Notes by
W. W. Welsh

STUDENT

Gloucester, Mass., etc

FILING COVER

To Bind Completed Matter

Course given by

SUBJECT:

For the

NATIONAL SEPARATE-LEAF NOTEBOOK

Patented by E. W. Hill, July 5, 1898.

Gloucester, April 17th

Capt. Carlo Young, states.

Herring exceedingly scarce, even to the Eastward, where only a few small herring have been taken. The vessels are using frozen alewives for bait, and today he is sending a vessel to Portland for these.

A short run of large spawn shore (?) herring is expected any day now at Provincetown — the run usually lasts five days or a week. These are taken in traps, and are anxiously awaited for bait purposes. Arranged with him to save me a sample of the first to come in. None of these so-called shore herring are taken any-where on the North Shore of Mass, or anywhere

on the Cape except Provincetown

Sea herring (large, fat) are reported now as being 8 to 15 miles off Gloucester. 5 bbls have been brought in, but none now on the market. According to Capt. Young, this school is a different one from the "shore herring at Provincetown. They appear off shore 10 to 20 miles (off Gloucester in the latter part of April), and work east, keeping off shore, past Seguin (may & June), to Mount Desert Rock. Described as large, weighing about a pound, and very fat. Described also as nearly ripe (off Gloucester) and supposed to spawn off-shore. Arranged with Capt Young to save a sample, all taken in Purse-seines.

In summer very small herring are found in the canal to Squam River

and thoroughfares about Ipswich Bay and Essex river.

Places of Inquiry —

Capt. George Nelson, Booth-bay freezer.

— Stanley, S.W. Harbor

McKinley freezer (near Bass Hbr?)

Portland Cold Storage & Freezer Co.

Wm F. Stickney, 10 Chapel St. Gloucester, (Works on Fort Point Fish-wharves) Confirms Capt. Young's statements, except that he thinks the Sea Herring referred to are fat, but not approaching spawning.

Purse-seining has not yet begun, but many of the little fellows are fitting out. Gill netters are still operating, but claim to have had a poor season. The big run of haddock has not arrived so far. Capt Young,

Who is emphatic in his disapproval of the "Beam Trawl" Report, states it as his opinion that the Trawlers have killed or broken up the schools of both cod & haddock that used to come to the inshore spawning-grounds. Also believes that the said report is unjust to the line fishermen.

Apr. 18th Sunday. No receipts of herring, and no new information

Apr. 19th (Legal holiday). Left Gloucester 8.20 Am for Boothbay, arriving at Booth-bay 5.30 P.M. Called up Capt. Hahn, but he was out, & all fish places closed.

Apr. 20th 7 to 8.30 Am spent talking round the fish wharves.

A very few small herring (about 5 in. long) are being taken in the few traps now operating. None now on hand. Schools of a smaller size (about 3 inches?) have also been seen. Large Sea-herring not yet reported, but arrived here last year on May 14th. Opinion differs as to whether they are spawn herring or not. All agree that they only get as far as Mt. Desert Rock. Here they are reported as coming right ~~out~~ up to the rocks of the outer islands, but are not reported inside.

Saw Capt. Hahn from 9 to 11 A.M. In P.M. had a long talk with Capt. George Nelson, who runs the Booth-bay freezer. He states that the Sea Herring have only been a factor here since

about 6 or 7 years ago, when the big run of fall spawn herring stopped. Also that the sea herring arrive about May 12th and are abundant not much over a month. The Casco Bay catch is mainly small herring, and are taken to Portland. Very few of the large herring run inside the islands here, although at times a few are taken. He thinks that over fishing (traps) for small herring inside has ruined the industry. Also makes the common complaint of old traps & gurry ruining the ground & frightening fish. Sure that motor-boats ~~scare~~ drive them away with noise & oil. — A few ground-fish are being brought in by small trawlers, but do not amount to much

Not many shad last season (offshore). None to speak of in the rivers. Seamen shad fishing best off sandy beaches. A few salmon are taken in traps at Small Point, but none to amount to anything.

Capt. Hahn thinks that the most important places to stop are Millbridge, Jonesport, Prospect, S.W. Hbr. Rockland, ~~Boothbay~~ Port Clyde, Boothbay.

Finney's fish wharf a good place to get information

David Greenlaw — for trap fish.

