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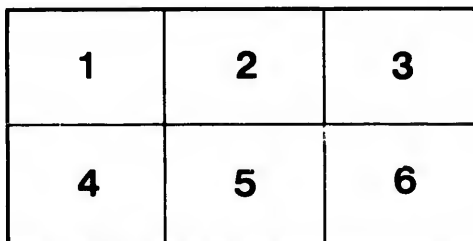
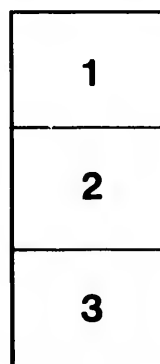
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Josephine Diebitsch-Peary

NORTHWARD OVER THE "GREAT ICE"

*A Narrative of Life and Work along the
Shores and upon the Interior Ice-Cap
of Northern Greenland in the Years
1886 and 1891-1897*

WITH A DESCRIPTION OF THE LITTLE TRIBE OF SMITH-SOUND
ESKIMOS, THE MOST NORTHERLY HUMAN BEINGS IN THE
WORLD, AND AN ACCOUNT OF THE DISCOVERY AND
BRINGING HOME OF THE "SAVIKSUE," OR
GREAT CAPE-YORK METEORITES

BY

ROBERT E. PEARY

CIVIL ENGINEER, U.S.N.

MEMBER OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS
MEMBER OF THE AMERICAN GEOGRAPHICAL SOCIETY

WITH MAPS, DIAGRAMS, AND ABOUT EIGHT HUNDRED
ILLUSTRATIONS

IN TWO VOLUMES

VOL. II.



NEW YORK

FREDERICK A. STOKES COMPANY

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CONTENTS OF VOL. II.

PART III.

NORTH-GREENLAND EXPEDITION OF 1893-1894.

CHAPTER	PAGE
I.—PHILADELPHIA TO CAPE YORK	I
II.—HOUSE-BUILDING AND HUNTING	35
III.—AUTUMN AND WINTER WORK	63
IV.—ON THE "GREAT ICE"	83
V.—ON THE "GREAT ICE" (<i>Continued</i>)	103
VI.—DISCOVERY OF THE "SAVKSUE"	121
VII.—RECONNAISSANCE OF MELVILLE BAY—ASTRÛP	157
VIII.—METEOROLOGICAL AND AURORAL NOTES—BALDWIN	175

PART IV.

NORTH-GREENLAND EXPEDITION OF 1894-1895.

I.—BOAT VOYAGE, FALCON TO LODGE	205
II.—BOAT VOYAGE, FALCON TO LODGE (<i>Continued</i>)	225
III.—THE WALRUS HUNT	245
IV.—TRANSPORTING MEAT TO THE LODGE	265
V.—FALL ICE-CAP WORK	285
VI.—FALL HUNTING, ARCTIC DAY AND NIGHT	303

CHAPTER	PAGE
VII.—DECEMBER JOURNEY TO CAPE YORK	325
VIII.—RETURN FROM CAPE YORK	341
IX.—WINTER ROUTINE	355
X.—SLEDGE TRIPS OF THE LONG NIGHT	371
XI.—MISCELLANEA	393
XII.—A WEEK AT PETERAHWIK	417
XIII.—UPWARD ICE-CAP JOURNEY	435
XIV.—THE LAND BEYOND THE ICE-CAP	459
XV.—THE LAND BEYOND THE ICE-CAP (<i>Continued</i>)	483
XVI.—RETURN ICE-CAP JOURNEY	505
XVII.—AFTER THE RETURN	525
OBJECTS AND RESULTS OF NORTH-GREENLAND EXPEDITIONS OF 1893 TO 1895	550

PART V.

SUMMER VOYAGES OF 1896-1897.

THE "SAVKSUE" OR CAPE YORK METEORITES	551
INDEX OF VOL. II.	619

ILLUSTRATIONS, MAPS, AND DIAGRAMS IN VOL. II.

	PAGE
JOSEPHINE DIEBITSCH PEARY	
ESKIMO GIRL OF UPERNAVIK	<i>Frontispiece</i>
HEADPIECE	2
THE "FALCON"	3
AIINGODOBLAHO	4
THE BURROS	5
OUR STATEROOM	6
BATTLE HARBOUR, LABRADOR	8
LABRADOR ESKIMO MAN	9
ROUTE OF NORTH GREENLAND EXPEDITION 1893	11
LABRADOR ESKIMO GIRL AND CHILD	12
LABRADOR HOME	13
SPEAKING A GREENLAND PILOT	14
HOLSTEINBORG, GREENLAND	15
A 33-INCH BEAUTY	16
NATIVES OF UPERNAVIK	18
PASTOR MÖRCH AND HIS CHAPEL	19
THE CEMETERY AT UPERNAVIK	20
ANDREAS THE PILOT	21
TASIUSAK, 73° 24' N. LAT.	23
THE DUCK ISLANDS	24
WHALE'S LOOKOUT, DUCK ISLANDS	26
CAPT. HARRY BARTLETT	27
CHIEF-ENGINEER FISCHER	28
THE "FALCON'S" FIREMEN	30
CAPE YORK FROM THE SOUTH	31
MIDNIGHT OFF CAPE ALEXANDER	32
HEADPIECE	36
GLACIERS OF THE CRIMSON CLIFFS	37
CAPE POWLETT	38
THE "FALCON" AT HER MOORINGS	39
BIRD'S-EYE VIEW OF FALCON HARBOUR	40
DISCHARGING SHIP THROUGH TRASH ICE	41
FRAMING THE HOUSE	42
JIMMY AND THE DOGS	44
LANDING A BURRO	45
A TEAM OF DOGS	46
GREY SANDSTONE CLIFFS	48
A SCENE IN THE WALRUS HUNT	49
HOISTING A HUGE BRUTE ON BOARD	50
CAPE ALEXANDER	51
CRYSTAL PALACE GLACIER (KANE)	52
ICE-PACK OFF LITTLETON ISLAND	53
	55

	PAGE
EDGE OF THE UNBROKEN PACK	56
SITE OF POLARIS HOUSE	57
THE SAVAGE CLIFFS OF NORTHUMBERLAND ISLAND	59
SCENE IN OLRIS BAY	60
"SHE REACHED FOR THE GOLDEN BAR"	61
HEADPIECE	65
THE DEPARTING "FALCON"	66
UNCONCERNED ABOUT THE DEPARTURE OF THE "FALCON"	67
FIRST STAGES OF THE LODGE	68
SURROUNDINGS OF THE LODGE	69
THE DINNER HOUR	70
A BURRO TRAIN	71
PAY DAY	73
THE LODGE NEARING COMPLETION	74
THE BABY'S FIRST OUTING	75
IN THE DINING-ROOM	76
THE "FAITH" STOVE BY THE GLACIER CONVULSION	77
THE COMPLETED LODGE	78
CLIMBING TO THE MORAINÉ	80
LEE AT THE MORAINÉ	81
TAILPIECE	82
SUGAR-LOAF MOUNTAIN, MIRROR GLACIER, Etc.	84
HEADPIECE	85
FIRST CAMP ON THE ICE-CAP	86
THE CACHE IGLOOS	87
THE PARTY AT THE IGLOOS	89
MAKING CAMP	91
SECURING A LOOSE DOG	93
TURNING OUT	94
READY TO START	96
CAMP EQUINOCTIAL	98
"THEIR FUR A MASS OF ICE AND SNOW"	99
SOME FROZEN FAST	101
AFTER THE RETURN	104
HEADPIECE	105
THE SIGNAL AT THE CACHE	106
ON THE RETURN	108
"SUMMER WEATHER"	110
KESSUH THE LEADER	112
ENTRIKIN	114
BALDWIN	116
CLARK	118
PEARY	119
THE "SAVIKSOAH" AS EXCAVATED FROM THE SNOW AND ICE	122
HEADPIECE	123
SLEDGING INTO OLRIS BAY	124
SAVIKSOAH MOUNTAIN FROM SITE OF THE "WOMAN"	125
FACE OF MARIE GLACIER	126
SAVAGE GLACIER	128
COAST EN ROUTE TO PETERAHWIK	129
FACSIMILE OF PAGE OF NOTE-BOOK	130
"A GLITTERING WINTRY DAY"	131
PANIKPAH	132
TUPIK AT NETIULUMI	134

