

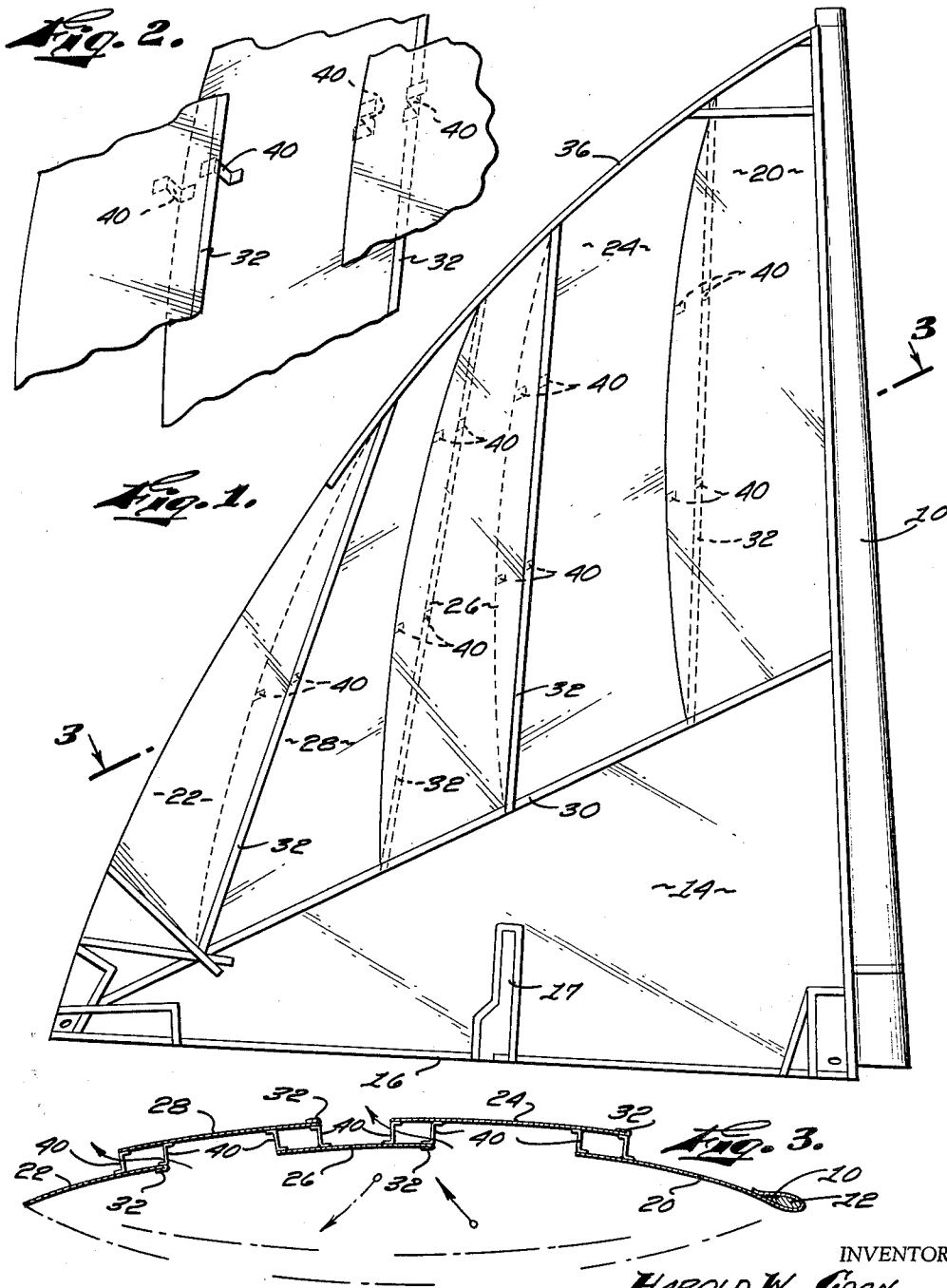
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SAIL CONSTRUCTION

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3 Claims. (Cl. 114-103)

The present invention relates generally to boating and more particularly to a new and novel sail construction.

It is a major object of the present invention to provide a sail construction wherein a larger area of sail is presented to the action of the wind without increasing the space occupied by a conventional sail of the same external dimensions.

A further object of the present invention is to provide a sail construction of the aforescribed nature, which provides more efficient operation than a conventional sail construction.

Yet a further object of the present invention is to provide a sail construction of the aforescribed nature which may be readily manufactured without any appreciable increase in cost over a conventional sail construction.

Another object of the present invention is to provide a sail construction of the aforescribed nature which does not require any more attention by the boat operator than is required by a conventional sail construction.

These and other objects and advantages of the present invention will become apparent from the following detailed description when taken in conjunction with the appended drawings, wherein:

FIGURE 1 is a side elevational view of a sail construction embodying the present invention;

FIGURE 2 is a fragmentary perspective view in enlarged scale showing a detail of said sail construction; and

FIGURE 3 is an inclined sectional view taken along line 3-3 of FIGURE 1.

