No. 613,661.

Patented Nov. 8, 1898.

## J. C. BYXBE. BUGGY TOP.

(Application filed Feb. 26, 1898.)

(No Model.)

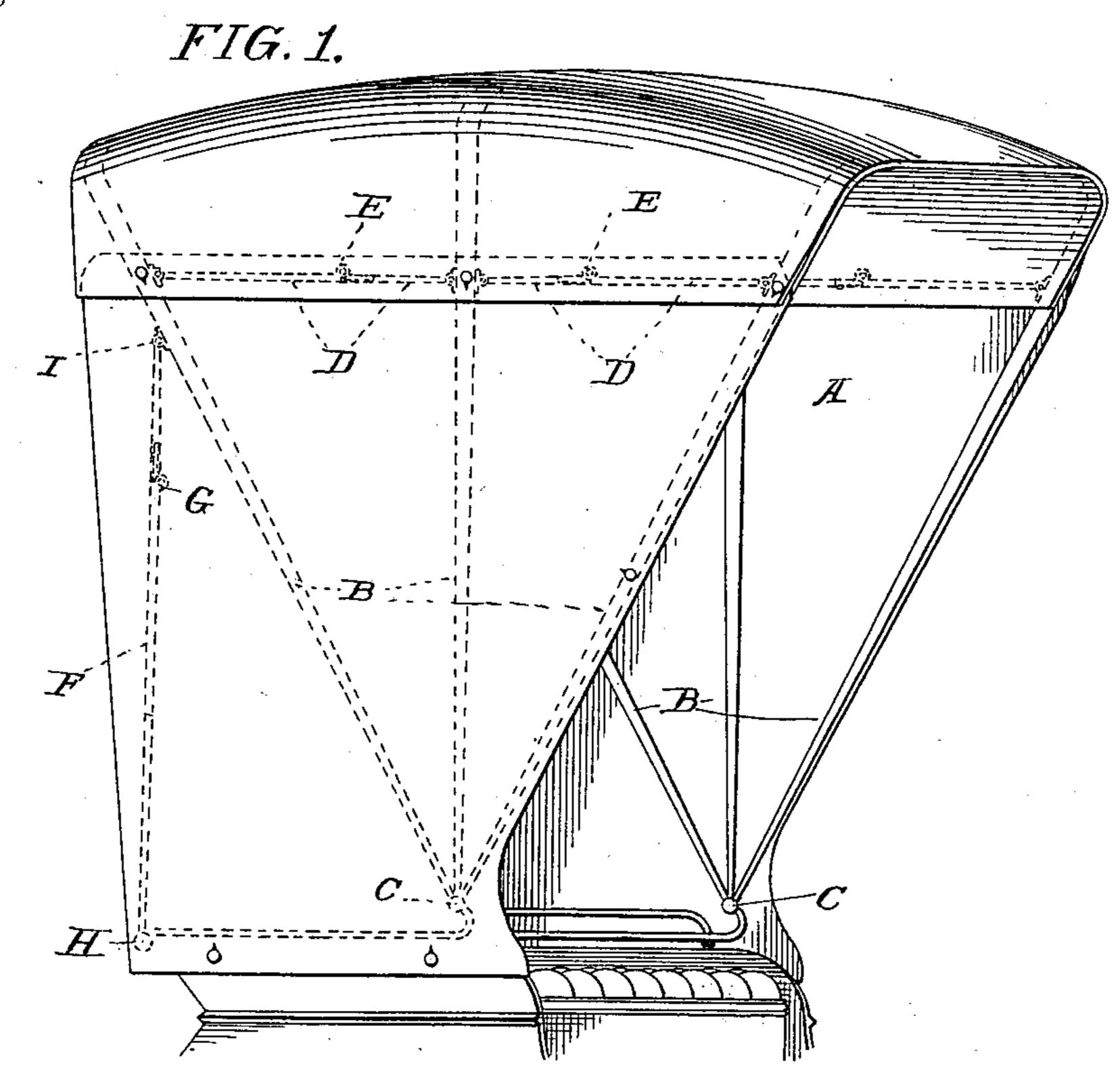
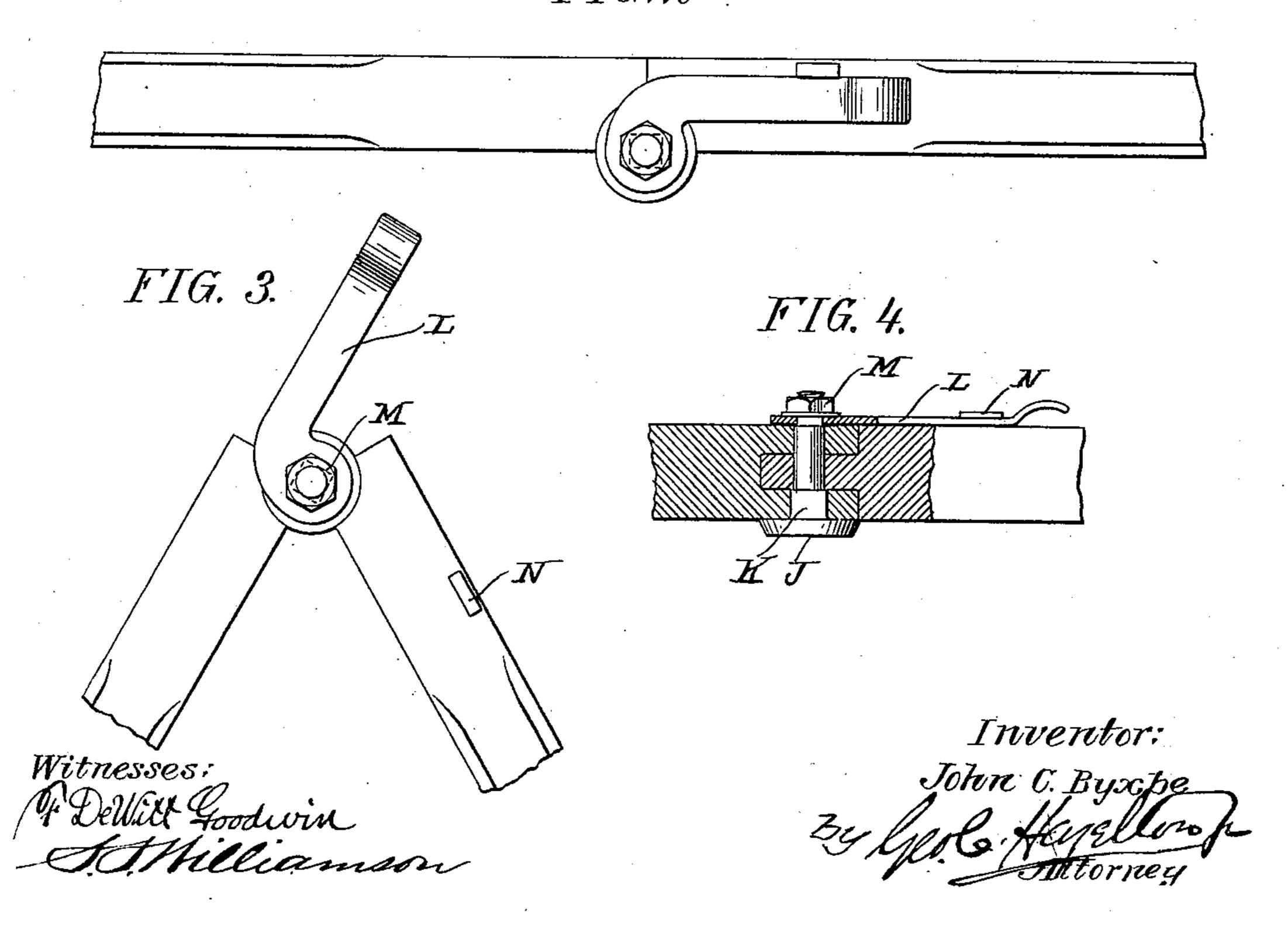