Capt Hahn says alewife run at Damariscotta Mills, 1st week in May, is worth seeing & photographing, privilege belongs to one Nickerson.

— Note: What really is a Kyak?

Apr. 21st Got herring sample in A.M. (Sample A), and left at 1 PM for Portland — next to impossible to get to Eastport any other way. Took 11 P.M. train for Eastport, arriving

Apr. 22 at noon. Spent P.M. talking things over and getting acquainted. Mr W.S. Hume and his son were fine — the latter took me around. Saw Capt. Mitchell (Seacoast Packing Co) — the best man in these parts. He says. No large herring now anywhere. In May go to Griffins Cove etc, St Mary's Bay, also Margaretville N.S.

Says also, E end of Fox Island Thorofare & NW of Goose Rock light & see R.C. & A. G. Gillis, after May 1st have weir — & are good men.

Says also - Be sure to see Mr. Stanley who has freezer at Bass Harbor - a good man + good fisherman

No herring here until tomorrow at 1 P.M. (which puts out the schedule again).

The canneries started Apr. 15th + there is an unusually large run for this time of year. No netting + no large herring expected till June or July. Capt Mitchell expects "too many" sardine herring this season

73
14
87

182.8
36.0
12.8
232.1

Sta 10273 May 10 - 6 30 P.M.

Depth, fath - 127	meters 232
0	let out 75 = 75
50	" " 50 = 125
100	" " 50 = 175
150	" 50 = 225
225	

Sta 10274 May 10th 11. P.M.

Depth 48 fath - 87. meters -

0	let out 40 = 40
40	" " 40 = 80
80	

Set 2. Blue Hill Bay
May 10. trap — extras

15				
14				
16	7	14	on	120 q.
15	22	15	"	500 "
14	13	16	"	360 "
15	7	17	"	210 "
15				
15	28	15	on	620
16	29	16	"	780
15	16	17	"	370
15	15	14	"	270
15				
15				
15				
14				
14				

16	14	15	16	15
16	15	15	16	15
15	15	15	15	16
17	15	17	17	15
16	15	17	15	15
17	15	17	16	15
15	15	17	16	16
17	13	17	16	15
16	15	17	16	15
16	14	15	14	15
15	15	15	15	16
15	13	16	16	15
15	15	16	15	16
14	14	14	15	16
16	15	16	13	17
14	18	17	14	16
16	15	14	16	17
15	15	16	14	14
15	16	16	16	15

16	15
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15	16
15	16
16	15
14	14
16	15
14	16
16	15
14	16
17	15
16	15
15	15
15	14
15	
15	
16	

Sample F.=6. Wein Shepherd R.
May 13 1914 (Branch Herring 9 cm.)

7	14	16	17	16
8	14	17	15	17
6	15	17	17	15
17	15	16	16	14
16	15	17	16	16
16	14	17	14	17
17	15	15	14	15
17	8	18	15	16
16	8	16	14	16
16	8	15	14	17
16	8	15	16	17
17	8	17	15	15
16	8	16	14	16
16	8	17	15	16
16	17	17	17	16
16	17	14	16	17
16	18	16	17	16
15				

15	16	17	15	16
14	16	16	18	17
16	15	13	16	16
15	14	12	16	15
17	17	7	16	16
16	16	8	15	16
17	16	8	16	15
15	14	7	17	17
16	15	6	15	17
16	17	7	17	16
16	16	8	15	15
15	14	8	16	15
16	14	8	18	14
16	17	7	15	13
17	16	17	16	16
8	16	17	16	14
15	16	17	15	13
14	13	16	14	15
16	7	15	16	15
17				

16 17 cm 50 fish

16 gross 2450
740
14 1710

16

14 16 cm 67 fish.

16 7 gross 2680
740
16 1760

15 15 cm. 46 fish.

