

(Model.)

G. A. COLTON.

CLASP.

No. 314,366.

Patented Mar. 24, 1885.

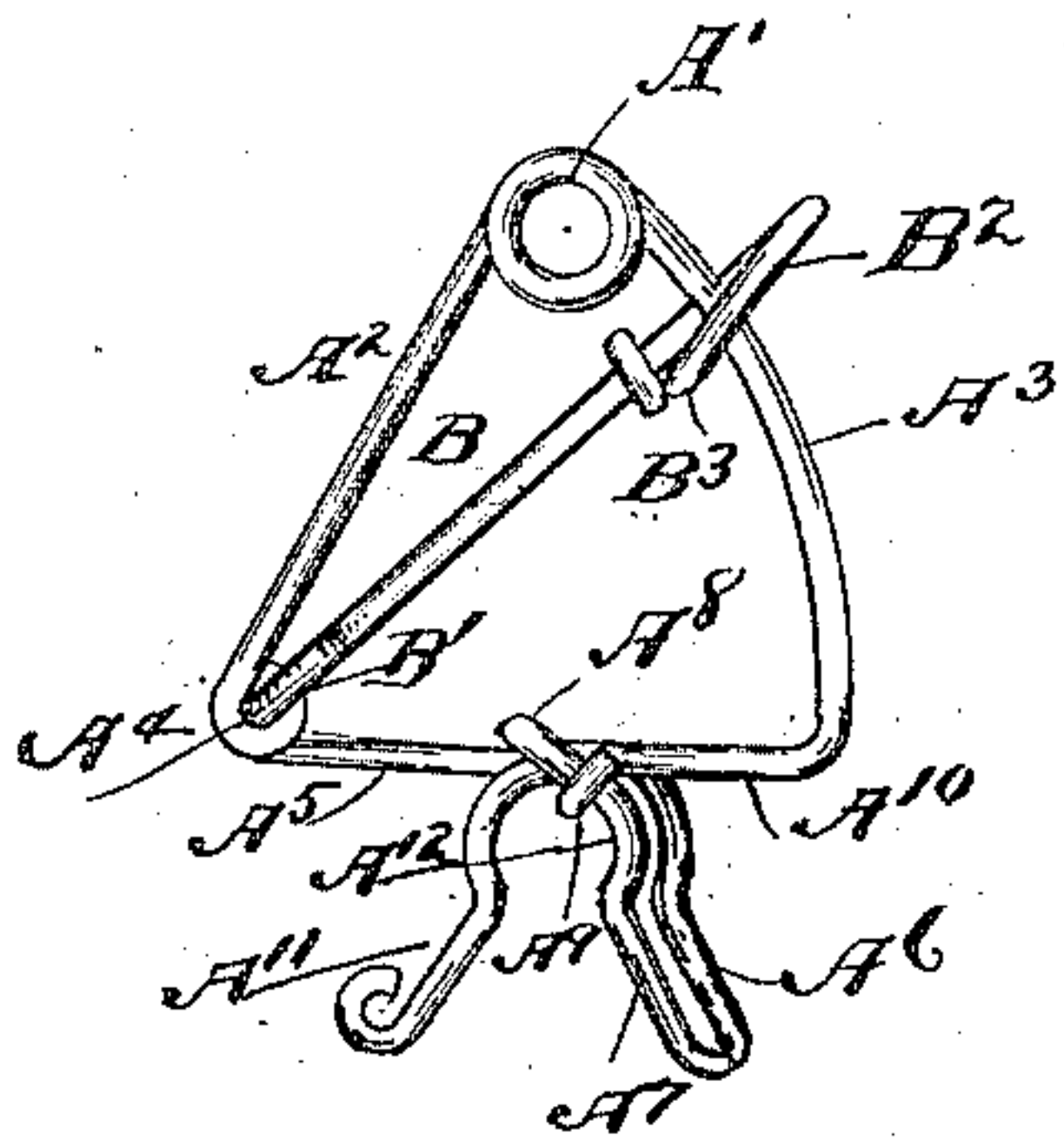


Fig. 1.

