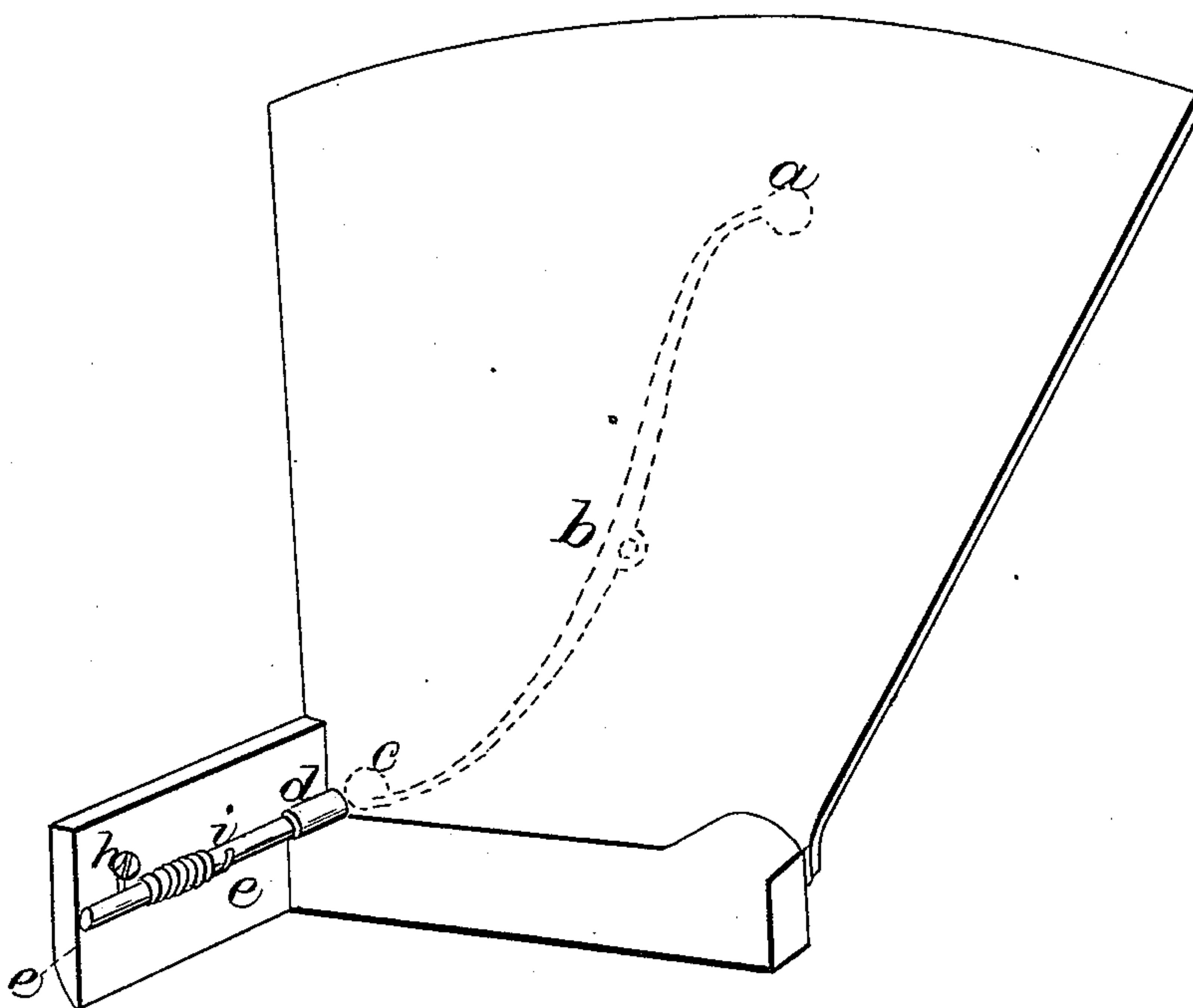


**Carriage-Top.**

Patented Jan. 14, 1851.

*Fig.1*



# UNITED STATES PATENT OFFICE.

JOHN L. ALLEN, OF NEW HAVEN, CONNECTICUT.

## IMPROVEMENT IN RAISING CARRIAGE-TOPS.

Specification forming part of Letters Patent No. 7,897, dated January 14, 1851.

*To all whom it may concern:*

Be it known that I, JOHN L. ALLEN, of the city, town, and county of New Haven, in the State of Connecticut, have invented a new and useful Improvement in Elevating and Supporting Carriage-Tops; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawing, in which the figure represents one side of the interior of an ordinary carriage-top.

The position of the brace on the outside of the top is shown by the dotted lines *a b c*, the lower end of the brace at *c* being fastened to the rod or prop *e*. This rod in the drawing passes through a socket at *d*, which keeps the rod or prop securely in its place. A spiral spring or wire is coiled around the rod, fastened at one end to the back of the seat at *h*, and at the other to the rod or prop at *i*. The length of this spring or wire is regulated by the strength which may be required to operate upon the brace in raising the top.

The operation is as follows: In throwing back the top (the lower part of the brace be-

ing fastened to the prop or rod *e*) the prop or rod turns, winding the wire or spring upon the rod, the spring growing gradually stronger as the top falls. When the top is to be raised, the strength of this wire or spring operates upon the rod or prop, turning it and raising the top as it turns. By means of this spring, which is proportioned in strength to the weight of the top, the heaviest carriage-top may be raised without trouble and with but little exertion of strength.

The spring may be made to operate by winding up or by unwinding. It may be applied on the outside as well as on the inside of the top. It may be applied at either end of the brace or at either prop.

What I claim as my invention, and wish to secure by Letters Patent, is—

The application of a spiral spring to operate upon the braces of a carriage-top, so as to assist in supporting and elevating the top, substantially as described and shown.

JOHN L. ALLEN.

In presence of—

DAVID H. CARR,  
LUCIUS G. PECK.