(No Model.)

J. S. JENNINGS. ANTIFRICTIONAL HANK FOR SAILS.

No. 601,002.

Patented Mar. 22, 1898.

Fig.1.

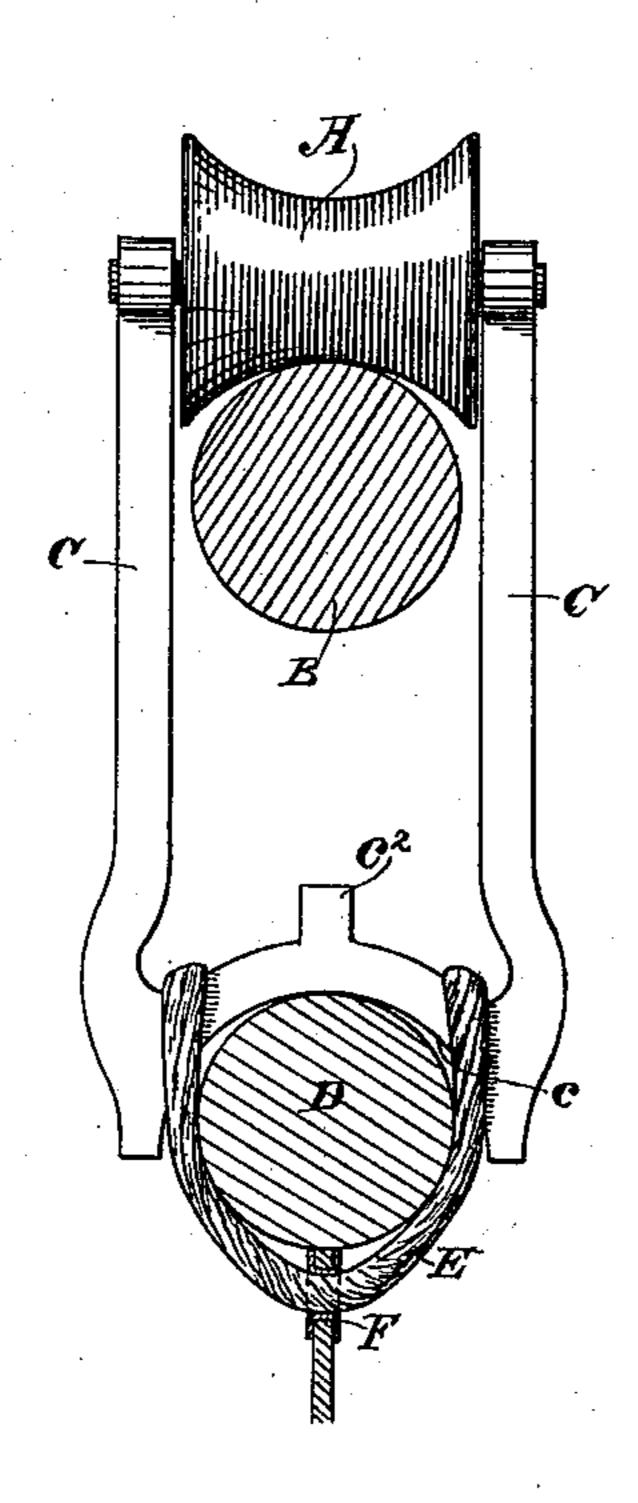
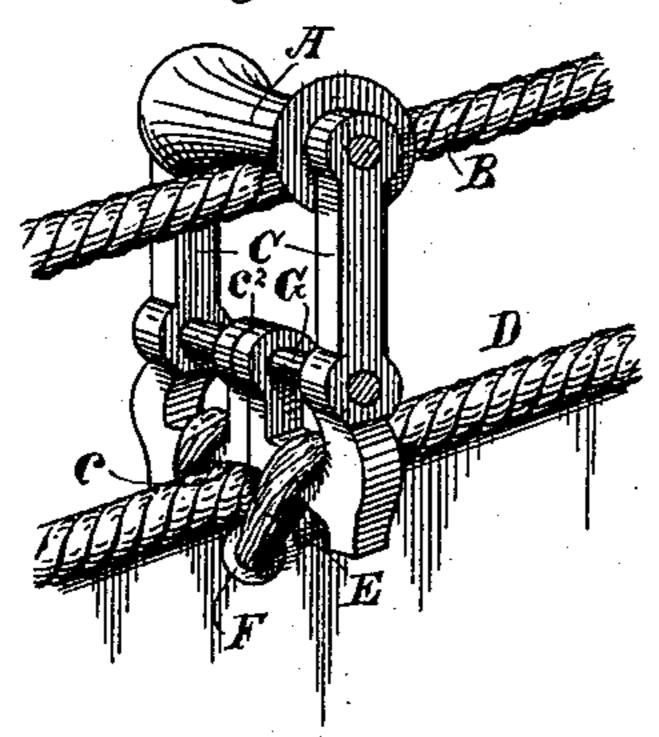


Fig. 2.