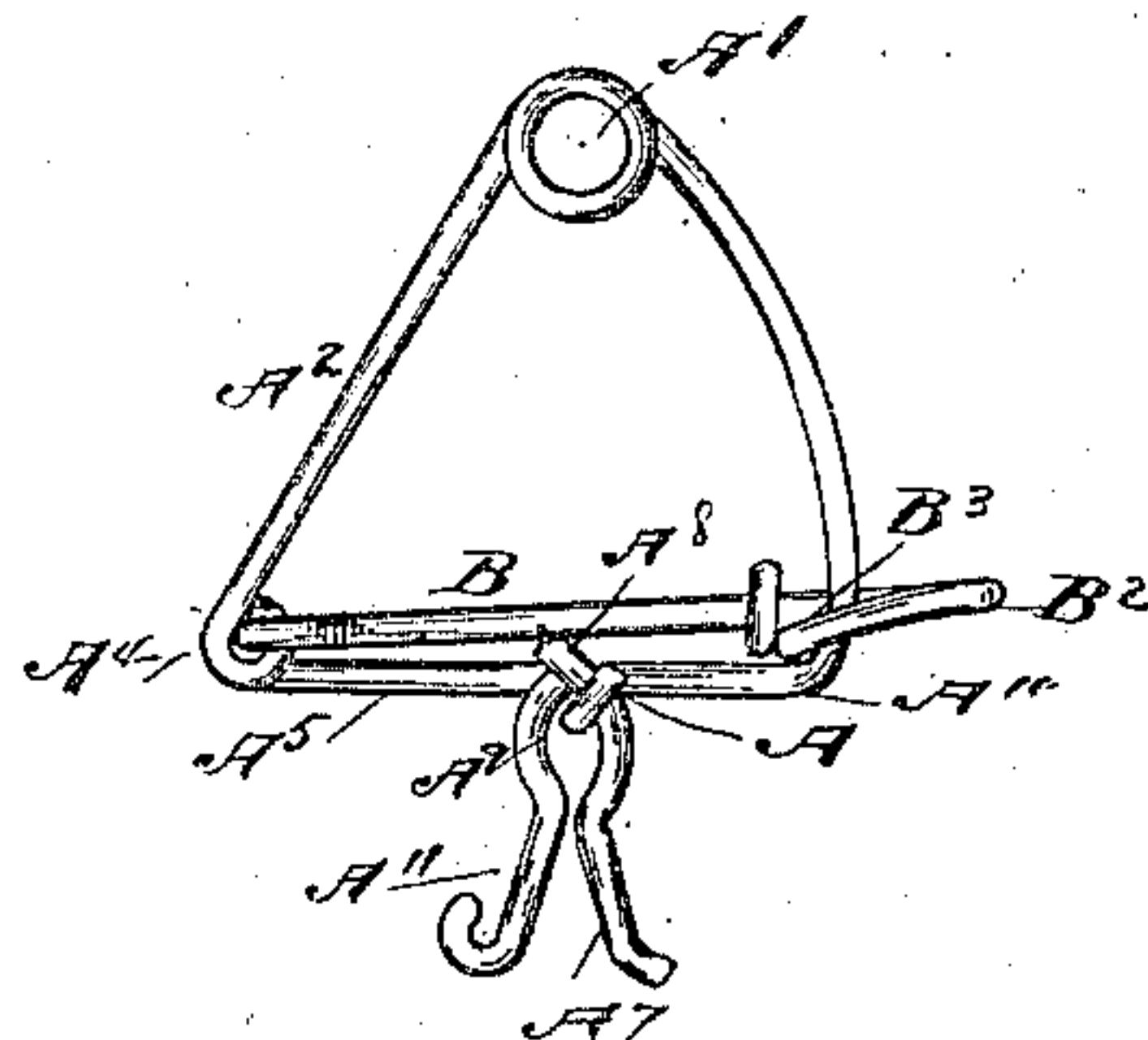


Fig. 2.

