

No. 667,873.

Patented Feb. 12, 1901.

W. FETZER.  
CURTAIN FASTENER.

(Application filed May 17, 1900.)

(No Model.)

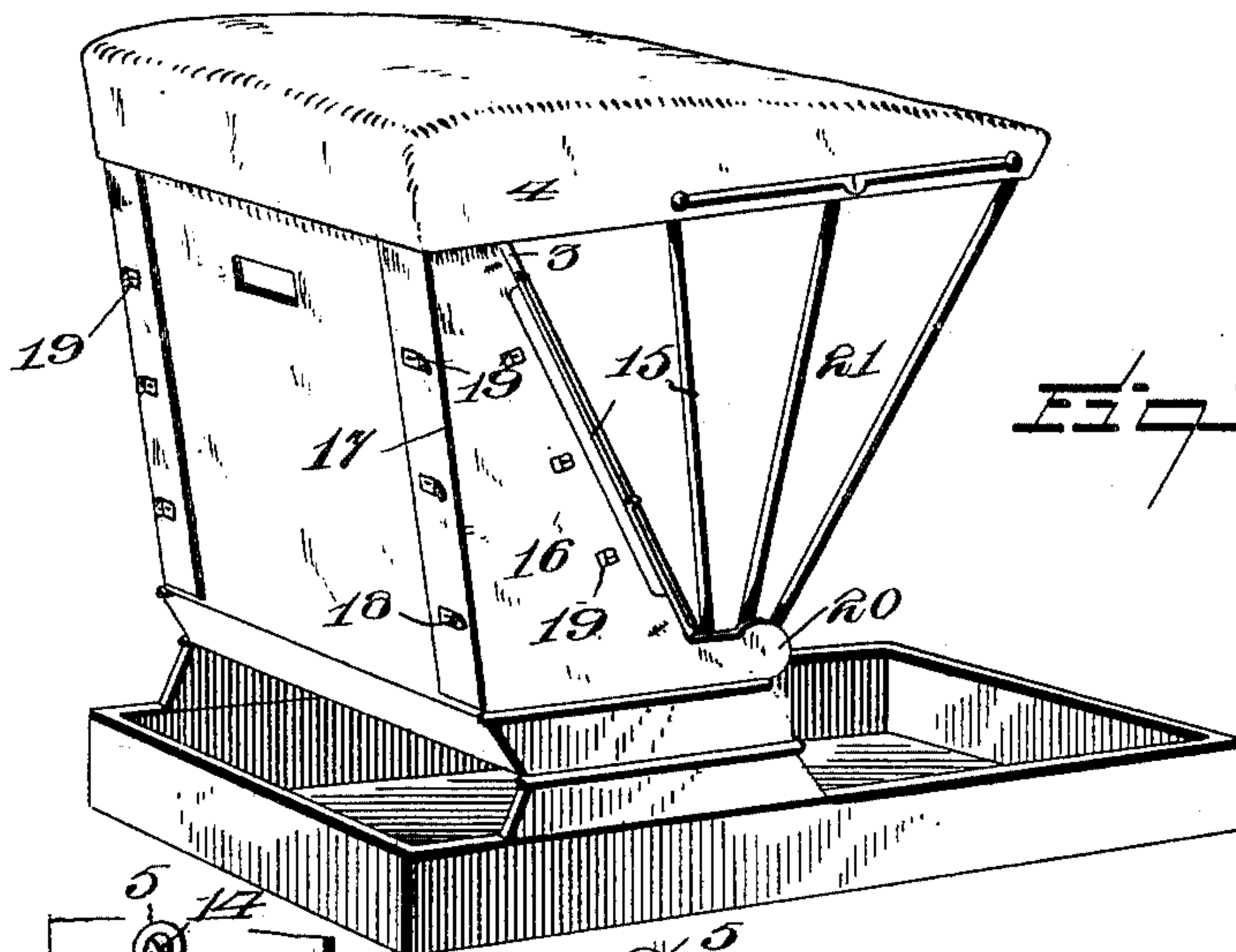


Fig. 1.

