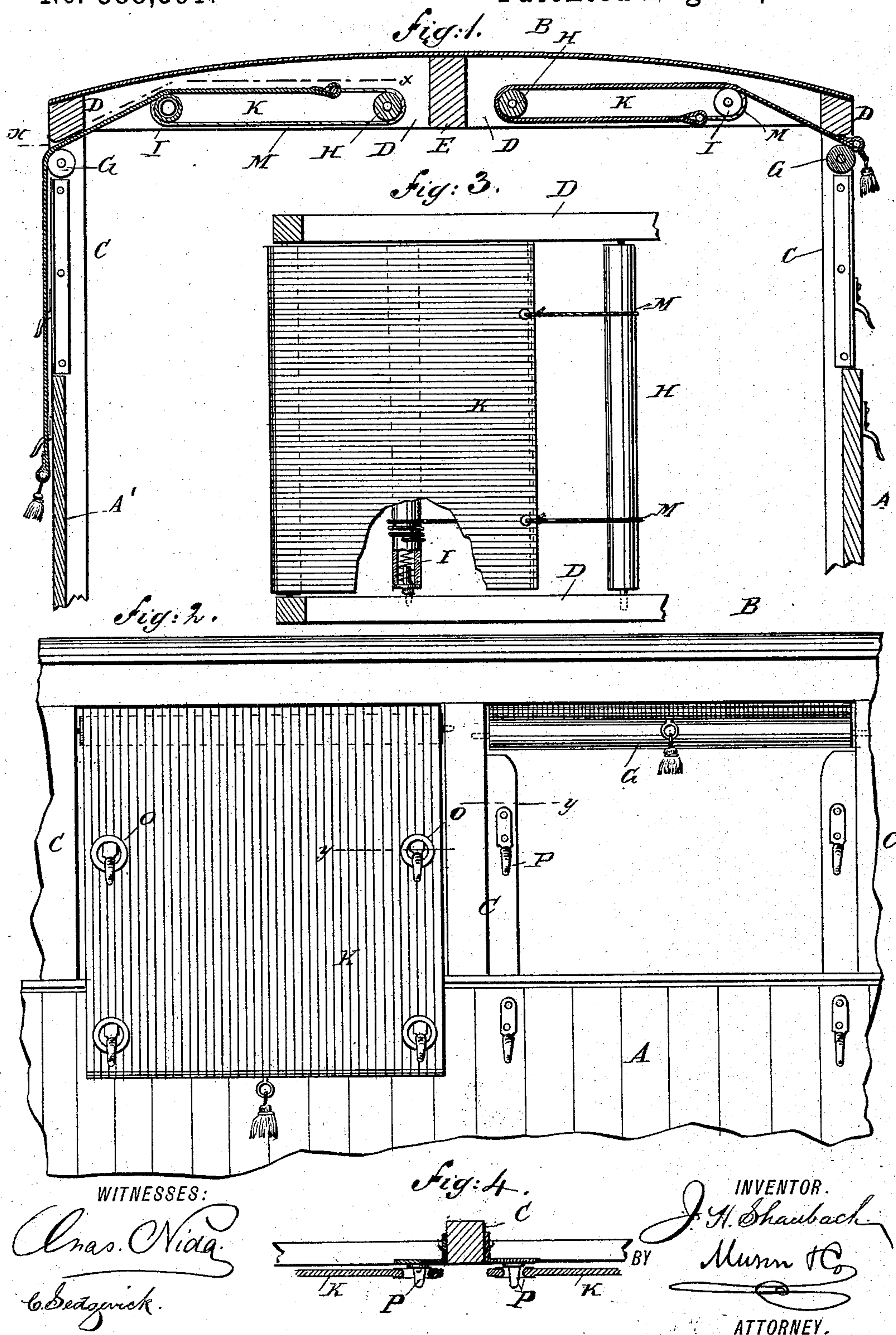


(No Model.)

