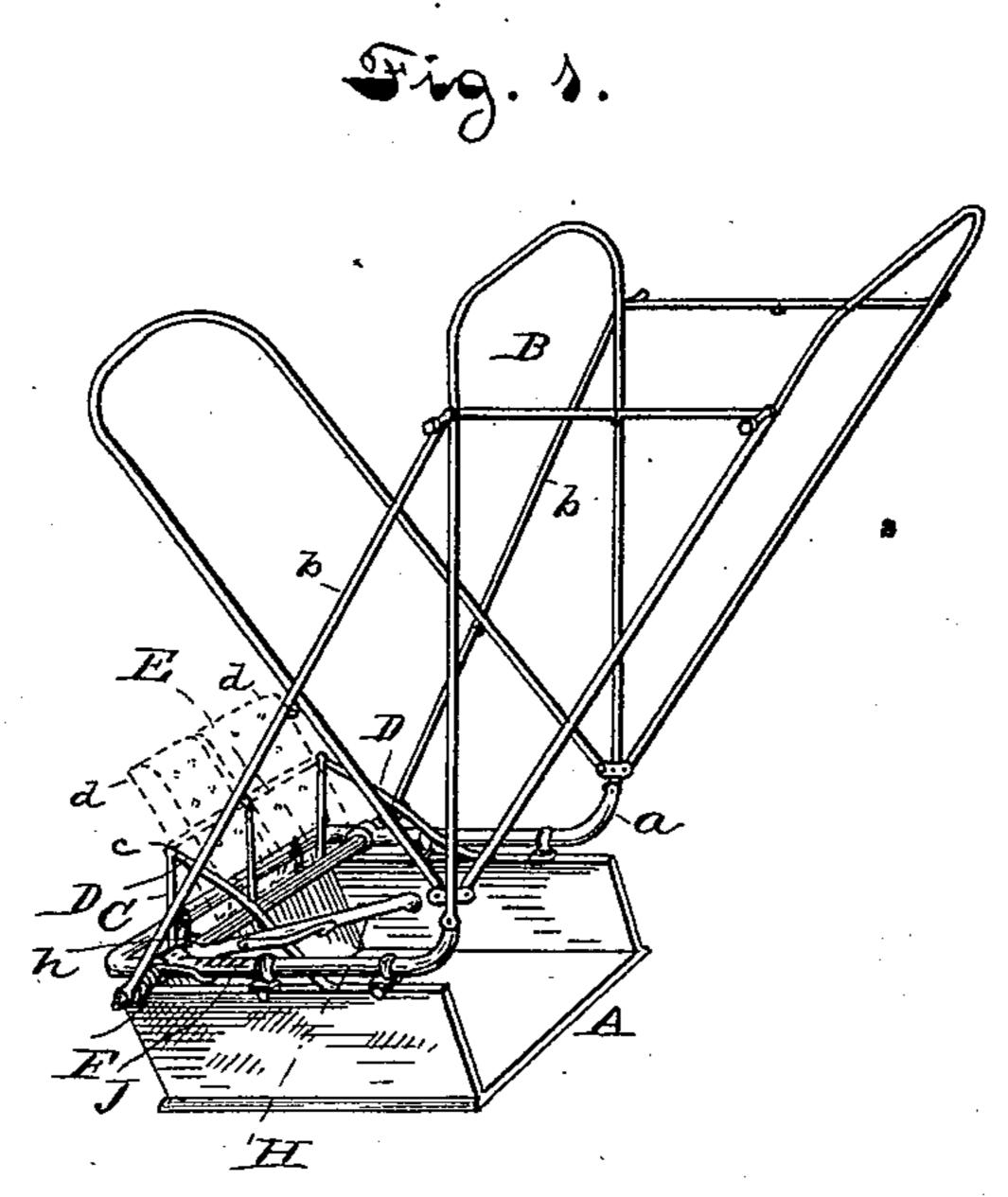
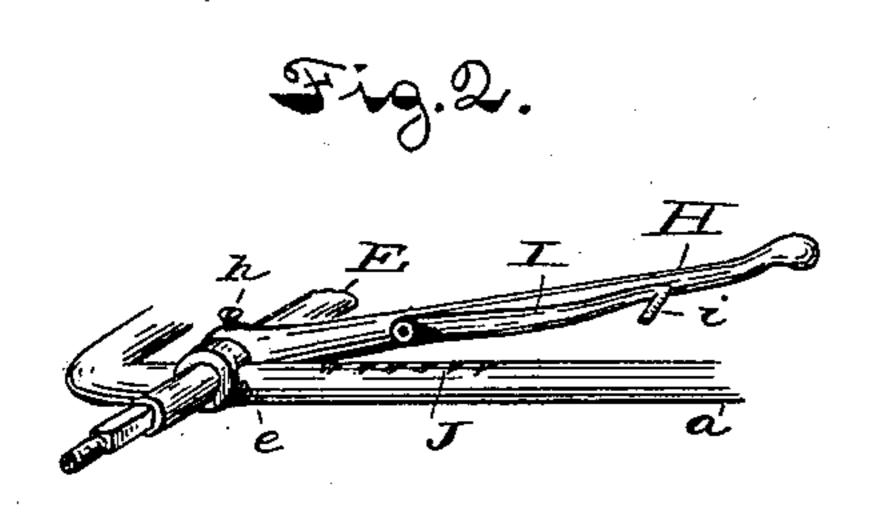
(No Model.)