FIG. 2



## United States Patent Office.

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## BUGGY-TOP.

SPECIFICATION forming part of Letters Patent No. 613,661, dated November 8, 1898.

Application filed February 26, 1898. Serial No. 671,826. (No model.)

To all whom it may concern:

Be it known that I, John C. Byxbe, a citizen of the United States, residing at Pensacola, county of Escambia, and State of Florida, have invented a certain new and useful Improvement in Buggy-Tops, of which the

following is a specification.

My invention relates to a new and useful improvement in concealed joints and sup-10 ports for carriage-tops and the like, and has for its object to provide an exceedingly simple and effective arrangement of this description by means of which the framework of a carriage-top, such as the bows, may be se-15 curely held in place when adjusted in their active position without the stays or joints being exposed to view from the outside of the top, and also when it is necessary to hold the top this result may be brought about from the 20 inside of the carriage and without liability of injury to the occupant, and when accomplished the joints and stays will still remain concealed from the exterior.

A further object of my invention is to provide means whereby the joints of the stays will be held in their proper active positions even though the tension thereon be varied by a change in the top occasioned by exposure

to the elements.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective of the top of a carriage having my improvements applied thereto; Fig. 2; a detail of one of the stay-joints, showing the locking-spring in position; Fig. 3, a similar view showing the joint broken,

and Fig. 4 a section of a portion of a joint when in its active position.

In carrying out my invention as here embodied, A represents the top, which is supported by the bows B, which may be of any suitable number, (here shown as three,) all of which are pivoted at a common center C.

These bows are connected together by the toggle-stays D, which are hinged together by the joints E, and these joints are so arranged 55 as to open downward, as will be readily understood, from which it is obvious that to collapse the bows it is only necessary to break the joints, when the stays will fold downward between each bow, and thus permit the collapsing of the top.

The support-stays F are provided with a toggle-joint G and are pivoted at H and I, so that when the top is raised and the members of these stays brought into alinement the top 65 will be sustained in position, as will be readily understood, and by this arrangement all strain is relieved from the bows, since they simply spread the top, while the stays F prevent its being swung rearward. From this 70 description it will be seen that the top may be easily collapsed by the manipulation of the toggle-joints from within, so that an occupant of the carriage does not have to lean therefrom to accomplish the desired result, 75 and it is also to be noted that the entire supporting-frame and mechanism is concealed from exterior view.

Each of the toggle-stays is jointed together by the bolt J, which passes through 80 the joint members and is prevented from turning by the square shank K. The threaded end of this bolt is preferably flattened upon two sides for the reception of the locking-spring L, which has an oblong hole therein 85 for the passage over this bolt, after which the running on of the nut M will securely hold the parts in position. The locking-spring L is so arranged that when the members of the toggle-stays are in line it will lie parallel and 90 against one of said members, thereby entering into engagement with the beveled lug N, so as to retain the stay in this adjustment; but when it becomes necessary to break the joint this is readily accomplished by disen- 95 gaging the locking-spring from the lug N. The use of this spring is advantageous in that it often happens that the stretch of the top occasioned by exposure to the elements tends to permit the joints to become accidentally 100 broken, whereas this spring will avoid this difficulty, and yet permit the breaking of the joints when desired.

The advantages of my improvement are,

613,661

first, the complete concealment of the joints of a buggy, carriage, or phaeton top; second, the fact that the top can be built up in such a manner that it will remain in perfect position, as the joints are all set before the top is made, also that there will be no holes cut in the top, and, third, a more rigid frame is provided without any strain on the bows, while in the old style the parts are secured to the outside of the bows and the joints at a suitable distance from the bows, and the action of the joints at every operation is such as to bring a strong pressure each way on the stays.

Of course I do not wish to be limited to the exact construction here shown and described, as this may be varied in detail without departing from the spirit of my invention.

Having thus fully described my invention,

what I claim as new and useful is—

of the members of which has a lug formed thereon, a bolt passed through said joint, said bolt having a squared shank fitting in a corresponding opening in one of said members whereby the turning of the bolt is pre-

vented, an angular portion formed near the end of the bolt, a flat spring fitted on said angular portion adapted to engage said lug and a nut threaded on the end of the bolt,

as and for the purpose set forth.

2. A top for carriages and the like consisting of a suitable frame composed of bows pivoted at a common center, toggle-stays pivoted to the bows, bolts hinging the members of said stays together, each of said bolts having a square shank, fitting in a corresponding opening in one of the members, and an angular portion formed near the end thereof, flat springs fitted on said angular portions of the bolts and lugs on certain of the members 40 with which said springs engage, as and for the purpose set forth.

In testimony whereof I have hereunto affixed my signature in the presence of two sub-

scribing witnesses.

JOHN C. BYXBE.

. Witnesses:

JAMES REED, J. B. VAUGHN, Jr.