Illustrations

ix

	PAGE
TRAVELLING COMPANIONS	135
A CAVE AT PETOWIK	137
GETTING DOGS ACROSS A LEAD	138
TYPICAL COAST SCENE	139
AT CAPE YORK	141
HEAD OF SAVIKSOAH BAY	142
VIEW EAST FROM THE METEORITE	143
HARD AT WORK	144
LOOKING NORTH ACROSS PETOWIK GLACIER	146
COAST NORTH OF PETOWIK GLACIER	147
PROFESSOR CHAMBERLIN	148
THE "FALCON" IN THE HARBOUR AGAIN	150
BRIDGMAN AT KANGERDLOOKSOAH	152
CLIFFS OF LION ISLAND	154
TAILPIECE	155
MAP OF MELVILLE BAY	158
HEADPIECE	159
TAILPIECE	174
THERMOGRAPH AND BAROGRAPH SHEETS OF EQUINOC- TIAL STORM	176
HEADPIECE	177
TAILPIECE	203
MARIE AHNIGHTO PEARV	206
HEADPIECE	207
"THE 'FALCON' SWUNG ON HER HEEL"	208
CONICAL ROCK	209
"A WILD FUR-CLAD CREW"	210
"BLACK CLIFFS OF THE IRON BOUND SHORE"	211
CAPE ATHOL	212
A STREAM OF DRIFT ICE	213
BIRD CLIFFS OF SAUNDERS ISLAND	214
NUMEROUS KITTIWAKES ON THEIR NESTS	215
THE CLIFF- AND GLACIER-PRISONED DEPTHS OF GRAN- VILLE BAY	217
RUINS OF BOAT-PARTY HUT	218
BLACK POOEENVAH AND THE IGNIMUT GLACIER	219
REMARKABLE BELL ROCK	220
KANGAISUK (THE GREAT CAPE)	221
TWO KAYAKERS MET US	222
"ONE OF THOSE WILD SUNSETS"	223
TAILPIECE	224
MI-SU-MI-SU GLACIER	226
HEADPIECE	227
"ONE OF THE ICE-STREAMS OF THIS PRECIPITOUS SHORE"	228
"PIERCED BY A MAGNIFICENT TUNNEL"	230
HEADING FOR THE ARCHWAY	231
ITTIBLOO GLACIER	233
VIEW IN OLRIS BAY	234
BOAT CAMP IN OLRIS BAY	235
SALMON-RIVER GLACIER	237
MT. GYRFALCO	238
THE NARROWS BECAME A CAVE OF THE WINDS	239
GREAT LAKE IN THE DEER PASTURES	241
BERGS AND TRASH ICE	243

	PAGE
WALRUS HEAD	246
HEADPIECE	247
A KARNAH TUPIK	248
DISMANTLING A TUPIK	249
MY PICKED CREW	250
ONE OF MY KAYAKERS	251
EASTERN END OF HERBERT ISLAND	252
A HERD OF WALRUS	254
FAST TO A WALRUS	255
WARPING A WALRUS UPON AN ICE-PAN	257
OUR ICE-RAFT	258
"A GREAT BERG LIKE AN OCEAN LINER"	259
"PUTTING THE STONE"	260
MY WALRUS FLEET	261
WELCOME BACK TO KARNAH	263
IN FULL WINTER RIG	266
HEADPIECE	267
THE MISTRESS OF THE TUPIK	268
WOMEN BUILDING IGLOOS	269
PLAN OF NIPSANGWAI'S NEW IGLOO	270
IGLOO UNDER CONSTRUCTION	271
WINTER IGLOO	272
"DRESSED IN A NONDESCRIPT RIG"	274
THE "MARY PEARY" AND HER CREW	276
UNDER THE SCULPTURED CLIFFS	277
A GIANT BASTION	278
NARWHAL SKULL	280
LONG-TAILED DUCKS AND BLACK GUILLEMOT	281
ARCTIC HARE	282
A WALRUS STEAK	283
TAILPIECE	284
BOWDOIN GLACIER IN OCTOBER	286
HEADPIECE	287
LEE AND HENSON STARTING FOR THE ICE-CAP	288
"FLAHERTY"	289
CLIMBING TO THE MORaine	291
CARRYING A SLEDGE	293
PACKING	295
DOGS AT THE MORaine	296
VIEW FROM THE ICE-CAP	297
HARD AT WORK	298
IN CAMP	299
"THE DIM GREY SUNLESS LIGHT"	300
GARGOYLE CLIFF, MT. BARTLETT	304
HEADPIECE	305
ICEBERG AND YOUNG ICE	306
CROSS-SECTION PEARY ARCTIC HOUSE	308
ANNIVERSARY LODGE, PLAN	310
ANNIVERSARY LODGE, LONGITUDINAL SECTION	312
ANNIVERSARY LODGE, CROSS-SECTION	314
THE LODGE	316
MY SUITE OF APARTMENTS	318
DEPARTURE OF SUN	320
"THE GHASTLY PALLOR OF A WHITE AND FROZEN LANDSCAPE"	322

Illustrations

xi

	PAGE
TAILPIECE	324
SLEDGE DOGS	326
HEADPIECE	327
"NUMEROUS GLACIERS IN GLISTENING SPLENDOUR"	328
MADAME TELLIKOTINAH	330
MISS TELLIKOTINAH	331
RAISED BEACHES	333
THE BIRD CLIFFS	335
PARKER SNOW BAY	336
CHILDREN OF NUIKINGWAH	337
CAPE YORK IN WINTER GARB	339
TAILPIECE	340
TRAVELLING COMPANIONS	342
HEADPIECE	343
HOMEWARD BOUND	344
WOMAN IN FULL WINTER COSTUME	345
"PLUMP, COMFORTABLE AHIHU"	347
ACCESSIONS TO OUR PARTY	348
"AHGOTAH OF THE WOODEN LEG"	350
IHKILLIE	351
"ROUND FACE GLOWING LIKE A BRONZE SUN"	353
TAILPIECE	354
TYPE COSTUMES	355
HEADPIECE	357
WINTER VISITORS	358
AN ARCTIC LAUNDRESS	359
FLASH-LIGHT STUDY	360
FLASH-LIGHT STUDY	362
FLASH-LIGHT STUDY	363
FLASH-LIGHT STUDY	364
FLASH-LIGHT STUDY	365
FLASH-LIGHT STUDY	366
AN ESKIMO MOTHER'S BURDEN	367
"LASSIE"	368
A WINTER NIGHT	369
HEADPIECE	372
AN UP-GRADE	373
ELATINGWAH	374
MYOUKSOAH	376
ESKIMO CHILDREN	377
"A CANAL OF BLACK WATER AT ITS FOOT"	379
"THE SAVAGE BLACK LOVER OF THE NORTH WATER"	380
MENDING A KAMIK	382
DECEMBER MOONLIGHT ON THE NORTH WATER	383
KIOSHOO	384
"EETOO" AND "TOOKY"	385
KEATE GLACIER	387
TOWSER	388
LION	389
AN ARCTIC BRONZE	390
HEADPIECE	394
BABY LAKE	395
"HE WEIGHS EIGHT POUNDS"	396
AHWEAH	397
	398