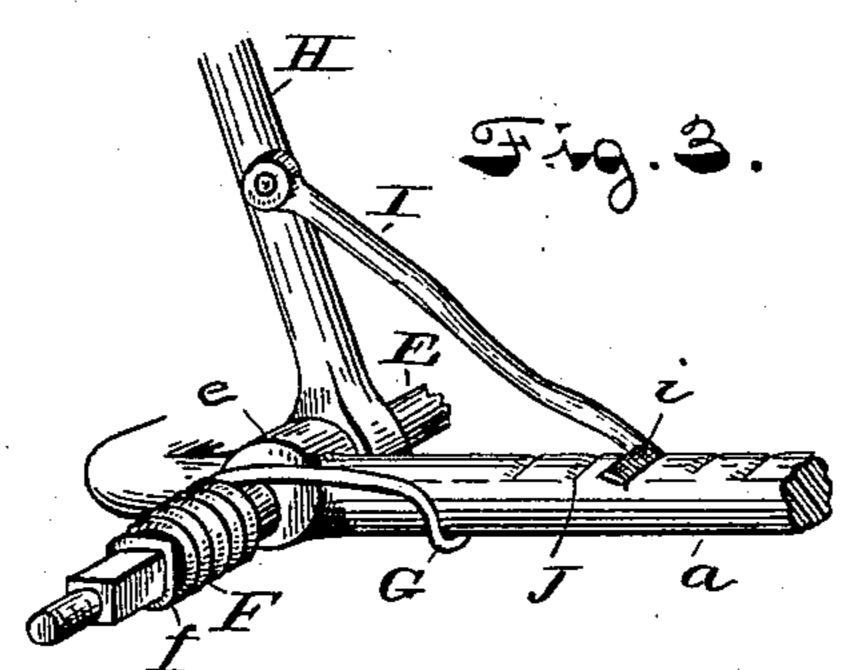
S. W. CATELY.
BUGGY TOP.