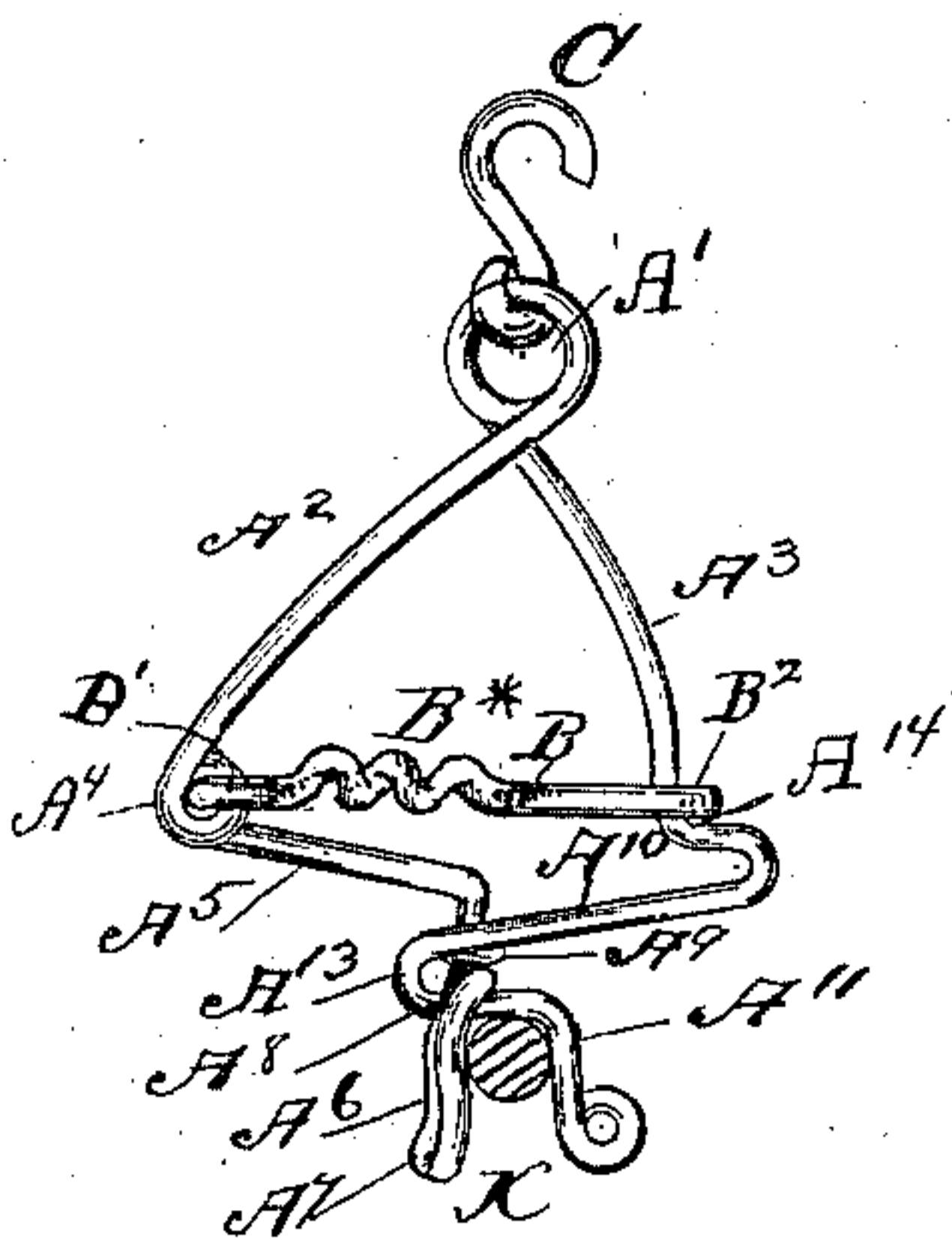


Fig. 3.

