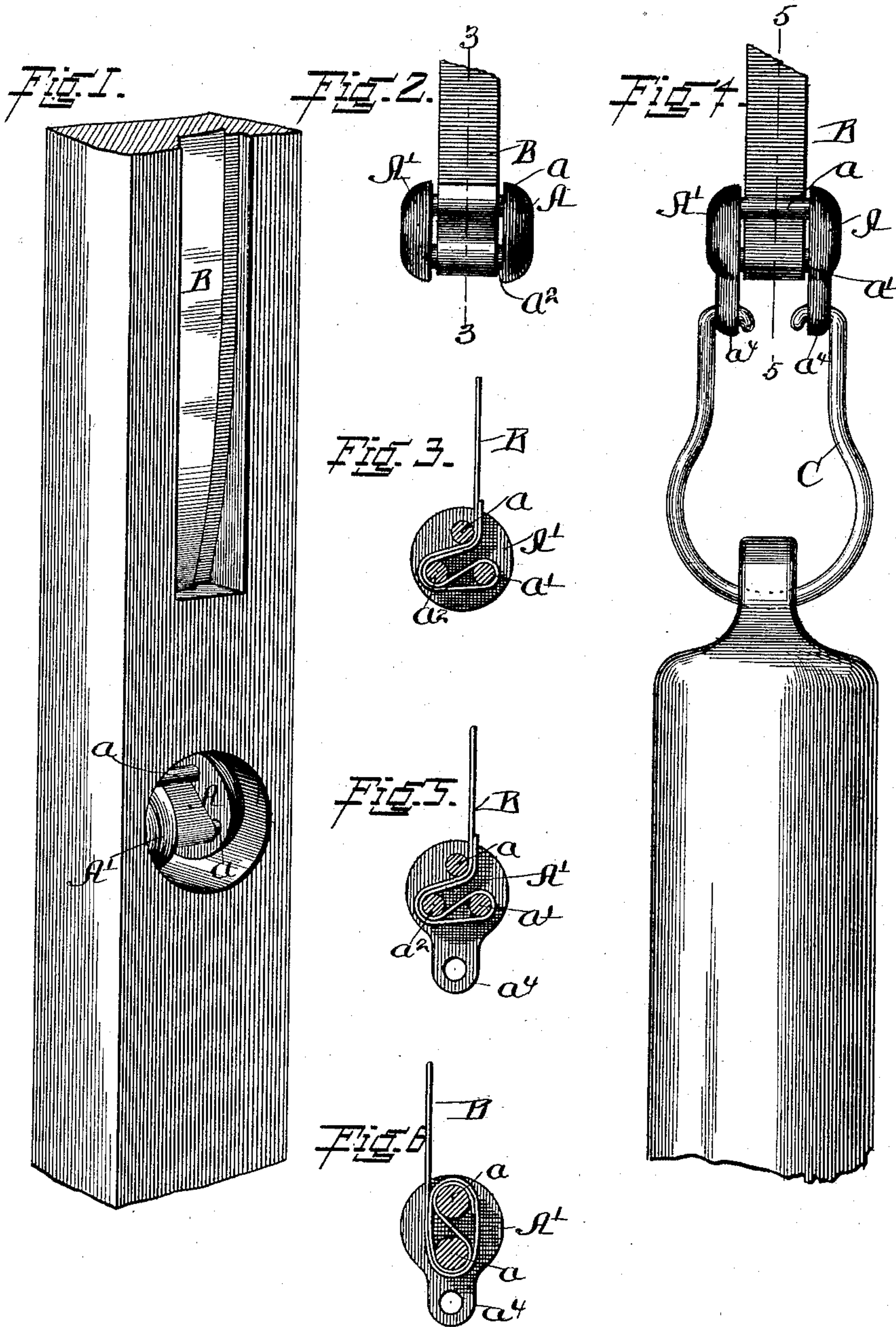


(No Model.)

