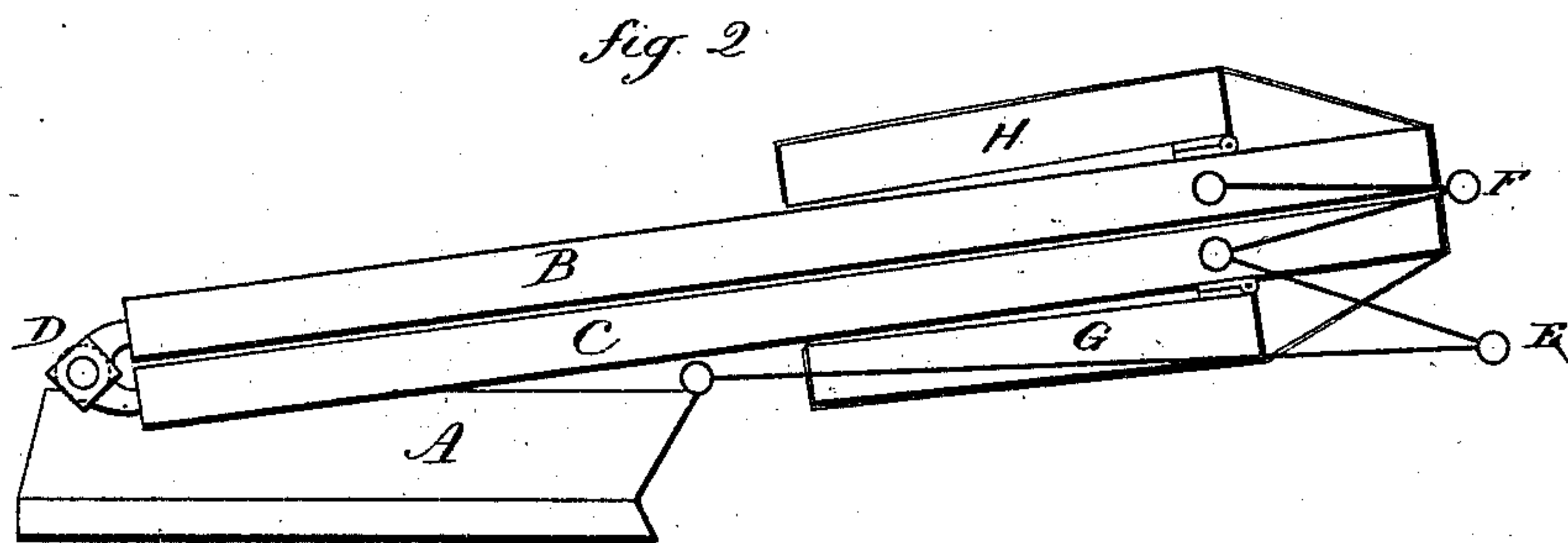
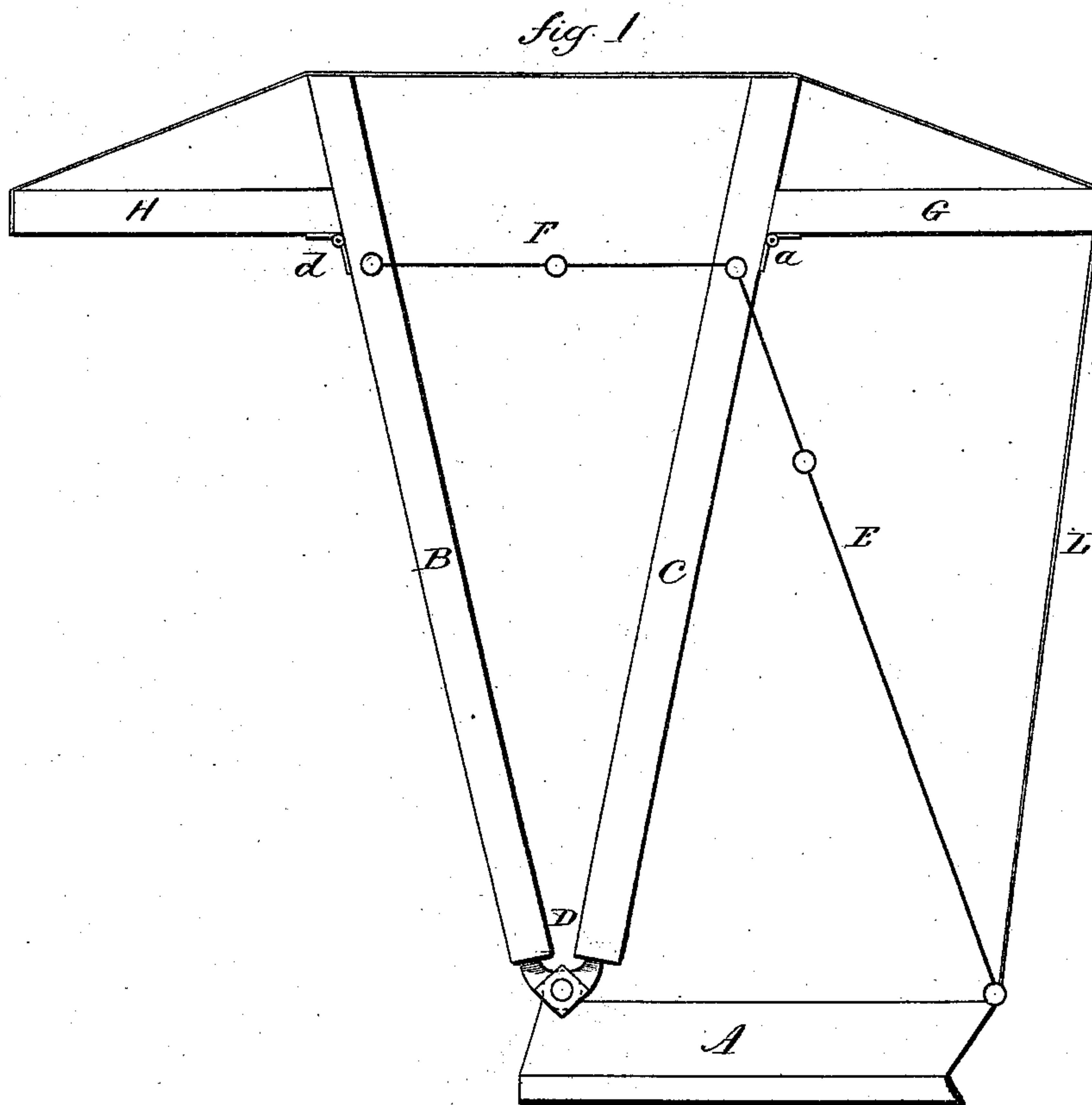