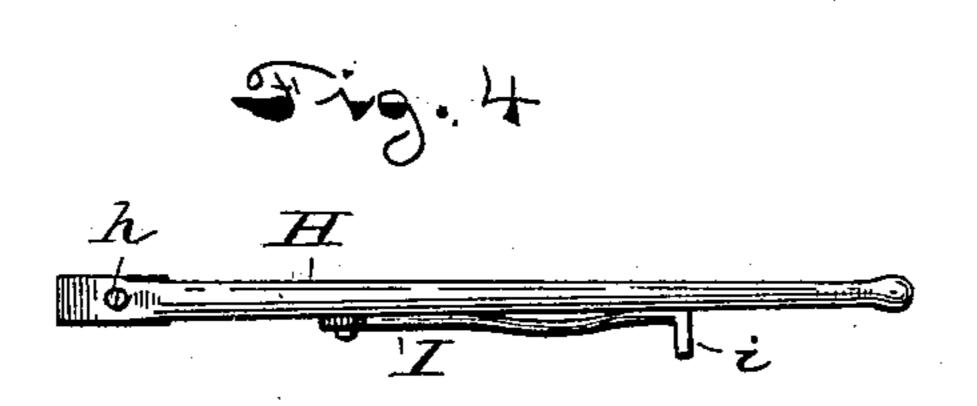
No. 405,303.

Patented June 18, 1889.









Wilmesses.

H.D. Neal,

Shepand W. Cately
By his Others.
Suell & Benedict

## United States Patent Office.

SHEPARD W. CATELY, OF CORTLAND, NEW YORK, ASSIGNOR OF ONE-HALF TO ALICE M. ETTLING, OF SAME PLACE.

## BUGGY-TOP.

SPECIFICATION forming part of Letters Patent No. 405,303, dated June 18, 1889.

Application filed March 9, 1889. Serial No. 302,692. (No model.)

To all whom it may concern:

Be it known that I, SHEPARD W. CATELY, a citizen of the United States, residing at Cortland, in the county of Cortland and State of New York, have invented certain new and useful Improvements in Buggy-Top Adjustments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the acompanying drawings, which form part of this specification.

My invention relates to a device for raising 15 and lowering the tops of buggies, and is an improvement on Patent No. 382,293, granted to me May 8, 1888, and has for its object to provide a lever with a detent and spring attached to the fixtures of the top in such a 20 manner as to enable the occupant of the buggy to quickly and easily lower or raise the top to its full limit or to any desired point of adjustment without touching the braces, and without subjecting it to the danger of break-25 age from a heavy throw in either direction and to hold the top from bounding up and down while passing over rough places; and it consists of the construction hereinafter described, and more particularly pointed out in 30 the claims.

Referring to the drawings, Figure 1 is a perspective view of a top and seat with my improvement applied thereto. Fig. 2 is an enlarged detail perspective view showing the operating lever and detent in position when the top is raised. Fig. 3 is an enlarged detail view showing my spring attachment applied to the shaft and seat-rail with the operating lever and detent in position when the top is lowered. Fig. 4 is a top view of the operating lever and detent, showing their frictional contact by which the one is held upon the other.

Like letters of reference represent corresponding parts in each figure of the drawings.

A represents the ordinary carriage or buggy seat having a seat-rail a mounted on top of its ends and rear side, and B the usual bows

or top supports attached in front to the seat-

50 rails with the long folding braces b, secured in the rear to an adjusting-rod.

The back of the seat A is provided with vertical standards C, having a rod c secured within their upper ends extending the length of the seat. From the ends of this rod and 55 the upper ends of the outer standards C there are forwardly-extending braces D, which are secured to the sides of the seat within the arm seat-rails.

Upon the rods c there are centrally pivoted 60 two independent backs d, so constructed that they will readily adjust themselves to the position of the back of the occupant of the seat desired and each revolving independent of the other, and they may be pitched at different another, and they may be pitched at different another at the same time to suit the convenience of each occupant.