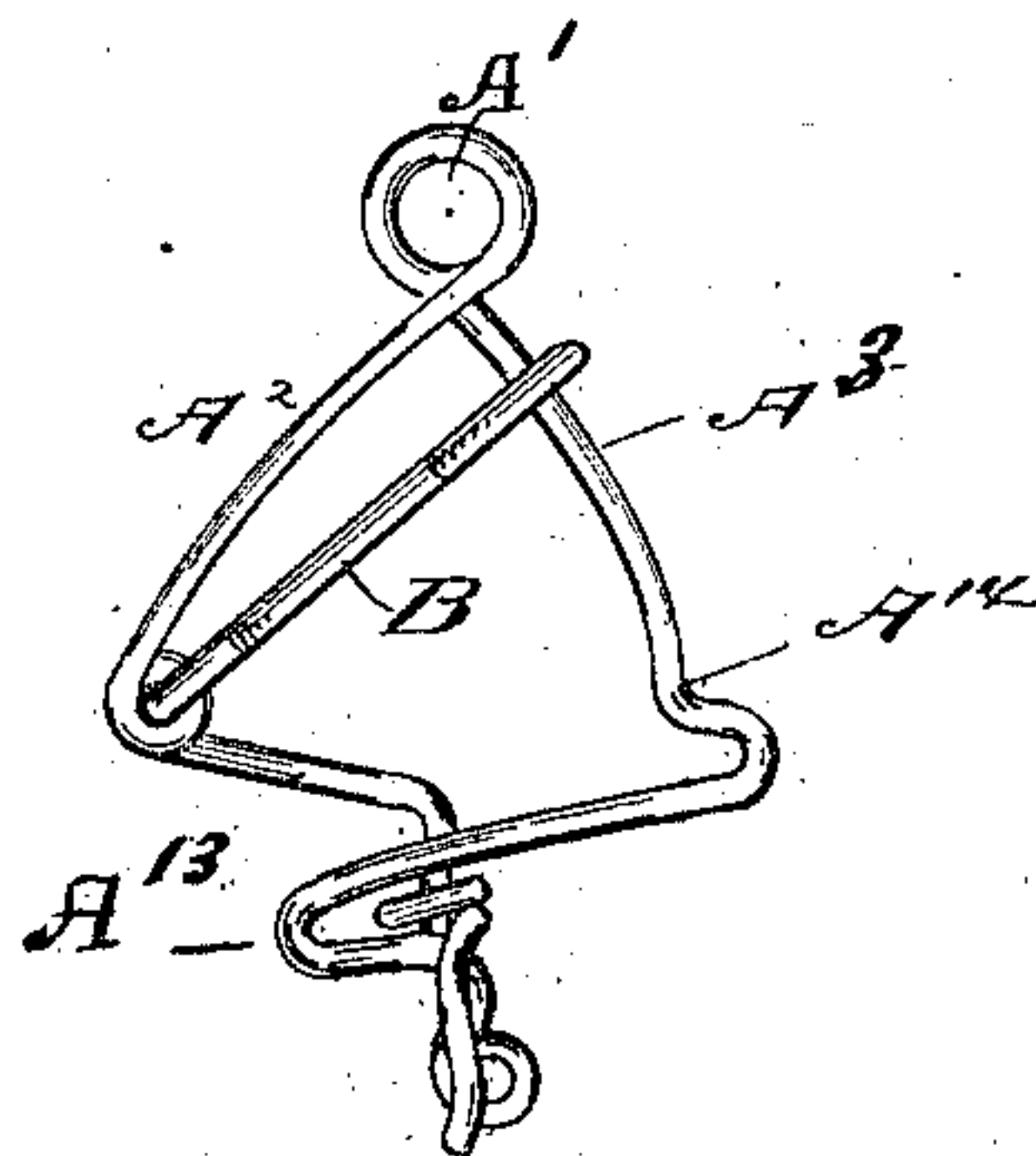


Fig. 4.

