No. 858,555. PATENTED JULY 2, 1907.

H. M. ALTICK.

SASH CORD FASTENER.

APPLICATION FILED FEB. 16, 1906.

Fig. 1.

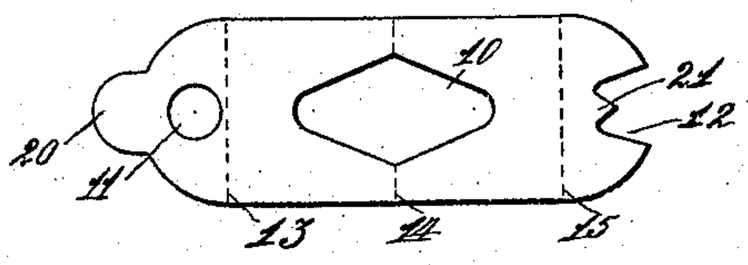


Fig. 2.

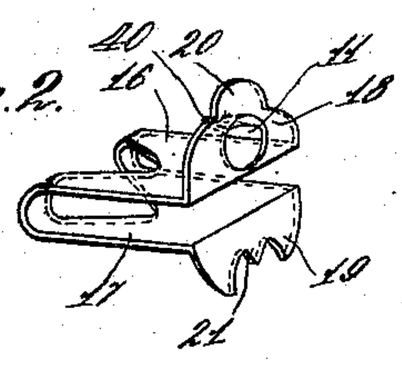
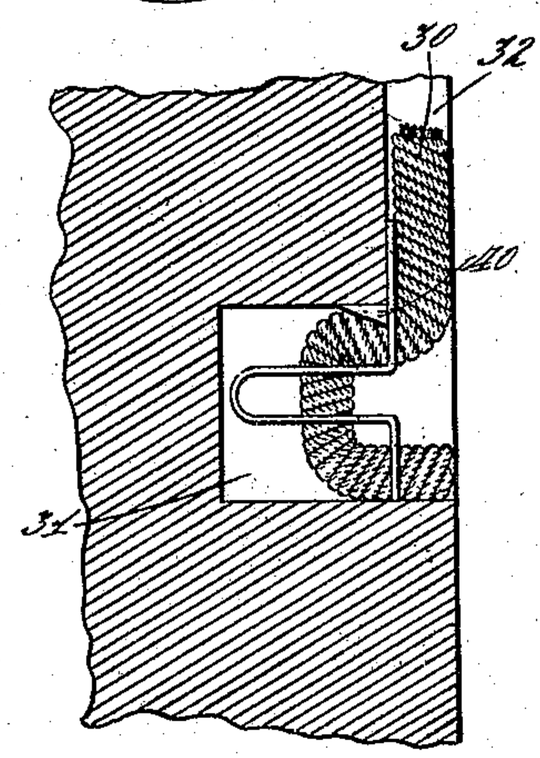


Fig. 3.



Witnesses
C. F. Smith
Earl W. Beust.

Inventor
Harry M. Altick
by J. B. Maynard
Attorney

UNITED STATES PATENT OFFICE.

HARRY M. ALTICK, OF DAYTON, OHIO.

SASH-CORD FASTENER.

No. 858,555. Specification of Letters Patent. Patented July 2, 1907.

Application filed February 16, 1906. Serial No. 301,414.

To all whom it may concern:

Be it known that I, HARRY M. ALTICK, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Sash-Cord Fasteners, of which the following is a specification.

This invention relates to improvements in sash-cord fasteners, in which a detachable device is utilized to effect a binding of the cord in such manner as to avoid the necessity for tying a knot to fasten the cord to the sash; and it is among the objects of the invention to devise such an improved form of fastener as will be simple in construction, economical to manufacture, easy of manipulation, and absolutely effective to produce the results desired of such fasteners.

With these and incidental objects in view, the invention consists in certain novel features of construction and combinations of parts, the essential elements of which are set forth in appended claims and a preferred form of embodiment of which is hereinafter specifically described with reference to the drawings which accompany and form part of this specification.

Of said drawings: Figure 1 represents the blank cut and punched with the desired apertures before bending into the final shape which the fastener assumes. Fig. 2 represents a perspective view of the fastener bent into its proper shape. Fig. 3 represents a sectional view of the sash with the fastener therein binding the cord shown in full.

The blank sheet of thin metal is first punched out as shown in Fig. 1, with the diamond shaped aperture 10. the circular aperture 11 and the recess 12. The metal is then bent along the dotted lines 13, 14 and 15 so as to shape the fastener into the form shown in Fig. 2. In such shape, the fastener comprises a main body portion consisting of two sections 16 and 17 substantially parallel to each other, with an upper wing 18 bent at right angles to the section 16 and containing the aperture 11, and with a lower wing 19 at right angles to the section 17, the wing 19 containing the recess 12. Thus the diamond shaped recess 10 now makes a "V" shaped aperture for these two parallel sections 16 and 17. The wing 18 also has an extension 20 for the purpose to be described, and the aperture 12 may be formed with one or more teeth 21 or with a serrated edge for the purpose of better gripping the rope as will presently be set forth.

