

1196 188

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 1196 to 1235

9

FISH HAWK.

1196

To

1235

$$\begin{array}{r} 1221 \\ 1196 \\ \hline 25 \end{array}$$

W<sup>1/2</sup> S

Myra Tumble # 39/75

~~1206 Ship's Head 66 x 6~~ 882

1209 Ship's Head 46 x 6 886

Ship's Head 54 x 6 886

~~886~~

$$\begin{array}{r}
 1248 \\
 1197 \\
 \hline
 51
 \end{array}$$

$$\begin{array}{r}
 1203 \\
 1197 \\
 \hline
 6
 \end{array}$$

1197

Specimens Obtained

Squirrel flounders crabs

~~Sentage~~ Santog Soup

King Crab

1197

## TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 feet)*Current number of observation, *1197*Date, *Aug 9th 1887*Locality, *Off Falmouth*Bearings, *Notaka bon S. N. by N.  $\frac{1}{4}$  N.**E. Chop light SE  $\frac{3}{4}$  S.*Time of day, *10.50 am*; of tide, *Flood*State of sky, *b-c*Temperature of air, *72°*" surface of water, *72*" at depth of ~~75~~ fathoms," of bottom, *71.5*Depth, in fathoms, *3  $\frac{1}{2}$* Nature of bottom, *Shell sand*Direction of ~~surface~~ *Wind* current, *SSE*Force of ~~surface~~ *Wind* current, *2*Direction of ~~bottom~~ *10 mph* current, *East ~~75~~  $\frac{1}{6}$* 

Force of bottom current,

Name of vessel, *U S S Fish Hawk*To what service attached, *U S F G*Name and rank of commanding officer, *James A Smith**Mate U S S*

Name and position of observer,

*J M Conington  
Mate U S S*

1298

REMARKS.

Specimens Taken

Spider Crabs Sea Robbings

Squid Hermit Crabs

Sculp Sea Urchin Starfish

Clams

1198

## TEMPERATURE RECORD.

Instrument used, *Beam Trawl*, *11 Feb*  
 Current number of observation, *1198*  
 Date, ~~*Off Falmouth*~~ *Aug 9<sup>th</sup> 1887*  
 Locality, *Off Falmouth*  
 Bearings, *Nbeka Light N 1/2 S 2'*  
*Falmouth N E 1 E 1'*  
 Time of day, *11.05 am*; of tide, *Flood*  
 State of sky, *bc*  
 Temperature of air, *70*  
 " surface of water, *72°*  
 " at depth of fathoms,  
 " of bottom, *71.5*  
 Depth, in fathoms, *4 3/4*  
 Nature of bottom, *Shell grass sand*  
 Direction of ~~surface~~ *Wind* current, *S S W*  
 Force of ~~surface~~ *Wind* current, *2*  
 Direction of ~~bottom~~ *Drift* current, *East 1/2*  
 Force of ~~bottom~~ *Drift* current,  
 Name of vessel, *U S Fish Hawk*  
 To what service attached, *U S F C*  
 Name and rank of commanding officer, *Jesse A. Smith*  
*Mate U S F*  
 Name and position of observer,  
*J M Penington*  
*Mate U S F*

1199

REMARKS.

Specimens Obtained  
Sea Robbins Scollap <sup>Hermit</sup> Crabs  
Sea Anchin Squid Sea Bass

1199

## TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 feet)*Current number of observation, *1199*Date, *Aug 9<sup>th</sup>*Locality, *Off Falmouth*Bearings, *Abakea Light SW  $\frac{1}{2}$  W  $\frac{1}{2}$* ~~*Falmouth S  $\frac{1}{2}$  E*~~ *& Ship light S E 9*Time of day, *11.28 am*; of tide, *Flood*State of sky, *bc*Temperature of air, *70*" surface of water, *72*

" at depth of fathoms,

" of bottom, *71.5*Depth, in fathoms, *4*Nature of bottom, *Shell sand gravel grass*Direction of surface current, *Wind SSW*Force of surface current, *Wind 2*Direction of bottom current, *Drift ESE  $\frac{1}{4}$* 

Force of bottom current,

Name of vessel, *U S S Fish Hawk*To what service attached, *U S F C*Name and rank of commanding officer, *James A Smith**Master U S F*

Name and position of observer,

*J M. Loughlin**Master U S F*

1250

REMARKS.

Specimens Obtained  
Sea Robbins Spider Crabs  
Hermit Crabs Scallops  
Star fish Sea urchin

1200

## TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 feet*  
Current number of observation, *1200*  
Date, *Aug 9<sup>th</sup> 1887*  
Locality, *Off Falmouth*  
Bearings, *Notka light N X S 2'*  
*Falmouth or E X E  $\frac{1}{2}$  E Chop light S E X  $\frac{8}{15}$*   
Time of day, *11.49* ; of tide, *Flood*  
State of sky, *bc*  
Temperature of air, *70*  
" surface of water, *71*  
" at depth of fathoms,  
" of bottom, *72*  
Depth, in fathoms, *5.  $\frac{1}{4}$*   
Nature of bottom, *Sand shell mud*  
Direction ~~of surface current,~~ *wind SSW*  
Force of ~~surface current,~~ *wind 2*  
Direction ~~of bottom current,~~ *drift S X E  $\frac{1}{2}$*   
Force of bottom current,  
Name of vessel, *U S S Fish Hawk*  
To what service attached, *U S F C*  
Name and rank of commanding officer, *James A. Smith*  
*Master U S N*  
Name and position of observer,  
*J. M. Loughran*  
*Master U S N*

1201

REMARKS.

