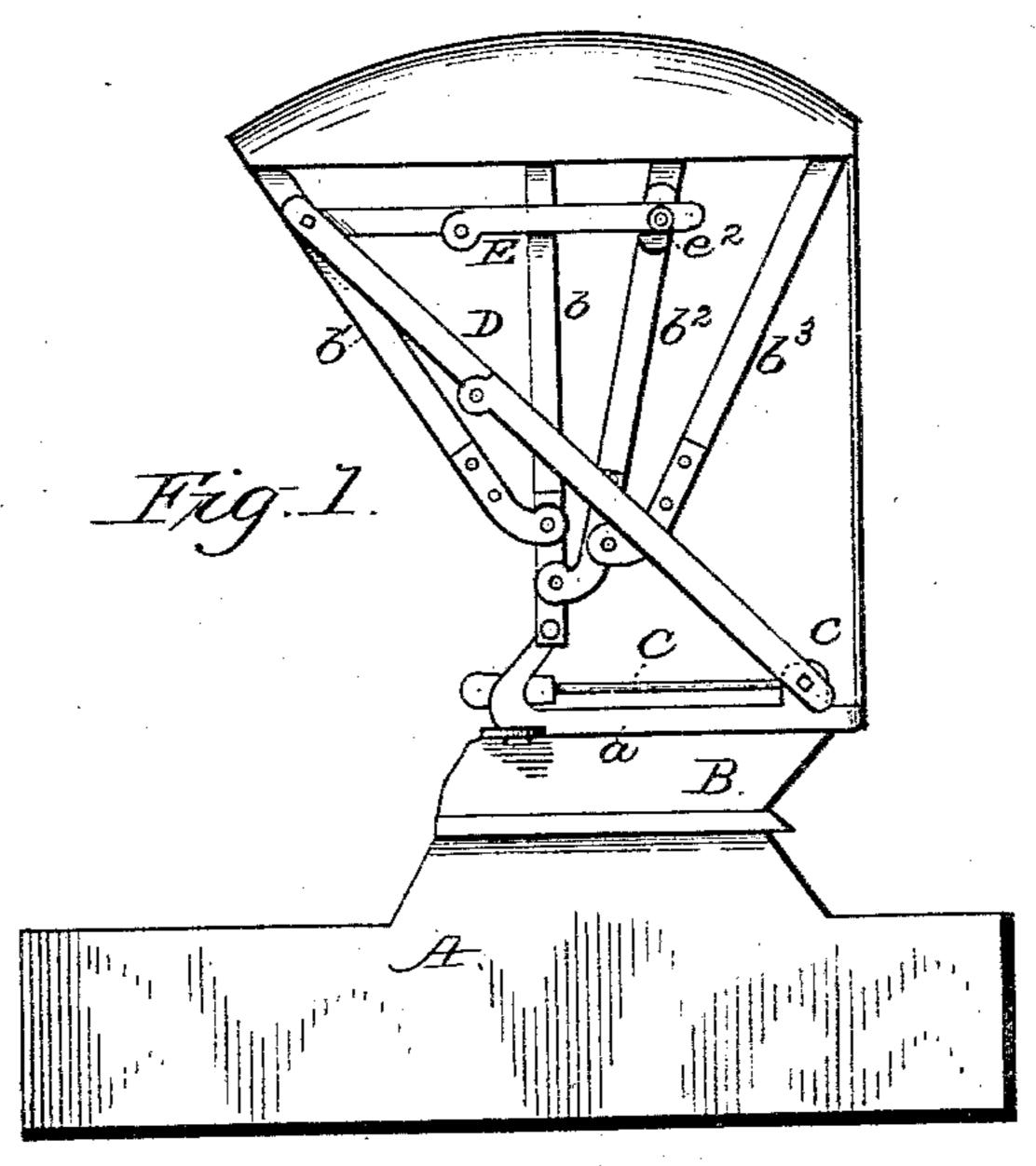
(No Model.)

