(No Model.)

C. F. JANES.

SHIP'S SAIL.

No. 307,952. Patented Nov. 11, 1884.

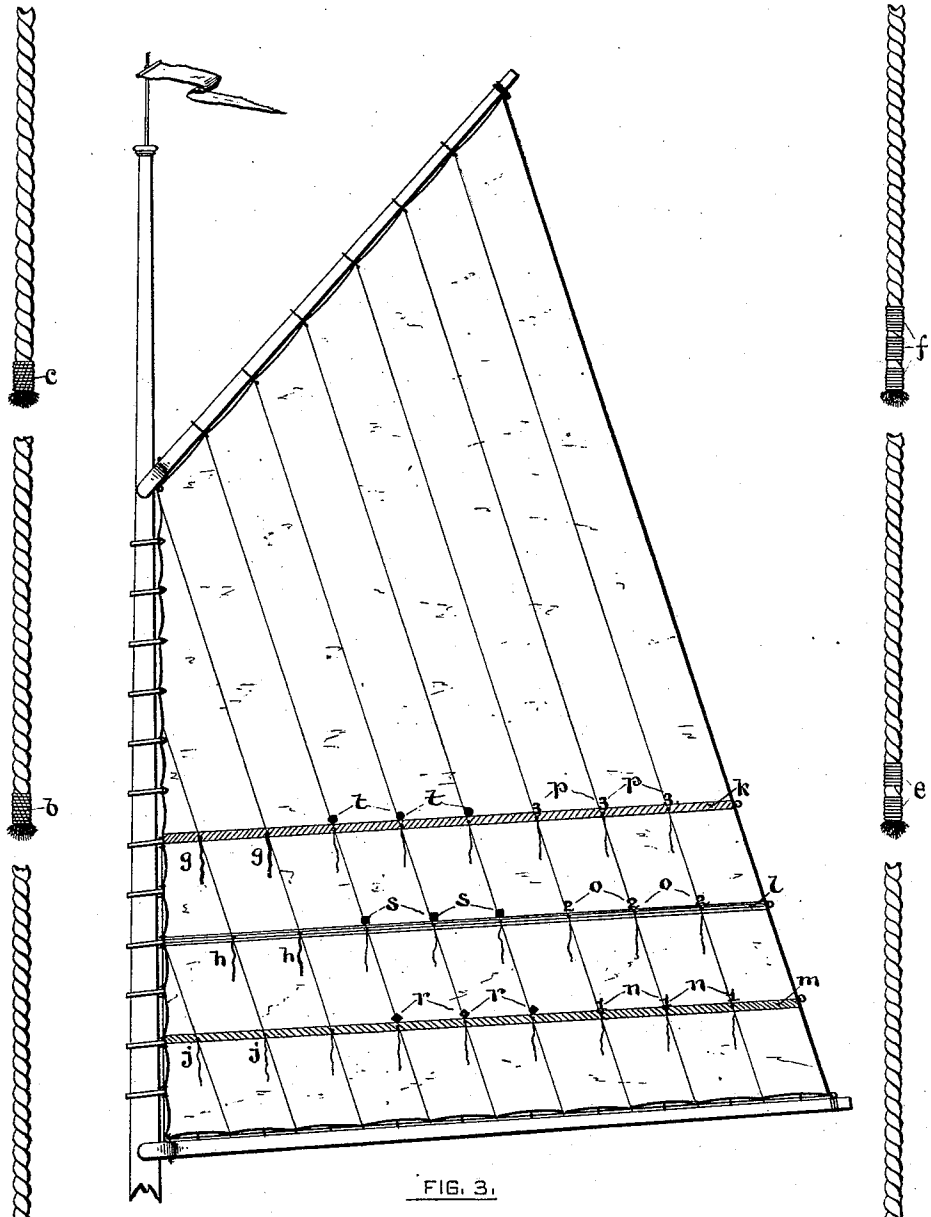


FIG. 3.

FIG. 1.

FIG. 2.

WITNESSES.

Geo. W. Cady.

Henry J. Stapelton.

INVENTOR.

Charles F. Janes.

by Edson Salisbury Jones.

Attorney.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

CHARLES F. JANES, OF PROVIDENCE, RHODE ISLAND.