Specimens Obtained  
Haik Flounders Sea Robbings  
Lautog. Cummins

1201

## TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11) feet*Current number of observation, *1201*Date, *Aug 9<sup>th</sup> 1887*Locality, *Off Falmouth*Bearings, *Abaka light S  $44^{\circ}$   $1/2$  W  $1^{\circ}$   $1/4$ '**E Chop light S  $6^{\circ}$   $3/4$  E  $8^{\circ}$   $1/4$  ~~to E  $1^{\circ}$   $1/4$~~* Time of day, *12 20* ; of tide, *Flood*State of sky, *bc*Temperature of air, *71*" surface of water, *71*

" at depth of fathoms,

" of bottom, *72*Depth, in fathoms, *2 1/2*Nature of bottom, *Sand & gravel*Direction of ~~surface current~~ *Wind SSW*Force of ~~surface current~~ *Wind 3*Direction of ~~bottom current~~ *Drift NE 24*

Force of bottom current,

Name of vessel, *U S Fish Hawk*To what service attached, *U S F C*Name and rank of commanding officer, *James A. Smith**Mate U S N*

Name and position of observer,

*J. M. L. Nighton**Mate U S N*

1202

REMARKS.

Specimens Obtained

Hounders Crabs Lobsters

Sea Robbins Skates Eggs of squid

Star fish

1202

## TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 fms)*Current number of observation, *1202*Date, *Aug 9<sup>th</sup> 1887*Locality, *Menemsha Light*Bearings, *Ey Head Light N.  $\frac{1}{4}$  S  $4\frac{1}{2}$ '**Center Lighthouse N. by N  $\frac{1}{4}$  N, Torpaulin N. W.  $\frac{3}{4}$  E.*Time of day, *3.50 Pm*; of tide, *Ebb*State of sky, *bc*Temperature of air, *69*" surface of water, *67*

" at depth of fathoms,

" of bottom, *68*Depth, in fathoms, *7*Nature of bottom, *Sand (hard)*Direction of surface current, *Wmch S E*Force of surface current, *Wmch 3*Direction of bottom current, *drift S by W  $\frac{3}{4}$  W  $\frac{1}{2}$  mile*

Force of bottom current,

Name of vessel, *U S Fish Hawk*To what service attached, *U S Fish*Name and rank of commanding officer, *James Admitt*  
*Master U S S*

Name and position of observer,

*J M Brighton*  
*Master U S S*

1203

REMARKS.

Specimens Obtained

Leahston Skate Eggs of squid

Flounders Star fish Sea Robbings

1203

## TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 feet)*Current number of observation, *1200*Date, *Aug 9<sup>th</sup> 1887*Locality, *Menasha Point*Bearings, *Center Quicks Hole to by West by Head N by S**Lar paulin Cove Lgh N N E.  $\frac{3}{8}$  E.*Time of day, *4:07* ; of tide, *Ebb*State of sky, *bc*Temperature of air, *70*" surface of water, *69*

" at depth of fathoms,

" of bottom, *67*Depth, in fathoms, *8*Nature of bottom, *Hard sand*Direction of ~~surface~~ *Wind* *SE*Force of ~~surface~~ *Wind* *3*Direction of ~~bottom~~ *drift* *N N  $\frac{3}{4}$  W,  $\frac{1}{4}$  mile*

Force of bottom current,

Name of vessel, *U S S Fish Hawk*To what service attached, *U S F C*Name and rank of commanding officer, *James A Smith**Master U S S*

Name and position of observer,

*James A Smith**Master U S S*

1204

REMARKS.

Specimens Obtained  
Skates lobsters squid flounders  
Clams & Shells

1204

## TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 feet)*Current number of observation, *1204*Date, *Aug 9 1887*Locality, *Menemsha, Right*Bearings, *Gay Head N 3 W Larpaulin Cove N E 1/2 W 1/2 S**Center Quicks Hole N X W 1/4 W 3 1/4*Time of day, *4, 25 Pm*; of tide, *Ebb*State of sky, *B-c*Temperature of air, *70*" surface of water, *69*

" at depth of fathoms,

" of bottom, *68*Depth, in fathoms, *9*Nature of bottom, *Hard sand*Direction of surface current, *Wind S E*Force of surface current, *Wind 3*Direction of bottom current, *drift - north 3/4 W 1/2*Force of bottom current, *12*Name of vessel, *U S Fish Hawk*

To what service attached,

Name and rank of commanding officer, *James A Smith*  
*Master U S N*

Name and position of observer,

*J. M. Lightham*  
*Master U S N*

1205

REMARKS.

Specimens Obtained  
Star Fish, Rock Eels

1205

## TEMPERATURE RECORD.

Instrument used, *Snodgrass*Current number of observation, *1205*Date, *Aug 11<sup>th</sup> 1887*Locality, *East Chop light*Bearings, *Nobska N  $W \frac{3}{4} N$   $W$  Chop  $W \times N \frac{3}{4} S$   $2 \frac{1}{2}^{\circ}$* *E Chop  $W \times S \frac{1}{2} E$* Time of day, *10.42 am*; of tide, *Flood*State of sky, *bc*Temperature of air, *73*" surface of water, *71*

" at depth of fathoms,

" of bottom, *72*Depth, in fathoms, *10*Nature of bottom, *Sand + shell + rock*Direction of ~~surface~~ <sup>*wind*</sup> current, *SSE*Force of ~~surface~~ <sup>*wind*</sup> current, *4*Direction of ~~bottom~~ <sup>*sift*</sup> current,  *$W \times S, \frac{1}{4}$  mile*

Force of bottom current,

Name of vessel, *U.S.S. Fish Hawk*To what service attached, *U.S.S. 7C*Name and rank of commanding officer, *James A. Smith*  
*Master U.S.N.*

Name and position of observer,

*Malenight*  
*Master U.S.N.*

1206

REMARKS.