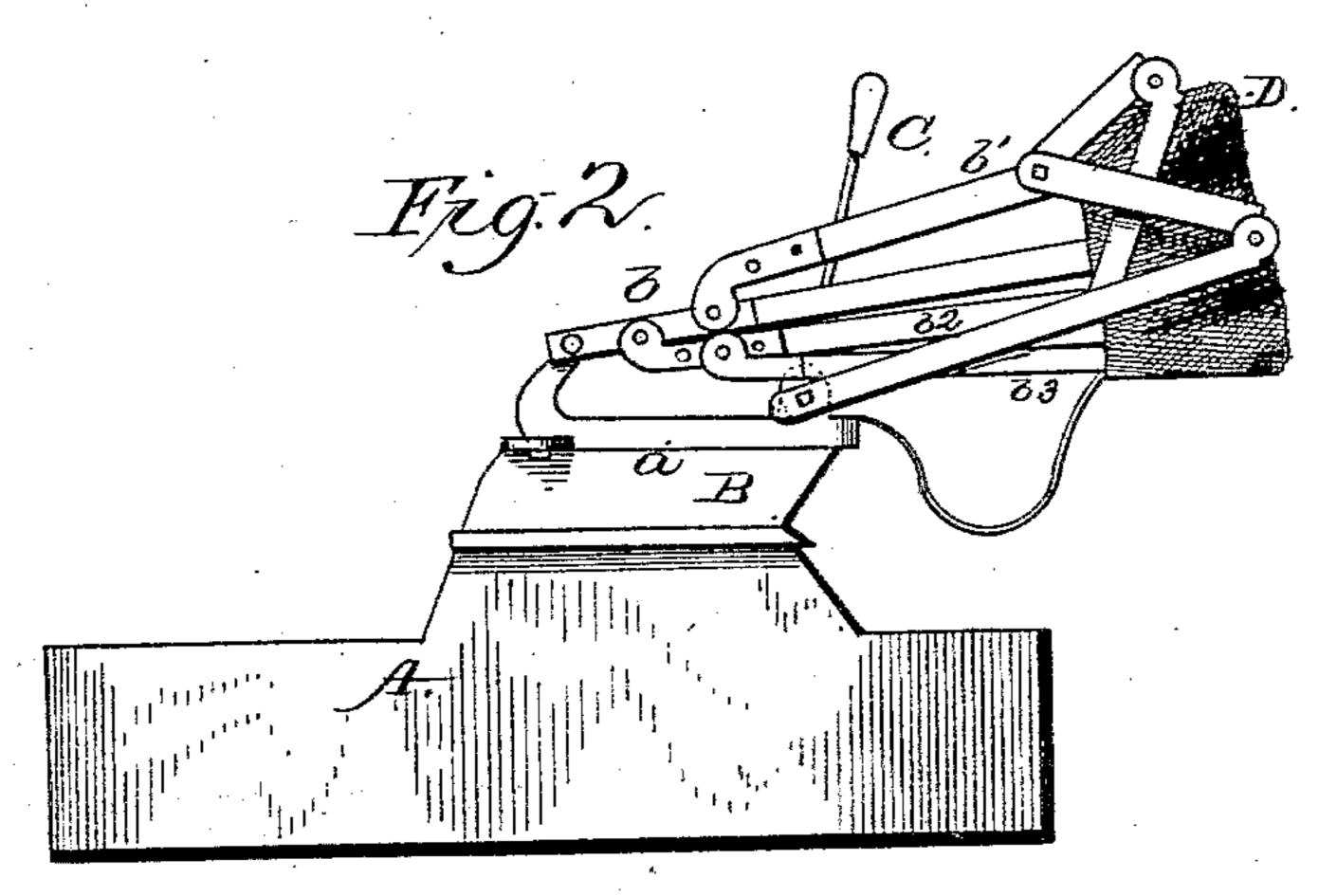
## A. M. COCHRAN.

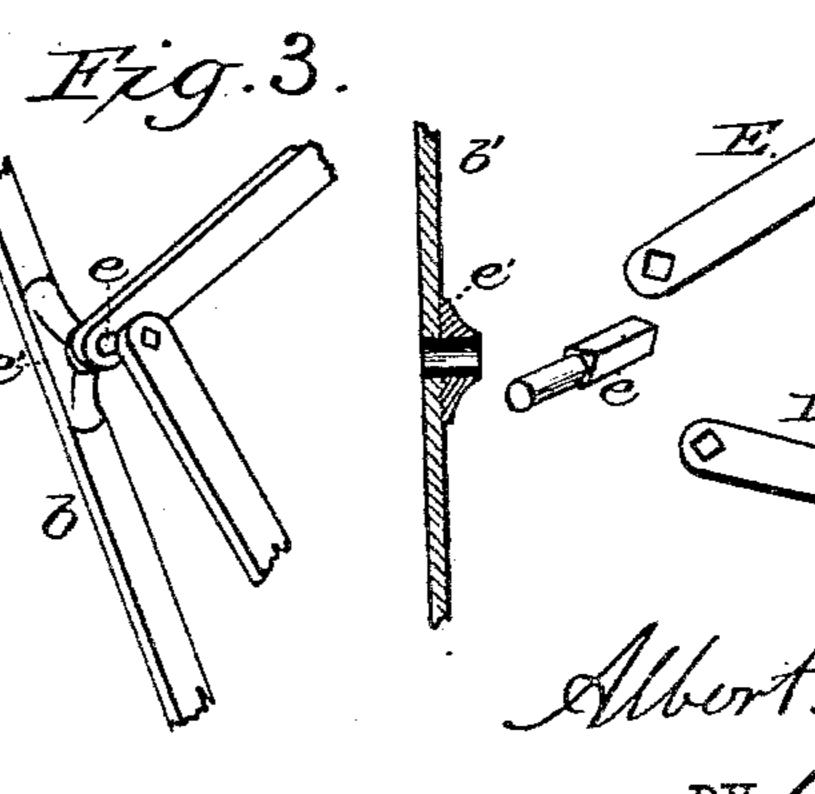
BUGGY TOP.

