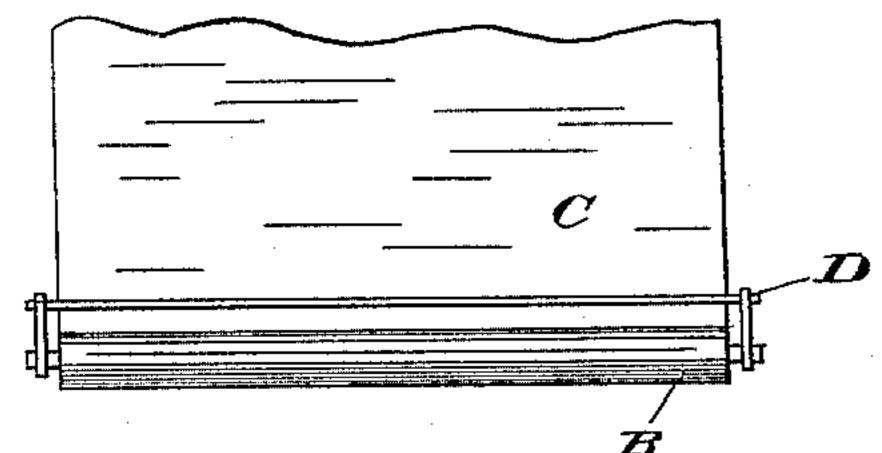
J. SPENCER. CURTAIN FOR CARRIAGE TOPS.

No. 467,385.

Patented Jan. 19, 1892.



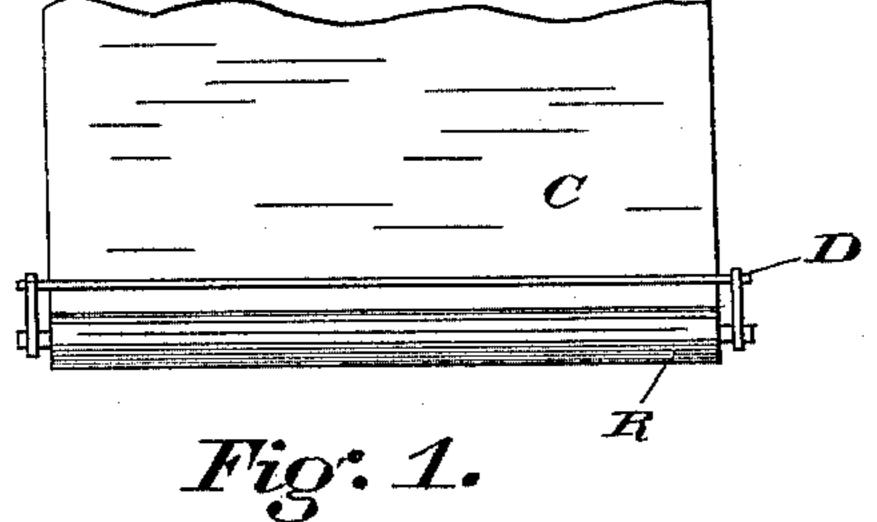


Fig. 2.