14 gross 1840
740
17 1110

14 14 cm 31 fish

15 gross 1320
740
8 580

7

15

14

15

15

7

7

7	16	15	17	17
7	5	16	16	17
7	16	16	16	16
7	14	16	7	15
7	6	16	15	17
17	7	16	13	15
18	8	16	15	17
17	8	16	14	15
17	9	16	8	16
16	9	7	17	15
15	15	15	7	14
16	14	15	8	15
7	16	13	7	13
7	15	14	9	14
8	14	17	8	19
7	16	8	7	12
7	17	14	7	13
16	14	14	11	12
18	15	9	8	11

17	15	13
16	15	14
17	15	8
16	16	7
14	17	8
16	13	7
16	15	6
15	15	7
16	15	8
15	14	8
14	14	16
14	15	15
15	15	16
16	14	16
17	14	17
14	14	16
17	15	
17	14	
16	12	
14		

18 cm.
27 fish
gram 1700
tare 650
1050

17 cm.
27 fish
gram 1660
760
900

19 cm
11 fish
1170
tare 640
530

20 cm
3 fish
640

21 cm. 2 fish 780
640
140

22 cm 1 fish 80
23 " 1 " 95

16 cm. 33 fish 1540
640
900

15 cm. 30 " 1340
640
700

14 cm 32 " 1350
640
710

6 7 8 9 10 11 12 13 14 15

16 17 18 19 20 21 22 23

5	/
6	
7	𝍸 𝍸 𝍸 𝍸
8	𝍸 𝍸 𝍸 |||
9	||
10	
11	
12	
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17	𝍸 𝍸 𝍸 𝍸 ||||
18	|||
19	|
20	
21	
22	
23	

[illegible] 10

Sample 7 Boom Id
May 14.-15 Seine.
Purchased frozen at Gloucester
May 20. (Good beam scales).

37 = 32 32 - 36
36 = 31 32 = 37
31 = 27 28 = 32
34 = 30 33 = 38
35 = 40
30 = 36

Sample 8 May 21st [illegible]
[illegible], rain, [illegible]
[illegible] May 22

Pure red-feed - [illegible]

Sample 9. May 20. Spruce
Bay Seine purchased [illegible]
May 22

Pure red-feed

Thursday. Sent Hank [illegible]
[illegible] to Cape Horn.
No [illegible] to the Steward.
Capt. Horn owes the mess
[illegible] days @ $2 [illegible] $2.50, for
[illegible] which [illegible] deserves to [illegible].
a balance due the mess of $3.50.
When the mess tried to collect
Capt Horn told them to collect
at the [illegible] when the
mess had the [illegible].
When it came time to [illegible]
[illegible] he was [illegible]
[illegible] days [illegible] and
[illegible] he might [illegible]

T0279 [illegible]

10 Aug.

41 feet = 75 m.

Surface	Just on	30
40 m	"	" 40
70 m.		

0		50
40	[illegible]	5.25 @ 9.5
70	5.33	4.04 @ 12

Desert. 65-0 1/2 meter

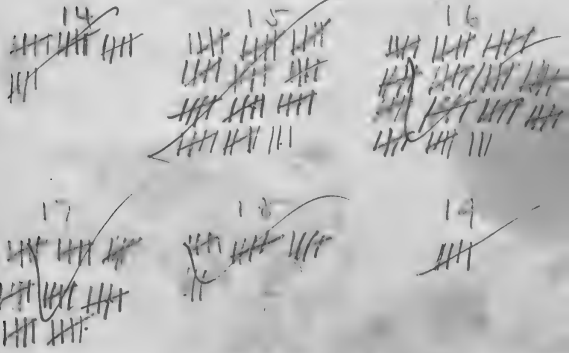
Helopland 60-0

20 met Surface

#5 " "

May 28. Herring sample
11. Trap. Shepard Pier
Many adult among them.
Stomachs of adult full of spawn
herring (bait)

Extra numbers Herring



7
1

13
1

Smith

16 | 17 | 18 | 19

1

14

1

Bill nets 3, 3 nights, set in cove back of Hatteras, Beaufort bay, May 27. for 1 night.

— Rhizoma (scale)

1 herring 11 in [illegible]

Silver fish

Sample 12, from 124 feet

Sample 12 Off Pumpkin Ridge
Boothbay, May 30. Seine.
Purchased from. Very little [illegible]
in Shoals.