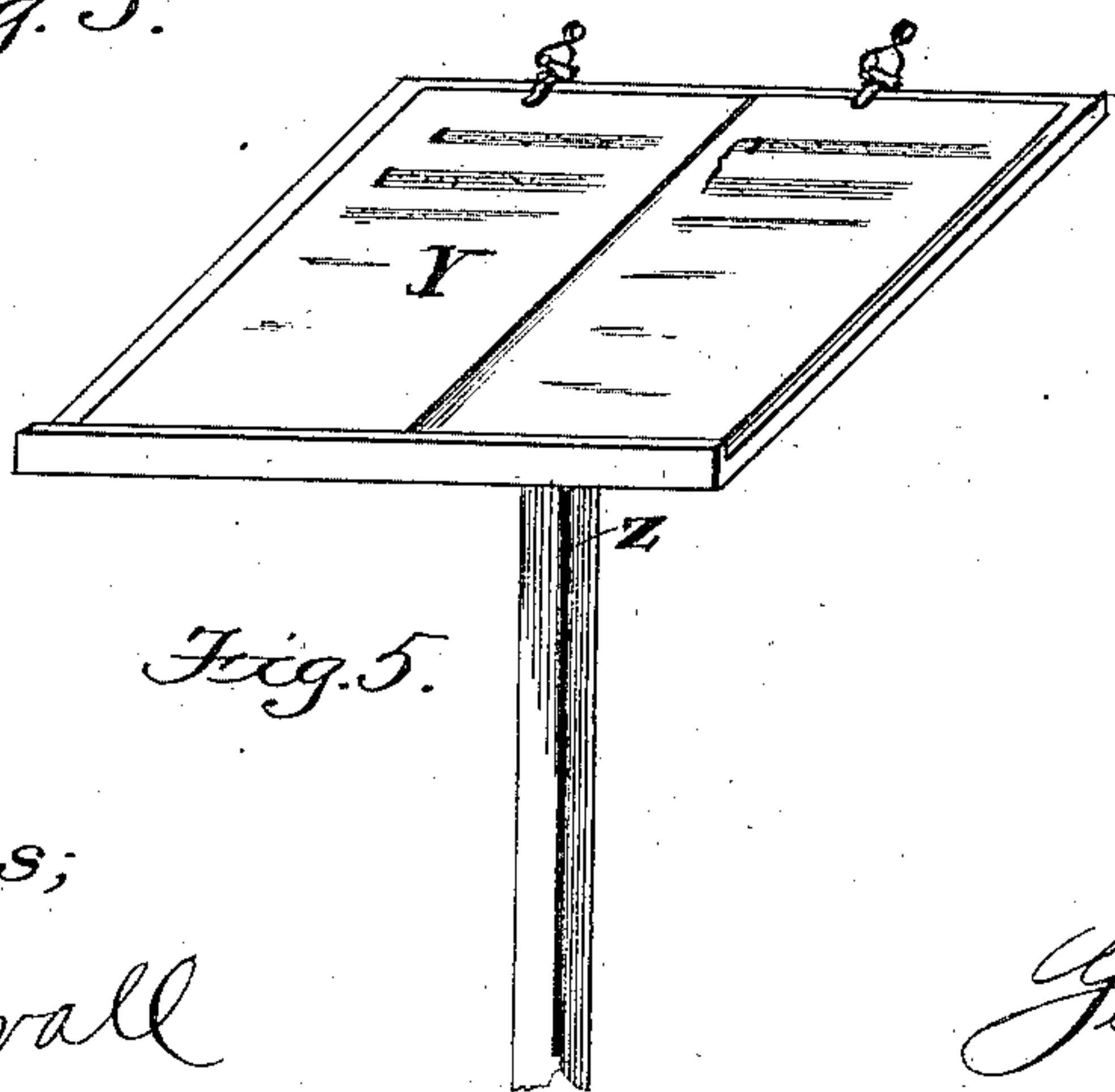


Fig. 5.

