

VOL II

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 962

The trawl hauls from 955 to 961 inclusive contained very nearly the same things.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 962

Date, Aug. 26, 1881

Locality, Off Nausahon

Bearings, Moepeket Id. N $E \frac{3}{4} E$ $1 \frac{1}{4} m$

Time of day, 3.10 P.M.; of tide, flood

State of sky, Clear

Temperature of air, 71

" surface of water, 68

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 8

Nature of bottom, Blk md. + sd.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

963 Dredge

Contained no fish.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 963

Date, Aug. 26, 1881

Locality, Off Nausahon

Bearings, Moepeket Id. SE $1\frac{1}{2}$ S 1 m

Time of day, 3.40 P.M.; of tide, flood

State of sky, Clear

Temperature of air, 70

" surface of water, 68

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, $8\frac{1}{2}$

Nature of bottom, Blue md.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 964 Dredge

Aug. 29 while at anchor at Hyannis very large schools of young Chirostoma were seen alongside; young Poronotus was caught under jellyfish; a male Syngnathus with pouch full of young was captured alive. On putting it in water some of the young were freed and wriggled about quite briskly.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 964

Date, Aug. 30, 1881

Locality, Off Chatham

Bearings, Chatham Lgts. ~~47~~ N N $\frac{1}{2}$ W 5 m

Time of day, 7.50 a.m.; of tide, Ebb

State of sky, Clear

Temperature of air, 65-

" surface of water, 61

" at depth of fathoms,

" of bottom, 55

Depth, in fathoms, 10

Nature of bottom, s + gr.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 965 Dredge.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 965

Date, Aug. 30, 1881.

Locality, Off Chatham.

Bearings, Chatham Lgt N N x N 6 m

Time of day, 8.15 a.m.; of tide, Ebb

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms, 15

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 966

Dredge.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 966

Date, Aug. 30, 1881,

Locality, off Chatham

Bearings, Chatham Lgt. H

N N x N $\frac{1}{4}$ N 6 $\frac{1}{4}$ m

Time of day, 8.40 ; of tide, ebb

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 16

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 967 Dredge.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 967

Date, Aug. 30, 1881

Locality, Off Chatham

Bearings, Chatham Lgt. H.

N π x π $\frac{1}{4}$ π 6 $\frac{3}{4}$ m

Time of day, 8.50 ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 16

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

968

Dredge

18

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

968

Date,

Aug. 30, 1881

Locality,

Off Chatham

Bearings,

Chatham Lgt. H.

N π x π $\frac{3}{4}$ π

$\frac{1}{4}$ m.

Time of day,

9 a.m.; of tide,

State of sky,

Temperature of air,

“

surface of water,

“

at depth of

fathoms,

“

of bottom,

Depth, in fathoms,

18

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 969

Dredge

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 969

Date, Aug. 30, 1881.

Locality, Off Chatham

Bearings, Chatham Lgt. H.

$N\ N \times N\ 3/4\ N$ 8 m.

Time of day, 9.10 a.m. of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 18

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 970

Dredge

Pleuronectes amer. (med. size) 1
Annelides, crustacea + a
very small starfish in stomach.

12

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 970

Date, Aug. 30, 1881.

Locality, Off Chatham

Bearings, Chatham Lgt. H.

N N N $\frac{3}{4}$ W 6 m.

Time of day, 9.43 a.m.; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms, 13

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 971

Dredge

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 971

Date, Aug 30 1881

Locality, Off Chatham

Bearings, Chatham Lgt. H.

N $3\frac{1}{4}$ ~~N~~ N $4\frac{1}{4}$ m.

Time of day, 10.05 a.m.; of tide,

State of sky,

Temperature of air, 67

" surface of water, 61.5

" at depth of fathoms,

" of bottom, 54

Depth, in fathoms, //

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 972

Dredge

Eumesogrammus subbifurcatus 1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 972

Date, Aug. 30 1881

Locality, Off Chatham

Bearings, Chatham Lgt. H.

N π x π $7/8$ π $7\frac{1}{2}$ m.