SHIP'S SAIL.

SPECIFICATION forming part of Letters Patent No. 307,952, dated November 11, 1884.

Application filed March 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. JANES, of the city and county of Providence, and State of Rhode Island, have invented a new and useful Improvement in Sails; and I do hereby declare that the following specification, taken in connection with the accompanying drawings, forming a part of the same, is a full, clear, and exact description thereof.

It is well known to persons experienced in the handling of sailing-craft that considerable annoyance and loss of time attends the reefing of a sail, owing to the difficulty of readily selecting the reef-points which compose the definite row to be tied down from those in other rows, and that the sail is quite liable to be torn when by mistake points in different rows are tied in the same reef.

The object of this invention is to enable the reef-points which compose any definite row readily to be distinguished during the operation of reefing from those in other rows; and to this end the invention consists in marking the reef-points or the line of reef-points upon the sail in such a manner that the points composing the respective rows can be readily recognized at the time of reefing, as will hereinafter appear.

Various means may be employed for carrying out the invention, several of which are shown in the drawings.

Figure 1 represents reef-points of three different rows which are intended to have the characteristic marking of whippings of different colors. Fig. 2 shows reef-points of three different rows which have the characteristic marking of a different number of whippings. Fig. 3 represents a sail upon which other methods of designation are employed.

An effectual means of carrying out the invention is to whip the reef-points composing the several rows with different-colored twines or yarns, respectively, as is intended to be indicated at *a b c*, Fig. 1. Another efficient means is by whipping once each reef-point in the first row, whipping twice each point in the second row, and whipping thrice each point in the third row, as shown at *d e f*, respectively, Fig. 2, the said whippings being all of the same color or of different colors for the respective rows of points.

Instead of whipping the reef-points with twine or yarn, or in addition thereto, whippings in the form of metallic ferrules may be employed, each having a different surface, (as flat, convex, and corrugated,) when, as shown in Fig. 1, the same number of whippings are used for points in all the rows; or when a different number of whippings are employed, as in Fig. 2, these ferrules may all have surfaces of the same character, or, if preferred, surfaces differing in character according to the rows to which the ferrules are applied. Another method (not shown in the drawings) is by making the reef-points in the several rows of different colors, respectively; or the points may be of different colors in the different rows, and also be whipped a different number of times. Still another method is to make the points of different diameters in the several rows, as indicated at *g h j*, Fig. 3, or of differently-constructed ropes—as twisted, braided, &c.—in the several rows, respectively. An additional distinction may be given to points of different diameters or different constructions by the use of colors or a different number of whippings, or both, as already described.

Instead of marking the reef-points themselves, or in addition to such markings, the line of reef-points upon the sail may be marked in various ways to designate the respective rows of points. This may be done with bands of different colors, as is intended to be indicated at *k l m*, Fig. 3, secured to, painted upon, or otherwise applied to the sail body in line with the rows of points or adjacent thereto, by numerals, as at *n o p*, or by any preferred arbitrary signs or symbols, as at *r s t*, Fig. 3, or by working the eyelet-holes through which the reef-points pass in different colors for the respective rows.

From the foregoing it will be readily understood that by any of the means described, or by a combination of the same, the proper points to be tied down can be selected readily and with certainty by the sense of sight at the time of reefing, and the operation be thereby performed much more quickly and more satisfactorily than when the sail is not provided with means for distinguishing the points composing the respective rows. It will also be understood that by the employment of a different number of whippings or whippings of

different lengths for each row of points, respectively, by the use of ferrules, or by employing points of different diameters or differing in general construction, as described, reefing may be performed in the darkness with comparative speed and ease and with certainty, since the proper points to be tied down can be readily distinguished by the sense of touch.

What I claim, and desire to secure by Letters Patent, is—

1. A sail having its reef-points or line of reef-points marked with distinguishing characteristics for the different rows or lines thereof, substantially as set forth, whereby the points in one row can be readily distinguished from points in another row.

2. A sail having the reef-points of the several rows respectively whipped a different number of times, substantially as and for the purposes specified.

CHARLES F. JANES.

Witnesses:
EDSON SALISBURY JONES,
HENRY J. STAPLETON.