

(No Model.)

J. G. ENGLISH.
Carriage Curtain Fastening.

No. 240,110.

Patented April 12, 1881.

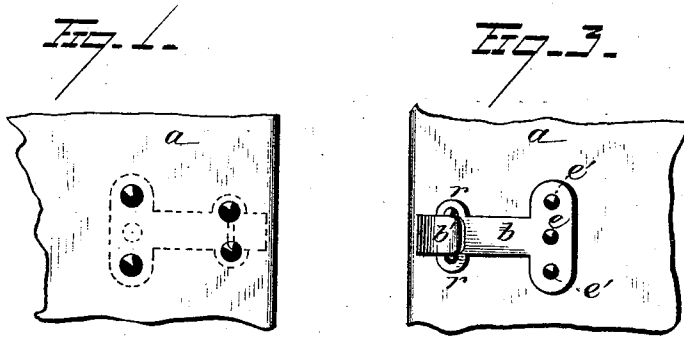


Fig. 2.

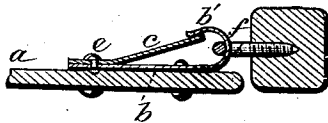


Fig. 4.

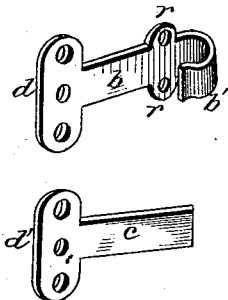


Fig. 5.

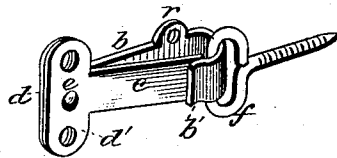
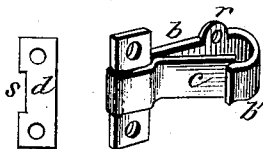


Fig. 6.



WITNESSES

Floyd Norris
Howell Bartle.

James G. English
INVENTOR

by Johnson and Johnson

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES G. ENGLISH, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO ENGLISH & MERSICK, OF SAME PLACE.

CARRIAGE-CURTAIN FASTENING.

SPECIFICATION forming part of Letters Patent No. 240,110, dated April 12, 1881.

Application filed February 10, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES GOURLIE ENGLISH, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented new and useful Improvements in Carriage-Curtain Fastenings, of which the following is a specification.

My improvement is directed to the production of a simple, cheap, and convenient spring-hook fastening adapted for attachment to the inner side of the curtain of a carriage and for use with a fixed eye. It is especially advantageous in places where the knob and curtain-eye cannot be used without bringing the eye so near the edge of the curtain as to render it more easily to be torn out by the knob. The facility by which the curtain can be fastened and unfastened from the inside or the outside of the carriage gives the fastening special importance in connection with being out of sight and the curtain free from holes.

The fastening device is a hook having a spring-guard of tempered steel, both secured to the curtain, by means of a binder or binders, in a manner to hold the fastening from turning out of position and firmly bound to the curtain in a direction at right angles to the hook part, and adapted for use with an eye in the frame. I prefer to make the binder double by coincident laps of the spring-guard and hook part riveted together centrally between the rivets by which the device is bound to the curtain. The spring-guard and hook, however, may be formed in one piece and suitably secured to a separate cross-binder.

Referring to the accompanying drawings, Figure 1 represents a fragment of a carriage-curtain from the outside, showing the fastening device in dotted lines; Fig. 2, a horizontal section of the same as fastened; Fig. 3, an inside view of a fragment of the curtain with the fastening device secured thereto; Fig. 4, the hook and the spring-guard parts of the device separated; Fig. 5, the fastening device and the shanked eye; and Fig. 6 shows the hook and tongue of one piece secured to a separate cross-binder.

My improvement embraces a new method of fastening carriage-curtains, in which the fast-

ening can be made from the inside and from the outside of the vehicle. In fastening and unfastening from the outside the edge of the curtain is taken hold of, and when from the inside the hook device is grasped. The device is secured to the inner side of the curtain, so as to bring the hook part a little within the edge, so as not to be seen from the outside.

Preferably the hook device is of two parts, the hook part *b* and the spring-guard *c* forming, when united, a tempered steel hook—that is, both the hook and the spring-guard are of tempered steel, with japan finish; but the device may be made of tempered brass and japanned. Steel is preferable, because it is cheaper, and as a japanned finish is most desirable, such finish adheres better to steel. When the hook and spring-guard part are made separate they are each formed with a coincident cross termination, *d d'*, which are riveted together in the line of the hook by the rivet *e*, while the cross-laps are provided with one or more holes at each end, by which to rivet them to the curtain by rivets *e' e'* passing through the laps, which thereby form binders at right angles to the line of the hook and with the binding-rivets out of line with the hook part, so that the latter cannot be turned out of its proper position. The flat hook part *b* lies against the curtain, the hook proper, *b'*, curves out from and over the flat part, and the spring-guard *c* extends from the cross-binder *d* to the end of the hook, against the inner side of which it presses. The flat hook part may be formed with edge projecting ears *r*, for securing the same to the curtain at or near the hook end, so as to hold the edge of the curtain snugly and closely to the frame.

I prefer to fasten the device by rivets through the cross-binders and the edge ears; but such fastening may be made by clinch-teeth integral with said cross-binders and ears and passing through the curtain, clinched on the outer side, with or without an outer binder-plate.

The eye *f* is oblong to receive the hook, and it is formed with a screw or barbed shank, by which it is driven into the bow or frame as a fixture or otherwise secured.

When the hook and spring-guard are of one piece, as in Fig. 6, it is locked in position upon the cross-binder by a recess, *s*, on the

back edge of the latter and an opening formed by the lapping and swaging of the hooked and spring-guard parts, and into which the binder fits, and may be further secured by a rivet passing through the lapped parts and binder.

I claim—

1. The spring-hook fastening secured upon the inner side of a carriage-curtain, substantially as described, in combination with a fixed eye on the frame.

2. The tempered steel spring-hook for carriage-curtains herein described, consisting of the hook part *b* and the spring-guard *c*, each provided with coincident right-angled or cross binders *d d'*, riveted together and having coincident rivet-holes, and edge projecting ears

r at or near the hook ends, as means for securing said spring-hook to the curtain, substantially as described.

3. As a new article of manufacture, a hook-fastening for carriage-curtains, formed with a spring hook and guard, the latter having a cross-binder and the former the edge ears and corresponding cross-binder, adapting it for being fastened to the inner side of the curtain, as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JAMES G. ENGLISH.

Witnesses:

WILLIAM BRYAN,
FRANCIS F. PREUDHOMME.