	PAGE
KOODLOOKTOO	399
"PANIKPAH OF THE OLD GUARD"	400
FROST EVERGREENS	401
MY COFFEE-POT	402
SEAL AND HUNTER	403
"A BUXOM AND OLEAGINOUS LADY"	404
ALAKAHISINGWAH	405
AHTOOKSUNGWAH	406
AHWEAHGOODLOO	408
RETURN OF THE SUN	409
AHTUNGAIHAKSOAH	410
ESKIMO DRAWINGS	412
DRAWINGS OF A 14-YEAR-OLD ESKIMO GIRL	414
ARROTOKSOAH	415
CAPE ALEXANDER	418
HEADPIECE	419
SIPSU	420
PETERAHWIK	421
KOODLAH	422
TWO MAPS OF COAST BY DIFFERENT NATIVES	423
ESKIMO BOY	424
ESKIMO DRAWING	425
A GOOD JOKE	426
PLAN AND SECTION OF SNOW IGLOO AT PETERAHWIK	427
WARMING HIS WIFE'S COLD FEET	428
HEAD OF POLAR BEAR	429
WOMEN PREPARING A BEARSKIN	430
RETURNING FROM PETERAHWIK	432
TAILPIECE	433
THE LODGE IN WINTER	435
HEADPIECE	437
SOKER	438
UP THE LANDWARD SLOPES OF THE ICE-CAP	441
MY ESKIMO COMRADES	442
A SHELTER	444
LEE AND THE "LONG SERPENT"	445
A CAMP	446
FEEDING THE DOGS	448
NOOKTAH AND THE "JOSEPHINE"	449
GOOD-BYE	450
THE GORDIAN KNOT WAS NOWHERE	451
THE DISASTER AT THE FOUR-HUNDREDTH MILE	453
LEE AND HIS FIREPLACE	454
MATT AND THE TENT-SLEDGE	455
LOOKING DOWN ON THE NORTHERN LAND	456
MATTHEW A. HENSON	460
HEADPIECE	461
ICE-CAP CREVASSE	463
"THREE EXHAUSTED MEN AND NINE STARVED DOGS"	464
MORaine CONE	467
THE NORTHERN LAND FROM THE MORaine	468
OUR BOULDER SHELTER	470
"HE SANK ON HIS HAUNCHES"	472
"WITH A BULLET BACK OF THE FORE SHOULDER"	475
DEAD MUSK-ON	477

Illustrations

xiii

	PAGE
"THE FAITHFUL SHADOWS WE CALLED DOGS"	479
SOMBRE NORTHERN LANDSCAPE	480
HUGH JOINSON LEE	484
HEADPIECE	485
SAMBO, THE MUSK-CALF	486
"MUSK-OX IS VERY GOOD"	487
STILL PUSHING ON	489
CATARACT OF THE ACADEMY GLACIER	491
LOOKING ACROSS ACADEMY GLACIER	493
GETTING WEARY AGAIN	495
A SHORT REST	496
MY LITTLE THEODOLITE	497
THE MORaine FROM THE LAND	499
VIEW NEAR ICE-CAP	501
THE RELENTLESS WHITE SLOPE OF THE "GREAT ICE"	502
TAILPIECE	503
SOME OF MY INSTRUMENTS	506
HEADPIECE	507
DINNER-TIME	508
DRIFTED IN	509
OUR TRAIL ACROSS THE FROZEN SAHARA	511
THE "PATHFINDER"	512
SIX	513
FIVE	514
THREE	515
TWO	516
"AT LAST THE WHALE-SOUND SUMMITS"	519
"THE SOFT MOTTLED SURFACE OF THE BAY"	521
THE SOLE SURVIVOR	522
"FAITHFUL NOBLE SERVITORS"	523
MIDNIGHT CALM	526
HEADPIECE	527
THE SHORE LEAD	528
JULY MIST-WREATHS	529
ALONG THE SCULPTURED CLIFFS	531
CASCADE IN THE SCULPTURED CLIFFS	532
"MISS BILL" AND HER FAMILY	531
THE GHASTLY ROCKS OF CAPE SABINE	536
SAVIKSOAH BAY	538
AN AUGUST SNOWSTORM	539
CONE ISLAND, JONES' SOUND	541
WHALE EMERGING FROM THE FOG	513
WEST COAST AT DEXTERITY HARBOUR	545
VILLAGE OF WEST-COAST ESKIMOS AT DEXTERITY HARBOUR	547
ESKIMO WOMAN AT DEXTERITY HARBOUR	548
TAILPIECE	549
MAP SHOWING LOCATION OF "SAVIKSUE" AND VOYAGE OF "HOPE" IN 1897	552
HEADPIECE	553
"TENT" OR "AHNIGHTO" METEORITE	555
EASTERN PART OF METEORITE ISLAND	557
PANORAMA OF SITE OF SAVIKSUE	558
METEORITE ISLAND, FROM TOP OF SAVIKSOAH MOUNTAIN	559

	PAGE
THE ICE FERRY-BOAT	560
THE "DOG"	561
HAULING THE "DOG" OVER THE ROCKS	562
ACROSS THE BAY ICE	563
MOVING THE "WOMAN" ON ROLLERS	564
"KITE" DOCKED IN THE ICE	565
THE "TENT" OR "AHNIGHITO" IN SITU	566
THE "SAVIKSUE" AS LEFT IN 1896	567
CARRYING THE HUNDRED-TON JACK	569
ROAD FOR THE METEORITE	570
AFTER A HALF REVOLUTION	571
TWO OF MY HYDRAULIC JACKS	573
THE METEORITE ON MY RETURN IN 1897	575
THE "HOPE" AT METEORITE ISLAND, AUG. 17, 1897	577
CAPTAIN JOHN BARTLETT	579
THE MASONIC GROUP	580
LAUNCHING THE "AHNIGHITO" ON BOARD	581
CROSSING THE BRIDGE	582
THE ESKIMOS' FAREWELL TO THE "SAVIKSOAH"	583
A MOMENTARY HITCH	585
"STOP THE WINCH"	586
METEORITE IN THE HATCH COMBINGS	587
RAMMING THE ICEBERG BARRIER	588
MY ESKIMO LABOURERS	589
WORKING UNDER THE METEORITE	590
METEORITE AT 'TWEEN-DECK'S LEVEL	591
REMAINS OF GREELY HOUSE AT CAPE SABINE	592
HOISTING METEORITE OUT OF THE "HOPE"	595
THE STORM UNDER THE LEE OF WOLSTENHOLM ISLAND	596
THE "DOG" IN SITU	597
RELATIVE SIZES OF "SAVIKSUE" AND SIX-FOOT MAN	598
THE "AHNIGHITO" IN SITU	599
THE "WOMAN" IN SITU	601
PILE OF TRAP COBBLES ABOUT THE "WOMAN"	603
SHOWING SURFACE OF "AHNIGHITO" METEORITE	605
WIDMANSTÄTTEN FIGURES OF "AHNIGHITO" AND "WOMAN"	607
ANCIENT ESKIMO KNIVES MADE FROM METAL OF THE "SAVIKSUE"	613
ANCIENT ESKIMOS OBTAINING METAL FROM THE "WOMAN"	615
THE SCULPTOR'S STUDIO ON METEORITE ISLAND	616
HOMEWARD BOUND WITH THE STAR STONE	618
CIRCUMPOLAR CHART (HEILPRIN)	faces 618

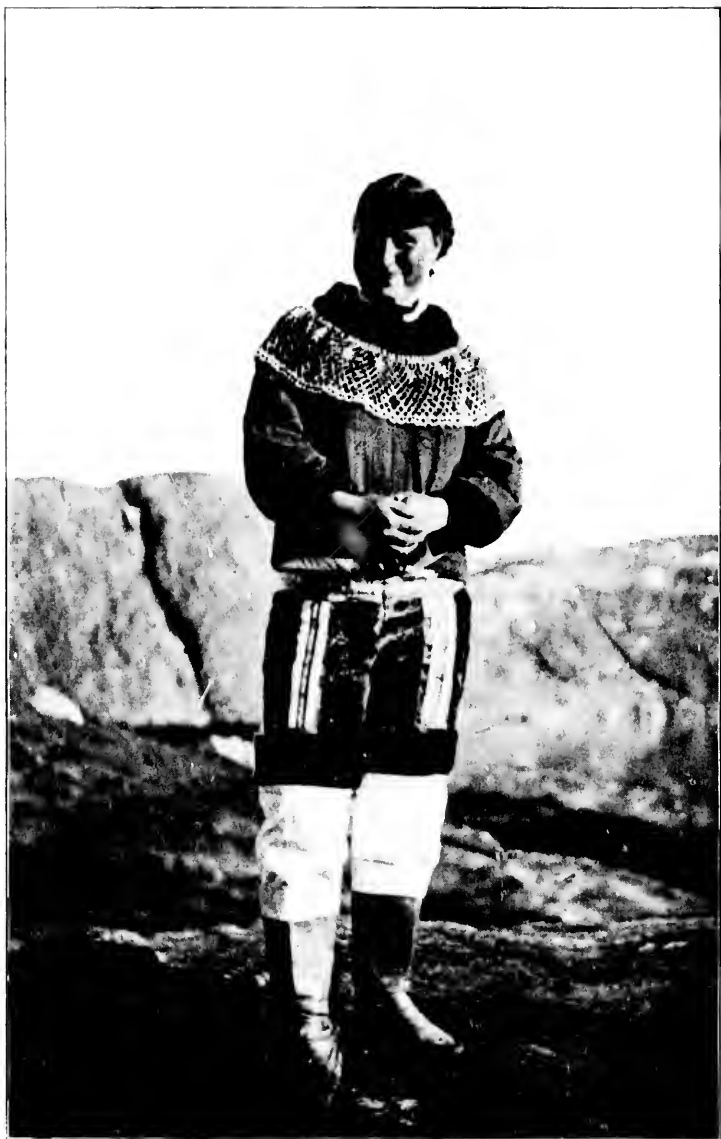
PART III.

