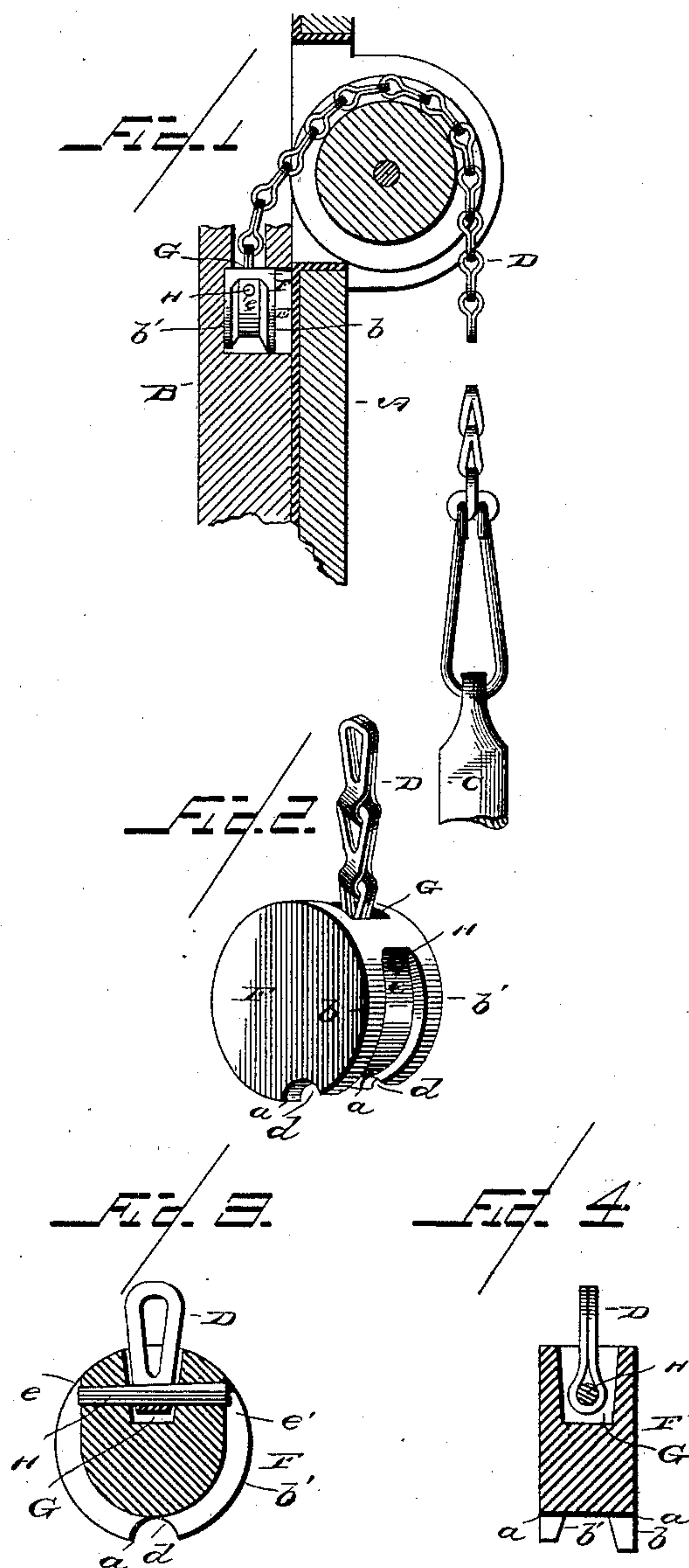


(No Model.)

T. MORTON.
SASH CORD FASTENER.

No. 341,496.

Patented May 11, 1886.



Witnesses

Edw. G. Siggers.

Inventor

Thomas Morton.
By his Attorneys.
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

THOMAS MORTON, OF NEW YORK, N. Y.

SASH-CORD FASTENER.

SPECIFICATION forming part of Letters Patent No. 341,496, dated May 11, 1886.

Application filed December 11, 1885. Serial No. 185,401. (No model.)

To all whom it may concern:

Be it known that I, THOMAS MORTON, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful Improvement in Sash Chains or Cord Fasteners, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to sash chains or cord fasteners of that class of devices which are employed to connect the ends of sash chains or cords to window-sashes.

The special object of the present invention is to improve on the construction shown in Letters Patent to Day, No. 238,363, dated March 1, 1881. In this patent is illustrated a U-shaped bracket composed of two disk or flat faces joined by a bridge, the latter being perforated for the passage of one end of the sash-chain, which is secured in place by an open ring located between the two faces of the bracket. A circular recess is bored in one side of the window-sash at the termination of the chain-groove to receive this bracket, the bridge of the latter resting on the curved upper wall of this recess, and as said bridge is flat it cannot have a firm solid bearing, but will turn within the recess. Again, the open ring employed to connect the sash-chain to the bracket has not a firm bearing in the perforation of the latter, but will be caused to sway or move laterally from side to side within the bracket as the sash is raised and lowered. To avoid these disadvantages, the present invention consists in providing a solid cast-iron or hard wood block having an opening at the top for the reception of one end of the chain, and perforated on each side of this opening for the passage of a small pin to secure the chain to the block, the latter being shaped to fit the recess in the sash, all as hereinafter set forth and claimed.