Time of day, 10.18 a.m.; of tide,

State of sky, Clear

Temperature of air, 67

" surface of water, 62

" at depth of fathoms,

" of bottom, 52

Depth, in fathoms, 16

Nature of bottom, gr., s. + st.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 973 Dredge.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 973

Date, Aug. 30, 1881

Locality, Off Chatham

Bearings, Chatham Lgt. H.

N N N 6 3/4 m

Time of day, 11.10 ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 17

Nature of bottom, gr. s. + st.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 974 dredge.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 974

Date, Aug. 30, 1881.

Locality, off Chatham

Bearings, Chatham Lgt, N.
N N N $\frac{1}{2}$ N 6 $\frac{1}{2}$ m.

Time of day, 11.30 ; of tide,

State of sky,

Temperature of air, 67

" surface of water, 62

" at depth of fathoms,

" of bottom, 51

Depth, in fathoms, 16

Nature of bottom, gr., s. + st.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 975 Dredge.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 975

Date, Aug. 30, 1881.

Locality, Off Chatham

Bearings, Chatham Lgt. H.

N N N $\frac{1}{4}$ N 6 $\frac{1}{4}$ m.

Time of day, 11.45 ; of tide,

State of sky, Clear

Temperature of air, 68

" surface of water, 63

" at depth of fathoms,

" of bottom, 52

Depth, in fathoms, 16

Nature of bottom, gr. s. + st.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 976 Dredge.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 976

Date, Aug. 30, 1881.

Locality, Off Chatham

Bearings, Chatham Lgt. 6 m
N N W $\frac{5}{8}$ N

Time of day, noon ; of tide,

State of sky, Clear

Temperature of air, 69

" surface of water, 63

" at depth of fathoms,

" of bottom, 52

Depth, in fathoms, 16

Nature of bottom, gr s + sh

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 977

Dredge

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 977.

Date, Aug. 30, 1881

Locality, Off Chatham

Bearings, Chatham Lgt.

NNN 5 m

Time of day, 12,20 ; of tide,

State of sky, Clear

Temperature of air, 70

" surface of water, 64

" at depth of fathoms,

" of bottom, 52

Depth, in fathoms, 17

Nature of bottom, gr. s. + sh.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 978 Dredge

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 979

Dredge

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

980

Dredge

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Trawl 981

Hippoglossoides	many-
Phycis Chess-	2-
Raja radiata	3
Cottus LF-spinosus	1
Triglops, Pingelii	many
Liparis	2 species
Muraenoides	1
Zoarces	juv
Merluccius	"
Aspidophoroides	1
Sebastes	"
Raja esplanterna	

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 981

Date, Aug. 30, 1881

Locality, Off Chatham

Bearings, Chatham Lgt

N. N. W. P. M. 16 m.

Time of day, 2.10 ; of tide,

State of sky, Clear

Temperature of air, 65

" surface of water, 63.5

" at depth of fathoms,

" of bottom, 49

Depth, in fathoms, 41

Nature of bottom, Sd + gravel

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 982 Trawl

Raia radiata ad + juv
~ eglantera

Hippoglossoides

Triglopus Pingelii

Merluccius

juv.

Liparis

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 982

Date, Aug. 30 1881

Locality, off Chatham

Bearings, Lat 41 36
Lon 69 35

Time of day, 2, 45 ; of tide,

State of sky, Clear

Temperature of air, 65

" surface of water, 63.5

" at depth of fathoms,

" of bottom, 41.5

Depth, in fathoms, 40

Nature of bottom, s. + gr.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 983

Raja eglan.	large ♂	3
" rad.	juv	1
Pleuronectes amer.		1
Hippoglossids		2
Gadus morhua	juv.	
Merluccius	"	
Triglops		
Liparis		
Aspidopteroides		

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

983

Date,

Aug 30 1881

Locality,

Lat 41 30

Bearings,

Lon 69 32 34

Time of day, 3.23 ; of tide,

State of sky,

Clear

Temperature of air,

64.5

" surface of water,

64

" at depth of

fathoms,

" of bottom,

42

Depth, in fathoms,

35-

Nature of bottom,

sd,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 984

<i>Limanda ferrug</i>	3
<i>Hippoglossoides</i>	3
<i>Cottus</i> 18-sp	2
<i>Ammodytes</i>	1
<i>Liparis</i>	3
<i>Raia ocellata</i> ♂ + ♀	2

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 9824

Date, Aug. 30, 1881.