NORTH-GREENLAND EXPEDITION OF 1893-1894.

CHAPTER I.

PHILADELPHIA TO CAPE YORK.

THE *FALCON* REACHES PHILADELPHIA—NEW YORK, BOSTON, PORTLAND, ST. JOHN'S—BATTLE HARBOUR, LABRADOR—MORAVIAN MISSIONS, HOPE-DALE AND OKKAK—LABRADOR ESKIMOS—THROUGH HELL GATE AND THE ICE PACK TO GREENLAND—CROSSING THE ARCTIC CIRCLE—HOLSTEINBORG AND GODHAVN—A BREATH OF THE TROPICS—UPERNAVIK AND TASIUSAK—MY ARCTIC ROOSTERS—THE DUCK ISLANDS—ACROSS MELVILLE BAY—THE QUICKEST RUN ON RECORD.



ESKIMO GIRL OF UPERNAVIK.

CHAPTER I.

PHILADELPHIA TO CAPE YORK.



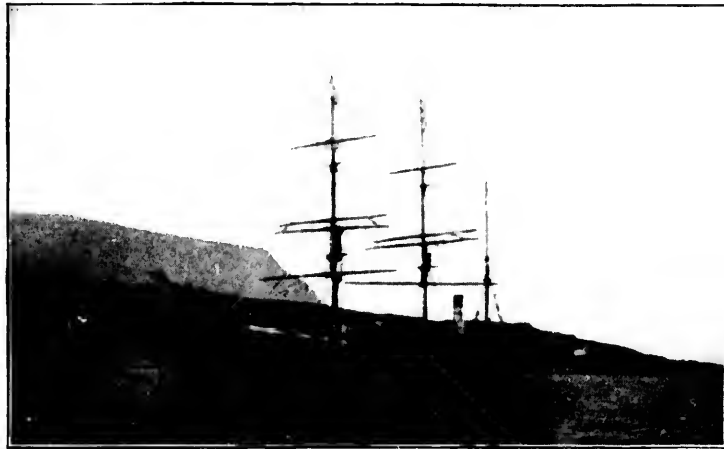
FRIDAY morning, June 23, 1893, was raw and disagreeable, with a light, drizzling rain, as my tug cast off from a Philadelphia pier, and went puffing down the dull grey expanse of the Delaware to meet the *Falcon*. A week and a day before, the cable had flashed the news of her

departure from St. John's, and the day before, the wire had brought tidings from the breakwater that she had been sighted there. The rain gradually ceased, the clouds began to break away, and when, just below Wilmington, we swung round alongside a trim black-hulled, yellow-masted bark, with two white crow-nests far up aloft, the stormy morning had merged into a perfect day.

At five in the afternoon she was fast at her pier, which had kindly been offered for her use by Superintendent Sweigard, of the Reading Railway. For the next three days she lay at this pier, the centre of interest for thousands of visiting Philadelphians. In

4 Northward over the "Great Ice"

the midst of the throng of visitors, as opportunity offered, the various items of her miscellaneous supplies were brought on board: among these, a steam launch—an oil burner—named in honour of one to whom I was under lasting obligations, Gen. I. J. Wistar; two whale-boats, the *Mary Peary* and the *Faith*, companions of the last expedition, and which, through the courtesy of Commodore Kirkland, U. S. N., had been stored at the League Island Navy Yard; the six dogs,



THE "FALCON."

Pau, Lion, Ahngodoblaho first and second, Merkto-shar, Panikpah, my noble assistants on the "White March," and companions through the three months' lecture tour, by which I had raised a large portion of the sinews of war for the expedition; the carrier-pigeons which were to carry messages through the White North; and last, the queer little ragged-coated, long-eared, pathetic-eyed burros that had come from far-off Santa Fé to serve as material for a somewhat

novel experiment in arctic methods. For three days, hundreds of visitors patted the dogs, pitied the burros, and climbed over and into every part of the *Falcon*, then, at midnight of the 20th, she slipped out from the pier, and dropped with the ebb-tide down the Delaware. Two days later, the observer at Sandy Hook saw a strange black craft steaming up from the southward; and passing up through the lower bay, with all her bunting flung out, the *Falcon* pointed her black nose towards one of the Brooklyn wharves, in the shadow of the great bridge, and late in the afternoon was again fast with the mooring lines. Three days of curious visitors here, interspersed with stowing on board several thousand pounds of pemmican, the provisions for the party, the arms and ammunition, the hardware and miscellaneous articles, gathered from north and south and east and west to their rendezvous here, and then late Sunday afternoon the *Falcon* cast off her lines and steamed up the East River, just as the little *Kite* had done two years before, amid the cheers, the waving of handkerchiefs, and the deafening whistles from the evening fleet of Sound steamers, and dipping flags and tooting whistles from



AHNGODOBLAHO.

6 Northward over the "Great Ice"

every other craft in and along the river. Fifty hours later, with spring and bow and stern lines taut, the *Falcon* was hugging historic Constitution Wharf in Boston, the fluttering flags at her tops glowing in the last rays of the setting 4th-of-July sun. From the very next slip, years ago, had started out Dr. Kane's Expedition. Here for two days, from early morning till late in the evening, crowds of interested Bostonians clambered over the ship, left presents,



THE BURROS.

souvenirs, and cards on board, or, lacking these, wrote God-speed and wishes for success in every available nook and corner.

Leaving Boston at eight o'clock in the evening, the run to Portland was made during the night, and a couple of hours before noon of the next day the *Falcon*, again with bunting streaming from every mast, steamed through the magnificent seaward gate of Portland harbour, past the familiar scenes of my boyhood, and up to her berth at Custom-House Pier, amid the

shrill screaming of whistles and tug-boats darting here and there. Only a day could be spared here to give old friends and acquaintances a chance to see the arctic ship, and this day was utilised to gather in a few last articles of equipment, which, failing to be delivered in time at Philadelphia or New York, had been traced and hurried up by telegraph to reach the ship here. The one night in Portland was taken advantage of by the city government to give the party a farewell banquet, and by at least one of the departing expedition that banquet was most deeply enjoyed and appreciated.

Saturday afternoon, July 8th, the *Falcon* swung away from her pier in Portland harbour. At the same moment, from another pier farther up the harbour, a little tug came puffing out, with Mrs. Peary, myself, and one or two other members of the expedition, accompanied by Professor Heilprin, to board the *Falcon* in mid-stream. It was a glorious day, and the familiar shores and islands of the harbour wore their most charming aspect in the brilliant summer sunshine. We responded to the salutes from Cape Cottage and other residences along the shore road as we steamed out, and at two o'clock the pilot left us off Ram Island Ledge, and, laying a course to clear Halfway Rock Light, we were at last fairly started on our northward voyage.

I had hoped to visit for an hour or so my little Eagle Island, but our direct course was too far from it, and I did not care to delay the ship solely for that, so I was content to see its green dome standing out against the misty background of beautiful Casco Bay. As the sun went down, the wind freshened, raising a little sea, which thumped against the weather-bow, and occasionally came splashing up on the quarter-deck. When darkness settled upon us, the water was alive with phosphorescence, and startled fishes, darting

8 Northward over the "Great Ice"

away from the ship's side, caused flashes like the glow of summer heat-lightning.