In the accompanying drawings, Figure 1 is a sectional view of a portion of a sash and window frame, showing my improved block or bracket for connecting the end of the sash-chain to the sash. Fig. 2 is a detail perspective view of the block with a portion of the chain. Fig. 3 is a vertical longitudinal section of the same. Fig. 4 is a transverse section.

Like letters are used to indicate corresponding parts in the several figures.

Referring to the drawings, A designates a portion of an ordinary window-frame, and B a corresponding portion of the sash. The window-frame is provided with the usual weight-box, to receive the weight C and the pulley over which the chain D passes to connect with the weight.

For purposes of illustration only I have shown the particular form of weight-securing loop and clip, described and claimed in Letters Patent No. 315,533, granted to me April 15, 1885, as a means of connection between the chain and the weight.

The sash B is provided with the usual chain-groove in the sides at the top, at the lower termination of which groove is a recess, E. (usually circular in form,) for the reception of the block, bracket, or fastener F. The latter is preferably constructed of cast-iron in one solid piece, with an opening, G, in the top to receive the last link of the chain D. The opening G is preferably smaller at the bottom or inner end than at the top or outer end, to correspond with the shape of the chain-link. The periphery of the block F is partially grooved along its central line, as at *a*, beginning on each side of the top and extending down the sides and around the bottom, leaving annular walls, rims, or flanges *b b'*, which are flat on their outer faces and inclined or beveled on their inner face. The wall *b'*, which is the inner one in use, is smaller in diameter than the other wall, *b*, so as to allow the ready withdrawal of the block. Notches *d d* are provided in the walls *b b'* at the bottom and diametrically opposite each other. In withdrawing, a short pin or other suitable device is inserted through the notches to catch the block, and thus facilitate withdrawing the latter.

The top of the block is left round, so as to neatly fit the inner rounded top surface of the recess E and have a firm solid bearing therein, which will effectually guard against the moving of the block or fastener F.

The sides of the block, on each side of the opening G, are perforated at *e e'*, for the passage of a small pin or bolt, H, which passes through the last link, I, of the chain D, and has its ends received in the perforations *e e'*. One end of the pin or bolt H is larger in diameter

than the other end, and one of the perforations *e e'* is made correspondingly larger than the other, to provide for the particular construction of the pin or bolt. By this arrangement, when the latter is driven into the block, it cannot possibly become detached, but will bind itself securely from all possible displacement.

The advantages of my improved block or fastener can be readily seen. Being constructed usually of cast-iron, they can be made much more cheaply than if they were stamped out of sheet metal and bent into shape, as in the case of the bracket-fasteners now in common use. They may also be constructed of hard wood with profit both to the manufacturer and purchaser.

It will be seen that the bearing of the block is solid upon the circle of the recess *G* in the sash, so that the block cannot turn in the recess or move to one side to catch against the window-frame and scratch the latter, or impede the free movement of the parts. The particular construction of the block causes it to fit the recess neatly and overcome all tendency of the block being displaced. Again, the pin or bolt *H* will be much stronger than the loop or ring shown in the Day patent referred to, and cannot possibly slip out of position, being held fast in the block. Furthermore, the pin will not move within the block or bracket and cause the shifting of the same within the recess of the sash aforesaid. It will also be observed that I employ no center hole in the block or bracket for the reception of a screw to hold it from moving, as in the Day patent, for in my construction the block will neatly fit and hold itself within the recess, and does not require any supplemental means.

The pin or bolt *H* may be withdrawn as desired for the purpose of changing the attachment, or when it is desired to take out the window for washing, &c.

When it is desired to employ the block or fastener where a sash or a cord is used, the block may be constructed of hard wood, and the cord provided with a loop to receive the pin *H*.

The annular groove in the sides of the block is to give a flat surface in drilling the hole for the pin or bolt. It also saves metal, and at the same time provides the two bearing edges or walls *b b'*, which will serve to hold the block in place within the recess or groove of the sash.

Having thus described my invention, I claim—

1. A sash chain or cord fastener composed of a solid block having its upper face or periphery rounded and the sides and bottom grooved, to provide flanges or walls, and notches *d*, the top of the block being provided with a small opening to receive the extreme end of the sash chain or cord, and a pin passed transversely across the opening to hold the chain or cord therein, as set forth.

2. A sash-chain fastener composed of a solid block having its upper face or periphery rounded to neatly and closely fit the mouth or outlet of the chain-groove and a small opening made in the top of the block to receive one end of the last link of the chain, perforations provided in the sides of the block to intersect with the said top opening, and a horizontal pin passed transversely through the perforations and opening in the block and through the end of the chain-link, the ends of the pin being firmly seated from disengagement, as set forth.

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

THOMAS MORTON.

Witnesses:

E. P. BROOK,
JOS. SHERIDAN.