Locality, Lat. 41 31

Bearings, Lon 69 28 32

Time of day, 4.07 ; of tide,

State of sky, Clear

Temperature of air, 64

" surface of water, 63.5

" at depth of fathoms,

" of bottom, 41.5

Depth, in fathoms, 32

Nature of bottom, sd & mud.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 985.

Melanogrammus	juv.	1
Squalus acanthias	"	2
Paralichthys oblongus		many
Limanda ferruginea		4
Cottus 18-spinosus		3
Hemitripterus		2
Phycis tenuis		many
Merluccius		2
Raia ocellata ?	♀ 2	(jaws)
" laevis juv.		3
" gl. erinacea ?		1
Liparis juv. in <u>Pecten</u>		1

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

985

Date,

Sept. 7, 1880

Locality,

Off No man's Land

Bearings,

41° 00'

70° 49'

Time of day, 1.05 P.M.; of tide,

State of sky,

Clear (slight haze)

Temperature of air,

73

"

surface of water,

66

"

at depth of

fathoms,

"

of bottom,

50

Depth, in fathoms,

25

Nature of bottom,

Sd.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 986.

<i>Gadus morhua</i> juv.	2
<i>Paralichthys oblongus</i>	9
<i>Limanda ferruginea</i>	9
<i>Phycis tenuis</i>	22
<i>Goarces anguillaris</i>	1
<i>Raia</i> 2 black ocelli <i>laevis</i> ?	1
<i>Raia laevis</i> ? juv.	2
<i>Cottus</i> 18-spine.	2
<i>Merluccius</i>	2

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 986

Date, Sept. 7, 1881.

Locality, 40° 55'

Bearings, 70° 48'

Time of day, 2 PM ; of tide,

State of sky, Clear

Temperature of air, 73

" surface of water, 67

" at depth of fathoms,

" of bottom, 49

Depth, in fathoms, 27

Nature of bottom, sd

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 987 Rake Dredge

Phycis tenuis	juv.	1
Cottus 18-spin.	very juv.	4 2
Hippoglossoides?	" "	1

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

987

Date,

Sept. 7, 1881.

Locality,

Off Noman's Ld.

Bearings,

40° 54'

70° 48' 30"

Time of day, 2.28 P.M. of tide,

State of sky,

Clear

Temperature of air,

73

" surface of water,

67

" at depth of

fathoms,

" of bottom,

49

Depth, in fathoms,

27

Nature of bottom,

sd.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 988 Rake Dredge

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 988

Date, Sept. 7, 1881.

Locality, off Norman's Ld.

Bearings, $40^{\circ} 49' 30''$
 $70^{\circ} 47'$

Time of day, 3.30 P.M. of tide,

State of sky, Clear

Temperature of air, 73

" surface of water, 67

" at depth of fathoms,

" of bottom, 49.5

Depth, in fathoms, 29

Nature of bottom, sd

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 989

<i>Lophius piscatorius</i>		1
<i>Phycis tenuis</i>		many
<i>Glyptocephalus cynog.</i> (medium)		1
<i>Paralichthys oblongus</i>	few	many
<i>Raia laevis</i> ?	juv.	1
<i>Limanda ferruginea</i>		1
<i>Hippoglossoides</i>	juv.	1
<i>Cottus</i> 18-spin.	"	4
<i>Phycis tenuis</i> ?	very juv. in <u>Pecten</u>	
<u><i>tenuicostatus</i></u>		5

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 989

Date, Sept. 7, 1881.

Locality, Off Noman's Ld

Bearings, $40^{\circ} 49'$
 $70^{\circ} 47'$

Time of day, 3.56 PM; of tide,

State of sky, Clear

Temperature of air, 73

" surface of water, 67

" at depth of fathoms,

" of bottom, 49.5

Depth, in fathoms, 29

Nature of bottom, sd

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 990

<i>Lophius pisc.</i>	1 lge. + 2 small	
<i>Enchelyopus cimbrius</i>		few
<i>Phycis tenuis</i>		many
<i>Glyptocephalus</i>		few
<i>Limanda</i>	fewing,	few
<i>Paralichthys oblongus</i>		few
<i>Merluccius</i>	jun.	1
<i>Citharichthys arc.</i>		1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 990

Date, Sept. 7, 1881.