Just in front of the back of the seat A the arm portion of the seat-rail a is re-enforced or enlarged at e, in which there are openings 70 forming bearings to hold a journal or rod E, that extends beyond the seat and from one side to the other under the edges of the adjustable backs d. Portions of this rod E near its ends are formed square for the purpose of 75 rigidly attaching the lower end of the long folding braces b thereto, and also for holding a heavy coiled spring F thereon. This spring is for the purpose of preventing injury to the top by suddenly throwing it backward and 80 down, by causing a gentle torsion of the coil as the top is moved backward, and also in aiding an upward movement when it is desired to raise the top. The outer end of the spring is formed into a square f, just fitted to 85 slide on the square portion of the rod E and to be held thereby, while the enlarged coiled portion passes on over the round outer section of the rod. The inner end of the coil is formed into a forwardly-projecting hook G, 90 which passes under the end sections of the seat-rail, and is held in that position by the constant torsion of the spring.

The journal or rod E, extending from one side of the top to the other, is provided with 95 an adjusting lever-arm H, one end of which is made to slide over and upon the rod, and is secured thereto by a pin or set-screw h, immediately on the inner side of the re-enforced arm portion e of the seat-rail, while the other 100 end extends to near the front of the seat-rail and is slightly bent upward to enable the

hand to readily grasp it in operating the top. The lever-arm H, being adjustable upon the rod E, can be placed at any desired angle most convenient to be grasped by the occupant when the top is up, and it being rigidly secured to the rod by the set-screw, the long hinged braces b on each side of the top are both operated at the same time by the single lever.

On the outer side of the lever-arm H at a suitable distance from the adjusting-rod E there is closely pivoted a detent I, that extends forward upon the side of the lever-arm. The central portion of the detent is bowed 15 outward, while its forward end and inner side is on a line with the pivot and side of the lever and forms frictional contact therewith holding it in place against the lever when it is not required for use. The forward end i20 of this detent is bent outward at right angles to the lever, and is so constructed that when released from its frictional contact with the lever it falls and rests upon the arm portion of the seat-rail a, and is adapted to fit into a 25 series of notches J thereon and to be adjusted in the said notches forward and backward as the top is raised or lowered for the purpose of holding the top, and for coacting with the coil-spring F on the outer portion of the ad-30 justing-rod, which has a constant tendency to throw the top forward to keep the top from bounding up and down when the vehicle is rapidly passing over rough places. When it is desired to fully raise the top, the detent is 35 lifted out of the notches and at the same time the lever is grasped and the two brought into frictional contact with each other, when they are together pressed forward until the top assumes its elevated position, and the lever and 40 detent rest by the side of the arm portion of the seat-rail.

It is evident that the use of the spring F may be dispensed with when only the functions of the lever H and detent I are desired

in adjusting the top and securely holding it 45 down to prevent it from bounding and damage in passing over rough places in the road, though I prefer the steadying coaction of the spring in exerting a constant forward tendency of the top in combination with the lever. 50

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

Patent of the United States, is-

1. The combination, with a rod extending from one side of the seat to the other, of a lever-arm secured thereto, one end of a detent pivoted to the outer side of the lever, and the other end held against the lever by frictional contact and adapted to be turned into notches on the seat-rail, as set forth.

2. The combination, with a rod holding the hinged braces of a top, having a lever secured thereto, with one end of a detent pivoted to the side of the lever and the other end resting on the seat-rail, of a spring on the 65 rod with one end locked under the seat-rail having an upward traction, as and for the

purpose set forth.

3. The combination, with a rod extending from one side of the seat to the other, having 70 a lever adjustably secured thereto on the inner side of the seat-rail, said lever having one end of a detent pivoted to its side and the other end bent outward and held to the lever by frictional contact and adapted to be turned 75 into notches on the seat-rail, of a coil-spring having its outer end secured on the square portion of the rod on the outer side of the rail, and its inner end locked under the rail in front of the rod, said spring having an up-80 ward traction on the top, as set forth.

In testimony whereof I affix my signature in

presence of two witnesses.

SHEPARD W. CATELY.

Witnesses:

WM. CORCORAN, L. P. HOLLENBECK.