~~St~~

Starfish clams spider crabs

1206

## TEMPERATURE RECORD.

Instrument used, *ondp*Current number of observation, *1206*Date, *Aug 11<sup>th</sup> 1887*Locality, *Off E Chop Light Vineyard Sound*Bearings, *Nobska light - S  $W \frac{1}{2}$  N  $5 \frac{1}{2}$* *W at Chop W  $8 \frac{1}{4}$  S  $4 \frac{1}{4}$  E Chop W  $5 \frac{1}{2}$  S*Time of day, *10.55 am*; of tide, *Flood*State of sky, *bc*Temperature of air, *73*" surface of water, *70.5*

" at depth of fathoms,

" of bottom, *72*Depth, in fathoms, *11*Nature of bottom, *sand shell gravel mud*Direction of ~~surface~~ *wind* current, *SSW*Force of ~~surface~~ *wind* current, *H*Direction of ~~bottom~~ *drift* current, *E  $S \frac{1}{4}$  S  $1 \frac{1}{2}$  miles*

Force of bottom current,

Name of vessel, *U.S.S. Fish Hawk*To what service attached, *U.S.F.C.*Name and rank of commanding officer, *James A. Smith**Master U.S.N.*

Name and position of observer,

*J. M. Leighton*  
*Master U.S.N.*

1207

REMARKS.

Same as 1206

# TEMPERATURE RECORD.

Instrument used, *dredge*

Current number of observation, *1207*

Date, *Aug 11<sup>th</sup> 1887*

Locality, *Off East chop Light*

Bearings, *N 1/4 E + N X N 1/4 W*

*W chop N X N 1/2 E 3 E chop N 1/2 E 5/8 N*

Time of day, *11.10* ; of tide, *Flood*

State of sky, *bc*

Temperature of air, *73*

" surface of water, *71*

" at depth of fathoms,

" of bottom, *72*

Depth, in fathoms, *11.5*

Nature of bottom, *sand + gravel*

Direction of ~~surface current~~ *Wind SSW*

Force of ~~surface current~~ *Wind* *↓*

Direction of ~~bottom current~~ *drift* *E 1/8 1/4 S 1/2 mile*

Force of bottom current,

Name of vessel, *U S S Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer, *James A. Smith*  
*Master U S S*

Name and position of observer,

*J. M. Loughlin*  
*Master U S S*

NEWARK

1208

REMARKS.

Specimens Obtained  
Same as 1206

# TEMPERATURE RECORD.

Instrument used,

*Snape*

Current number of observation,

*1208*

Date,

*Aug 11<sup>th</sup> 1887*

Locality,

*Off East Chop Light*

Bearings,

*Noboka, N W  $\frac{3}{4}$  W &*

Time of day,

*11.29*

; of tide,

*Flood*

State of sky,

*bc*

Temperature of air,

*73*

"

surface of water,

*70.5*

"

at depth of

fathoms,

"

of bottom,

*72*

Depth, in fathoms,

*10*

Nature of bottom,

*Sand Gravel & Shell*

Direction of

*Wind*

*SSW*

Force of

*surface current,*

*4*

Direction of

*drift*

*E x S  $\frac{1}{4}$  S,  $\frac{1}{2}$  mile*

Force of bottom current,

Name of vessel,

*U S Fish Hawk*

To what service attached,

*U S F C*

Name and rank of commanding officer,

*James H. Smith*

*Master U S N*

Name and position of observer,

*J. H. L. Smith*

*Master U S N*

1209

REMARKS.

~~G.~~ Spider Crab Soup  
Hermit Crab Haile

S. 16 by 16  $\frac{3}{4}$  L.

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 feet)*

Current number of observation, *1209*

Date, *Aug 11<sup>th</sup> 1887*

Locality, *Muskeget Channel*

Bearings, *SE End Martha's Vineyard SW  $\frac{1}{2}$  S  $\frac{1}{4}$  E*

*Cape Poge N  $\frac{5}{8}$  E, SE S S in Lake SE  $\frac{3}{4}$  E*

Time of day, *12.50 Pm*; of tide, *Flood*

State of sky, *bc*

Temperature of air, *70*

" surface of water, *69*

" at depth of fathoms,

" of bottom, *69.5*

Depth, in fathoms, *5*

Nature of bottom, *fine sand*

Direction of ~~surface current~~, *SSW*

Force of ~~surface current~~, *3 knots*

Direction of ~~bottom current~~, *drift S  $\frac{1}{4}$  S.  $\frac{1}{4}$  E*

Force of bottom current,

Name of vessel, *U.S.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James H. Smith  
Mate U.S.S.*

Name and position of observer, *J. M. Lightham  
Mate U.S.S.*

1210

REMARKS.

Specimens Obtained  
Sculpine, Crabs & Hermit Crabs  
& Sculp

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 feet)*

Current number of observation, *1260*

Date, *Aug 11th 1887*

Locality, *Muskeget Channel*

Bearings, *S E end Martha Vinjord S W X S 1/4 S*

*Muskeget Isle S E 1/2 E Cape Poge S W X 2 1/2*

Time of day, *1.13 PM*; of tide, *Flood*

State of sky, *bc*

Temperature of air, *70.5*

" surface of water, *70*

" at depth of fathoms,

" of bottom, *71*

Depth, in fathoms, *3*

Nature of bottom, *Sand*

Direction of ~~surface current~~ *Wind SSW*

Force of ~~surface current~~ *Wind 3*

Direction of ~~bottom current~~ *Drift N North E X S 1/4 S 1/4 mile*

Force of bottom current,

Name of vessel, *U S S Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer, *James A Smith*

Name and position of observer

*J. M. Wright  
Mate U S S*

1210

REMARKS.