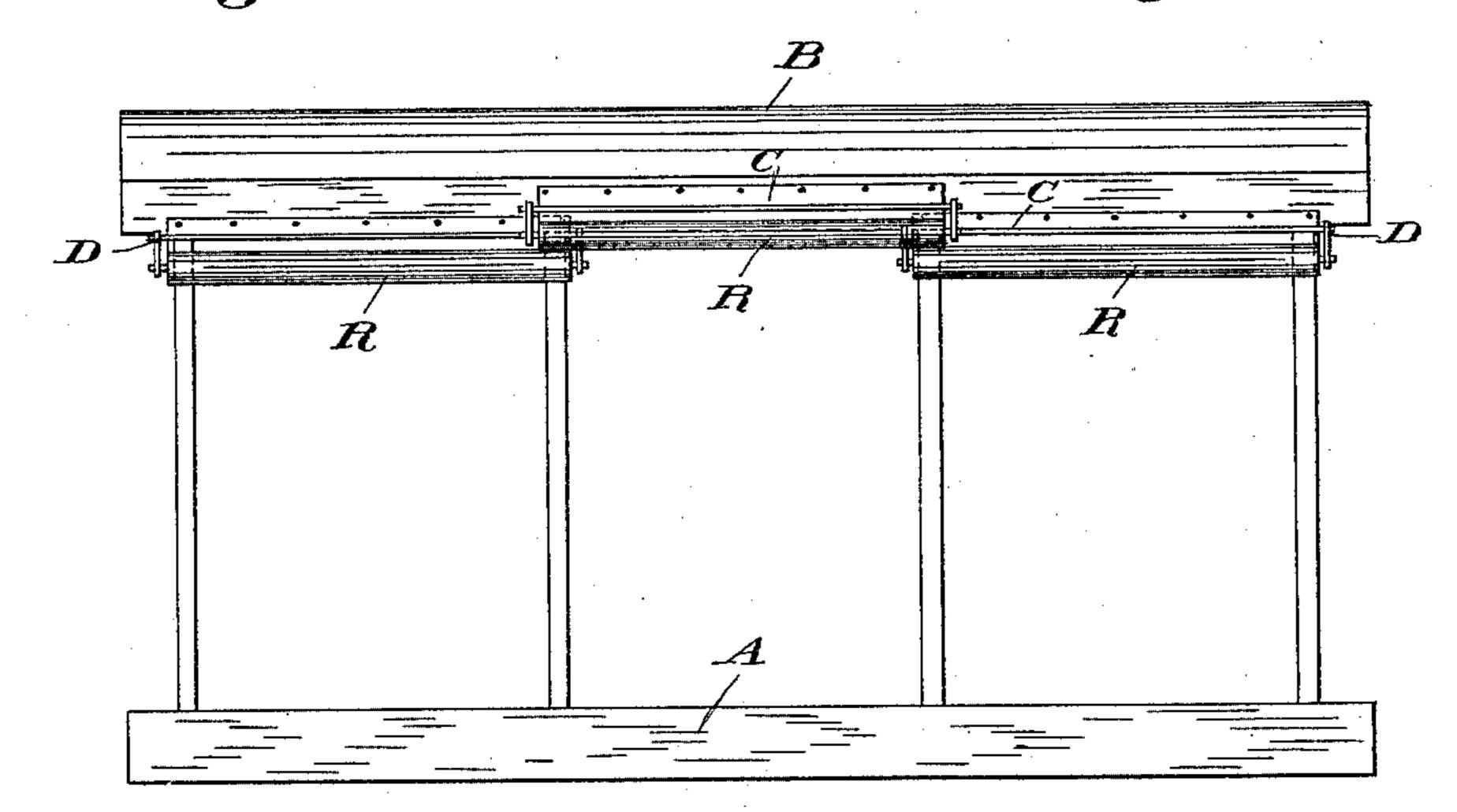


Fig. 3.

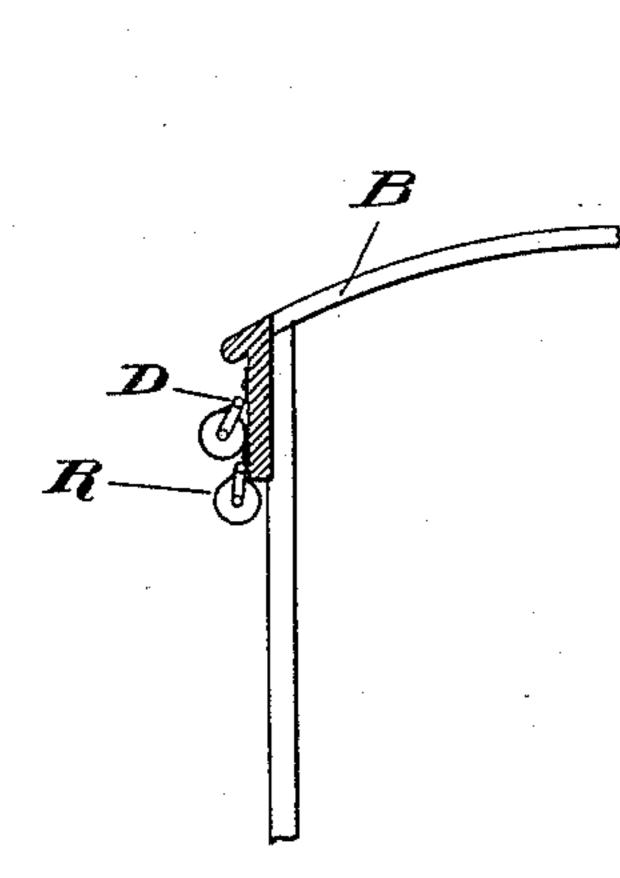
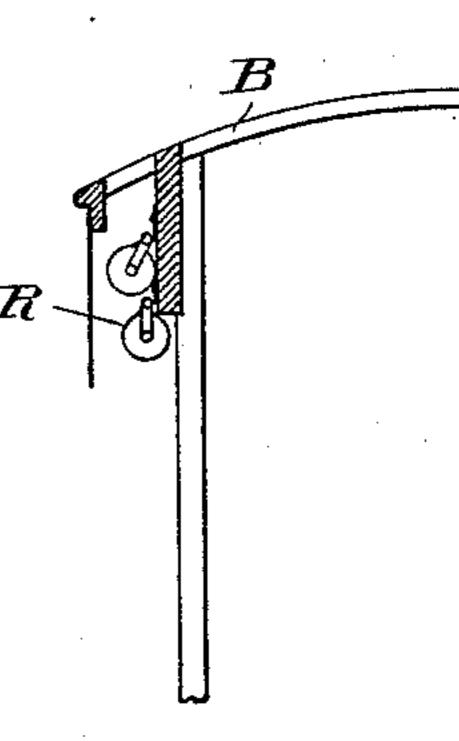


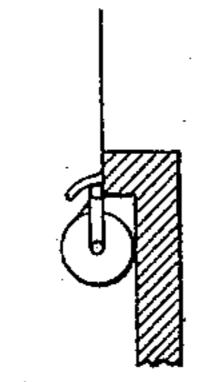


Fig. 4.