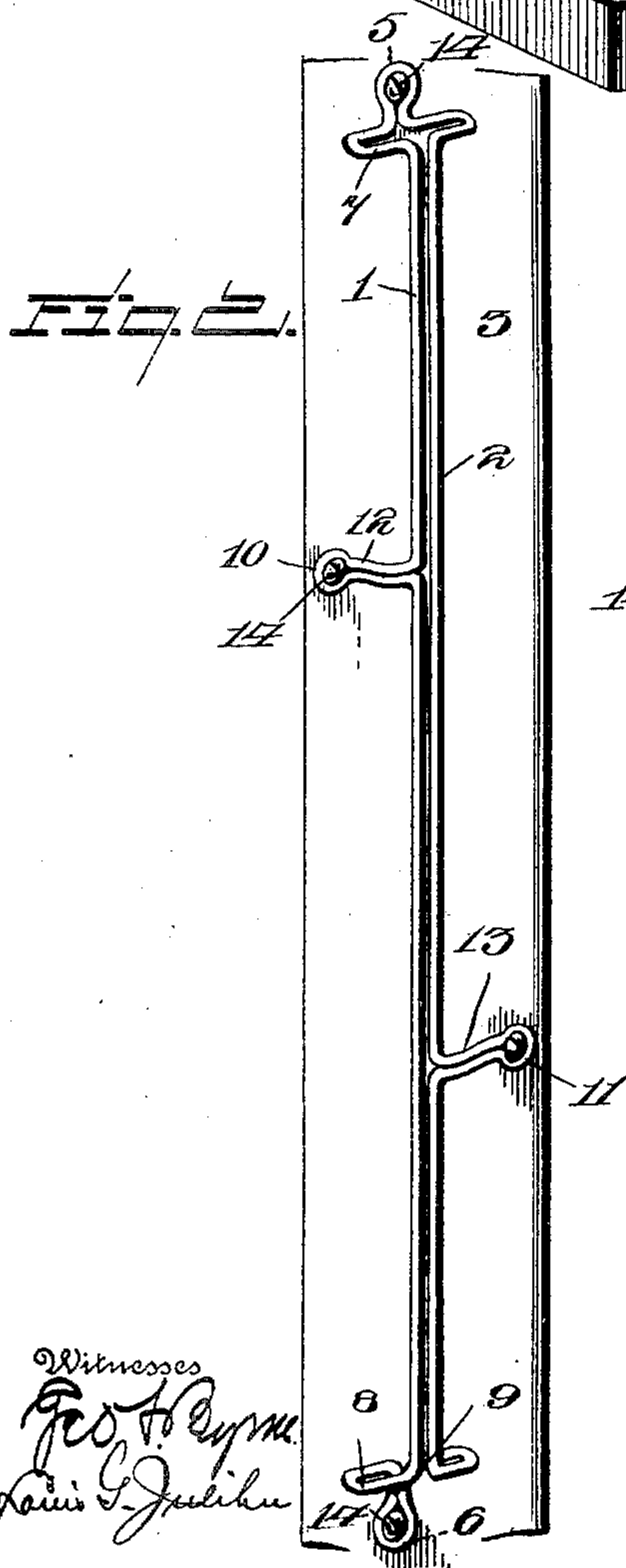


Fig. 2.