Specimens Obtained  
Horns Horn tube scup +  
Small shell

~~drift 28 1/2 E 2~~ Rim

stand

## TEMPERATURE RECORD.

Instrument used,

*Snape*

Current number of observation,

*1210*

Date, *Aug 15 1887*

Locality,

*off West Island Buzzard Bay*

Bearings,

*sumpling Light W 1/2 S*

*Clarke Pt S 50° 10' 10" 1/4 W Head Pt S 48° 1/4 E*

Time of day,

*10-18 Am; of tide, Slack*

State of sky,

*bc*

Temperature of air,

*70*

"

surface of water,

*69.5*

"

at depth of

fathoms,

"

of bottom,

*71*

Depth, in fathoms,

*6*

Nature of bottom,

*black mud*

Direction of

*wind* surface current,

*SSW*

Force of

*wind* surface current,

*4*

Direction of

*drift* bottom current,

*SE*

*1/4 mile*

Force of bottom current,

Name of vessel,

*U.S. Fish Hawk*

To what service attached,

*U.S. 76*

Name and rank of commanding officer,

*James A. Smith*

*Mate U.S. 76*

Name and position of observer,

*Malenight*

*Mate U.S. 76*

1212

REMARKS.

Specimens Obtained  
Spider crab Corolla Sea Robin  
Flounder Squilla

*SEX & Sea wife*

## TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 feet)*

Current number of observation, *1212*

Date, *Aug 15 1887*

Locality, *Off West Island Buzzard Bay*

Bearings, *Dumpling Light N  $\frac{1}{2}$  S*

*Clarke Pt St N N W Tide Pt St N E*

Time of day, *10.25* ; of tide, *Flood*

State of sky, *bc*

Temperature of air, *70*

" surface of water, *70*

" at depth of fathoms,

" of bottom, *71*

Depth, in fathoms, *7*

Nature of bottom, *Shell Grass*

Direction of ~~surface current~~ *Wind SSW*

Force of ~~surface current~~ *Wind 4*

Direction of ~~bottom current~~ *drift S E 1/4*

Force of bottom current,

Name of vessel, *U S Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer, *James A Smith*

*Mate U S F C*

Name and position of observer,

*Indymington*  
*Mate U S F C*

1213

REMARKS.

Specimens Obtained  
Squid eggs Spider crabs Soup  
Flounder Conchs shell

Drift 886

Rain

## TEMPERATURE RECORD.

Instrument used, Beam Trawl 111 feet

Current number of observation, 1213

Date, Aug 15<sup>th</sup> 1887

Locality, Off West Island Buzzard Bay

Bearings, Sumpling Light West

Clarke Pt Lt NW  $\times$  W  $\frac{1}{4}$  W. Head Pt Light N  $\frac{1}{2}$  E

Time of day, 10-55 ; of tide, Flood

State of sky, bc

Temperature of air, 70

" surface of water, 70

" at depth of fathoms,

" of bottom, ~~70~~ 70.5Depth, in fathoms, 7  $\frac{1}{2}$ Nature of bottom, ~~70.5~~ Shell gravelDirection of ~~surface current~~, ~~SSW~~ SSWForce of ~~surface current~~, ~~SSW~~ 4Direction of ~~bottom current~~, ~~SSW~~ Drift 46° E  $\frac{1}{4}$  mile

Force of bottom current,

Name of vessel, U.S.S. Fish Hawk

To what service attached, U.S.S. 76

Name and rank of commanding officer, James A. Smith  
Mate U.S.S.

Name and position of observer,

J. M. Lighten  
Mate U.S.S.

1214

REMARKS.

Specimens Obtained  
beach shell spider crate

Drift - S S E

Run

## TEMPERATURE RECORD.

Instrument used, Beam Level 01 feet

Current number of observation, 1214

Date, Aug 15<sup>th</sup> 1887

Locality, Off West Island Buzzard Bay

Bearings, Lumping, Lt N  $\frac{1}{4}$  S

Clarke Pt Lt S  $\frac{1}{2}$  W  $\frac{1}{2}$  N Sides 1<sup>st</sup> Lt North

Time of day, 11. 20 ; of tide, Flood

State of sky, 2c

Temperature of air, 69.5

" surface of water, 70

" at depth of fathoms,

" of bottom, 71

Depth, in fathoms, 7  $\frac{1}{4}$

Nature of bottom, Shell & grass

Direction of ~~surface current~~, Wind SSW

Force of ~~surface current~~, Wind 4

Direction of ~~bottom current~~, Drift S E  $\frac{1}{4}$

Force of bottom current,

Name of vessel, U S S Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith  
Mate U S N

Name and position of observer,

J M Loughlin  
Mate U S N

1215  
REMARKS.

Specimens Obtained  
Shells worms

Drift- S E  $8\frac{1}{2}$  8

min  
S E  $\frac{1}{2}$  E stand

# TEMPERATURE RECORD.

Instrument used, *Anders*

Current number of observation, *1215*

Date, *Aug 15<sup>th</sup> 1887*

Locality, *Middle Buggs Bay*

Bearings, *Dumpling St N  $\frac{1}{8}$  E*

*Clarke Pt St N  $\frac{1}{2}$  W  $\frac{1}{2}$  N side of Let. N  $\frac{1}{2}$  W*

Time of day, *12.44* ; of tide, *Flood*

State of sky, *bc*

Temperature of air, *69.5*

" surface of water, *70.5*

" at depth of fathoms,

" of bottom, *7 f*

Depth, in fathoms, *7  $\frac{1}{2}$*

Nature of bottom, *Black mud*

Direction of ~~surface current~~, *Wind S S W*

Force of ~~surface current~~, *Wind 4*

Direction of ~~bottom current~~, *Drift S E  $\frac{1}{4}$  mile*

Force of bottom current,

Name of vessel, *U S S Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer, *James A Smith*  
*Mate U S A*

Name and position of observer,

*Imbriington*  
*Mate U S A*

1216

REMARKS.