Referring to the drawings and particularly FIGURE 1 thereof, there is shown a preferred form of sail construction embodying the present invention. The sail shown represents a mainsail usable with a Marconi-type rigging. It should be understood, however, that the particular type of sail shown in the drawings is merely exemplary and other sail plans may incorporate the teachings of the present invention without departing from the spirit thereof.

The sail shown in the drawings includes a vertically extending mast-receiving pocket 10 formed at its leading edge portion. As indicated in FIGURE 3, the pocket 10 is adapted to receive a spar, such as a mast 12. It should be understood, however, that the leading edge of the sail may, if desired, be formed with a conventional bolt rope arrangement, with such bolt rope being receivable by the rear portion of a mast in a conventional fashion. Rearwardly of the mast pocket 10 the sail is provided at its lower portion with a base panel 14 of generally triangular configuration. The lower edge of the base panel 14 defines a clew 16 which is secured in a conventional manner to a boom (not shown). It will be observed that the base panel 14 tapers downwardly and rearwardly from the mast pocket 10. A bottom pocket 17 may be formed in the base panel 14.

Above the base panel 14 the preferred form of sail embodying the present invention is provided with a plurality of generally vertically extending independent panels. Thus, there are provided a front panel 20, a rear panel 22 and intermediate panels 24, 26 and 28. The lower edge of each of the panels 20 through 28 are affixed to the uppermost edge of the base panel 14 as by reinforcing strip 30. Referring particularly in FIGURE 3, the leading edge of the independent panels 22 through 28 are overlapped, as indicated at 32, so as to rigidify the

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leading edge of such panels. Preferably, the upper edges of the panels 20 through 28 will be contiguous and to this end an upper reinforcing strip 36 is provided.

As particularly indicated in FIGURE 3, the leading edge of the most forward intermediate panel 24 overlaps the rear portion of the front panel 20. The most rearward intermediate panel 28 overlaps the front portion of the rear panel 22. The rear portion of the other intermediate panels 24 and 26 overlap the front portions of the intermediate panel immediately rearwardly thereof. The overlapped portions of the independent panels are interconnected by flexible tabs 40, the opposite ends of such tabs being affixed to overlapped panels. This arrangement permits the independent panels to collectively define an airfoil configuration while such panels may independently assume a plurality of airfoils, each spaced laterally apart, as indicated in FIGURE 3.

The panels, reinforcing strips and tabs may be formed of conventional materials utilized in constructing sails, and these parts may be assembled in a conventional manner.

The operation of the aforescribed sail will be similar to that of a conventional contiguous surface-type sail. When the boat equipped with such sail is on a port tack as indicated in FIGURE 3, the intermediate panels 24 and 28 will assume a position spaced laterally to windward relative to the other panels. At this time the effective area of the sail will be greater than the area of a conventional sail of similar outline by the amount of the overlapped panel portions. Additionally, any dead wind will be readily spilled through the vertical slots separating the overlapped panels. Hence, the sail of the present invention will afford more efficient operation than a conventional sail of the same external dimensions.

Various modifications and changes may be made with respect to the foregoing description without departing from the spirit of the present invention or the scope of the following claims.

I claim:

1. A sail, comprising: a front panel; a rear panel; a plurality of intermediate panels, with the leading edge of the most forward intermediate panel overlapping the rear portion of said front panel, the most rearward intermediate panel overlapping the front portion of said rear panel and the rear portion of the other intermediate panels overlapping the front portion of the intermediate panel immediately rearward thereof; and tab means interconnecting the overlapped portions of said panels whereby said panels may collectively define an airfoil configuration while they independently assume a plurality of airfoils each spaced laterally apart.

2. A sail, comprising: a base panel; a front panel; a rear panel; a plurality of intermediate panels, with the leading edge of the most forward intermediate panel overlapping the rear portion of said front panel, the most rearward intermediate panel overlapping the front portion of said rear panel and the rear portion of the other intermediate panels overlapping the front portion of the intermediate panel immediately rearward thereof; means interconnecting the upper edges of said front, rear and intermediate panels; means interconnecting the lower edge of said front, rear and intermediate panels and the upper edge of said base panel; and tab means interconnecting the overlapped portions of said panels whereby said panels may collectively define an airfoil configuration while they independently assume a plurality of airfoils each spaced laterally apart.

3. A sail comprising: a generally triangular downwardly and rearwardly tapering base panel; a front panel; a rear panel; a plurality of intermediate panels, with the leading edge of the most forward intermediate panel overlapping the rear portion of said front panel, the most

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rearward intermediate panel overlapping the front portion of said rear panel and the rear portion of the other intermediate panels overlapping the front portion of the intermediate panel immediately rearward thereof; a strip extending along and interconnecting the upper edges of said independent panels; a reinforcing strip extending along the upper edge of said base panel and interconnecting the lower edges of said front, rear and intermediate panels; and tab means interconnecting the overlapped portions of said panels whereby said panels may collectively define an airfoil configuration while they independ-

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ently assume a plurality of airfoils each spaced laterally apart.

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