Feb. 23, 1960 S. COLGATE 2,925,798

JIB MAGAZINE

Filed Nov. 20, 1958 2 Sheets-Sheet 1

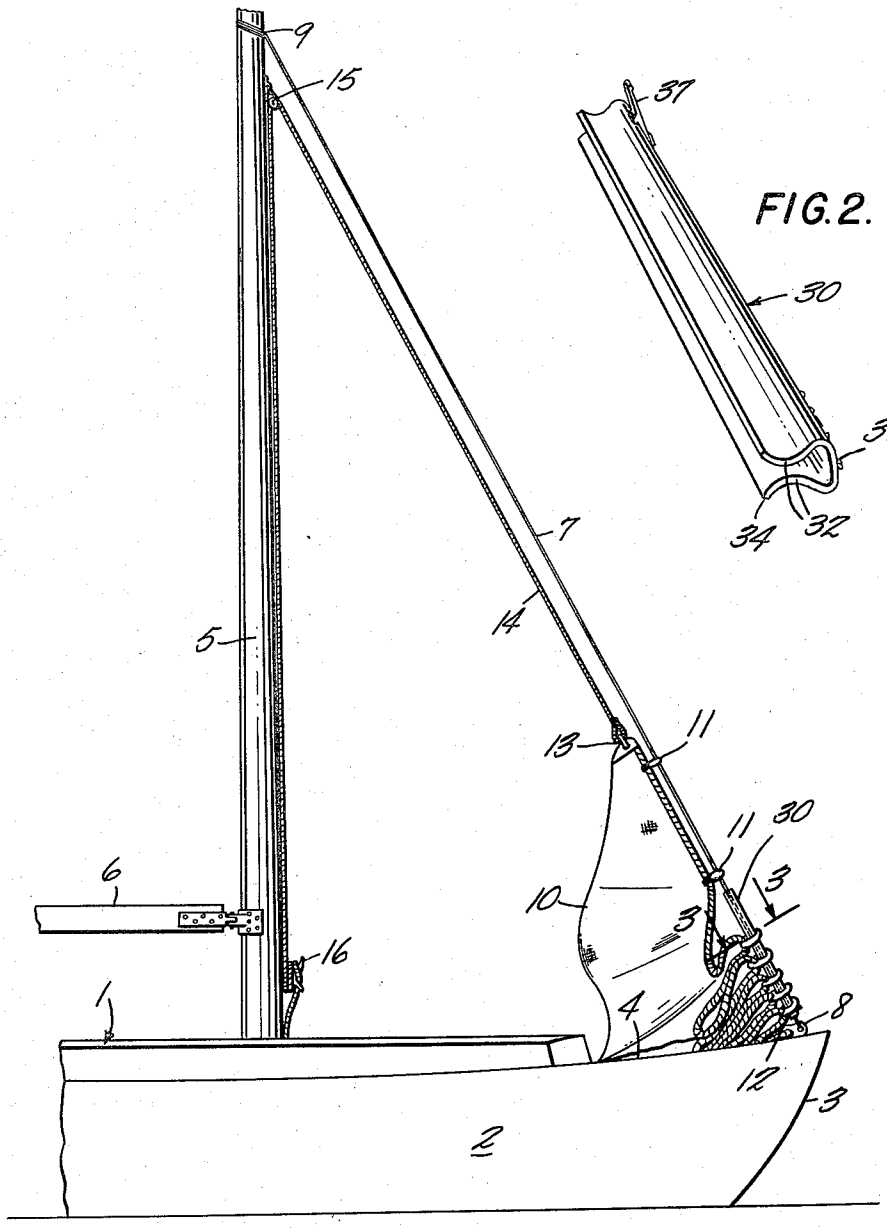


FIG. 1.

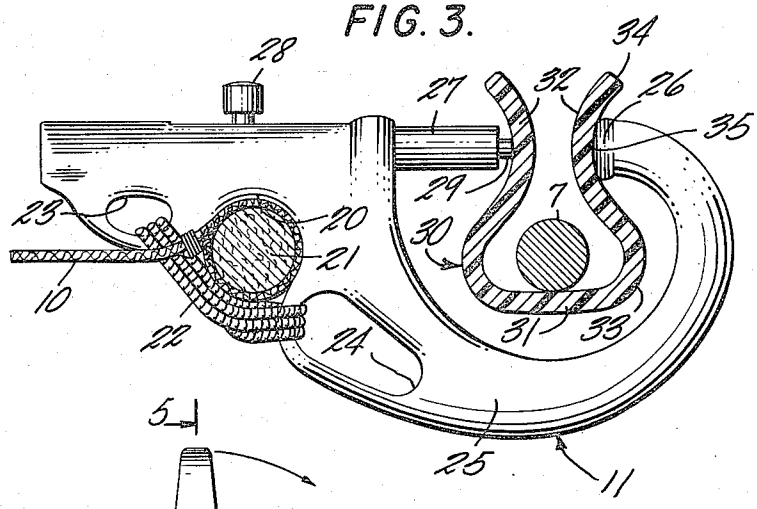
FIG. 2.