In applying the fastener to the sash, the cord 30 is led through the aperture 11, then is bent around the "V" shaped opening 10 as shown in Fig. 3, and then again bent to appear through the recess 12. The body portion of the fastener and the bent portion of the cord are then seated within the bore 31 of the sash while the cord extends upward along the usual groove 32 also formed in the sash. The extension 20 also extends along the groove and rests against the inner wall of the groove with the cord bearing against the same. In such condition the binding effect on the cord is such that the cord cannot pull free from the fastener and the fastener remains firmly seated in the bore 31 and no knot is necessary at the lower extremity of the cord, while at the same time the cord can readily be unfastened when desired by the removal of the fastener from its seat within the bore. There being two of these "V" shaped apertures 10, one for each of the sections 16 and 17, this gives a double wedging effect on the cord when the cord is under tension and this increases the fastening capacity of the device.

The fastener being made of metal, the bending backward upon themselves of the two sections 16 and 17 of the main body portion, with the intervening space between them, produces a slight spring condition, whereby the spreading of the spring tends to force the cord against the walls of the bore 31 and thus aid in securing the necessary binding effect, and moreover, this spring makes the fastener adjustable to different sized holes in the sash, adaptable to different sizes of sash cords, the spring section intervening between the bent portions of the cord.

The extension 20 projecting up into the groove 32 and resting against the inner wall thereof, aids in keeping the fastener in proper place and in preventing undue tilting of the fastener, the cord when under tension exerting pressure against the extension 20.

If desired, the aperture 11 may have projecting from it rearwardly one or more teeth 40, preferably punched out directly from the metal when the aperture is formed, these teeth serving to assist in preventing the cord from slipping.

It will be apparent that the shape and nature of the various apertures and recesses, and the general contour of the fastener may be varied in a number of respects without departing from the spirit of the invention.

The precise construction set forth herein represents only the preferred form of embodiment of the invention and it is not desired to limit the invention thereto, but to include other forms of embodiment coming within the scope of the claims which follow.

It is to be understood that the cord for the sash may be either an ordinary form of rope or may be a chain such as is sometimes used for such purposes, and in the use of a chain, the aforesaid teeth 21 and 40 will be useful in engaging the links of the chain to increase the holding effect.

It may also be added that the combined size of the wings 18 and 19 is preferably such as to approximately fill up the entire bore 31 so that the edges of the wings will engage the walls of the bore and the friction will

serve to hold the fastener more securely in its seat within the bore, the aforementioned spring action also aiding in this result.

What is claimed is as follows:

1. A sash cord fastener comprising a main body portion recessed to receive the cord, with two wings extending therefrom substantially at right angles to the body portion, one of the wings being apertured to permit the insertion of the cord therethrough and the other wing having a recess to engage the cord.

2. A sash cord fastener comprising a main body portion recessed to receive the cord, with two wings extending therefrom substantially at right angles to the body portion, one of the wings being apertured to permit the insertion of the cord therethrough and the other wing having a recess to engage the cord, said first mentioned wing also having an extension formed thereon to fit into the grooved portion of the containing sash.

3. A sash cord fastener comprising a spring compressible main body portion with provisions whereby the cord may be looped around said compressible portion, to inclose the latter when it is inserted within the bore of the containing sash, the two strands of the loop engaging the walls of said bore, and the free ends of the cord being outside of the bore.

4. A sash cord fastener comprising a spring-compressible main body portion suitably recessed to permit the looping of the cord around said compressible body portion, with extensions projecting from the body portion for engaging the outer ends of the loop.

5. A sash cord fastener comprising a single piece of metal bent into a main body portion consisting of two substantially parallel spring sections, with a wing extending from each of said sections and substantially at right angles thereto, the first of said wings being apertured to permit the insertion of the cord therethrough and the other wing having a recess to engage the cord.

6. A sash cord fastener comprising a single piece of metal bent into a main body portion consisting of two substantially parallel spring sections, each of said sections being formed with a wedge-shaped recess to receive and bind the cord; with a wing extending from each of said sections and substantially at right angles thereto, the first of said wings being apertured to permit the insertion of the cord therethrough and the other wing having a recess to engage the cord.

7. A sash cord fastener comprising a single piece of metal bent into a main body portion consisting of two substantially parallel spring sections, each of said sections being formed with a wedge-shaped recess to receive and bind the cord; with a wing extending from each of said sections and substantially at right angles thereto, the first of said wings being apertured to permit the insertion of the cord therethrough and the other wing having a recess to engage the cord; the first wing also having an extension formed thereon to fit into the grooved portion of the containing sash.

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

HARRY M. ALTICK.

Witnesses:
J. B. HAYWARD,
PEARL N. SIGLER.