A SERIES OF CHARTS,

WILL

SAILING DIRECTIONS,

EMBRACING SURVEYS OF THE

FARALLONES, ENTRANCE TO THE BAY OF
SAN FRANCISCO, BAYS OF SAN FRANCISCO AND SAN
PABLO, STBAITS OF CARQUINES AND SUISUN BAY, CONFLUENCE AND DELTIC BRANCHES OF THE SACRAMENTO AND SAN
JOAQUIN RIVERS, AND THE SACRAMENTO RIVER (WITH THE
MIDDLE FORK) TO THE AMERICAN BIVER, INCLUDING
THE CITIES OF SACRAMENTO AND BOSTON,

STATE OF CALIFORNIA.

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CADWALADER RINGGOLD, COMMANDER.

U. S. HAVY.

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SAGADEHOCK.—In Sagadehock Reach there is an extensive shoal lying along the right bank, to avoid which, the opposite shore must be kept aboard from the time of rounding the point below. Flats lie off the mouth of the slough, (above this shoal,) which connects with the San Joaquin river.

The main river and the Middle Fork are the only available channels. The West Fork, and the sloughs connecting with it, are not navigable except for small boats; orginally, they were successfully frequented by trappers, for otter and beaver. On the west, the waters terminate and waste themselves in swamps and mud flats.

The main river has some obstructions in its channels, commencing at Ida isle, thence up to near the outlet forming Hensley's slough. From this point there is a clear, bold, and uninterrupted channel.

The Middle Fork has a middle ground at its mouth, represented on a large and convenient scale.

Hogsback Shoal, in the Middle Fork, is next in order and importance. This passed, by following the chart closely, the second section is reached without much difficulty, and which, although contracted and narrow, has a deep channel.

Entering the main river at Barber's Ranch, a good clear channel is found until after passing Webster, or the Russian Embarcadero, where the river shoals for a short distance, soon again increasing in depth with little variation. Arriving at the last bend, below Sacramento City, the channel contracts, and may be followed according to the harbor plan, attached to the chart.

Snags do not often obstruct the channel; they lie along the margin of the river, and are generally seen, except during the season of freshets. At the lowest stages of the water, the maximum depth available for vessels proceeding up the Sacramento river, owing to the obstructions existing in portions of the channels, does not exceed ten feet; from six to eight feet in the San Joaquin river.

Middle Fook