34 ✓	315	♂	1	2
33 ✓	270	♂	1	2
33 ✓	300	♂	+	2
34 ✓	320	♂	+	2
34 ✓	310	♂	+	2
31 ✓	250	♂	m	2
33 ✓	270	♀	1	2
31 ✓	250	♀	+	2
33 ✓	270	♂	1	2
34 ✓	270	♀	1	2
32 ✓	275	♀	1	2
32 ✓	270	♀	1	2
33 ✓	295	♀	1	2
32 ✓	280	♀	1	2
32 ✓	270	♀	+	2

33	270	♂	+	2
34	325	♀	1	2
33	280	♀	1	2
32	275	♀	1	2
33	285	♂	+	2
32	260	♂	+	2
32	245	♂	1	2

33	320	♂	+	2
34	300	♂	0	2
33	300	♂	+	2
34	305	♂	+	2
31	275	♀	1	2
34	315	♂	+	2
34	320	♂	+	2
34	310	♂	+	2

~~01 — 3~~
02 — 6
~~03 — 11~~
~~04 — 9~~
~~05 — 1~~

182
1/2
174

Log. G. current book 46

Sta 1028 2 June 10th
107 fath. 194 meters
8 AM 10 Am

0	~~3.83~~ 43		W.S.
50	~~4.33~~ 5.75 @ 7.25		W
100	~~5.33~~ 5.78 @ 6.5		
~~150~~	~~5.44~~ 5.22 @ 6.5		W, S
180	5.33	5.30 @ 7	W.S.

1/2 meter 180 – 0 Am Ventricosa
very Cattle, mostly colonies
20 shapes } fractured, mostly
5 " } fragments

Hel. 175 – 0 Abundant Cal.
Mela ~~7.5~~ 7.0 – 0 Scant Cal.

44 35
26 32
13 miles W for Pteropods

Sta 1028 3 June 10th
7.40 P.M. – 9.30 P.M.
115 fathoms = 209 meters to uneven bottom. 180 m.

MS

0 42
50 5-30 @ 6
100 4-4-7-5-12 @ 6
180 333 364 @ 6

1/2 m. mud net. 180 – 0 Strands bottom [illegible] + red feed and [illegible]
20 surface Secchi
5 " "

Holgoland 100 – 0 m.
1 1/2 quarts alcohol + [illegible]
[illegible] Secchi Range [illegible]

Clear smooth finish W.

Sta 1 2 3 4 June 11th

5.15 A.M. 6.30 A.M.

Clear ~~hazy~~ hazy smoke. calm.

50 fall = 91 m, but shooting.

0	42		WS
40	N+N. 5.15 @ 7		WS
80	533	5.25 @ 9	WS

1/2 m. particles 50-0 fine sand

20 hair diabetes on surface heart

Meter net 70-0

2 pts solid redfeet

1 clam 1 saggitta

Sta 1028 June 14th
6:20 A.M. Calm, cloudy, smooth
fast - miles.
Surface temp: W.S.W.
46.0

20 net 0, 10 min.
1/2 meter net 0: 15 min.

After minute tow clogged the nets with diatoms.
1/2 meter net, some fish eggs also.

Sta 10286 June 14
9:30 A.M.
52 fm = 95 meters.
fog Smth. smooth
Light

0	45.5	60.
40	40 5.44 @ 7	48
80	5.20 @ 7	43.

Peridin 80—0 few - scarce
Nitz 70—0 few [illegible]
1/2 m few few Some colonies +
20 " Micro abundant
Red

10287 June 14th

Stations. 4.15 [illegible] 5.15 P.M.

S. light, smooth clear

43 fath = 78 meters

0		46		W S
35	N-7	17023	5.95 @ 17	W S
70	S.V.	5-33	4.90° @ 13	W S

½ meter vertical 50-0

meter net 50-0

20 m " surface

½ m " "

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in different studies

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SUBJECT OF STUDY:

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To index the book, write below on the margin, the name of the study

10288

June 19, 195
2.30 A.M.

125 fath = 227 meters.

0 = 49.5°

50 = 5.7 no. 5[illegible] at 9

100 = [illegible]

150 = 5.7 no. [illegible] at 9.

220 = 6.3 no. 5[illegible] at 9.

100 [illegible] 5[illegible] at 8

WS at 0, 50, 100, 150, 220

½ m

[illegible]

½ m. [illegible]

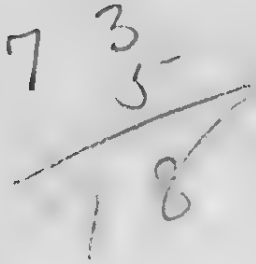
[illegible], 85 - 0

[illegible]. 195 - 0

10240
June 19 Th 5:30 pm.

64 meters

B 43°



Sta 10291 June 23, 830 [illegible]

78 meters.