Locality, Off Noman's Ld

Bearings, $40^{\circ} 44'$
 $70^{\circ} 47'$

Time of day, 5.05 P.M.; of tide,

State of sky, Clear

Temperature of air, 71.5

" surface of water, 66

" at depth of fathoms,

" of bottom, 47

Depth, in fathoms, 33

Nature of bottom, gn mud & sd

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 991 Trawl

No fish

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 991

Date, Sept. 7, 1881.

Locality, Off Norman's Land

Bearings, $40^{\circ} 39'$
 $70^{\circ} 46'$

Time of day, 6.05 PM; of tide,

State of sky, Clear

Temperature of air, 70

" surface of water, 66

" at depth of fathoms,

" of bottom, 47.5

Depth, in fathoms, 33

Nature of bottom, gn mud + sd

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 992

Hippoglossoides	juv.	1
Limanda ferrug.		2
Paralichthys oblongus		1
Phycis tenuis		many
Gadus morhua	juv.	1
Liparis in <u>Pecten</u> <u>tenuis</u> .		12 +

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 992

Date, Sept. 7, 1881.

Locality, Off Noman's Land

Bearings, $40^{\circ} 33'$
 $70^{\circ} 45'$

Time of day, 7.35 P.M.; of tide,

State of sky, Clear

Temperature of air, 69

" surface of water, 65

" at depth of fathoms,

" of bottom, 48

Depth, in fathoms, 35

Nature of bottom, gn. md + sd

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 993.

Enchelyopus cimbrius		8
Melanogrammus	large	1
Lophius		1
Hippoglossoides		few
Merluccius		1
Phycis tenuis		many
Limanda ferrug.		1
Liparis	from <u>Pecten tenuis</u> .	15

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 993

Date, Sept. 7, 1881.

Locality, Off Roman's Land

Bearings, $40^{\circ} 28'$ $70^{\circ} 44'$

Time of day, 8.24 PM; of tide,

State of sky, Clear

Temperature of air, 69

" surface of water, 65

" at depth of fathoms,

" of bottom, 46.5

Depth, in fathoms, 37

Nature of bottom, md.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 994

✓ Glyptocephalus	many	
✓ Macrurus Bairdii	moderate	
✓ Phycis Chesteri		3
✓ Synaphobranchus		15
✓ Centroscyllium	♀	1
✓ Cottunculus torvus		1
✓ Amitra		2
Conopogadid n.g.		1
✓ Sternoptychid		1
✓ Scopelus		2
✓ Lycodes verrillii		3
✓ Cottunculus microps juv.		1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 994

Date, Sept. 8, 1887.

Locality, S S W $\frac{1}{4}$ W from Gay Head

Bearings, 104 $\frac{1}{2}$ m. 39° 40'
71° 30'

Time of day, 4.50 a.m. of tide,

State of sky,

Temperature of air, 72

“ surface of water, 68

“ at depth of fathoms,

“ of bottom, 40.5

Depth, in fathoms, ~~351~~ 368

Nature of bottom, mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 995 Light haul

✓ Scopelus	2+3
✓ Sternoptychid	4
✓ Stomias	1
Congrogadid n.g.	1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 995

Date, Sept. 8, 1881.

Locality, 55 N $\frac{1}{4}$ W from Gay Head

Bearings, $104^{\circ} \frac{1}{2}$ S $39^{\circ} 40' 30''$
 $71^{\circ} 31'$

Time of day, 6.32 ; of tide,

State of sky, Hazy + cloudy

Temperature of air, 72

" surface of water, 68

" at depth of fathoms,

" of bottom, 43.5

Depth, in fathoms, ~~345~~ 358

Nature of bottom, yellow md + sd

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 996 R. Dredge

nothing

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

996

Date,

Sept. 8, 1881.

