

# 2851

Diag. Cht. No. 1209-2 & 1210-2

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2851  
1906

Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

*O. A. Tittmann*

Superintendent.

State: *Massachusetts*

U. S. C. & G. SURVEY  
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MAY 22 1907

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## DESCRIPTIVE REPORT.

*Hyde* Sheet No. *2851*

LOCALITY:

*Massachusetts Sound  
Hedge Fence and  
L. Bonmedieu Shoals  
and Vicinity*

1906

CHIEF OF PARTY:

*Walter C. Dibrell*

2851

Descriptive Report to Accompany Hydrographic Sheet # 2851  
( Field # 15 ). Nantucket Sound, Massachusetts, 1906. Scale: 1-20,000

U. S. C. & G. SURVEY.  
SOUND AND SHOALS  
NOV 27 1907  
Map. No.

1. This sheet embraces the resurvey of Hedge Fence and L'Hommedieu Shoals in the western part of Nantucket Sound, including the extension of the latter shoal to Nobska Point.

2. Your instructions of August 21, 1906, under which this work was done, directed that before proceeding with a close re-survey of these shoals an examination be made in order to determine whether the changes were such as to justify a complete re-survey. An examination with the ship of the area between the western end of L'Hommedieu Shoal and Nobska Point, and of the area to the southwestward of this Shoal developed material changes. Launch lines run across Hedge Fence Shoal at intervals of two or three hundred meters gave indications of some slight changes. The question of whether or not to make a close re-survey of the shoals with the launch was not a clear one, but considering the importance of these waters, owing to the great amount of shipping under both sail and steam passing through the Sounds, and considering the fact that it was necessary to do considerable hydrographic work in the vicinity with the ship, my final decision was to proceed with the launch work.

3. The area between L'Hommedieu Shoal and Nobska Point was surveyed with the ship, excepting the very shoal patch between buoys S 17 and C 19, and the eleven foot lump upon which the schooner "Teal" grounded in 1906. The lines were run approximately east and west and are quite close. Owing to strong tidal currents and eddies the lines are very crooked. Two leadsmen were used, sounding alternately from starboard and port chairs. The depth is ir-

regular over this area and in places there is less water than shown on the chart. As the configuration of the adjacent shoreline is such as to form eddies in this locality, further changes no doubt will take place in the course of time. The northern and southern limits of this work are in deep water with regular bottom.

4. The ship work also includes the triangular area lying between buoys 15 and 17 and the western end of Hedge Fence Shoal. There is less water on this bank than shown on the chart. The least depth found is 15 feet at mean low water. The lines extend to the five fathom curve on all sides.

5. The lump on which the Teal grounded was carefully investigated, using the whaleboat under oars. This danger is marked by a spar buoy. It is small in extent and the least depth found is 10.8 feet at mean low water. Vessels standing into Falmouth should make due allowance for the current in passing the spar.

6. An examination was made with the ship off the eastern end of Hedge Fence Shoal, but no changes were found. The sounding lines followed the ridge indicated by the chart and extended about 1 1/2 miles eastward from the spar buoy. I was told by a resident of Vineyard Haven, believed to be reliable, that lumps form in the vicinity of Hedge Fence Shoal and later disappear.

7. A number of ship lines were run off the eastern end of L'Hommedieu Shoal, but the soundings here developed nothing new. It was my intention to make a careful examination of the 16 and 9 foot spots shown between the eastern end of L'Hommedieu Shoal and Succonesset Shoal, but bad weather prevented this being done. Some lines were run across the 16 foot lump but there probably is less water than the soundings on these lines indicate.

8. Hedge Fence Shoal, L'Hommedieu Shoal and the patch be-

tween buoys S 17 and C 19 were developed with the launch. The lines were run approximately at right angles to the length of the respective shoals and they are fairly close. Additional lines would have been run however, had the length of the season permitted. A small portion at the eastern end of L'Hommedieu Shoal was left unfinished. It would have required but a few days more of good weather, but the season was already well advanced for work in this latitude, and the weather was very unfavorable. The unfinished portion is unimportant.

9. The positions on this sheet depend chiefly upon objects previously determined by triangulation. Two or three signals were erected, and these together with one or two prominent objects were out in by sextant angles observed on board and on shore. These angles will be found in the sounding records. Buoys in the vicinity of the hydrographic work were determined by sextant angles and these angles will also be found in the sounding records.

10. The tidal reductions for this work depend upon the readings made in Vineyard Haven Harbor. The plane of reference is mean low water derived from the tidal observations made by the party of C. P. Perkins, U. S. N., Assistant, C. & G. Survey, in 1887. The sheet is transmitted to the office with only a portion of the positions plotted.

11. The following suggestions are offered for the improvement of chart # 112: More topography should be shown, especially the configuration of the more important hills. Among the prominent objects that should be shown on the chart are, the Falmouth stand pipe, "Fal" ( prominent building with cupola standing on bluff at Falmduth ) Lagoon Heights stand pipe, Vineyard Haven stand pipe and Makonikey hotel. Hydrographic signal "Wind" is a tall windmill standing beside a prominent white house (western side), and the two

should be shown on the chart. The rear object of the range leading into New Bedford harbor is not a stand pipe as indicated on this chart, but an elevated tank supported upon a steel framework. There is a tall and prominent factory chimney near this range, which in thick weather might readily be taken for a stand pipe.

12. For the use of vessels going into Vineyard Haven from the Sound, the Marine Hospital and the more important buildings of the town (town hall for instance) should be shown. As there are no dangers in the harbor, chart # 112 might ~~be~~ readily be used for going in without the necessity of looking up the harbor plan.

