

C. B. CLARK.
Sash-Cord Guides.

No. 140,887.

Patented July 15, 1873.

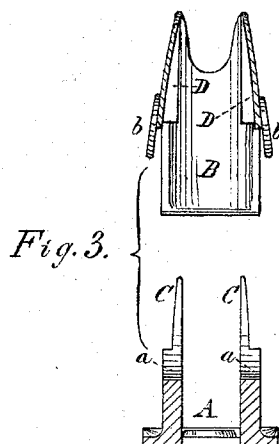
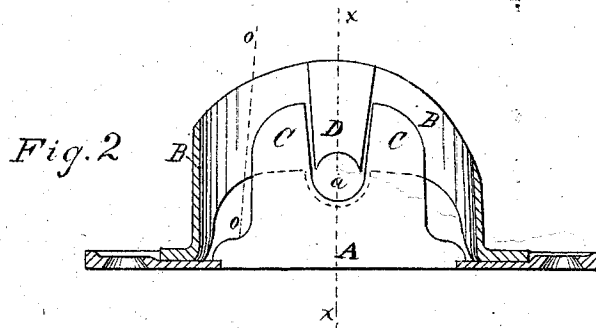
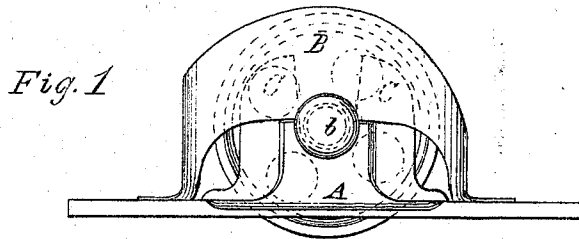
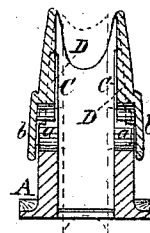


Fig. 4.



Witnesses:

Inventor:

Mrs S. L. Saunders.
Arthur C. Fraser

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Per Burke & Fraser attys

UNITED STATES PATENT OFFICE.

CHARLES B. CLARK, OF BUFFALO, NEW YORK.

IMPROVEMENT IN SASH-CORD GUIDES.

Specification forming part of Letters Patent No. **140,887**, dated July 15, 1873; application filed June 23, 1873.

To all whom it may concern:

Be it known that I, CHARLES B. CLARK, of Buffalo, in the county of Erie and State of New York, have invented an Improved Sash-Pulley, of which the following is a specification:

My improvement belongs to that class of sash-pulleys in which the case and face-plate are divided into two longitudinal parts and held together by friction, and it has for its object to produce a compact and durable sash-pulley, and one easily molded and cast; and it consists in the arrangement of two pairs of frictional arms projecting from the face-plate within the shell or case, each pair of said arms embracing a frictional guide on the interior of the sides of the case, by which arrangement the advantages of larger extent of surface in the bearings of the axle-journals, a reliable connection between the face-plate and the case, and a form of case more symmetrical and more readily molded and cast are secured.

Figure 1 of the accompanying drawings is a side elevation of my improved pulley with all the parts in position. Fig. 2 is a longitudinal section of the same with the wheel removed. Fig. 3 is a transverse section of the face-plate on line *x x*, and of the shell or case on about line *o o* of Fig. 2, separated from each other and showing the projecting frictional guides on the interior of the sides of the case in elevation. Fig. 4 is a transverse section on line *x x* of Fig. 2, the wheel being represented by broken lines.

Similar letters of reference indicate corresponding parts.

As represented in the drawings, A is the face-plate of the pulley, and B the shell or case. From the sides of the face-plate, at each side of the axle-bearing *a*, two arms, C C C C, project into the interior of the case B, as shown in Figs. 1, 2, and 4, and adhere to the sides thereof by friction. These arms embrace a frictional guide or rib, D, projecting from the

center of the case on each side in a line with the axle-bearing *a*, as shown in front elevation in Fig. 2, in side elevation in Fig. 3, and in section in Fig. 4. These ribs serve as a guide to the ready and accurate connection of the case to the face-plate, and also strengthen the case where most necessary, and form wider upper bearings for the axle of the pulley, as seen in Fig. 3, and in section in Fig. 4. The coincident sides of the shell B and the friction-arms C are slightly inclined and act as wedges when forced together. By means of this arrangement of the arms C C C C and ribs D D a much greater frictional surface is secured, rendering the connection more reliable, while the strengthening of the case in the center with the ribs D D enables the sides of the case which embrace the friction-arms to be cast very thin, and thus secure more elasticity, and consequently a greater amount of adhesion. From the exterior of the sides of the case depend ears *b b*, which cover the ends of the axle, as seen in Figs. 1, 3, and 4.

By means of these improvements in the construction I am enabled to produce a sash-pulley which combines strength and lightness in a symmetrical form, in which the adhesion of the parts is much greater and are thus more firmly held together, in which wider bearings for the axle are secured, and which at the same time is more readily molded and cast.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a divided case sash-pulley the arms C C C C on the face-plate A and ribs D D of the shell B, arranged and operating substantially as and for the purposes set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

CHARLES B. CLARK.

Witnesses:

CHARLES H. THAYER,
N. ROCHESTER.