Specimens Obtained  
Shell gravel worm & worm tubes

# TEMPERATURE RECORD.

Instrument used, *brass*

Current number of observation, *1216*

Date, *Aug 15<sup>th</sup> 1887*

Locality, *Middle Port Buzzards Bay*

Bearings, *Dumpling Lt - N  $\frac{1}{2}$  E*

*Clarke Pt Lt - N  $\frac{1}{2}$  W  $\frac{1}{4}$  N or less Pt Lt - N  $\frac{1}{2}$  W*

Time of day, *12,03 PM*; of tide, *Flood*

State of sky, *bc*

Temperature of air, *69*

" surface of water, *70*

" at depth of fathoms,

" of bottom, *71*

Depth, in fathoms, *7  $\frac{1}{2}$*

Nature of bottom, *Black mud*

Direction of ~~surface current~~ *Wind SSW*

Force of ~~surface current~~ *Wind 4*

Direction of ~~bottom current~~ *drift SE  $\frac{1}{4}$*

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith*  
*Mate U.S.F.*

Name and position of observer,

*J. M. Light*  
*Mate U.S.F.*

1217

REMARKS.

Specimens Obtained  
Same as 1216

# TEMPERATURE RECORD.

Instrument used,  *dredge*

Current number of observation, *1217*

Date, *Aug 15<sup>th</sup> 1887*

Locality, *Middle point Buzzards Bay*

Bearings, *Dumpling St N  $\frac{1}{2}$  E*

*Calais Pt to 4 N  $\frac{1}{2}$  W  $\frac{1}{2}$  N side of Pt to 4 N  $\frac{1}{2}$  W*

Time of day, *12, 25* ; of tide, *Flood*

State of sky,

Temperature of air, *69*

" surface of water, *70*

" at depth of fathoms,

" of bottom, *71*

Depth, in fathoms, *7  $\frac{1}{2}$*

Nature of bottom, *Black mud*

Direction of ~~surface~~ *mud* current, *S W*

Force of ~~surface~~ *Wind* current, *4*

Direction of ~~bottom~~ *drift* current, *SE  $\frac{1}{4}$*

Force of bottom current,

Name of vessel, *U S Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer, *James A Smith*  
*Mate U S A*

Name and position of observer,

*J. M. Nightin*  
*Mate U S A*

1218

REMARKS.

Specimens Obtained  
June 12 1896

# TEMPERATURE RECORD.

Instrument used,

Dredge

Current number of observation,

1218

Date,

Aug 15 1887

Locality,

Buzzards Bay

Bearings,

Dumpling Lt N  $\frac{3}{4}$  E

Albatross Pt Lt N  $\frac{1}{2}$  W  $\frac{1}{4}$  N or side Pt Lt N  $\frac{1}{2}$  W

Time of day,

12.55

; of tide,

7 flood.

State of sky,

Cloudy

Temperature of air,

69

"

surface of water,

70

"

at depth of

fathoms,

"

of bottom,

71

Depth, in fathoms,

8

Nature of bottom,

Black mud

Direction of ~~surface current~~,

Wind

S. W.

Force of ~~surface current~~,

Wind

H

Direction of ~~bottom current~~,

drift

S E

$\frac{1}{4}$

Force of bottom current,

Name of vessel,

U S Fish Hawk

To what service attached,

U S F C

Name and rank of commanding officer,

James C Smith

Mate U S F

Name and position of observer,

William H. Smith

Mate U S F

1219

REMARKS.

Specimens Obtained

Same <sup>as</sup> 1216

# TEMPERATURE RECORD.

Instrument used, *Wedge*

Current number of observation, *1219*

Date, *Aug 15<sup>th</sup> 1887*

Locality, *middle port Buzzards Bay*

Bearings, *Dumpling Pt - N 7/8 E*

*Clarke Pt. S N 8/8 W 7/8 W Oriskany Pt. S N 1/4 W*

Time of day, *1.18 PM*; of tide, *High*

State of sky, *cloudy*

Temperature of air, *69.5*

" surface of water, *70*

" at depth of fathoms,

" of bottom, *71*

Depth, in fathoms, *8*

Nature of bottom, *Black mud*

Direction of ~~surface current~~ *Wind* *S W*

Force of ~~surface current~~ *Wind* *4*

Direction of ~~bottom current~~ *drift* *S E 1/4 mile*

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith  
Master U.S.N.*

Name and position of observer, *J. M. Lightham  
Master U.S.N.*

1220  
REMARKS.

Specimens Obtained

Same as 1216

# TEMPERATURE RECORD.

Instrument used, *snipe*

Current number of observation, *1220*

Date, *Aug 15<sup>th</sup> 1887*

Locality, *Buzzards Bay*

Bearings, *Dumpling St N X E*

*Clarke Rd N X W 1/4 W* *Inds Rd St N X W 3/4 W*

Time of day, *1:42 P.*; of tide, *Flood*

State of sky, *cloudy*

Temperature of air, *69.5*

" surface of water, *70*

" at depth of fathoms,

" of bottom, *72*

Depth, in fathoms, *8 1/2*

Nature of bottom, *Black mud*

Direction of ~~surface current~~, *Mud S W*

Force of ~~surface current~~, *Wind N*

Direction of ~~bottom current~~, *drift S E 1/4*

Force of bottom current,

Name of vessel, *U S S Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer, *James A Smith*  
*Capt U S A*

Name and position of observer, *Intermittent*  
*Mar U S A*

1221  
REMARKS.

*Specimens Obtained*  
*Same as 1216*

### TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1221

Date, *Aug 15<sup>th</sup>* 1887

Locality, Buzzard Bay

Bearings, Dumping 15-24 1/4 N

the PTA will be held at the PTA

Time of day, 2, PM ; of tide, Flood

State of sky, *Cloudy*

Temperature of air, 69.5-

“ surface of water, 70

“ at depth of fathoms,

“ of bottom, 72

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

Nature of bottom, *Black mud*

Direction of surface current,  $\vec{J}_s$

Force of surface current,  $\frac{1}{2}$

Direction of ~~bottom~~ current,  $\frac{1}{4}$

Force of bottom current,

Name of vessel, *U. S. Fish Hawk*

To what service attached, *26876*

Name and rank of commanding officer, *James A. Smith*

Matc 26 S. M.

Name and position of observer,

Inverlighton  
Materd St

1222

REMARKS.