G. E. SPARE.
CARRIAGE-TOP.

No. 177,763.

Patented May 23, 1876.



Witnesses.

J. W. Hummway

Clara Broughton

Geo. E. Spare

By Atty. *Inventor*

John E. Spare

UNITED STATES PATENT OFFICE.

GEORGE E. SPARE, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN CARRIAGE-TOPS.

Specification forming part of Letters Patent No. **177,763**, dated May 23, 1876; application filed March 9, 1876.

To all whom it may concern:

Be it known that I, GEORGE E. SPARE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Carriage-Tops; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, side view with the top extended; Fig. 2, the same with the top collapsed.

This invention relates to an improvement in that class of carriage-tops which are made to close by collapse, and such as are formed on bows hung to the seat and supported by braces.

In the usual construction four bows are employed. The object of this invention is to dispense with part of the bows, and yet make a top which may be closed into a close and compact form; and it consists in hinging to the vertical bows a transverse bow or bows, which, when the top is raised, assume a horizontal position, but, in collapsing, the top may, in consequence of being hinged, be brought parallel with the principal bows, as more fully hereinafter described.

A represents the seat or body, to which the bows B C are hung by a common joint, D, in the usual or other convenient manner. These bows are supported by jointed braces E F, also in the usual manner. Near the top of the rear bow is a transverse bow, G, hinged to the bow C, as at *a*, upon the under side, its outline, when in its raised position, corresponding to what would be the rear bow in the usual construction, and on the forward side of the front bow a similar horizontal bow, H, is hinged, as at *d*, corresponding to what would be the front or fourth bow. From the body a strap or straps, L, extend up, attached to the bow G, passing over the bows C B, to, and the other end attached to, the bow H, so that when the bows B C are raised the strap will support the transverse bows G H in their raised or extended position; but when the braces are turned so as to allow the closing of

the bows B C, the bows G H may be turned down onto their respective bows C B, as seen in Fig. 2, the strap L sliding over the bows B C for that purpose, and, when again raised, the strap will be drawn taut, and draw the bows G H to their proper position. Thus two vertical bows only are necessary for the top. The front bow being dispensed with leaves a clearer way for entrance to or exit from the carriage than when that bow is present, and the hinging of the transverse bows enables the closing or collapsing of the top into as compact a form as the usual construction.

Either of the transverse bows may be dispensed with, thereby making, practically, a three-bowed carriage-top; but for general use the two are desirable.

The two transverse bows, or either of them, may be rigid upon their respective vertical bows, thereby allowing the collapsing of the top to the extent of the space between the two bows, or either may be rigid and the other hinged.

A strap or other device is desirable to connect the bows G H when in their folded condition, and support the rear bow G to prevent its falling.

I do not broadly claim the arrangement of transverse bows in a carriage-top, so that the said transverse bows may be folded as the carriage-top is opened, as such, I am aware, is not new.

I claim—

1. In a folding carriage-top, the combination of the vertical bows B C, the transverse bows H G, attached respectively to the said vertical bows, and the hinged braces E F, substantially as described.

2. In a folding carriage-top, the combination of the vertical bows B C, the transverse bows H G, one or both hinged to their respective vertical bows, and the hinged braces E F, substantially as specified.

GEO. E. SPARE.

Witnesses:

JOHN E. EARLE,
CLARA BROUGHTON.