It is a strange sight that the *Falcon's* deck presents. Forward, on the starboard side, are the eight little burros, munching continuously at their hay, and sel-

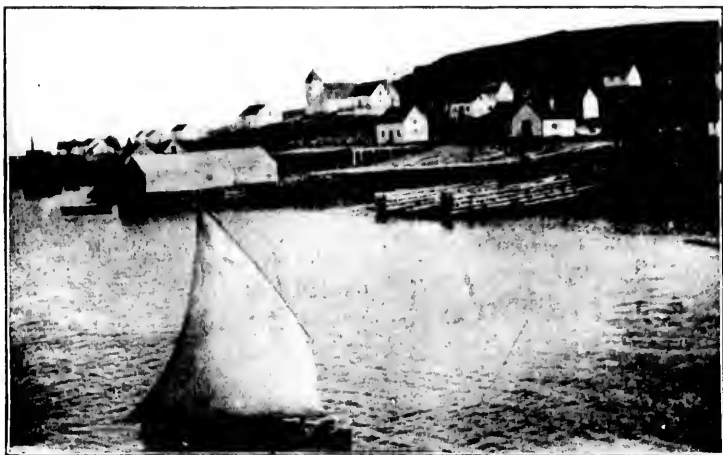


OUR STATEROOM.

dom showing any signs of animation beyond the slow lifting of an ear. Poor little fellows! Just across the deck from the burros, are the two Ahngodoblaho dogs. One of them has already come to the conclusion that the burros are good to eat, and makes frantic efforts

to get at them. Along either side of the deck-house, are piled the bales of hay, and in the waist of the ship, along both rails, is a continuous row of oil barrels.

Passing down the companion-way, immediately in front is the door leading to the main cabin, and, entering this, a door is seen opening both to port and starboard from it. On the port side, the door leads to a series of three staterooms in line, with accommodations for eight of the party, and on the left the door



BATTLE HARBOUR, LABRADOR.

leads to our own little stateroom, scarcely, if any, larger than the one on the *Kite*, but somewhat more conveniently arranged, and much more pleasant from the addition of a circular swinging port in the ship's side, directly above the berth. The washstand, a small chest of drawers built against the wall, and a box stood on end to assist in climbing into the narrow bunk comprise the furniture of this little room.

Late Wednesday afternoon, Cape Pines, on the southern Newfoundland coast, was sighted off the port

bow, and when the late sunset came, the bluffs of the cape, only a few miles from us, with a little white lighthouse perched upon their top, were thrown into sharp relief against the crimson glories of the western sky. About midnight we rounded Cape Race, and at seven o'clock Thursday morning, when I came on deck, the giant rock portal of St. John's harbour was directly ahead of us, the familiar red-brown cliffs on either side glowing in the bright morning sunshine.

Stopping at St. John's only long enough to fill with coal, the *Falcon* got away on the 15th, and ploughed her way northward. In the waist and forward, her deck was washed constantly, and the poor little burros stood knee-deep in the water. The rain and wind, the latter always disagreeable to the Eskimo dog, kept these four-footed friends of mine in a constant state of vociferous protest against the weather. About ten o'clock I missed my grey Ahngodoblaho dog, and after an unsuccessful search, we at last discovered the rope and harness by which he had been fastened, hanging over the ship's side, near where he had been the night before.

Poor fellow! I mourned him all day long. Though possessing, perhaps, the least stamina of any of the surviving dogs of the 1892 Inland-Ice journey, he had during his sojourn in civilisation become the most affectionate of the team, and had even learned some civilised customs, such, for instance, as shaking hands. It seemed a pity that, after having gone through so much, he should have been lost at this time, and, like one of Hall's Eskimos, have died on his way home, just after he had seen the first ice.

On the 17th, after a night of heavy weather off the Strait of Belle Isle, weather in which two of my burros succumbed, the *Falcon* touched into Battle Harbour on the Labrador coast, to purchase dogs. There is a

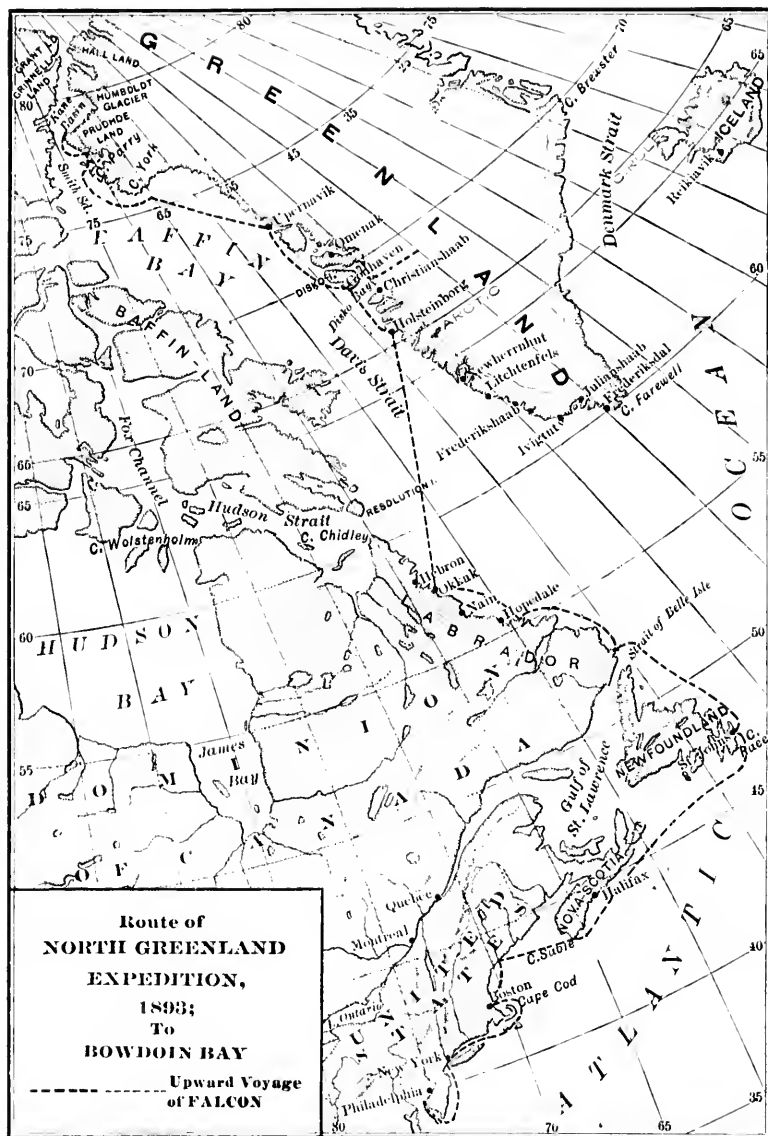
wild view from here of wind-swept grey sea, dotted with a numerous fleet of icebergs, and fading away in the distance into the shrouding fog. The rocks and shores of this coast, to my mind, are more sombre and desolate in appearance than the shores of Greenland as far north as Disco Bay, almost twenty degrees higher latitude. The scattered patches of moss and turf are bright with flowers, and I saw two or three sparrows flitting over the grey rocks.

My efforts to obtain dogs met with little success, and at earliest daylight we steamed out across the breezy white-caps of St. Lewis Sound. Late in the afternoon, we began to run through

streaks of fog, and the icebergs seemed more numerous. At nine o'clock we rounded Wolf Rock and hauled more to the westward along the now receding Labrador coast. The nights were now decreasing



LABRADOR ESKIMO MAN.
Moravian Mission.



rapidly in length, it being fairly light at ten P.M., and there were indications of southerly winds during the night and in the morning, which meant no fog.

During the night, we passed the mouth of Hamilton Inlet, and the next noon were off bold Cape Har-



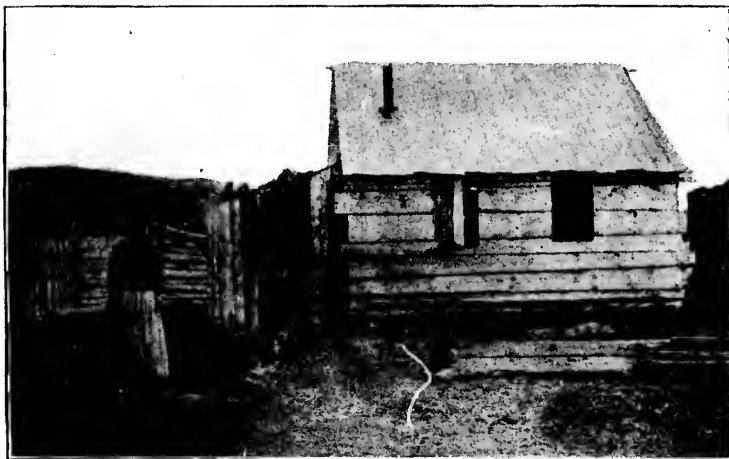
LABRADOR ESKIMO GIRL AND CHILD.