13. A light displayed at the head of the harbor at Vineyard Haven would materially assist vessels coming in at night. During the time that the Explorer was in the vicinity a fixed red light was exhibited from the flag staff at the Marine Hospital by the hospital authorities, but its light was too faint to be of much assistance to vessels. Vineyard Haven is quite an important harbor of refuge and temporary anchorage for sailing vessels and tugs with tows.

14. Lombards Cove (chart 112) should be Lamberts Cove. "Kopeecon" Point doubtless is a corruption of Cape Higgon.

Respectfully submitted,

Assistant, C. & G. Survey,

Chief of Party.

COAST AND  
GEODETIC SURVEY

DEPARTMENT OF COMMERCE AND LABOR

MAY 21 4 29 PM 1907

Coast and Geodetic Survey

FILE:  
REFERRED:  
ASSISTANT IN CHARGE

O. H. Tittmann, Supt.

2851

U. S. C. & G. SURVEY.  
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MAY 22 1907

Acc. No.

Hydrographic Sheet No. 15, Field.

*Western Point*  
Nantucket Sound, Massachusetts

Hedge Fence and L'Hommedieu Shoals and Vicinity

Assistant Walter C. Dibrell, Chief of Party

Steamer "Explorer".

Begun: Sept. 7

Ended: Nov. 30

1906

Scale: 1-20,000

11/1/'06.

S T A T I S T I C S

Date	Vol.	Let.	Miles	Sdgs.	Angles	Boat
1906						
Sept. 7	1	a	2.0	271	144	Whaleboat
Sept. 10	1	a	5.4	275	128	Steam Launch
" 11	1	b	7.1	331	138	" "
" 12	1	c	13.6	686	248	" "
" 18	1	d	3.2	141	58	" "
" 19	2	e	12.7	552	228	" "
" 20	2	f	0.4	26	6	" "
" 21	2	g	8.6	449	188	" "
" 22	2	h	0.7	48	20	" "
" 28	2&3	i	19.3	1098	384	" "
" 29	1&4	k	12.1	495	186	" "
Oct. 1	4	l	17.0	1111	258	" "
" 2	4&5	m	17.0	756	290	" "
" 3	5	n	15.9	904	274	" "
" 5	5&6	o	15.0	792	252	" "
" 11	6	p	1.9	57	38	" "
" 12	6	q	10.3	482	202	" "
" 13	3	r	16.7	1158	262	" "
" 26	6	s	6.7	365	142	" "
" 27	3&7	t	6.4	490	114	" "
Nov. 5	7	u	7.9	482	124	" "
" 26	7	v	15.8	932	232	" "
" 27	7&8	w	8.3	521	120	" "
" 28	8	x	16.9	932	246	" "
<b>Totals</b>	<b>9</b>	<b>25</b>	<b>238.9</b>	<b>13093</b>	<b>4136</b>	" "
Sept. 12	1	A	19.7	995	266	" Explorer"
" 13	1	B	8.8	413	114	" "
" 19	1&2	C	16.7	737	208	" "
" 20	2	D	1.7	109	26	" "
" 21	2	E	22.0	1043	384	" "
" 22	2&3	F	12.2	494	188	" "
" 28	3	G	17.1	850	252	" "
" 29	3	H	19.3	834	234	" "
Oct. 1	4	J	17.3	1022	284	" "
" 2	4&5	K	19.5	925	248	" "
" 3	5	L	19.0	906	266	" "
" 27	5	M	6.6	300	74	" "
Nov. 5	5	N	11.3	477	108	" "
" 28	6	O	8.5	525	114	" "
" 30	6	P	4.4	231	62	" "
<b>Totals</b>	<b>6</b>	<b>15</b>	<b>204.1</b>	<b>9877</b>	<b>2826</b>	" "
<b>Grand totals</b>	<b>15</b>	<b>39</b>	<b>445.0</b>	<b>23231</b>	<b>7108</b>	

*Square miles (nautical), 9 1/2*

Observers

Walter C. Dibrell, Assistant.  
 C. M. Sparrow, "  
 Eoline R. Hand, Aid.  
 J. R. Hurley, Surgeon.  
 B. Ackerman, Mate.  
 James H. Simpson, Deck Officer 1cl.

Recorders

Edward Treffz, Chf. Wr.  
 Harold Olsen, Wr. 2cl.

Leadsman

T. N. Janssen, Q.M. 1cl.  
 A. M. Berggren, " 2cl.  
 H. W. L. Zall, " "  
 E. N. Larsen, " "  
 T. K. Janssen, Seaman.  
 Emil Walden, "

Tidal observations at Vineyard Haven,  
 Massachusetts.

Sounding lines plotted by

*Plotted & Inked by H. B. Down*  
*Reviewed & Curves by J. Watkins*  
Tide Observers

W. K. Snock, Seaman.

G. E. Jackson, Seaman.

9-19-07



V.E.C.  
Apr. 18, 1907.

HYDROGRAPHIC SHEET 2851.

Nantucket Sound, Western Part, Massachusetts, by  
W.C. Dibrell in 1906.

TIDES

	Vineyard Haven ft.
Mean low water, or plane of reference on staff	4.2
Lowest tide observed " "	3.2
Highest " " " "	7.1
Mean rise and fall of tides	1.7

*Applied Dec. 11<sup>th</sup> 07.*  
*H. E. G.*

Coast and Geodetic Survey  
APR 18 1907  
TIDAL DIVISION.

Sheet 2851 Nantucket Sound

The sounding lines were run very close together and crossed each other in many places. While the ground is well sounded it seems that the same result might have been reached with less work.

A comparison with the soundings taken in 1887+8 shows an enlargement and a slight shifting of the top of the shoals (6 fms deep) but the depth remains about the same (see tracing with sheet.)

While all lines were protracted and the soundings plotted in pencil, only a selection of soundings are inked on sheet.

June 19<sup>th</sup> 1907

F. C. Davis