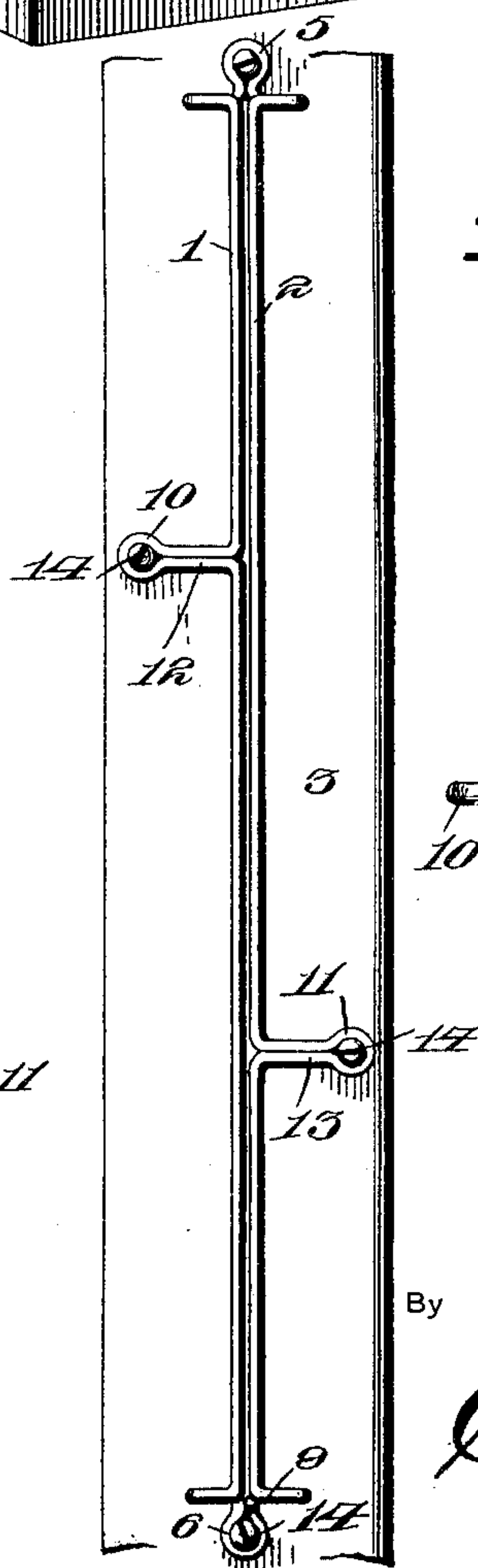


Fig. 3.

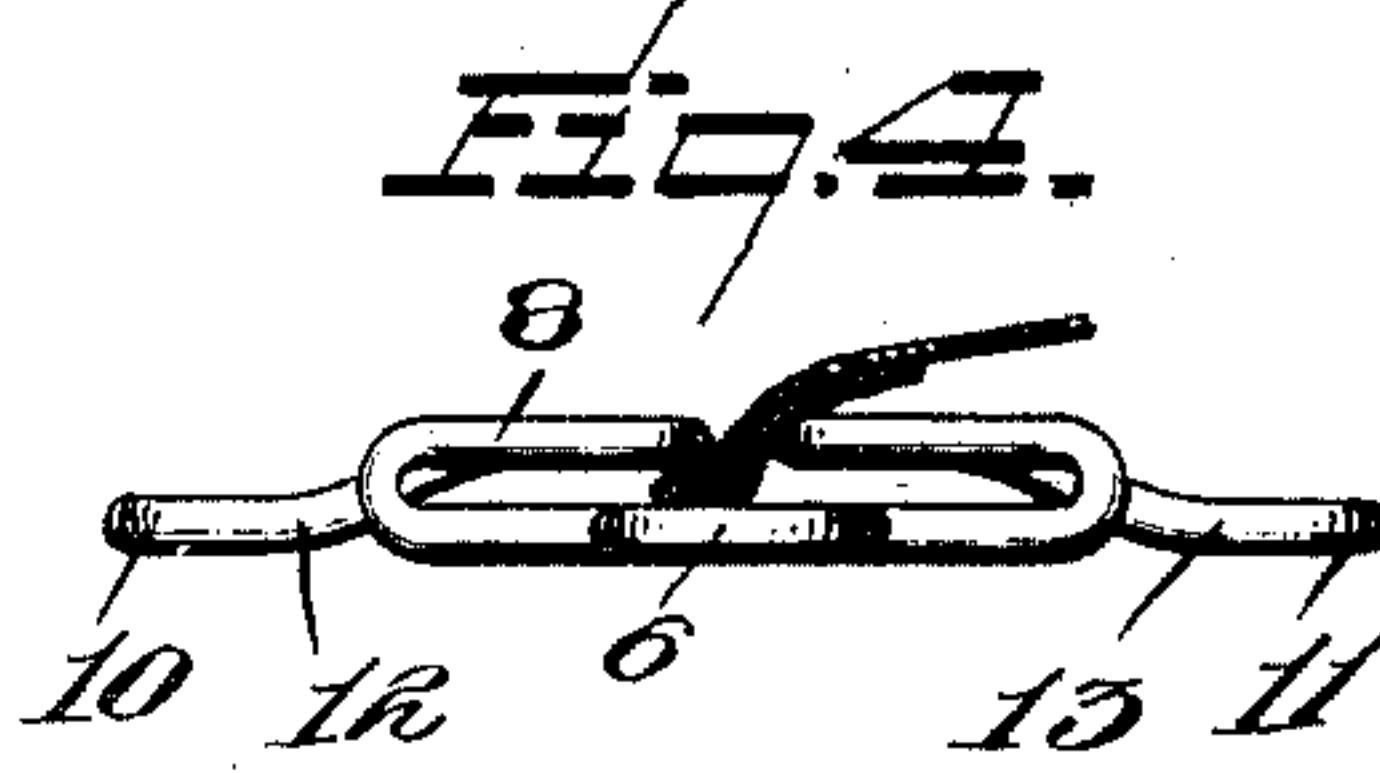


Fig. 4.