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FIG. 3.



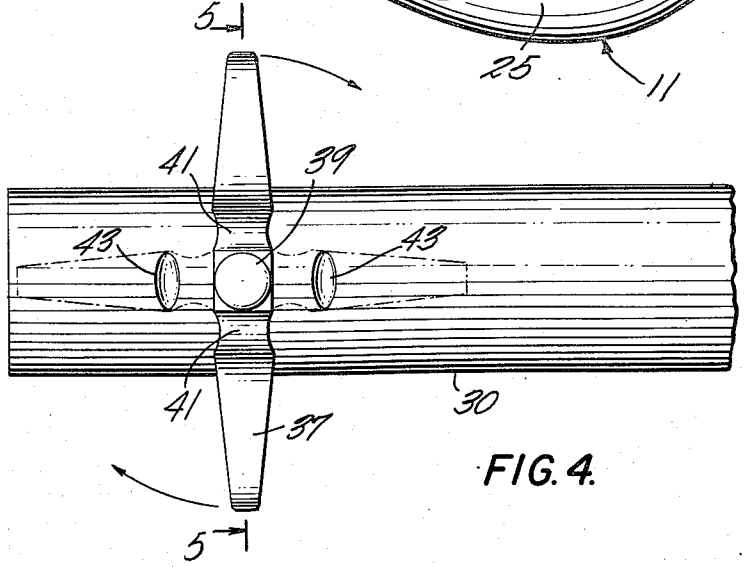


FIG. 4.

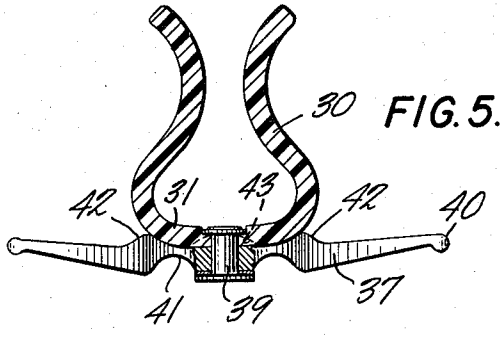


FIG. 5.

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2,925,798

JIB MAGAZINE

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Application November 20, 1958, Serial No. 775,155

4 Claims. (Cl. 114—102)

The present invention relates to sail boat rigging and particularly to a magazine for storing and quickly setting a jib or other sail on a stay or other rigging line of a sailboat.

The jib of a sailboat is commonly provided along its luff or forward edge with a series of spaced snap hooks which snap over a stay or other rigging line to secure the sail on the line. At its lower forward corner or tack a jib is provided with an eye or snap shackle adapted to be fastened to a stem head plate or other fitting to which the lower end of the jib stay is anchored. At its head a jib is provided with an eye or other fitting to receive a halliard shackle. In setting a jib, the snap shackle at the tack of the sail is first connected to the stem head plate. The individual snap hooks on the luff of the jib are then opened one at a time and hooked on the jib stay. The head of the sail is then connected to a halliard which is hauled up to set the sail. These operations, particularly the individual opening of the numerous snap hooks, take considerable time. In racing, the speed with which sails can be set may be a highly important factor and it is hence desirable to provide means which make it possible to set a jib or other sail more quickly. The present invention is directed to this problem.

In accordance with the invention, there is provided a magazine on which all of the snap hooks of a jib or other sail are positioned when the sail is stored, or at least in advance of the time when it is desired to set the sail. The magazine carrying all of the snap hooks of the sail is slipped onto the stay, the eye or shackle at the tack of the sail is connected to the stem head plate or other fitting and the halliard is connected to the peak of the sail. When the halliard is hauled up, the snaps slip off of the magazine in a lengthwise direction onto the stay. The magazine is then removed. By thus applying the magazine to the stay with all of the hooks on the magazine instead of having to open each hook individually and applying it to the stay, a considerable amount of time is saved in setting the sail.

The sail magazine in accordance with the present invention has still other advantages. In rough weather the setting of a jib may be a difficult and even hazardous operation since it is necessary for a sailor to crawl out on the forward deck which may be wet, slippery and pitching. By greatly simplifying the operation and reducing the time required, the present invention minimizes the difficulty and hazard of setting a jib.

The nature and advantages of the invention will be more fully understood from the following description and claims in conjunction with the accompanying drawings which show by way of example a preferred embodiment of the invention. In the drawings;

Fig. 1 is a schematic side elevation of the forward portion of a sailboat illustrating the use of a magazine in accordance with the invention in setting a jib.