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UNITED STATES PATENT OFFICE.

GEORGE A. COLTON, OF SYRACUSE, NEW YORK.

CLASP.

SPECIFICATION forming part of Letters Patent No. 314,366, dated March 24, 1885.

Application filed August 4, 1884. (Model.)

To all whom it may concern:

Be it known that I, GEORGE A. COLTON, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Clasps, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to paper-clips, show-card clasps, or spring-clips for holding various articles—such as pencils, leaves of books, music-sheets, price-cards, and various articles of merchandise which are capable of being suspended in show-cases and show-windows, and for other uses—and it has particular reference to such devices which comprise spring-jaws and a suspension eye or ring, whereby suitable articles may be seized by the jaws, and when so seized may be suspended for exhibition; and the invention in this instance consists in certain features of construction hereinafter described, and specifically set forth in the claims.

Referring to the drawings, Figure 1 is a plan of a clasp constructed in accordance with my invention, and represented as open. Fig. 2 is a similar view of the same device closed, and locked in that position. Figs. 3 and 4 are plans of a modification of my invention, the former figure representing the clasp with an article between the jaws thereof, which are locked, and the latter representing the same unlocked, the jaws being closed. Fig. 5 illustrates one use of my clasp.

Like letters indicate like parts in all the figures.

The main object of my invention is to form a clasp of the class described, in which the resiliency of the material of which it is made shall not be relied on entirely for securing a firm hold upon articles held by the same.

Other objects and advantages will appear in the following description of its construction and use.

The clasp proper consists of a single piece of wire, which is bent at a desired point between its ends to form a coiled spring, A', and at either side of said spring branches A² A³, the latter one of which is curved on a circle the center of which is at the center of an eye,

A⁴, formed at the end of the branch A². Beyond the eye A⁴ the wire is extended inwardly in a straight line, as at A⁵, for a sufficient distance, and is then bent downwardly, as at A⁶, to form one of the jaws of the clasp. If desired, the wire may terminate at the lower end of said jaw, but in this instance I have shown it returned upwardly, as A⁷, to make a loop of the jaw, in order to give it a broader bearing-surface. At A⁸ the upward extension A⁷ is carried over the opposite jaw and over the branch A⁵, and is then returned under both and bent about itself, as at A⁹, forming an eye at the upper end of the jaw thus formed, through which the opposite jaw and the straight portion A⁵ pass. The branch A³ is also bent inwardly, as at A¹⁰, and thence downwardly, as at A¹¹. Each of the jaws is curved, as at A¹², to adapt them to hold cylindrical articles, while their lower portions are straight in order to adapt them to hold flat articles.

In the eye A⁴ is pivotally secured a locking-lever, B, in this instance formed of wire, and which may be coiled, as at B*, to form a spring, though it also may be made of other forms of metal, it having an eye, B', at one end to embrace the eye A⁴ and a loop, B², at the other end to embrace the branch A³, whether having a depression, A¹⁴, or not, the rear wall, B³, of the loop being such a distance from the eye B' that it will force the jaws firmly against any article placed within them, so as to retain said article firmly within the grasp of the jaws.

I am aware that there have been constructed nippers and other grasping and holding devices which have been provided with a sliding ring or loop, the function of which is to force and hold together the jaws of such devices, which have been constructed to separate by reason of resiliency in themselves or by reason of springs applied thereto; but in this instance it will be noticed that the tendency of the spring A is to draw the jaws together or close the same, so that in applying this clasp to any article the branches A² A³ are compressed by the hand or the finger and thumb toward each other, when they are allowed to close by the action of the spring A, and then, by forcing the lever B downwardly

to the position shown in Fig. 2, the jaws are made to firmly clasp the article, as hereinbefore stated. Take, for example, the object X, Fig. 3. which may be a pencil, a clothes-line, a rod in a show-window, or a bar in a clothes-rack, and the object Y in Fig. 5, which represents sheet-music upon a music-stand, Z, and it will be seen that by pressing the branches $A^2 A^3$ toward each other, or as the lower ends of the jaws are curved outwardly by pressing the same against the edge of some article, said jaws are opened and the article is secured to the rod, bar, cord, or stand. The resiliency of the jaws holds the clasp and the article in position while the locking-lever is being forced downwardly to securely lock the clasp to the article.