Witnesses, H.F. Olscheck

John & Jennings, By Dewey 460.

United States Patent Office.

JOHN S. JENNINGS, OF SAN FRANCISCO, CALIFORNIA.

ANTIFRICTIONAL HANK FOR SAILS.

SPECIFICATION forming part of Letters Patent No. 601,002, dated March 22, 1898.

Application filed August 6, 1897. Serial No. 647,309. (No model.)

To all whom it may concern:

Be it known that I, John S. Jennings, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Antifrictional Hanks for Stay and Similar Sails; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an improvement in the operation of sails of that class which are adapted to be raised and lowered upon a rope or stay—such as jibs, staysails, and others of a like character.

The invention consists in details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a view showing the application of my invention. Fig. 2 shows the hank made in two parts.

Sails of that class which are hoisted and lowered upon a rope which is termed a "stay" are usually connected therewith by means of 25 a ring or loop, technically called a "hank," which is adapted to slide upon the stay and has means by which the edge of the sail is attached to it to form a permanent connection. This device is objectionable, first, because of 30 the friction, which is always great, and when the sail is partially filled, so as to drag to one side, it makes it almost impossible to hoist the sail. It is also objectionable on account of the wear which takes place between the 35 stay and the hank, and as these stays are usually made of wire rope they soon become abraded or cut, so that they must be renewed, or in some cases the hanks themselves will be worn through.

of a roller A, which is grooved, as shown, so as to travel easily upon the stay B, this stay being either rod or wire rope or other suitable rigidly-stretched connection between different spars to form a support for the upper edge of the sail.

The roller A is journaled upon a pin which passes through the ends of a yoke C. The side bars of this yoke are far enough apart so

as to allow ample room for the passage of the 55 stay B, and at the lower end they are united either permanently or they may be so united as to be separable.

When permanently united, as shown in Fig. 1, the frame C is cast in a single piece and 55 holes are made through the sides to receive the bolt upon which the pulley A is journaled.

The lower end of the yoke has a concaved channel formed in it, as shown at c, which is adapted to receive the bolt-rope D, this rope 60 being secured along to the upper edge of the sail in the usual manner. This bolt-rope is then attached to the yoke C by what are technically known as "seizings" or small cords E, which are passed through holes or eyelets 65 F, made at intervals in the edge of the sail, the seizings passing around the lower part of the yoke C. This lower portion is divided by an upwardly-projecting lug or spur c^2 , leaving two spaces, one upon each side of it, 70 through which the seizings pass.

In order to conveniently attach or detach the sail, I prefer to make the yoke C in two parts. The pulley or roller A is journaled at the upper end, the screw-bolt passing through 75 the two sides of the yoke at this end and forming a connection, while at a point just above the lower end, where the bolt-rope lies, the lug c^2 is made in two parts, which lie against each other and which are secured together by a 80 screw bolt or pin G, passing through the sides of the yoke C and through the lug c^2 , thus binding the whole firmly together. When it is desired to attach or remove the sail, it is only necessary to remove the two screw-bolts 85 and the parts of the hank will be separable, so that they can be removed from the stay without disturbing the latter.

Having thus described my invention, what I claim as new, and desire to secure by Letters 90 Patent, is—

A device for detachably connecting sails with the stay upon which they are adapted to be raised and lowered consisting of a two-part yoke, the lower end of which is made 95 concave to fit the bolt-rope upon the edge of the sail, lugs projecting upwardly from each half of the yoke, a bolt passing through

said lugs and the sides of the yoke whereby this portion is united together and channels formed for the seizings by which the sail is attached to the yoke, a concaved roller adapted to travel upon the stay and a journal-pin passing loosely therethrough so as to unite the upper ends of the yoke together.

In witness whereof I have hereunto set my hand.

JOHN S. JENNINGS.

Witnesses:
S. H. Nourse,
Jessie C. Brodie.