Moravian Mission.

rison. At five P.M. we passed the point of Kidliauit, or outer Ironbound Island. A very pronounced mirage was noticed among the icebergs to the north-east for an hour during the forenoon. The next morning, we stopped a few minutes at the fishing station of Turnavik to leave a mail. For an hour before and

14 Northward over the "Great Ice"

after reaching the station we were surrounded by little brown-sailed fishing-boats, one or two hundred of which rendezvous at this place. Lighted as they were by the slanting rays of the evening sun, they presented a very picturesque sight. Hopedale, the Moravian mission station, about midway of the Labrador coast, was my next stop, on the 20th. Here, for the first time on this coast, I saw the Eskimos themselves, and I found them difficult to deal with, as in every other



A LABRADOR HOME.

place where they have been in contact with the whites. Although there were numbers of dogs about the settlement, the owner of every desirable dog, by a strange coincidence, was away fishing, and the few men still remaining at the station who had dogs they wished to sell, by another strange coincidence, had sent them to a distant island.

Three Moravian missionaries—Kastner, Hansen, and Simon,—with their wives, are at this station. A few oranges were very acceptable to these isolated

people, and in return I was pressed to accept a present of lettuce and rhubarb from the mission garden. These gardens present a pitiful appearance. Just back of the village, amid a little clump of stunted, grey-bearded fir and spruce trees, are a series of small enclosures, surrounded by a close fence of split logs driven into the ground. Over the entrance of each of these enclosures is inscribed some Scripture name, such as Enon or Saron, and within the shelter of these fences are grown the potatoes, lettuce, rhubarb,



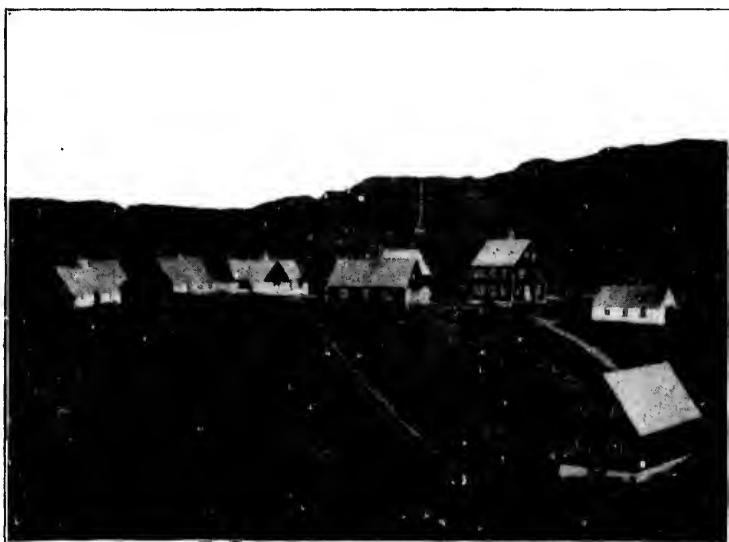
SPEAKING A GREENLAND PILOT.

horseradish, and other vegetables which supply the wants of the missionaries. A few pansies also show their bright heads.

The most touching place, however, was the pleasure garden, if I may be allowed the term, a little enclosure around the sides of which ran a gravel walk, with two others intersecting it in the centre. At the intersection of these two walks is a little rough board shelter, open on one side, and with a rude wooden table in the centre, the whole facing southward, the dreariest possible apology for a summer pavilion. In front of this

are one or two little beds of struggling flowers, and everywhere else through the enclosure the rank wet grass grows in the shadow of the stunted trees. These trees to me are more striking pictures of loneliness, desolation, and barrenness than the barest of bare rocks.

The settlement itself consists of three or four neat, strongly built houses, which form the quarters and stores of the missionaries, surrounded by the small



HOLSTEINBORG, GREENLAND.

wooden structures occupied by the natives, of whom there are some one hundred and fifty at this place. None of the natives here live in stone or turf houses. Back of the principal house is an enormous pile of sawed and split wood, the common property of the settlement. This wood is gathered at the heads of the inlets in the autumn after the fishing is over, and rafted down to the settlement by the natives.

From Hopedale we threaded our way through fog and heavy ice to the mission station of Okkak. The appearance of this station is very similar to that of Hopedale, though there seems to be a larger number of native habitations. Nearly all the natives, we found on landing, were away at various points along the coast, fishing, and, in this case, just the reverse of the conditions at Hopedale, they had all their dogs with them. On learning this, I remained ashore only long enough to obtain from the missionary the location of these camps to the northward, and then went on board ship.

Late on the 22d I had twenty-five dogs on board, including the five of my old team, and I decided not to waste more time in the fog and ice of this inhospitable coast, but to bear away at once for Greenland. So the *Falcon's* prow was headed for the entrance of Hell Gate, the wild passage leading northward from the bay, under the cliffs of the Bishop's Mitre, a great mountain towering in red-brown grandeur three thousand feet above us.

The mission natives whom we had seen about this bay were very similar in appearance to the Greenland natives, and in one or two of them, darker than the rest, I fancied that I detected a resemblance to some of our old Whale Sound acquaintances. Though some of the men had on sealskin trousers, most of them were dressed in garments made of civilised material, the coats, or timiaks, without exception, being of white blanketing, trimmed with bands of red cloth about the bottom and the wrists and the front of the hood. The pattern of these garments was that of the fur garments of all the Eskimos on the western shores of Baffin Bay and Davis Strait, having the pointed hood. The upper garment of the women was of the same material and much of the same cut, except that

it had the long rounded tail to the coat. Some of the women had a single very abbreviated skirt of some woven material, while others wore simply the heavy blanket trousers. All, both men and women, wore the regulation Eskimo foot-gear.



A 33-INCH BEAUTY.

Passing between the almost overhanging cliffs of Hell Gate, we emerged from the northern end of the passage, and were once more in the ice.

All night long the *Falcon* fought the ice, till every timber creaked and loose articles in the cabin and staterooms danced a merry jig. All night the cry of the man at the bridge and the answering shout from the wheel of "port," "port, sir," "steady," "starboard," "hard over," kept sleep from the eyes of the younger members of the party. At 10:30 o'clock on Sunday morning, July 23d, after passing through some four miles of heavily packed ice, the *Falcon* punched her nose through into the open sea, and we were free.

Throughout the day, a long, heavy swell from the northwest, a reminder of the past week of heavy weather, kept the *Falcon* rolling in a manner that placed many of the party *hors de combat*.

Tuesday and Wednesday were days of thick fog that dripped constantly from the masts and rigging, keeping everything on deck as wet as in a summer

shower. Our reckoning showed that we would cross the Arctic Circle at noon, and a little before that time the ship was decked with all her bunting, with the Stars and Stripes at the fore, the Expedition flag at the main, and the British ensign and the ship's flag at the mizzen. As the ship's bell struck eight bells, a salute of three guns was fired from the old piece on the fore-castle, and we then all descended to the cabin, where a punch had been brewed for the occasion. A bit of



NATIVES OF UPERNAVIK.

strawberry syrup gave the punch the proper colour, and a lemon or two slashed into it gave the finishing touch. In this we drank success to the Expedition, and the health of the ladies and of Captain Bartlett. As this was the captain's first crossing of the Arctic Circle, a five-dollar gold piece, the only thing available, was presented to him as a souvenir of the occasion.

About three o'clock in the afternoon, the lookout discovered low-lying rocks close on our starboard bow, and the fog lifting a little later, gave us a view of the

bold Greenland coast, only a few miles distant. Carefully scanning the horizon in the intervals when the fog lifted from us a little, we discovered at last a beacon on an island a few miles to the south of us. Steaming down to it, a solitary kayaker was seen approaching the ship, and, coming on board a few minutes later, he informed us that we were at the entrance



PASTOR MÖRCH AND HIS CHAPEL.

Upernavik.

of the passage into Holsteinborg. Then, coming on the bridge, he piloted us into the harbour, where we dropped anchor at six o'clock in the evening.