J. H. SHAUBACH.
VEHICLE TOP CURTAIN.

No. 388,591.

Patented Aug. 28, 1888.



UNITED STATES PATENT OFFICE.

JOHN H. SHAUBACH, OF BROOKLYN, NEW YORK.

VEHICLE-TOP CURTAIN.

SPECIFICATION forming part of Letters Patent No. 388,591, dated August 28, 1888.

Application filed March 8, 1888. Serial No. 266,529. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. SHAUBACH, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful
5 Improvement in Vehicle-Top Curtains, of which the following is a full, clear, and exact description.

The object of this invention is to provide top carriages and similar vehicles with curtains which can be quickly adjusted to close
10 in the top, and when not needed can be raised easily and completely out of the way.

The invention consists of a novel construction and combination of parts, substantially as
15 hereinafter described, and as distinctly pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate
20 corresponding parts in all the figures.

Figure 1 is a transverse sectional elevation of the upper part of a vehicle-top provided with my improvement. Fig. 2 is a side elevation of the same. Fig. 3 is a detail sectional plan view on the line *xx*, Fig. 1. Fig.
25 4 is a detail sectional plan view of the line *yy*, Fig. 2.

A A' designate the opposite side rails of a vehicle-body; B, the roof; C, the roof-supporting posts rising from the upper edge of the side rails A A'; D, the cross-braces connecting the upper ends of corresponding posts C and supporting the roof; and E, the central longitudinal roof-brace, all of which may be
30 of the usual description.

At and close to the top of each window-opening formed on each side, between successive posts C, is journaled a guide-roller, G, extending the full width thereof, and another
40 similar guide-roller, H, is journaled to and between the corresponding roof-braces D on each side of and close to the longitudinal roof-brace E. A spring winding-roller, I, of any ordinary or approved description, is also journaled to suitable brackets on the said cross-braces D between the two guide-rollers G and H. A flexible curtain or shade, K, adapted to cover the opening F, has its inner edge stiffened by a cross rod or wire and connected by
45 two or more cords, M, to the spring-roller I. The outer end of the curtain K is passed inward beneath and around the inner guide-roller, H, outward and over the spring-roller I and guide-roller G, from between which and

the edge of the roof it issues. The arrangement is such that the spring-roller I will normally wind up the cords M and draw almost the entire curtain up beneath the roof, as shown in Fig. 1, the wired outer end of the curtain being made too large to pass between
60 the guide-roller G and the roof, so that it will be retained thereat in position to be seized for lowering in opposition to the tension of the roller I.

The opposite side edges of all the curtains
65 K are provided with series of eyes O, to receive corresponding series of downwardly-projecting hooks P, fixed to the posts C and bottom rails, A A', so as to hold the curtains down. When released from said hooks, the
70 curtains will be automatically rolled up, as before.

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

1. The combination, with the braced roof and the roof-supporting posts forming the open sides of a vehicle, of a guide-roller mounted across the top of a side opening, a spring shade-roller journaled to and beneath the braced
80 roof, and a curtain running over the guide-roller and arranged to be rolled up under the roof by the spring-roller, substantially as described.

2. The combination, with the braced roof
85 and the roof-supporting posts forming the open sides of the vehicle, of a guide-roller mounted across the top of a side opening, another guide-roller mounted beneath the middle part of the roof, a spring-roller mounted beneath
90 the roof in front of the latter guide-roller, a curtain passed around the two guide-rollers, and cords connecting the curtain to the spring-winding roller, substantially as described.

3. The combination, with the roof of a vehicle and the roof-supporting posts, of a guide-roller journaled between the posts a short distance below the cross-braces of the top, a spring-roller journaled beneath the top, and
100 a curtain connected to said spring-roller and passing between the guide-roller and the cross-brace, substantially as herein shown and described.

JOHN H. SHAUBACH.

Witnesses:

JOHN A. NEXSEN,
WM. H. HAZZARD.