In the modification shown in Figs. 3 and 4 the locking-lever, while pivoted in the eye A^4 , as in the other figures, and while embracing the branch A^4 , as before stated, is intended to lock by means of the contact of the outer end of the loop B^2 formed therein instead of the inner end—that is to say, instead of acting as a spreader to force the jaws together, it is intended to perform the same function by pulling the branches toward each other, the jaw A^{11} being recurved, as at A^{13} , in order to adapt it to advance toward the jaw A^6 by means of a pulling action of the lever B. In this instance, also, the bends $A^8 A^9$ are simply made to cause the branch A^7 to be joined to the branch A^6 of the jaw, which they form, and does not embrace the branches $A^{10} A^5$, as in the construction above described. In this modification the branch A^3 has a slight depression, A^{14} , which serves to hold the lever B from accidental displacement from a locked position.

To apply this modification to an article such as a show-card, wire, rod, or rope, the jaws may be separated by hand or by introducing the article at the extreme points of the jaws, which are curved outwardly to facilitate the entrance of the article, and when fairly within the jaws the lever B is brought down until it springs into the notch or groove A^{14} , which firmly locks the clasp in position.

I do not wish to be understood as limiting myself to any particular use of the clasp herein shown, but reserve my right to apply it to any use to which it may be adapted by its construction and manner of operation.

The spring A serves as means for suspending the clasp, and, if desired, an additional suspension ring or hook, C, may be applied to the spring A for the same purpose.

By forming the locking-lever B as a coil at B^* , the tendency to “set” or take the resili-

ency out of the arms $A^2 A^3$ by securing the clasp to articles which are too large to be easily received between the jaws is substantially overcome, as the lever yields longitudinally and retains its normal length when strained and removed from strain, respectively, in the cases mentioned.

Having described my invention and its operation, what I claim is—

1. A clasp comprising a body portion made of a single piece of wire, and having an eye and jaws, and provided with a locking-lever pivoted in said eye and adapted to embrace an opposite branch of the body portion, substantially as specified.

2. A clasp comprising a body portion which is formed of a single piece of wire, so as to form a spring, an eye, and jaws, which are brought into contact by the said spring, and a yielding locking-lever pivoted in said eye and adapted to embrace one branch of said body portion having a depression, substantially as specified.

3. A clasp comprising a body portion formed of a single piece of wire, and having a spring, an eye, and jaws, and a locking-lever pivoted in said eye and constructed to spread the branches of the body portion, substantially as specified.

4. A clasp the main portion of which is formed of a single piece of wire, having a spring, A' , an eye, A^4 , and jaws $A^6 A^{11}$, in combination with a yielding or spring locking-lever, B, pivoted in the eye A^4 , and adapted to embrace a branch, A^3 , of the clasp, substantially as specified.

5. The body portion consisting of a single piece of wire bent to form the spring A, the substantially-straight branch A^2 , the eye A^4 , the straight branch A^5 , and the jaw $A^6 A^7$, the eye $A^8 A^9$, and the curved branch A^3 , the jaw A^{11} , said jaws being curved, as at A^{12} , in combination with a locking-lever, B, having the eye B' and the loop B^2 , substantially as shown and described.

6. In a clasp of the class described, a body portion bent, as at $A^{10} A^{11}$, to form one jaw, and bent, as at $A^5 A^6 A^7$, to form the opposite jaw, and bent, as at $A^8 A^9$, to form an eye embracing both jaws, to prevent them from separating laterally, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE A. COLTON.

Witnesses:

FREDERICK I. ALLEN,
FRANK B. KENNARD.