Specimens Obtained  
Sponges Sea Urchins Worms  
Crab Star Fish

# TEMPERATURE RECORD.

Instrument used, *Bridges*

Current number of observation, *1222*

Date, *Aug 27<sup>th</sup> 1887*

Locality, *Vineyard Sound*

Bearings, *Lar paulin Cor N  $\frac{3}{8}$  S N Chop SE  $\frac{1}{2}$  S*

*Mobaka Lt N  $\frac{1}{2}$  W  $\frac{1}{2}$  S*

Time of day, *10.08 Am* of tide, *ebb*

State of sky, *bc*

Temperature of air, *67*

" surface of water, *68*

" at depth of ~~*12 1/2*~~ fathoms,

" of bottom, *69*

Depth, in fathoms, *12 1/2*

Nature of bottom, *fine sand shell*

Direction of ~~surface current~~ *wind* *N S W*

Force of ~~surface current~~ *wind* *2*

Direction of ~~bottom current~~ *drift* *Nest* *3/4*

Force of bottom current,

Name of vessel, *U S S Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer, *Jamieson Smith*  
*Master U S N*

Name and position of observer,

*Jamieson Smith*  
*Master U S N*

1223

REMARKS.

Specimens Obtained  
Starfish Sea Urchins Shells  
Sponge Worms

# TEMPERATURE RECORD.

Instrument used, *anemometer*

Current number of observation, *1223*

Date, *Aug 27<sup>th</sup> 1887*

Locality, *Vineyard Sound*

Bearings, *Went to look 38 1/4 E*

*Tarpaulin Cord N 1/2 S North Star at N x E 1/4 N*

Time of day, *10.20 am* of tide, *Ebb*

State of sky, *bc*

Temperature of air, *67*

" surface of water, *68*

" at depth of fathoms,

" of bottom, *68*

Depth, in fathoms, *125*

Nature of bottom, *Shell & Sand*

Direction of ~~surface current~~ *wind* *N SW*

Force of ~~surface current~~ *wind* *2*

Direction of ~~bottom current~~ *drift* *West* *3/4*

Force of bottom current,

Name of vessel, *U S Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer, *Jamieson Smith*  
*Master U S A*

Name and position of observer,

*J. M. Loughlin*  
*Master U S A*

1224

REMARKS.

Specimen Obtained  
~~Star fish Sea Urchin~~  
Same as 1223

# TEMPERATURE RECORD.

Instrument used, *Snipe*

Current number of observation, *1224*

Date, *Aug 27<sup>th</sup> 1887*

Locality, *Vineyard Sound*

Bearings, *Laurel Cove N 3/4 S*

*West Chop S E 3/4 E N 1/4 E*

Time of day, *10.36 am* ; of tide, *Ebb*

State of sky, *bc*

Temperature of air, *67*

" surface of water, *68*

" at depth of fathoms,

" of bottom, *68*

Depth, in fathoms, *11 1/2*

Nature of bottom, *Sand & shells*

Direction of surface current, *Wind N 8 W*

Force of surface current, *Wind 2*

Direction of bottom current, *briefly West 1/2*

Force of bottom current,

Name of vessel, *U S Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer, *James H. Smith  
Master USN*

Name and position of observer,

*J. M. Nightingale  
Master USN*

1225

REMARKS.

Specimens Obtained  
same as 1223

# TEMPERATURE RECORD.

Instrument used, *ondex*

Current number of observation, *1225*

Date, *Aug 27<sup>th</sup> 1887*

Locality, *Vineyard Sound*

Bearings, *Lantern Cove N.  $\frac{3}{4}$  S*

*Noted as N  $\times$  E  $\frac{1}{4}$  E. Not chop S  $\times$  E  $\frac{1}{4}$  E*

Time of day, *10.55* am of tide, *ebb*

State of sky, *bc*

Temperature of air, *67*

" surface of water, *68*

" at depth of fathoms,

" of bottom, *68*

Depth, in fathoms, *13*

Nature of bottom, *Sand gravel + shell*

Direction of ~~surface current~~ *Wind N S W*

Force of ~~surface current~~ *Wind 2*

Direction of ~~bottom current~~ *Drift West  $\frac{1}{2}$*

Force of bottom current,

Name of vessel, *U S S Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer, *Jamieson Smith*  
*Capt U S A*

Name and position of observer, *J. M. L. H. T. M.*  
*Capt U S A*

1226

REMARKS.

Specimens Obtained  
Scup Gilly fish & Sea bass

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 feet)*

Current number of observation; *1226*

Date, *Aug 27<sup>th</sup> 1897*

Locality, *Vineyard Sound*

Bearings, *North by East 8 1/2 S*

*North by East Tarpon Cove N 1/4 S*

Time of day, *11-14 Am*; of tide, *ebb*

State of sky, *bc*

Temperature of air, *67*

" surface of water, *68*

" at depth of fathoms,

" of bottom, *68*

Depth, in fathoms, *13*

Nature of bottom, *Sand & shell*

Direction of ~~surface current~~ *Wind N S W*

Force of ~~surface current~~ *Wind 3*

Direction of ~~bottom current~~ *Drift West*

*1/4*

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James H. Smith  
Mate U.S.F.*

Name and position of observer,

*J. M. Nightingale  
Mate U.S.F.*

1227  
REMARKS.

Specimens Obtained  
Squid boat sponge Starfish

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 feet)*

Current number of observation, *1227*

Date, *Aug 27 1887*

Locality, *Vineyard Sound*

Bearings, *Lampauin Cove N  $\frac{1}{8}$  S*

*North N  $\frac{1}{4}$  W N. by E Chop E  $\frac{1}{8}$  S  $\frac{1}{8}$  S*

Time of day, *11.32 Am*; of tide, *Ebb*

State of sky, *bc*

Temperature of air, *67*

" surface of water, *68*

" at depth of fathoms,

" of bottom, *68*

Depth, in fathoms, *13*

Nature of bottom, *Sand & Shell*

Direction of ~~surface~~ *Wind* current, *N S W*

Force of ~~surface~~ *Wind* current, *3*

Direction of ~~bottom~~ *Drift* current, *West*  *$\frac{1}{4}$*

Force of bottom current,

Name of vessel, *U.S.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *Jamieson Smith*  
*Master U.S.N.*

Name and position of observer,

*J. M. L. Hightower*  
*Master U.S.N.*

1228

REMARKS.