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# UNITED STATES PATENT OFFICE

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## CURTAIN-FASTENER.

SPECIFICATION forming part of Letters Patent No. 667,873, dated February 12, 1901.

Application filed May 17, 1900. Serial No. 16,995. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM FETZER, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented a new and useful Curtain-Fastener, of which the following is a specification.

My invention relates to a curtain-fastening designed particularly for the securing of carriage curtains, aprons, fenders, or other flexible closures or protectors for carriages. Ordinarily carriage-curtains are buttoned or fastened by means of hooks and eyes or similar devices to the bows or other members of the supporting-frame for the carriage canopy or top. These modes of fastening are objectionable because of the difficulty of fastening and unfastening the curtains and because the actual securing of the curtain edge is only effected at intervals. Many attempts have been made to overcome these objections, notably by providing metallic tubing of various forms longitudinally slitted for the reception of a bead located at the edge of the curtain and by forming various kinds of continuous sockets for the reception of such beaded edges. These attempts have been comparatively futile, however, for the reason that these various expedients are costly, more or less cumbersome and unsightly, and usually necessitate more or less adaptation of the supporting structure.

One object of my invention is to provide a fastening which will possess all of the advantages of these last-named devices, particularly the continuous connection of the entire edge of the curtain, but which will be capable of manufacture at nominal cost and will not detract from the neat appearance of the carriage to which it is attached.

A further object of the invention, when considered in a somewhat specific aspect, is the securing by means of my fastener of a novel form of side curtain for buggies, which curtain is designed to close the space between the rear bow of the buggy-top and the back curtain or backstay to form a mud and dust guard which will protect the buggy-seat and its occupants, while allowing for the free circulation of air, so essential to the comfort of the occupant of the vehicle.

To this end the invention consists in pro-

viding a curtain-fastener which is formed from a single strand of wire or from a number of wire pieces bent to form cooperating retaining members and attaching devices, by means of which the fastening as a whole is attached to a bow or other supporting part of a buggy, with the clamping or clip bars lying in a plane removed from the contiguous face of the supporting part, in order that the stiffened edge or bead of the curtain to be attached may be passed between and under said bars and securely retained by the clamping action of the latter.

Referring to the drawings, in which I have shown one application of my fastening for the purpose of illustrating the subject-matter of the succeeding description, Figure 1 is a perspective view of a portion of a buggy, illustrating the application of my invention. Figure 2 is a perspective view, on a somewhat-enlarged scale, of my fastening attached to a bow. Figure 3 is a front elevation showing the spread positions of the clamping or fastening bars in dotted lines, and Figure 4 is an end view of the subject-matter of Figure 3.

Referring to the numerals of reference, indicating corresponding parts and structural characteristics in the several views, 1 and 2 indicate a pair of parallel fastening or clamping-bars carried by any suitable supporting member—as, for instance, the rear bow 3 of a buggy-top 4—the bars 1 and 2 constituting spring jaw members of the curtain-fastening body. The bars 1 and 2 are supported in a plane removed from the face of the bow by offset terminal retaining devices comprising loops or eyes 5 and 6, lying flat against the face of the bow 3, and standards or spacers 7 and 8, the latter being disposed in horizontal planes—that is to say, in planes at right angles to both the bars 1 and 2 and the eyelets 5 and 6 for the purpose of throwing the bars and eyelets in different vertical planes in order that the former will be somewhat removed from the surface of the supporting member or bow for a purpose which will be hereinafter made apparent.

In constructing my fastening I preferably, though not necessarily, take a single strand and double it upon itself, the recurved or doubled extremity constituting the retaining



loop or eye 5. The side strands are then bent in opposite directions at right angles to the eye 5 and are recurved in a plane at right angles to the eye to form the standard 7. The side portions or standards of the wire are now again bent into substantial alinement with the eye 5; but being at the opposite sides of the standard 7 the eye and rods are thus located in different planes. I next bend the bar 1 at the end opposite the eyelet 5 to form one of the recurved sides of the standard 8 and the terminal eye or loop 6. The contiguous end of the rod 2 is then bent to form the other side of the standard, and the ends of the wire are connected by solder, brazing, or other suitable means, as indicated at 9. The recurving or looping of the sides of the standards 7 and 8 is provided for a definite purpose, which is to secure a comparatively broad base for the fastening and to permit the relative yielding of the rods 1 and 2 by reason of the resiliency of the sides of the standards.