0 48°
30 3.5‰ [illegible]
75 [illegible]

[illegible]

1/2 m. bot, 78 – 0.
Meter net 60 – 0
1/2 m } Empty
30 net }

11 P.M. 97 Felt.

0 49.5° ab

40 3.1° ab

80 2.27 ab

120 7.5° ab

170 8.25 ab

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10299

120 path = 219,

0 56.5°

50 6.2 at 11 [illegible] 2

100 4.7 at 10 11 # 2

210 [illegible] at 10 11 5 33

1/2 th. leaf 2nd — 0

2 in Conf

Sta.
1030 1 July 15th 1915
(in vicinity of burning) 10 Km

73 meter.
3 miles SW by W. from Aldbrough St.

0 48° W.S.
60 m. 7.20 @ 9 hrs W.S.

Water not boiled as.
½ " " Sempra } ½ km.
20 " " "

Sempra 2½ inch nickel plated
½ in. [illegible] fine type 1½ in.
Mappy Ivy Spring Calamus
2 in. fine green polished
Sedum, Sedum not many spreading
Many fine eggs. A few green
cotyledons + larval [illegible]
→ No food at all.

41	420	♀	6
41	450	♀	7
37	380	♀	7
38	420	♀	7
42	540	♀	6

Provincetown July 8:

Fish in 2 bushels read from trap net

139 Menhaden

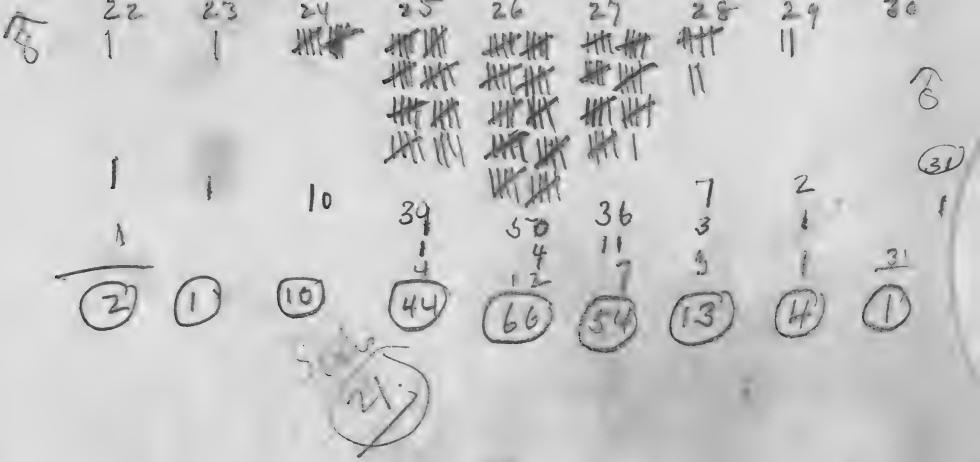
1 shad (scales taken)

1 squirrel hake

15 Hyacks (P. pseudoharengus).

Of these last a few were recently spent, and thin, but most had recovered and were quite fat

See over for weather


22
23
24
25
26
27
28
29
30
31
2
1
10
44
66
54
13
4
1
21

20 - 160 (3 scale samples)
22 - 115
27 - 190
26 - 185
28 - 235
27 - 195
28 - 260
26 - 210
26 - 190
27 215
26 - 190

over

Pomolobus aestivalis

for 81 A.

Provincetown Mass. July 7th

27 - 215 mm. red feed.