Locality,

85 m $\frac{1}{4}$ m from Gay Head

Bearings,

104 $\frac{1}{2}$ m

39° 41' 71° 31' 37"

Time of day, 7.35 a.m. ; of tide,

State of sky,

Temperature of air,

"

surface of water,

67.5

"

at depth of

fathoms,

"

of bottom,

40

Depth, in fathoms,

346

Nature of bottom,

y. m. sd

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 997

✓ <i>Phycis Chesteri</i>		mod.
✓ <i>Lophius</i>	ad.	1
✓ <i>Glyptocephalus</i>		mod.
✓ <i>Phycis tenuis</i>		1
✓ <i>Macrurus Bairdii</i>		mod.
✓ <i>Halientara sentiosa</i>	juv.	1
✓ <i>Nemichthys</i>		2
✓ <i>Synaphobranchus</i>		few
✓ <i>Scopelus</i>		1
✓ <i>Sternoptychid</i>		1
✓ <i>Amitra</i>		4
✓ <i>Lycodes verillii</i>		4

Phycis Chesteri stomachs were nearly all crammed with amphipods. Pyl. caeca of one examined 17, long + slender. Peritoneum black.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 997

Date, Sept. 8, 1881.

Locality, S S W $\frac{1}{4}$ W from Gay Head

Bearings, 103 $\frac{1}{2}$ W
39° 42' 71° 32'

Time of day, 9.03 A.M.; of tide,

State of sky,

Temperature of air, 75-

" surface of water, 67.5

" at depth of fathoms,

" of bottom, 40

Depth, in fathoms, ~~322~~ 335-

Nature of bottom, Yel. md

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 998.

✓ <i>Phycis tenuis</i>		1
✓ " <i>Chesteri</i>		few
✓ <i>Merluccius</i>	large	6
✓ <i>Macrurus Bairdii</i>		few
✓ <i>Glyptocephalus</i>		"
✓ <i>Synaphobranchus</i>		"
✓ <i>Lycodes vahlii</i> ?		1
✓ " <i>verillii</i>		2
✓ <i>Cottunculus</i>		3
✓ <i>Amia</i> <i>Careproctus</i>		1
<i>Raia</i>	juv.	3
<i>Lycodes</i> big head	"	1
✓ <i>Enchelyopus cimbrius</i>		1
✓ <i>Brama</i> ? <i>Hoplostethus</i> very juv. (ring)		1
✓ <i>Sternopterygiid</i>	(wings)	1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 998

Date, Sept. 8, 1881.

Locality, 55 N $\frac{1}{4}$ W from Gay Head

Bearings, 102 $\frac{1}{2}$ N
39° 43' 71° 32'

Time of day, 10.34 A.M.; of tide,

State of sky, Hazy

Temperature of air, 74

" surface of water, 68

" at depth of fathoms,

" of bottom, 40

Depth, in fathoms, ~~289~~ 302

Nature of bottom, Gn. md.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 999 R.-Dredge.

<i>Macurus Bairdii</i> juv.	1
<i>Lycodes verrillii</i>	1

TEMPERATURE RECORD.

Instrument used,
Current number of observation, 999
Date, Sept. 8, 1881.
Locality, SSW $\frac{1}{4}$ W from Gay Head
Bearings, 100 m
39° 45' 13"
71° 30'
Time of day, 11.48 a.m.; of tide,
State of sky, Hazy
Temperature of air, 73
“ surface of water, 68
“ at depth of fathoms,
“ of bottom, 50 (?)
Depth, in fathoms, ~~256~~ 266
Nature of bottom, Gn. md.
Direction of surface current,
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

Haul 1025

✓ <i>Phycis</i> <i>Chestei</i>	great many
✓ <i>Merluccius</i>	8
✓ <i>Phycis</i> <i>tennis</i>	1
✓ <i>Glyptocephalus</i>	few
✓ <i>Macrurus</i> <i>Bairdii</i>	many
✓ " <i>carminatus</i>	few
✓ <i>Lycodes</i> <i>Verrillii</i>	1
✓ <i>Nemichthys</i>	1
✓ <i>Haliutæa</i> <i>senticosa</i> juv.	1
✓ <i>Hoplostethus</i> "	1
<i>Raja</i> egg small	1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1025

Date, Sept. 8, 1881.