Fig. 2 is a perspective view of the sail amagazine.

Fig. 3 is an enlarged cross section taken approximately on the line 3—3 in Fig. 1 and illustrating the magazine applied to a stay and one of the snap hooks on the magazine.

Fig. 4 is a fragmentary view of one end of the magazine showing a movable stop member for releasably retaining the sail on the magazine.

Fig. 5 is a cross section taken approximately on the line 5—5 in Fig. 4.

In Fig. 1 there is shown by way of example a sailboat 1 having a hull 2 with a bow 3 and deck 4. The rigging of the boat is shown as comprising a mast 5, boom 6 and a jib stay 7, the lower end of which is anchored to a stem head plate 8 while the upper end is connected at 9 to the mast.

The sails of the boat include a jib 10 provided at its luff or forward edge with a series of snap hooks 11 adapted to snap onto and slide on the jib stay 7. At its tack the jib is provided with an eye adapted to receive a suitable fitting or with a snap shackle 12 adapted to snap into an eye in the stem head plate 8 to anchor the tack of the sail. At its head the jib is provided with an eye to receive a snap shackle 13 on a halliard 14 which runs over a pulley or sheave 15 provided on the mast near the connection 9 of the jib stay and down to a cleat 16. The jib is also provided at its lower rear corner or clew with an eye or other fitting for connection to the jib sheet (not shown).

In Fig. 3 there is shown on a larger scale one of the snap hooks 11. The snap shown is of the type known as a non-fouling jib snap. It is provided with a recess 20 to receive a luff rope 21 of the sail 10 and is secured to the sail by stitching or lacing 22 which passes through eyes 23 and 24 in the snap hook and around the luff rope 21. The body of the snap comprises a C-shaped portion 25 which terminates in a stationary jaw 26. A movable jaw comprising a longitudinally slidable pin 27 is pressed toward the stationary jaw 26 by an internal coil spring (not shown) and is retractible by means of a knob or handle 28 which projects laterally from the pin 27 and out through an elongated slot in the body portion of the snap. The snap is opened by moving the knob 28 toward the left as viewed in Fig. 3. When the knob is released the pin 27 is moved toward the right by its spring into engagement with the stationary jaw 26. A projection 29 on the end of the pin 27 seats in a corresponding recess in the stationary jaw 26 to provide a positive interlock preventing lateral movement of the movable jaw when it is closed. Ordinarily in setting a jib, each of the snap hooks 11 has to be opened individually by means of its knob or handle 28 and placed on the jib stay 7.

A sail magazine 30 in accordance with the present invention is shown in position on the jib stay in Fig. 1 and is illustrated more clearly in Figs. 2 to 5. The magazine comprises an elongated member which is of channel cross section with a base portion 31 and opposite side portions or flanges 32. The side portions 32 join the base portion in outwardly convex curve portions 33. They then curve inwardly toward one another as they extend away from the base portion 31 and then flare outwardly away from one another terminating in edge portions 34. As viewed in cross section it will be seen that the right hand flange portion 32 is S-shaped while the left hand flange portion is reverse S-shaped. The reverse curvature of the flange portion 32 provides concave channels or tracks 35 on opposite sides of the magazine. When the jib snaps are applied to the magazine 30 as illustrated in Fig. 3, the stationary jaw 26 of each snap seats in one of the concave tracks 35 of the magazine while the movable jaw 27 of the snap seats in the opposite track. When the sail is on the magazine all of the snaps 11 are positioned as illustrated in Fig. 3, the snaps being disposed as close to one another as the folds of the sail permit. The maga-

zine 30 is of sufficient length to receive all of the snaps 11 but should not be longer than the distance between the lowest and the next lowest snap 11 when the sail is set.

The magazine 30 is formed of metal, plastic or other material that is sufficiently resilient to permit the side flange portions 32 to spring toward and away from one another to a limited extent but sufficiently strong and rigid as to withstand hard usage and resist the force of the snap springs acting on the slidable jaw pins 27. The pressure of the springs will tend to flex the side flanges of the magazine toward one another but should not be sufficient to close the magazine by bringing the side flanges into engagement with one another. The magazine is of sufficiently large cross section to receive the jib stay 7 in the space defined by the base portion 31 and the side portions 32 as shown in Fig. 3. Preferably the dimensions and the resilience of the side flange portions of the magazine are such that when the jib snaps are in position on the magazine as shown in Fig. 3 the minimum distance between the side flange portions 32 is slightly less than the diameter of the jib stay 7 so that the magazine carrying the snap hooks can be snapped onto the jib stay by lateral movement of the magazine with sufficient force to spring the side portions slightly apart. The resilient side flange portions of the magazine thereupon spring back toward one another to retain the magazine in position on the stay.