Holsteinborg ($66^{\circ} 56'$ N. Lat.) is situated on a projecting peninsula of the mainland, which here rises to a considerable height, but is partly bordered by a strip of flat lowland, intersected by valleys. The houses,

with a church and missionary dwelling, stand at the mouth of a valley, somewhat higher above the sea than most Greenland settlements. The harbour is spacious, offering a safe anchorage for ships. On the north side of the harbour, the ruins of the original settlement, which was founded in 1759, are found. This spot is overgrown by willows, whose luxuriance is exceptional in a spot so near the open sea, but may be explained by the shelter offered by the mountain



THE CEMETERY AT UPERNAVIK.

chain on the north side. The settlement is just within the Arctic Circle, the sun being visible for a few days at midnight.

The Governor of Holsteinborg was absent on one of his summer tours, and only Assistant-Governor Franzen was at home. I found him very pleasant and anxious to be of all possible assistance, the instructions from the Danish Government in regard to the Expedition having reached the colony. In a few hours, seventeen dogs had been purchased and put aboard.

We learned from the Governor that our celebration, when our vessel crossed the Arctic Circle at noon, had been the cause of considerable alarm in the little village, as the people had heard our guns and were fearful that in the heavy fog we had run upon some rock.

Next to Godhavn this little Greenland town, Holsteinborg, is the prettiest and most picturesque. The harbour is not quite so completely enclosed as at Godhavn, but there are numerous little bights running out from it that make perfect shelter for small boats. The hamlet itself, consisting of four or five Danish houses, occupying a common enclosure surrounded by a neat painted fence, is at a considerable elevation above the water-level, and grouped to the westward of this enclosure are the dwellings of the Eskimos. These dwellings seem to be more regularly and closely built than those at any other of the Greenland settlements which I have visited.

Just a few minutes before midnight the *Falcon's* bow was pointed westward, the propeller began its revolutions, and we steamed out of the harbour to the sound of our whistle and the saluting cannon of the town, with the yellow midnight sunlight just tipping the ragged peak of Kellnerhatten, which stands guard over the little settlement. One of the most picturesque scenes of the voyage was our pilot-boat veering away from the side of the ship, sharply outlined against the blazing northern sky, and the occupants of the boat swinging their hats and giving three cheers for the Expedition.

Early on the 28th, we entered the harbour of Godhavn. The anchor was no sooner down than the natives were alongside us with the numerous little articles so familiar to visitors to these Greenland ports—the toy kayaks, muffs, footstools, tobacco-cases, ivory carvings,

slippers, bird-skins, and rugs made from various furs and trimmed and decorated with bits of brilliantly dyed seal leather. Some of the men brought off more substantial if less interesting articles, in the way of ducks, salmon trout, rock cod, and so on.



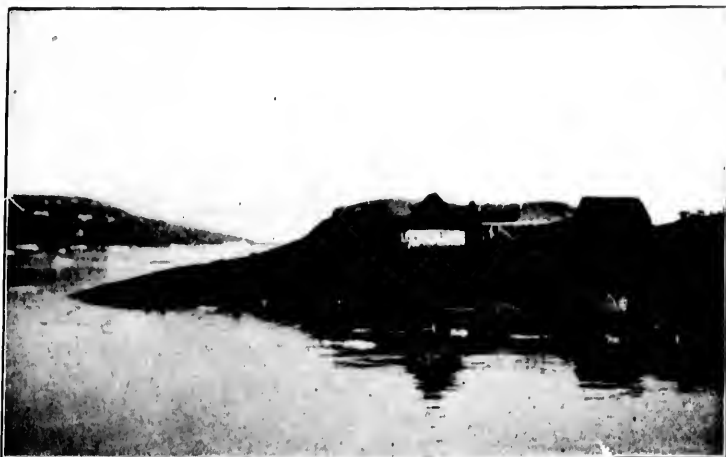
ANDREAS THE PILOT.

I found that my fur clothing, ordered from Copenhagen, was ready for me, and so were twenty dogs. Returning to the ship, I had the presents intended for our Greenland friends brought up and put in one of the boats to take ashore. Then, accompanied by

24 Northward over the "Great Ice"

Mrs. Peary, I left the ship again and, landing, went up to the Inspector's house.

Here, after the first greetings were over, I told Mrs. Andersen that for a little while I wanted to take possession of the Inspector's billiard room, and that she was not to look into the room or out of the windows to see what was going on until she had my permission. Then three or four pairs of willing hands



TASIUSAK, 73° 24' N. LAT.

The Most Northerly Settlement in the World with Permanent Civilised Inhabitants.

brought up from the boat a case of oranges, another of lemons, a big watermelon, and half a dozen pine-apples, all of which had been purchased and carefully treasured during the voyage for this occasion. They were unpacked and piled upon the billiard table, and round them were placed several souvenirs for the members of the family, including a silver mug for my godchild, now a stalwart little fellow of seven. Then Mrs. Andersen was requested to come in.

Never shall I forget the expression on the good woman's face and the way her eyes filled with tears as she entered the room, now redolent with the perfumes of the tropics, and saw the table loaded down with fruits which she had not seen for years and years. She could hardly desist from picking up the pineapples and oranges and inhaling their perfume; and if ever there were happy children they were those of the Andersen family as they rushed away with an orange in each hand.

We got under way a little before ten in the evening and reached Upernavik at five o'clock in the afternoon of the second day.

The fog was our most persistent enemy. Whenever we had a port to make all the way north from Battle Harbour, Labrador, to Upernavik, the incessant fog hampered and delayed us. It had already cost me days of time, wasted in trying to find the entrance to the various harbours.

At Upernavik, where I had counted on finding a large supply of good dogs, I was disappointed in finding that I could obtain at most ten or eleven, as the others were scattered about the limits of the colony, on outlying islands and distant settlements, and it had been impossible to gather them in. I found Governor Olsen now in charge at Upernavik, and anxious to be of all possible assistance, like the officials of all the other ports where I stopped. Here too I met my old friend of 1886, Pastor Mörch, the only ordained Eskimo pastor in Greenland. Our stay at Upernavik was only long enough to get the dogs on board, and also a native pilot, Andreas Peters, who was to show us the way to Tasiusak, forty miles to the northward, where the Governor informed me he was confident I could obtain a number of very good dogs.

Steaming away from Upernavik and out from under

the majestic peak of Sanderson's Hope, we reached Tasiusak at two o'clock in the morning. When I turned out, we were within one hundred yards of the most northerly house occupied by civilised man on the face of the globe. This one house, surrounded by Eskimo huts, forms Tasiusak. Here I obtained seventeen good dogs.

Our stay at Tasiusak was only an hour and a half, and we then steamed northward again with eighty-seven dogs on board. If ever there was pandemonium on a ship it was on the *Falcon*, with nearly a



THE DUCK ISLANDS.

hundred of these howling, fighting, restless brutes on board. It was impossible to keep them fastened, and they were over and into everything. The boys gave them the name of "Arctic roosters," from their sleep-disturbing peculiarities.

The *Falcon* arrived at the Duck Islands on the south side of Melville Bay about noon, and, after landing a party on the eastern island, she steamed over to the outer islands and anchored in nine fathoms of water, just in the passage between the two. A second party landed on the inner island, while another, includ-

ing Mrs. Peary and myself, landed on the outer one.

We found birds very scarce, and the few remaining females were very wild, probably the result of five whalers stopping there during June.

The outer island is the highest of the group, and climbing to its summit, which by my aneroid is 260 feet above the sea-level, I found perched upon it a circular stone wall breast-high, with an opening to the south.



WHALERS' LOOKOUT, DUCK ISLANDS.

This is the Whalers' Lookout, from which, early in the season, they scan the north and north-west for a favourable lead through which their vessels may make their way through the ice.

A few feet south-west of this lookout, the island ends in a vertical cliff, from which, as I drew near, two ravens sailed out, probably a nesting pair. Turning northward from the summit, there is a gradual

descent over a muddy, rocky slope strewn with patches of yellow poppies, down to the northern point of the island. Part way down, on a bluff, facing west, are half a dozen piles of stone, the rude graves of sailors who died while waiting for their ships to get

through the bay ; and as if with kindly meaning, even on this barren rock nature had sprinkled the poppies more abundantly about these heaps of stone than at any other point on the island.