Locality, S S W $\frac{1}{4}$ W from Gay Head

Bearings, 95 m

39° 49'
71° 25'

Time of day, 1.05 P.M., ; of tide,

State of sky, Clear

Temperature of air, 70

" surface of water, 69

" at depth of fathoms,

" of bottom, 45-

Depth, in fathoms, 197 216.

Nature of bottom, Gn. md.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 1026

Phycis Chesteri	great	many
Merlucius		8
Phycis tenuis		1
Glyptocephalus		few
Macrurus Bairdii		many
" carminatus		few
Lycodis verrillii		1
Nemichthys		1
Halientæga senticosa	juv.	1
Brama?	juv.	1
Raja egg	small	1

✓ Phycis Chesteri		many
✓ Macrurus Bairdii?	juv.	4
✓ " carminatus		4
✓ Scopelus		6
✓ Hoplostethus	juv.	2
✓ Merlucius		4

1072

JANUARY 1906 - RECORD

TEMPERATURE RECORD.

Instrument used,
Current number of observation, 1026
Date, Sept. 8, 1881.
Locality, 55 N 1/4 W from Gay Head
Bearings, 93 1/2 m
39° 50' 30"
71° 23'
Time of day, 2.55 P.M.; of tide,
State of sky, Clear
Temperature of air, 69
" surface of water, 69
" at depth of fathoms,
" of bottom, 47.5
Depth, in fathoms, ~~175~~ 182
Nature of bottom, Gn. md.
Direction of surface current,
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

Haul 1027

✓ <i>Phycis chuss</i>		Ma 2
✓ <i>Raia erinacea</i>	♂	1
<i>Stegodonta</i>		4
<i>Romulus</i>		2
<i>Megascopus</i>		4

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1027

Date, Sept. 14, 1881

Locality,

Bearings, Lat. 40° 00' N.

Lon. 69° 19' W.

Time of day, 7.23 a.m. ; of tide,

State of sky, Clear

Temperature of air, 61

" surface of water, 65

" at depth of 5 fathoms, 66

" of bottom, 48.5

Depth, in fathoms, 93

Nature of bottom, fine sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 1028,

✓ <i>Synaphobranchus pinnatus</i>	45
✓ <i>Macrurus Bairdii</i> (all juv. but one)	19
✓ <i>Coryphaenoides</i> (28926)	1
✓ <i>Lycodes Verillii</i>	1
✓ " short snout	1
✓ <i>Phycis Chesteri</i>	7
✓ <i>Glyptocephalus cynoglossus</i> 2 juv. + 1 med.	
✓ <i>Scopelus</i> (in wings)	1

Phycis Chesteri pyl. caeca - 13, 13
Coryphaenoides stomach - amphipods
Synaphobranchus ♀ full of eggs

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1028

Date, Sept. 14, 1881.

Locality,

Bearings, N. lat. $39^{\circ} 57'$

W. lon. $69^{\circ} 17'$

Time of day, 9.01 a.m.; of tide,

State of sky, Clear

Temperature of air, 66.5

" surface of water, 66

" at depth of 5 fathoms, 66

" of bottom, 41

Depth, in fathoms, 410

Nature of bottom, Yellow mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 1029

✓ Haloporphyrus viola	juv.	3
✓ Coryphaenoides		2
✓ Macrurus Bairdii	mostly juv.	52
✓ Phycis Chestni		14 13
✓ Synaphobranchus		17
✓ Merluccius	large	1
✓ Scopelus		4+1
✓ Centroscyllium	juv.	1
✓ Cothurniculus torvus	"	2
✓ Glyptocephalus	6 j. + 8 med.	
✓ Lycodes Verrillii		1
W " short head		1
✓ Sternoptychid		2

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1029

Date, Sept. 14, 1881.

Locality,

Bearings, N. lat. $39^{\circ} 57'$
N. lon. $69^{\circ} 16'$

Time of day, 12.13 noon; of tide,

State of sky, Clear

Temperature of air, 72

" surface of water, 68

" at depth of 5 fathoms, 66

" of bottom, 40

Depth, in fathoms, 45-8

Nature of bottom, Yellow mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

RECEIVED RECORD