26 - 220 "

29 - 245 "

25 - 180 "

26 - 210 "

27 - 210 +

27 - 205

26 - 200

26 - 190

28 - 235

27 - 220

26 - 190

26 - 185

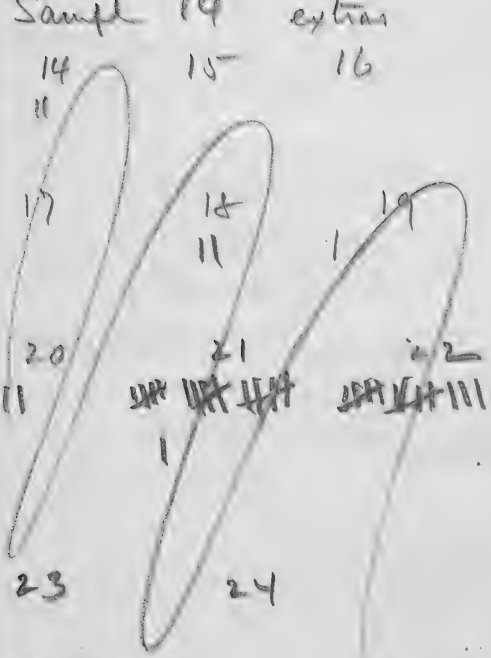
26 - 180

25 - 180

26 - 190

25 - 165

all very fat, but small



14 - 2
15 - 1
17 - 4 = 137g
18 - 5 - 205g.
19 - 1 = 50g.
20 - 2 = 124g
21 - 16 = 105

22 - 13 = 99g
23 1 = 95

Mites not 2 sp. Calanus
& chiru 3 copepodites

Several fish-larvae
1 amphipod crustacean "
2 Cyclopterus A few fish eggs.

20 mites A few diatoms - recent
Hy- " " Calanus, 1 schizopod
Many fish eggs. A few larvae
fish.

Stg. 1 May 31st

7 fm. to 8.15 A.M.

~~11 fath. = 44 fm.~~

16 fath.

smooth clear T. 9. light.

surf 44.5

~~20~~

~~40~~ 5-33 5,78 @ 17

16 fath 28 m.

Meter net 15-0 m.

20 net 0

#5 0

2 large fin backs

10 or 12 porpoises in company

catching herring 3 fin whales.

1 this in the place sample 12 was

caught yesterday. Oz.

Perimeter, May 25

Sample of Nails (unbarred)
from keg. No 2 herring
1 1 spring hole

Square Nails 40 @ V 400

Herring 32 @ II 200 1
25 @ I 125 1

Sample D. Taken in fyke-net
Apr. 23, off Isle of Shoals.
Purchased at Gloucester fish-
ing fleet, May 3rd.

As 9/10 of the catch were
haddock, these fish
only to last scale in order.

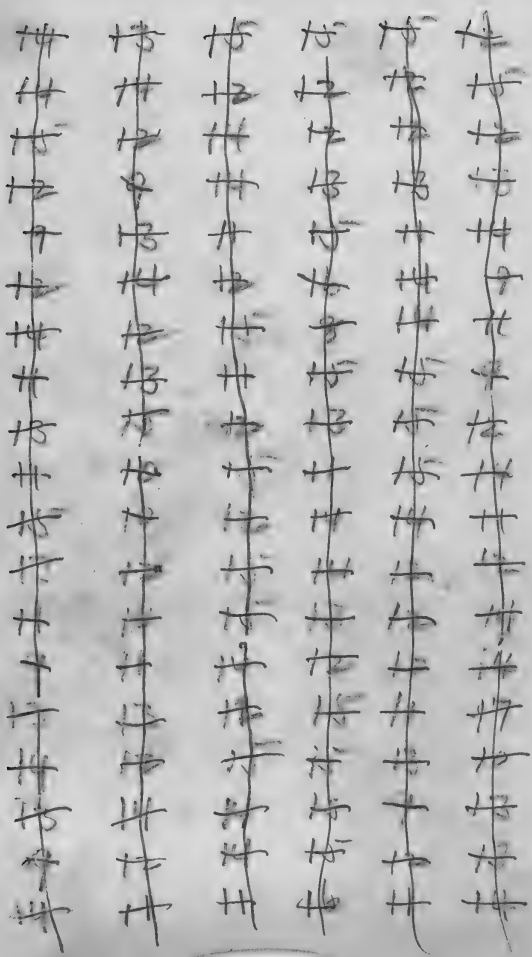
A few with some red spots & whitish.