WITNESSES:

J. K. G. Deffinder ffre. C. C. Hoolley



INVENTOR

Fig. 7. Price Stewart
ATTORNEYS.

Fig:6.

United States Patent Office.

JERVIS SPENCER, OF BALTIMORE, MARYLAND, ASSIGNOR TO THE JERVIS SPENCER COMPANY, OF SAME PLACE.

CURTAIN FOR CARRIAGE-TOPS.

SPECIFICATION forming part of Letters Patent No. 467,385, dated January 19, 1892.

Application filed March 19, 1891. Serial No. 385,585. (No model.)

To all whom it may concern:

Be it known that I, JERVIS SPENCER, of Baltimore, in the State of Maryland, have invented a new and useful Improvement in Curtains 5 for Carriage or Wagon Tops and Windows, and that it relates especially to the arrangement, attachment, and operation of said curtains, of which the following is a specification.

The curtain to which my invention applies 10 is known as the "self-winding" or "spring" curtain; and the object of my invention is to furnish a ready and excellent curtain which may be attached to any vehicle without alteration of the vehicle, to be easily closed, 15 and which will run up without danger when released.

Figure 1 of the drawings shows the curtain with its roller detached from the vehicle and provided with the cross-bar or cord. Fig. 2 20 shows the curtain the same with double crossbar. Fig. 3 shows three curtains side by side on a wagon-body; Fig. 4, the curtain when closed and fastened. Fig. 5 is a diagrammatic sectional view of a portion of a wagon-top, 25 showing the relative position in which the curtains lie to each other when the curtain is rolled up; Fig. 6, a view of the same with hanging projection concealing the curtain from view, if desired. Fig. 7 illustrates one 30 means for fastening the curtain at the bottom.

In the drawings, A represents an ordinary wagon-body; B, the top, supported by the usual posts; C, the curtain.

Upon referring to Fig. 3 it will be seen that 35 the curtains are shown attached to the body of a vehicle at the top by simply tacking the end of said curtain in the usual way.

R is the automatic spring-roller, upon which the curtain is wound or unwound in hoisting 40 and lowering, and, as shown in the drawings, hangs below, the roller itself furnishing the weight to keep it steady. It will be seen by this arrangement that there need be no alteration or change of the construction of a carriage-body in order to attach my curtain, consequently no additional room in the top of the carriage for the roller and supportingbrackets therefor. It will also be seen that as the roller is pulled down and released its 50 weight increases by rolling up the curtain as it ascends and the tension of the spring in the roller diminishes, so that the two, acting |

in concert, tend to make the curtain roll up easily without snapping hard against the top. In addition to this I have provided a brake, 55 as shown in the cross-bar D. When the curtain is in normal position, either at the top or bottom of its movement, this cross-bar D is pressed against the curtain by the tension of the spring and bears upon it, acting as a 60 brake in pressing against the curtain. Its ends are attached to the arbor of the springroller, and consequently hold the arbor while the roller responds to the action of the spring. Instead of a bar a cord may be used, drawn 65 sufficiently tight to answer the purpose or the cross-bar may be cut in the middle, leaving the two ends to act as the brake and holder. The curtain may also be used, if desired, with the ordinary means attached to 70 the roller for stopping it at intermediate points. It will be seen, also, that when the curtains are attached to a wagon-body in the ordinary way and the rollers left to hang they may be easily made to overlap by tacking the 75 edge of one over the other.

I do not claim the stopping device shown in the Shaw patent, No. 201,710, as his bar or binder brings the curtain to a full stop, while the operation of my apparatus is that of a 80 frictional retarding device to permit an easy

rolling of the curtain.

What I claim, and desire to secure by Let-

ters Patent, is—

1. A flexible self-rolling curtain having a 85 spring-roller and attached to a wagon body or window by the end opposite the roller, in combination with a frictional retarding device operated by the roller-spring to steady the movement and permit an easy rolling of 90 the curtain.

2. A flexible self-rolling curtain having a spring-roller and attached to a wagon body or window by the end opposite the roller, in combination with a cross-bar bearing upon 95 the curtain and attached direct to projections from the roller-shaft to steady the curtain in hoisting.

Signed at Baltimore city, in the State of Maryland, this 17th day of March, A. D. 1891. 100

JERVIS SPENCER.

Witnesses:

M. TURNER, H. MACCARTHY.