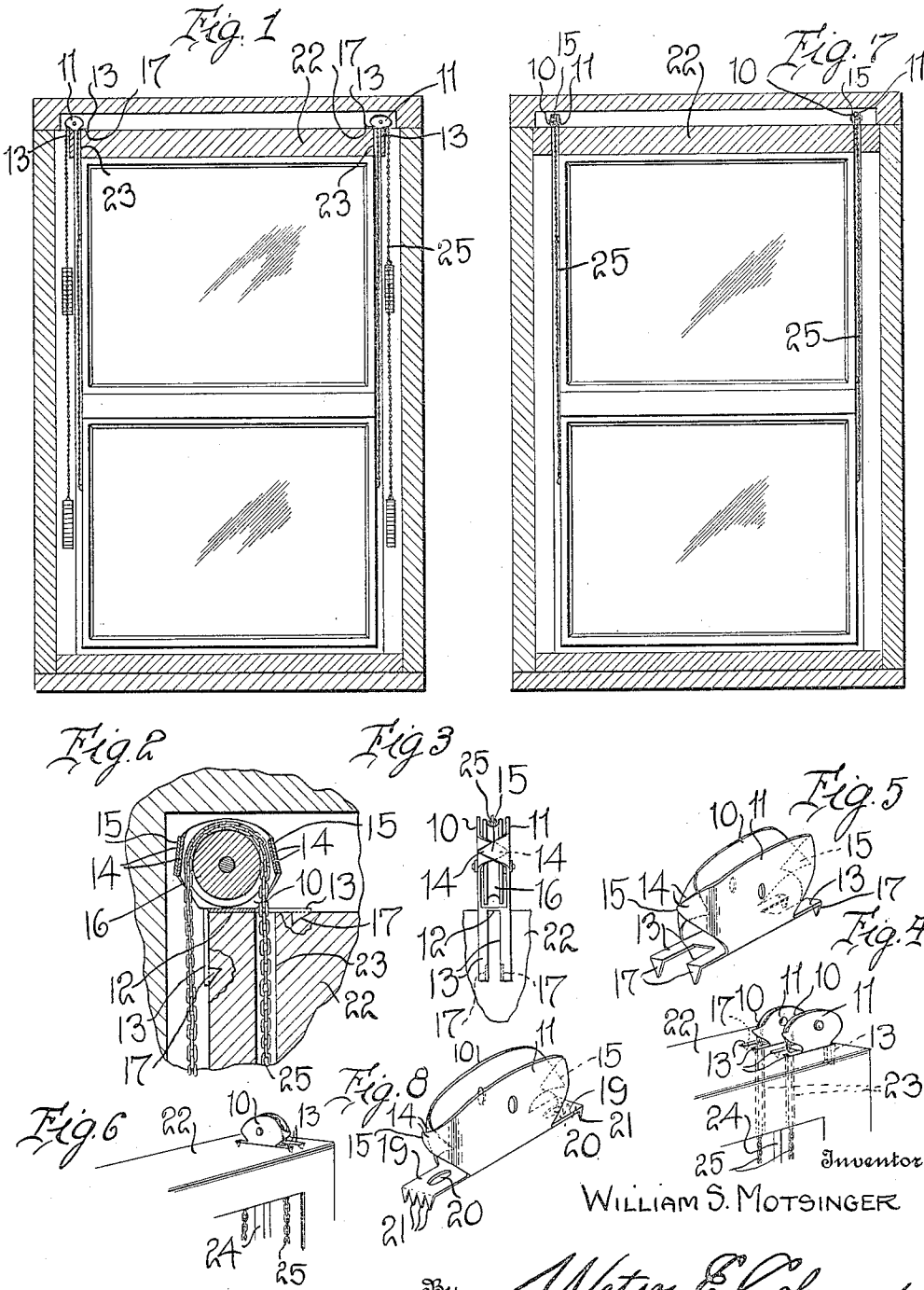


W. S. MOTSINGER.
PULLEY MOUNTING.
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To all whom it may concern:

Be it known that I, WILLIAM SHERMAN MOTSINGER, a citizen of the United States, residing at Crab Orchard, in the county of Williamson and State of Illinois, have invented certain new and useful Improvements in Pulley-Mountings, of which the following is a specification, reference being had to the accompanying drawings.