G. C. GARDNER.
SASH CORD FASTENER.

No. 474,522.

Patented May 10, 1892.



Witnesses:

Charles O. Sheroy.
H. J. Ebbesen

Inventor:

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UNITED STATES PATENT OFFICE.

GEORGE C. GARDNER, OF HINSDALE, ILLINOIS.

SASH-CORD FASTENER.

SPECIFICATION forming part of Letters Patent No. 474,522, dated May 10, 1892.

Application filed June 15, 1891. Serial No. 396,212. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. GARDNER, a citizen of the United States of America, residing at Hinsdale, in the county of Du Page and State of Illinois, have invented certain new and useful Improvements in Sash-Balances, of which the following is a specification.

My invention relates to a device for securing a metal ribbon to a window-sash or to a balancing-weight to enable the ribbon to perform the function of the more common chain or cord.

The purpose of the invention is to produce a fastening wherein the ribbon may be secured to either sash or weight by taking advantage of its stiffness and also of the friction that can be obtained by properly winding the ribbon about two or more pins united by proper side pieces to form a block suitable for fastening to the sash or weight.

To such end my invention consists, broadly, in the combination, with the end block containing two pins, of a metal ribbon looped about one of the pins and wound about the other in such a manner that the free end of the ribbon shall lie between the second pin and the supporting-strand which carries the block. There are various ways in which this can be accomplished, the simplest of which is illustrated in the drawings presented herewith, in which—

Figure 1 is a perspective of the edge of a window-sash with my preferred fastening applied thereto. Fig. 2 is a side view of said fastening; Fig. 3, a section in line 3 3 of Fig. 2; Fig. 4, a side view of the fastening adapted for attachment to the weight and showing the latter supported therefrom; and Fig. 5 is a section of the fastening shown in Fig. 4, taken in line 5 5 of said figure.

The block, as here shown, consists of two rounded heads A A', connected by three cross-pins a a' a^2 . The ribbon B is shown as first looped about the pin a^3 with the short or free end inside, then carried around the pin a' , so that said short end shall lie next to the pin, and then inserted between the pins a a' . To do this the ribbon must be more or less bent, and when the block is pulled downward upon said ribbon the draft of the supporting-strand presses the inner strand against the pin a' and effectually prevents it from slipping, being aided by the stiffness of the ribbon itself.

While I prefer to use the pin a , said pin is not absolutely essential, inasmuch as its main purpose is to keep the block in proper position to bring the draft of the ribbon well around the pin a' . This can be accomplished, however, by any other means—as, for instance, in the case of the fastening for the weight end shown in Figs. 4 and 5. The heads A A' have depending ears a^4 , to which a wire bail C is secured. The draft or pull of the weight upon these ears would keep the block in position without the use of the pin a . With said pin, however, another bend can be made in the ribbon, which is desirable, inasmuch as each additional bend increases the security of the fastening.

The three pins in the block here shown are arranged in the form of a triangle to enable the ribbon to be easily applied. Such arrangement is, however, not at all material to my invention, broadly considered, as they might be arranged in any conceivable position and the ribbon still wound according to the general principle above stated. It may sometimes be found convenient to use even more than three pins, although that will probably be unnecessary unless in hanging exceedingly heavy sashes or doors.

I claim as new and desire to secure by Letters Patent—

1. An end fastening for metal ribbons, consisting of a block provided with two or more substantially parallel pins and a metal ribbon looped about one of said pins and wound about the other or others in such a manner that the free or short end of the ribbon shall lie between the main or supporting strand and one of the pins which sustains the draft of said supporting-strand, substantially as described.

2. An end fastening for metal ribbons, consisting of a block having the heads A A', depending ears a^4 , pins a a' a^2 , and a metal ribbon looped about the pin a^2 and wound about the pin a' and back between that and the pin a in such a manner that the short end of the ribbon shall lie between the main strand and the pin a' , substantially as described.

GEORGE C. GARDNER.

Witnesses:

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