The device as thus far described comprehends what would be a complete fastening in some instances, inasmuch as it defines a pair of parallel gripping or fastening rods and means for supporting said rods in yielding relation at a suitable distance from the base of the supporting member. I prefer, however, to carry the invention further by providing one or more intermediate retaining devices, which will serve to support the rods 1 and 2 at points intermediate of the standards 7 and 8 without preventing such relative lateral yielding of the rods as would interfere with their effective coöperation. These intermediate retaining devices are provided by looping the rods 1 and 2 in opposite directions at intermediate points to form eyes 10 and 11, designed to lie flat against the surface of the bow 3 and connected to the rods 1 and 2 by oppositely-inclined yielding standards 12 and 13. I prefer to space the intermediate retaining devices in a suitable manner to have the intermediate retaining device of each rod opposed to a smooth unbroken portion of the opposite rod, as the resistance opposed by the standards 12 and 13 to the yielding of the rods would render the latter too stiff for the ready insertion of the curtain edge if said standards were directly opposed. The fastening is secured upon the bow or other part by solder, brazing, rivets, or other suitable fasteners 14, passed into the supporting member through each of the loops 5, 6, 10, and 11.

In Fig. 1 I have illustrated my curtain-fastenings applied upon the rear bow of a buggy-top and retaining the stiffened or ribbed edge 15 of a novel supplemental side curtain or fender 16, designed to close that space defined between the seat and the buggy-top and the rear bow and back curtain for the purpose of protecting the occupant of the buggy from mud and dust without interfering with the free circulation of air through the buggy. The edge 15 is therefore inclined to correspond to the inclination of the bow 3, and the rear

straight edge 17 is fitted with a flap designed to be strapped by buckles 18 to the back curtain or backstay of the top. The curtain is also provided, adjacent to the edge 15, with a series of buckles 19 or other suitable securing devices for the attachment of the usual side curtain of the buggy, and the lower forward portion of the curtain is extended, as indicated at 20, and is fastened to the front bow 21 in order to fully protect the front portion of the seat from mud or dust thrown up by the wheel.

From the foregoing it will be observed that I have produced a simple and inexpensive fastening for buggy-curtains and like closures, which fastening may be constructed from one or more pieces of wire and which will securely retain the edge of the curtain or other part continuously between the jaw member and in the interval between said members and the surface of the supporting part in a manner to prevent its accidental detachment, while permitting its release when necessary; but while the present embodiment of my invention appears at this time to be preferable I do not wish to limit myself to the structural details defined, but reserve the right to effect such structural variations as may come properly within the scope of the protection prayed.

What I claim is—

1. A curtain-fastener comprising a body adapted to be secured to a bow of a buggy and having spring jaw members normally sprung toward each other to receive therebetween the curtain edge, said body also having offset supporting elements to hold the spring jaw members off from the surface upon which the device is arranged, to permit the curtain edge to extend between the jaws and into the interval between said jaws and the supporting-surface.

2. The combination with a supporting part, as for instance, a bow of a buggy, of a curtain-fastening formed from wire bent to form a pair of parallel, laterally-yielding jaw members normally opposed and designed to extend over the face of the supporting part and having retaining devices offset from said members and secured to the face of the supporting part to support the jaw members at a sufficient distance from the surface of the supporting member to permit the clamping of the curtain between the jaw members and the clamping of the curtain edge against the opposed face of the supporting part.

3. A curtain-fastening adapted to be mounted upon a bow of a buggy and comprising substantially parallel opposed jaw members, terminal standards supporting the jaw members directly over but removed from the supporting-surface, and intermediate standards supporting the jaw members at points intermediate of the terminal standards to permit a curtain to be clamped between the jaw members and to have its edge located in the interval between the supporting-surface and the jaw members.



4. A curtain-fastener provided with terminal eyes located in the same plane, standards disposed at right angles to the loops and having relatively-yielding side portions, parallel  
5 fastening-rods connected at their opposite ends to the side portions of the side standards, and intermediate retaining devices aiding in the support of the rods and arranged out of apposition and provided with eyes disposed  
10 in the plane of the terminal eyes and consti-

tuting therewith the supporting means for securing the fastening-rods to a suitable support but offset from the surface thereof.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 15 the presence of two witnesses.

WILLIAM FETZER.

Witnesses:

CHAS. PAPSON,

W. S. AYRES.