10 My present invention relates broadly to new and useful improvements in windows and has more especial reference to the provision of an improved form of pulley mounting.

15 One object of the invention is to provide a pulley mounting formed from a single blank of sheet metal which is cut and shaped to form a pair of bracket plates and wherein may be journaled the pulley, a plurality of fastening members which may be engaged with and driven in the window casing, and chain guards which are positioned to prevent the jumping of the sash chains from the pulley.

20 A further object is to construct a pulley mounting which is designed with such regard to proportion, number and arrangement of parts that it may be cheaply manufactured, and will be durable and efficient in service.

25 The above, and other incidental objects of a similar nature, which will be hereinafter more specifically treated are accomplished by such means as are illustrated in the accompanying drawings, described in the following specification, and then more particularly pointed out in the claims which are appended hereto and form part of this application.

30 With reference to the drawings, wherein there has been illustrated the preferred embodiment of this invention, as it is reduced to practice, and throughout the several views of which similar reference numerals designate corresponding parts, Figure 1 is a vertical section taken through a window constructed in accordance with my invention; Fig. 2 is an enlarged fragmentary section similar to Fig. 1 and disclosing the manner in which the pulley is mounted upon the head board of the casing in the preferred form of the invention; Fig. 3 is an edge view of the pulley as it is applied in Fig. 2; Fig. 4 is a fragmentary perspective view of a corner of the head board of the casing, showing the pulleys

arranged thereon, as in Fig. 1; Fig. 5 is a detail perspective view of the preferred form of pulley mounting; Fig. 6 is a detail fragmentary perspective view of the corner of the head board, showing a single pulley applied thereto; Fig. 7 is a vertical section taken through the window casing, showing the pulleys applied to the head board thereof, as in Fig. 6; and Fig. 8 is a detail perspective view of the modified form of pulley mounting.

As disclosed in Figs. 2 and 3 of the accompanying drawings, the preferred form of pulley mounting is fashioned from a single blank of sheet metal which is cut to provide a pair of bracket plates 10 and 11, a connecting wall or base piece 12, and a pair of fastening strips 13 at each terminal of the base piece. The bracket plates are provided at their outer corners with the substantially triangular extensions 14 which are bent to extend at right angles from the plates on which they are formed. The adjacent extensions 14 are overlapped, as shown in Fig. 3, so that a pair of guard members is provided for the pulley journaled between the bracket plates. These guard members are, of course, spaced a sufficient distance from the pulley indicated at 16, to permit the sash chains to freely play thereover. As will be readily observed upon reference to Fig. 2, the guard members constituted by the overlapping extensions of the bracket plates will prevent the sash chain from jumping off the pulley. The individual strips of each pair 13 extend in parallel spaced relation to each other and longitudinally from the base piece. These members are provided at their outer terminals with the triangular spurs 17 which extend at right angles to the members 13 and are adapted to be driven into the window casing in a manner to be hereinafter explained. Since the preferred form of pulley mounting is adapted to be applied to the head board of the window casing in longitudinal position thereon, the spurs 17 are formed on the inner longitudinal edges of the members 13, so that they (the spurs), may be driven into the casing to extend with the grain of the window casing head board and side board, as will be later explained.

In the modified form of the invention, shown in Fig. 5, the pulley mounting is constructed in the same manner as is the preferred form, except that the spurs 18 are

formed on the ends of the members 13 and extend, not only at right angles to the plane of the members 13, but also at right angles to the longitudinal edges thereof.