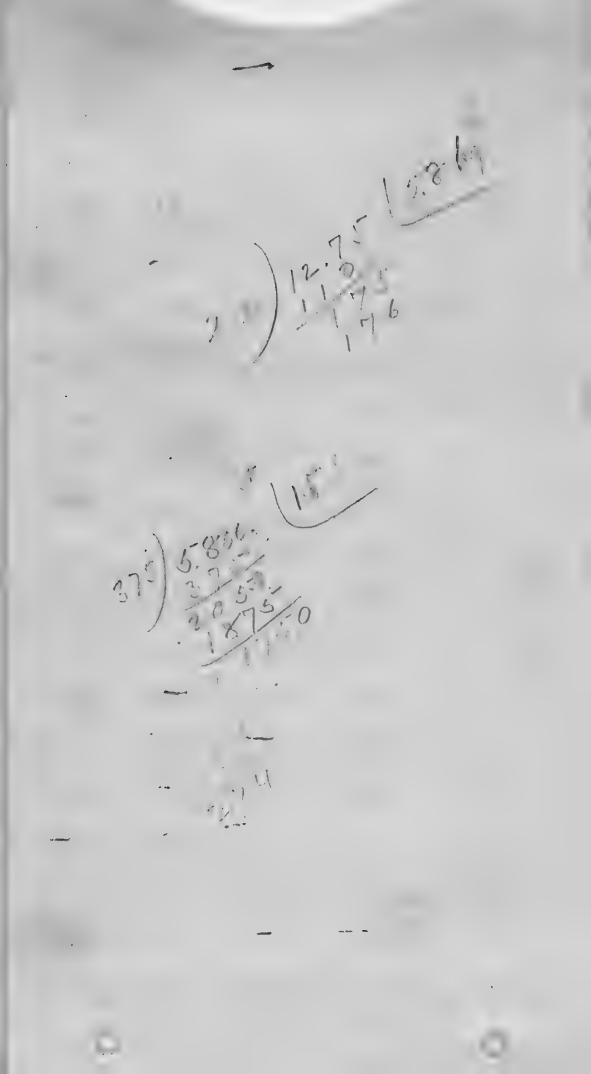
Left Gloucester May 4, 10 A.M.

Sample C. Taken in trap at Provincetown Apr. 19–24 1915. Bought frozen at Boston Apr. 27th

24 cm.	1
25 "	2
26 "	2
27 "	5
28 "	3
29	6
30	5 5
31	76
32	31
33	6
34	3
	190

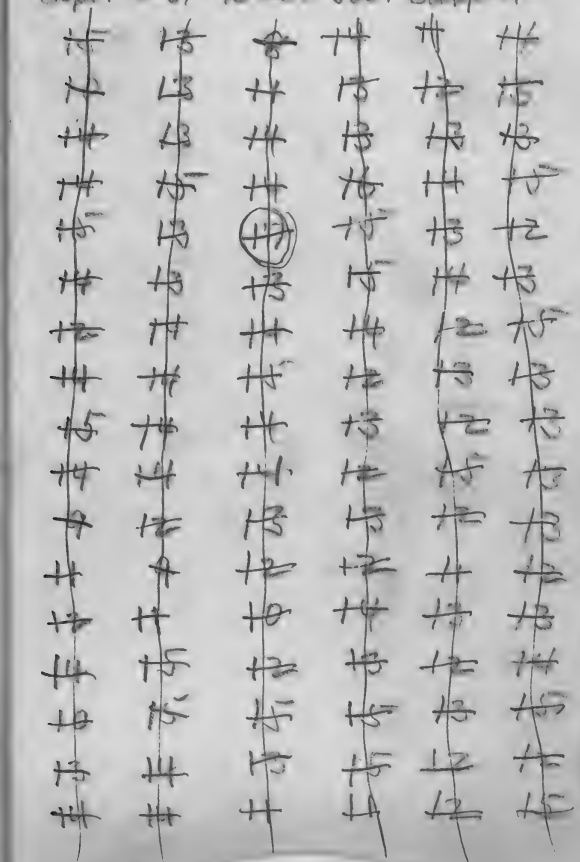
Scales + weights (by chart spring balance in ounces).





Additional lengths, lot B

Ap. 23. Deer Id. Earport



Ultimate length, Lot A 123
Badly sealed. Blg. yr. in.

15	18	16	17
17	17	17	15
14	16	16	14
17	15	15	17
16	16	16	18
17	16	16	17
16	17	16	15
16	17	18	15
16	17	16	13
17	17	15	14
17	16	14	16
18	17	14	16
14	18	17	15
13	15	16	15
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