No. 300,575.

Patented June 17, 1884.







WITNESSES:
Shand & Ellio
Anna & Ellio

ATTORNEY

## United States Patent Office.

ALBERT MIFFLIN COCHRAN, OF TERRE HAUTE, INDIANA, ASSIGNOR OF ONE-HALF TO PETER N. STAFF, OF SAME PLACE.

## BUGGY-TOP.

SPECIFICATION forming part of Letters Patent No. 300,575, dated June 17, 1884.

Application filed February 23, 1884. (No model.)

To all whom it may concern:

Be it known that I, ALBERT M. COCHRAN, of Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Buggy-Tops; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My improvements relate to that class of buggy-tops in which an occupant of the buggy can, without rising from the seat, operate the "top" to open and close the same at will; and it has for its object to provide means whereby in such operations the several parts serving to constitute the top are all made to act simultaneously upon application of the requisite amount of force.

To this end the invention consists in such details of construction and combination of parts as will be hereinafter distinctly pointed out.

Referring to the annexed drawings, in which like letters indicate like parts, Figure 1 represents a side view, in elevation, of a "buggytop" in which are embodied my improvements. 30 Fig. 2 is a like view illustrating the top in its lowered position, and Fig. 3 represents in detail several of the portions in order to more clearly illustrate their construction.

Reference being had by the letters marked thereon, A represents a vehicle-body, and B the seat.

a designates the side rails of the seat, whose forward ends have pivoted to them the main bow b, to which in turn are pivoted the bows 40 b' b', while to b' is pivoted the rear bow, b', such manner of pivoting the bows being generally well known. The rear end of the side rails terminate in bearings c, within which is loosely journaled a rock-shaft, the lower end to the back quarters or curtain being secured to the back rail, as ordinarily. Rigidly attached to said rock-shaft are levers C, preferably one to each side of the seat and within the top, by which the occupant operates the

top to raise and lower the same. The ends of 50 these levers are provided with weighted handles, which assist in maintaining the top in its upright position.

D represents the main jointed side braces, which are keyed or rigidly attached at one end 55 to the ends of the rock-shaft by having such ends square; or they may be attached thereto in any manner suitable to cause them to be operated when said rock-shaft is turned. The opposite ends of these jointed braces are 60 keyed to pins e, which bear loosely in offsets secured to the forward bow near the top, as shown in the detail, Fig. 3.

E represents the horizontal jointed braces, which are secured to the pins e in like manner as are the ends of braces D. This may be either by having a portion of pin e made square and the hole in the braces by which they are secured thereto made of corresponding contour, or the side of the hole in the end 70 of the braces may be provided with a groove, in which a feather-key formed on the pins fits. The rear end of the horizontal jointed brace E is pivoted in an offset,  $e^2$ , projecting from the side of bow  $b^2$ , in order to bring it in the same 75 plane as its forward end.

The operation is as follows: It will be supposed, for instance, that the top is in an upright position. The occupant, desiring to lower the same, simply takes hold of one or 80 both of the levers C, (which, when the top is up, extend out nearly parallel with the side rails of the seat,) and raises them upward. This action causes the rock-shaft to turn in its bearings, which, by virtue of its rigid con-85 nection with the jointed braces D, transmits to said braces the motion imparted to it, and causes their joint to break upward. In so doing the rigid connection of the upper portion of braces D with the pins e revolves said pins 90 in their bearings, which causes the horizontal braces E to also break upward simultaneously with braces D, thereby drawing back the bows b'  $b^2$ , and consequently operating the remaining bows. To raise the top it is simply nec- 95 essary to depress the levers C, and the top is brought forward by a reverse operation of the

It will be observed that the elements all act simultaneously in raising and lowering the top without the expenditure of labor necessary in many instances with buggy-tops now in use.

5 Having thus described my invention, what I

claim is—

1. In a buggy-top, the combination, with the bows b b, having offsets e', and the rock-shaft, of the jointed side brace D, movably connected at its upper end to the bow b by pins turning in said offsets, and rigidly attached at its lower end to the rock-shaft, and the horizontal jointed side brace E, movably connected at its forward end to the bow b by the same pin, while its rear end is similarly connected to bow b, all substantially as described and shown.

2. In a buggy-top, the bows  $b b' b^2 b^3$ , piv-

oted at the forward end of the side rails, said bows b' and  $b^2$  provided, respectively, with 20 the offsets e'  $e^2$ , in combination with brace E, pivoted at its rear end in the offset  $e^2$ , and rigidly attached at its forward end to a pin loosely journaled in offset e', and the brace D, similarly attached at its upper end to said pin, 25 while its lower end is rigidly attached to the rock-shaft extending across the rear of the seat, substantially as and for the purpose described.

In testimony that I claim the foregoing as 30 my own I affix my signature in presence of two witnesses.

ALBERT MIFFLIN COCHRAN.

Witnesses:

ANDREW GRIMES, GEO. F. SEEMAN.