The magazine is shown provided at its ends with stops 36 for preventing the snap hooks 11 from sliding off the ends of the magazine. The stop provided at least at the upper end of the magazine is movable between a locked or closed position in which it retains the snaps 11 on the magazine and a released or open position in which it permits the snaps 11 to slide off the end of the magazine. For convenience of manufacture and to provide interchangeability of ends of the magazine, the stops are shown as being the same at both ends.

As illustrated by way of example in Figs. 4 and 5 each of the stops comprises a bar-shaped member 37 pivotally mounted on the base portion 31 of the magazine near the end of the magazine by a pivot pin shown in the form of a rivet 39. The bar 37 has oppositely extending end portions 40 and intermediate portions 41 which are of reduced thickness so as to provide flexibility. On the side of the bar toward the magazine there are provided protuberances 42 adapted to engage the magazine 30. The stop member 37 is rotatable about its pivot 39 from a closed position as shown in full lines in Figs. 4 and 5 to an open position as shown in broken lines in Fig. 4. When the stop member is in closed position, it prevents the snaps 11 from sliding off the end of the magazine. When it is in open position the snaps can slide off over it. When the stop is in closed position, the protuberances 42 engage side portions of the magazine base 31 as shown in Fig. 5 to hold the stop in this position. When the stop is in open position, the protuberances 42 engage in slight recesses or depressions 43 in the base portion 31 to retain the stop in open position. The resiliency of the stop member provided by the reduced portions 41 permits the stop member to spring sufficiently to move from one position to the other when sufficient force is applied but the protuberances 42 hold the stop member resiliently in either of the positions to which it is turned.

The operation of the magazine will be readily apparent from the foregoing description. When the jib or other sail is stored, or at least before it is to be used, all of the snaps 11 are placed on the magazine 30 with the jaws of the snaps in opposite channels or tracks 35 of the magazine and with the snaps opening in the same direction as the magazine as illustrated in Fig. 3. When it is desired to set the jib, the magazine 30 carrying all of the snaps 11 is slipped laterally onto the jib stay 7 so that the stay is inside the magazine. The eye or shackle 12 at the tack of the sail is attached to the stem head plate or other fitting 8 and the head of the sail is attached to the jib by the fitting 13. The stop member 37 at the upper end of the magazine is moved from closed to open position. The halliard is then hauled up to hoist the sail, whereupon the snaps 11 slide off of the magazine 30 in a lengthwise direction and onto the stay 7. As each snap slides off the magazine, the movable jaw 27 of the snap is pushed by its spring into engagement with the stationary jaw 26 so that the snap immediately closes. As will be seen from Fig. 3, the tracks 35 in which the jaws of the snaps slide are located beyond the space in which the stay 7 is received in the magazine so as to assure that the snaps close over the stay as they slide off of the magazine. After all of the snaps 11 have slid up off of the magazine, the magazine is preferably removed from the stay by slipping it off laterally.

It will be understood that the invention is in no way limited to the details of the embodiment herein shown and described by way of example. Moreover, while the invention has been described with particular reference to a jib, it will be understood that the magazine in accordance with the invention is equally applicable to any other sail which is set in a similar manner or a stay or other standing rigging of a sailboat. It will be recognized by those skilled in the art that various modifications may be made without departing from the scope and spirit of the invention.

What I claim and desire to secure by Letters Patent is:

1. A magazine for storing and quickly applying to a rigging line of a boat a sail having a tack and along one edge beginning at said tack a series of spaced snap hooks having opposed jaws and adapted to go on said line to secure said sail removably to the line, said magazine comprising an elongated member of channel cross section having a base portion and opposite side flange portions projecting from the base portion, said flange portions curving inwardly toward one another as they extend away from the base portion and then flaring out away from one another to define on the outer faces of said flange portions concave tracks to receive the opposite jaws of said snap hooks, said sail being applied to said magazine to position said snap hooks on said channel member with the jaws of said snap hooks engaged in said tracks and with said snap hooks opening in the same direction as said channel, said channel member having inside dimensions to slip over said line in a lateral direction wth said snap hooks on said channel member, whereby said snap hooks can be slid in a lengthwise direction off of said channel member onto said line to secure said sail to said line.

2. A sail magazine according to claim 1, further comprising stop members at the ends of said channel member to restrain said snap hooks from sliding off the ends of said channel member, at least one of said stop members being movable to release said snap hooks and permit them to slide off of said end of the channel member.

3. A sail magazine according to claim 1, for application to a rigging line of a boat in which said sail has at its tack a shackle adapted to snap into an eye fitting attached to said boat and having the nearest one of said snap hooks spaced a selected distance from said shackle when said sail is in extended position on the rigging line, the length of said channel member being less than the selected distance.

4. A magazine as described in claim 1, characterized in that the length of said channel member is less than the distance between a snap hook at the tack and the next following snap hook when the sail is in its extended and operative position on the boat.

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