5 The modified form of pulley mounting shown in Fig. 8 and fastening strips, indicated at 19, are solid throughout, except for sash chain receiving openings, indicated at 20. On the ends of these members 19 are
10 formed the fastening spurs 21 which extend at right angles to the plane of the base piece and members 19, and at right angles to the longitudinal edges thereof.

The actual construction of the various
15 forms of pulley mountings being thus disclosed, it now remains to describe the manner in which they are applied to the window casing for the reception of the sash chains. In this connection, reference will be had to
20 Figs. 1 and 4, in which the application of the preferred form of mounting is disclosed. As shown in these figures, the head board 22 of the window casing is provided with transversely spaced and alined bores 23 which
25 are disposed on opposite sides of the guide strips 24. Through one of these openings, the chain from the lower sash is adapted to pass, while through the other opening the chain of the upper sash is adapted to pass.
30 A pair of pulleys is mounted at each end of the head board of the window casing.

As disclosed in Fig. 4, the pulleys of each pair are transversely spaced and disposed to receive the two chains passing through the
35 pair of openings at the end of the head board. The pulleys are disposed in planes parallel to the planes of the sashes, being therefore, longitudinally disposed with respect to the head board of the casing.

40 It will be observed from the foregoing description, that when the pulley mountings are employed in connection with window sashes provided with weights, that a pair of the pulleys is provided for each end of the head board of the casing. The fastening
45 members make possible the easy and ready application of my pulley mountings since it is not necessary, as in the ordinary mounting to provide screws. It is only necessary to
50 strike the spurs with a hammer or similar tool.

When it is desired that the window sashes be connected by common sash chains or cords, so that the two window sashes will counter-
55 balance each other, whereby they may be disposed in adjusted position without the use of weights, the modified form of mounting shown in Fig. 5 is employed. As will be seen upon reference to Fig. 8 this modified pulley mounting is disposed trans-
60 versely with respect to the head board so that a sash chain, indicated at 25 may be attached to the lower sash, passed through

one bore 23, then over the pulley and down through the other bore 23 to be fastened to
65 the other sash. The spurs of the fastening strips are driven into the head board and, being disposed as they are, at right angles to the longitudinal edges of the fastening
70 strips, they extend with the grain of the wood, instead of traversing the same.

In reduction to practice, it has been found that the form of this invention illustrated in the drawings and referred to in the above description as the preferred embodiment is
75 the most efficient and practical; yet realizing that the conditions concurrent with the adoption of this device will necessarily vary, it is desirable to emphasize the fact that various minor changes in the details of con-
80 struction, proportion and arrangement of parts may be resorted to, when required, without sacrificing any of the advantages of this invention, as defined by the appended
85 claims.

What is claimed is:—

1. A pulley including a base member, a pair of bracket plates rising therefrom in parallel spaced relation to each other, ex-
90 tensions formed on the corners of the bracket plates, the corresponding extensions of the plates being overlapped, providing guards at each side of the mounting, a pulley journaled between the plates, and fast-
95 ening members extending longitudinally from the base.

2. A pulley mounting including a base member, a pair of bracket plates rising therefrom in parallel spaced relation to each other, said plates being adapted to receive
100 between them a pulley wheel, there being substantially triangular extensions formed on the corners of each bracket plate, the corresponding extensions of the plates being overlapped, forming guard members at each
105 side of the mounting, fastening members extending longitudinally from the base member, and spurs extending at right angles to the plane of the fastening members, said spurs being adapted to be embedded in the
110 bracket to which the pulley is applied.

3. A pulley mounting including a base plate, a pair of bracket plates rising there-
115 from in parallel spaced relation to each other, fastening members extending longitudinally from the base member, and spurs formed on the inner longitudinal edges of the fastening members and disposed at right angles to the fastening members.

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

WILLIAM SHERMAN MOTSINGER.

Witnesses:

ROY FIVEASH,
BEN T. BUNDY.