Specimens Obtained

Skate, Flounders, Crabs  
Starfish, Squid eggs  
Hermit Crabs, Sponges

# TEMPERATURE RECORD.

Instrument used, Beam Trawl (11 feet)

Current number of observation, 1228

Date, Aug 29<sup>th</sup> 1887

Locality, Vineyard Sound

Bearings, Gay Head S 87° E

Light House S 77° E Vineyard S 4° S 1/2 W

Time of day, 10-42 am; of tide, Flood

State of sky, bc

Temperature of air, 65

" surface of water, 64

" at depth of fathoms,

" of bottom, 61

Depth, in fathoms, 18

Nature of bottom, Sand

Direction of Wind NNE

Force of Wind 3

Direction of Drift West 1/4

Force of bottom current,

Name of vessel, U.S.S. Fish Hawk

To what service attached, U.S.S. Fish Hawk

Name and rank of commanding officer, James Smith  
Master

Name and position of observer,

Imberighton  
Mate U.S.S.

1229

REMARKS.

Specimens Obtained

Common Hark Flounders Starfish  
Hermit Crabs

# TEMPERATURE RECORD.

Instrument used, *Beam Level (11 feet)*

Current number of observation, *1229*

Date, *Aug 29 1887*

Locality, *Vineyard Sound*

Bearings, *Vineyard S<sup>d</sup> Lt Ship N<sup>1</sup>/<sub>2</sub> S*

*cuttyhunk S<sup>d</sup> + W<sup>1</sup>/<sub>2</sub> S*

Time of day, *11.12 am*; of tide, *Flood*

State of sky, *b.c.*

Temperature of air, *66*

" surface of water, *64*

" at depth of fathoms,

" of bottom, *62*

Depth, in fathoms, *15 1/2*

Nature of bottom, *Sand*

Direction of ~~surface current~~ *Wind N N E*

Force of ~~surface current~~ *Wind 3*

Direction of ~~bottom current~~ *drift West 1/2*

Force of bottom current,

Name of vessel, *U.S.S. Fish Hawk*

To what service attached, *U.S.S.*

Name and rank of commanding officer, *James Smith*

*Mate U.S.S.*

Name and position of observer,

*William H. Thompson*  
*Mate U.S.S.*

1230

REMARKS.

Specimens Obtained  
Same as 1229

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 feet)*

Current number of observation, *1230*

Date, *Aug 29<sup>th</sup> 1887*

Locality, *Vineyard Sound*

Bearings, *Vineyard Id. S 5 1/4 W*

*Cuttyhunk Id. N 2 1/4 W Gay Head S 6 1/2 E*

Time of day, *11:47 AM* of tide, *Flood*

State of sky, *bc*

Temperature of air, *65*

" surface of water, *64*

" at depth of fathoms,

" of bottom, *61*

Depth, in fathoms, *14*

Nature of bottom, *1 Sand*

Direction of ~~surface current~~, *Wind N to E*

Force of ~~surface current~~, *3*

Direction of ~~bottom current~~, *drift West 3/4*

Force of bottom current,

Name of vessel, *U.S.S. Fish Hawk*

To what service attached, *U.S.S. Fish Hawk*

Name and rank of commanding officer,

Name and position of observer,

1231  
REMARKS.

Specimens Obtained  
Sand & small dead shells

# TEMPERATURE RECORD.

Instrument used, *Dredge*

Current number of observation, *1231*

Date, *Aug 29<sup>th</sup> 1887*

Locality, *Vineyard Sound*

Bearings, *Vineyard S<sup>85</sup>W<sup>15</sup> N x W  $\frac{1}{2}$  N*

*Gayhead S<sup>85</sup>W<sup>15</sup> E. Antybank N x W  $\frac{3}{4}$  W*

Time of day, *12.15 P.M.*; of tide, *Flood*

State of sky, *bc*

Temperature of air, *65*

" surface of water, *64*

" at depth of fathoms,

" of bottom, *62*

Depth, in fathoms, *16*

Nature of bottom, *Sand*

Direction of ~~surface current~~ *Wind N x E*

Force of ~~surface current~~ *Wind 3*

Direction of ~~bottom current~~ *Drift West 1/2*

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *Jesse Smith  
Master U.S.N.*

Name and position of observer,

*J. M. Lenington  
Master U.S.N.*

1232

REMARKS.

Specimens Obtained  
Sand dollars Hark  
Skate Starfish

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl (11 feet)*

Current number of observation, *1232*

Date, *Aug 29 1887*

Locality, *Vineyard Sound*

Bearings, *Vineyard Sound St. Ship N x E 1/8 N*  
*Sey head S E 1/4 E Luthyheads N x E 1/8 N*

Time of day, *1 PM* ; of tide, *Flood*

State of sky, *bc*

Temperature of air, *65*

" surface of water, *64*

" at depth of *10* fathoms, *62 1/2*

" of bottom, *62 1/2*

Depth, in fathoms, *13*

Nature of bottom, *mud & shells*

Direction of ~~surface current~~ *Wind* *N N E*

Force of ~~surface current~~ *Wind* *2*

Direction of ~~bottom current~~ *Drift* *West* *3/4*

Force of bottom current,

Name of vessel, *U.S.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *J.A. Smith*  
*Master USN*

Name and position of observer, *J.M. Crighton*  
*Master USN*

1233

REMARKS.

Specimens Obtained

Land dollars crabs  
dead shell hermit crabs  
starfish

# TEMPERATURE RECORD.

Instrument used, *Beam Level (11 feet)*

Current number of observation, *1233*

Date, *Aug 29<sup>th</sup> 1887*

Locality, *Vineyard Sound*

Bearings, *Vineyard Pt Ship W 7/8 N*

*Leuttyhunk S 85 1/8 W Gayhead S E 1/8 S*

Time of day, *1.27 Pm*; of tide, *Flood*

State of sky, *bc*

Temperature of air, *65*

" surface of water, *64*

" at depth of *15 1/2* fathoms, *62*

" of bottom, *62*

Depth, in fathoms, *13 1/2*

Nature of bottom, *sand shale*

Direction of ~~surface~~ *Wind* current, *NNE*

Force of ~~surface~~ *Wind* current, *2*

Direction of ~~bottom~~ *Drift* current, *West* *1/2*

Force of bottom current,

Name of vessel, *U.S.S. Hawk*

To what service attached, *U.S.S. Hawk*

Name and rank of commanding officer, *James D. Smith*  
*Master U.S.N.*

Name and position of observer, *J. M. Smith*  
*Master U.S.N.*

1234

REMARKS.

*Specimens Obtained*

# TEMPERATURE RECORD.

Instrument used, *Sigsbee*

Current number of observation, *1234*

Date, *Aug 29 1887*

Locality, *Vineyard Sound*

Bearings, *Gayhead S E 3/4 E*

*Vineyard Sound S 45/2 E & Leally hunk S W 1/4 E*

Time of day, *1-49 PM*; of tide, *Flood*

State of sky, *bc*

Temperature of air, *65*

" surface of water, *64*

" at depth of *13 1/2* fathoms, *62.5*

" of bottom, *62.5*

Depth, in fathoms, *13 1/2*

Nature of bottom, *1 Sable shell*

Direction of ~~surface current~~ *Wind* *NE*

Force of ~~surface current~~ *Wind* *2*

Direction of ~~bottom current~~ *drift* *West*

Force of bottom current,

Name of vessel, *U.S.S. Fish Hawk*

To what service attached, *U.S.S. Fish Hawk*

Name and rank of commanding officer, *James Smith*  
*Master 2d class*

Name and position of observer,

*John L. Smith*  
*Master 2d class*

1235

REMARKS.

Specimens Obtained  
Sand dollar starfish  
sponges herabs, flume dens

# TEMPERATURE RECORD.

Instrument used, *Beaman Trawl (11 feet)*

Current number of observation, *1235*

Date, *Aug 29<sup>th</sup> 1887*

Locality, *Vineyard Sound*

Bearings, *Gay Head S E x S  $\frac{1}{2}$  S*

*Vineyard S E W x N  $\frac{1}{2}$  N Light House N N  $\frac{1}{2}$  E*

Time of day, *2.10 P.M.*; of tide, *Flood*

State of sky, *bc*

Temperature of air, *65*

" surface of water, *64*

" at depth of fathoms,

" of bottom, *62.5*

Depth, in fathoms, *12*

Nature of bottom, *hard shell*

Direction of ~~surface~~ *Wind* current, *N N E*

Force of ~~surface~~ *Wind* current, *2*

Direction of ~~bottom~~ *drift* current, *West* *1/4*

Force of bottom current,

Name of vessel, *U.S.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *Jamieson Smith  
Master*

Name and position of observer, *John L. Linton  
Master*

1236  
REMARKS.

*Specimens Obtained*

# TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1236

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~~, *Wind*

Force of ~~surface current~~, *Wind*

Direction of ~~bottom current~~, *Drift*

Force of bottom current,

Name of vessel, *U.S.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *Jas. H. Smith*  
*Master U.S.N.*

Name and position of observer,

1237

REMARKS.

*Specimens Obtained*

~~1~~  
~~2~~  
~~3~~  
~~4~~  
~~5~~

# TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1237

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, 1

Direction of ~~surface current~~ Wind

Force of ~~surface current~~ Wind

Direction of ~~bottom current~~ Drift

Force of bottom current,

Name of vessel, U.S. Fish Hawk

To what service attached, U.S.F.C.

Name and rank of commanding officer, James H. Smith  
Master

Name and position of observer,

1238

REMARKS.

Specimens Obtained

1/10/1911  
1/10/1911  
1/10/1911  
1/10/1911

# TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1238

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, 1

Direction of ~~surface current~~ *Wind*

Force of ~~surface current~~ *Wind*

Direction of ~~bottom current~~ *Drift*

Force of bottom current,

Name of vessel, *U.S.S. Fish Hawk*

To what service attached, *U.S. 76*

Name and rank of commanding officer, *James H. Smith*

*Master U.S.N.*

Name and position of observer,

1239

REMARKS.

*Specimens Obtained*

*[Faint, illegible handwritten notes]*

# TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1239

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, 1

Direction of ~~surface current~~, Mud

Force of ~~surface current~~, Mud

Direction of ~~bottom current~~, drift

Force of bottom current,

Name of vessel, 26 S S Fish Hawk

To what service attached, 26 S 76

Name and rank of commanding officer, James Hornsby

Name and position of observer, Watson

1240  
REMARKS.

*Specimens Obtained*

# TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1240

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~~, Wind

Force of ~~surface current~~, Wind

Direction of ~~bottom current~~, breeze

Force of bottom current,

Name of vessel, 26 S S Fish Hawk

To what service attached, 26 S 76

Name and rank of commanding officer, James Smith  
Master

Name and position of observer,

## REMARKS.

$$\begin{array}{r}
 1221 \\
 4241 \\
 \hline
 20
 \end{array}$$

Gift-SE

$$\begin{array}{r} 1240 \\ 1220 \\ \hline 19 \end{array}$$

$$\begin{array}{r} 10 \\ 9 \\ \hline 19 \\ 22 \\ \hline 41 \end{array}$$