CAPT. HARRY BARTLETT.

From the Whalers' Lookout, Horsehead to the south, Cape Shackleton to the south-east, Sugar Loaf to the east, and Wilcox Head to the north-east are distinctly visible. These islands are shown without any attempt at accuracy on the present charts. Their number is three instead of two as indicated. The two westward islands are separated by a very narrow passage. The

most western and southern of these two islands presents to the sea a vertical cliff towards the south-west, and its highest point is 260 feet above the sea-level. It commands the entire horizon. Sloping to the north, it ends in a rocky point, and to the west, some-

what south of this point, is a beach, if the term may be used, composed of the whitest cobble-stones. Some two hundred yards or more to the west of the centre portion of this island is a rock which is bare at low water. About midway of the channel between these islands there is a rock, presumably the one on which the *Panther* struck; south of this there is an anchorage of ten fathoms.

The second or middle island is long and comparatively low, its western face being precipitous and dropping at an angle of 30° . The top of this face forms a nearly straight ridge along the western side of the island, and is the highest part of the island. Eastward this ridge slopes down to a low, flat valley, rising again to a similar but somewhat lower ridge on the eastern side of the island. The southern end of this valley is occupied by a little shallow pond, from which a small brook trickles away to the southern end of the island. There is also another pond formed by a dyke thrown across the northern part of the island by the action of the sea and possibly the effect of the piling ice.

North of this island are three rocks projecting from the water, and about two miles north of east of it is the third island of the group, presenting round eminences of rock at both its northern and southern ends, with a valley of shallow depression between them. The length of the middle island is something like a mile, the eastern island about the same, and the extreme western island somewhat shorter. All the islands are covered with glacial detritus, and show the effects of glacial action.

The three islands have been in times past a great resort for eider-ducks, but the whalers going north have been in the habit of stopping to get eggs and ducks, and this, with the fact that for the last three

seasons the ducks have been attacked later during the season, may account for their being scarce, and they may have sought other breeding-places. The result of five hours' shooting was only about forty birds. Quite a number of other species were noted on the island, but we only obtained four. These were two black guillemots, a young brant, and three burgo-



CHIEF-ENGINEER FISCHER.

master gulls. The other birds seen were a snow-owl, a pair of Brünnich's guillemots, ravens, two sand-pipers—variety unknown—and also numbers of snow-buntings. On the southern end of the middle island, where the brook comes to the sea, there is a coarse, rocky apology for a beach, and there is also a short beach of round cobblestones on the east-ern side of the outer island, about mid-way of the passage

between the two islands, and this would be about the only available landing-place in heavy weather on this island.

At eight P.M. on July 31st, with the temperature 42° F., we fairly began the passage of the dreaded Melville Bay. We left the Duck Islands at 4:40 o'clock, our

course being N. N. E. magnetic. There was not a cloud in the sky. The wind was light and directly ahead. A few large bergs were scattered around the horizon, but otherwise we were sailing over a summer sea where two years and a month before we had battled with the pack ice nearly every inch of our



THE "FALCON'S" FIREMEN.

way for three dreary weeks. There was no ice sky, and all the indications were for pleasant weather for the next day or two. My hopes began to rise that we should beat the record. I promised each fireman one pound sterling if we beat thirty hours, and one dollar additional for every hour under this. The offer of a reward for good time across the bay had

its effect, and all through the night the *Falcon's* propeller pulsated with unaccustomed rapidity. The water was absolutely smooth, without the slightest indication of wave or swell, and during much of the time there was a perfect calm. At 10:45 P.M., after leaving the Duck Islands, we ran into a stream of loose pan ice, and steamed through it for four hours and a half. Some of these pans were of considerable size, but all of the ice was so thin and rotten that it was hardly more than water-saturated snow, and its resist-



CAPE YORK FROM THE SOUTH.

ance was so slight that no attempt was made to avoid the pans, but the ship kept right on her course through them. About four A.M. there was fog for a short time, but after that there was the same brilliant, calm weather as during the preceding night.

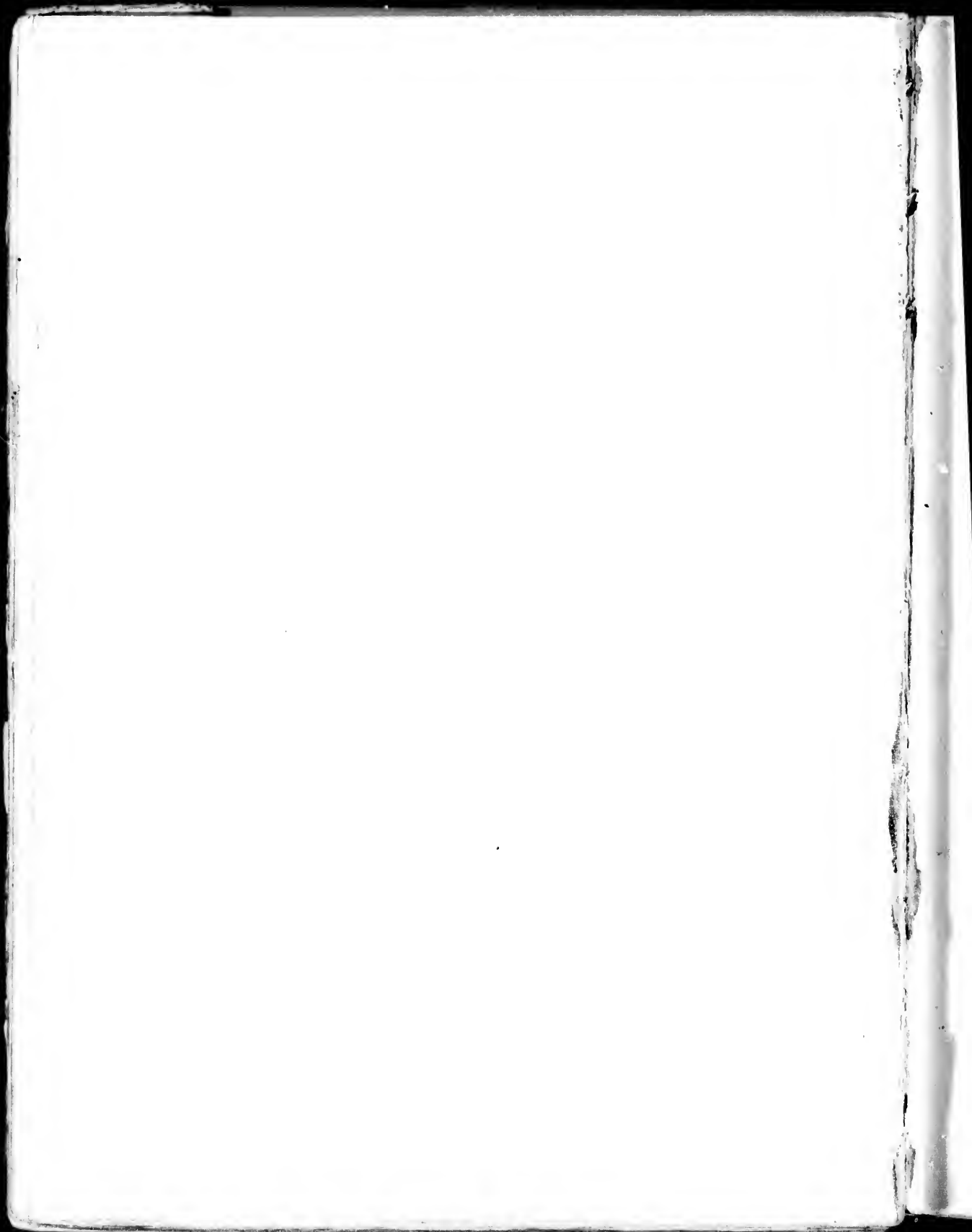
At ten o'clock, the course was changed to east by north for Cape York, and at 11:30 A.M. the cape itself was seen directly ahead of us; and now we ran up the fore-and-afters to take advantage of the light northeasterly breeze which had sprung up. The cape was apparently about forty miles distant, and if this was

the case, the prospects were very fair for our completing the passage in twenty-four hours.

Flocks of little auks had been swimming in the water since ten o'clock in the morning, and this in itself indicated the proximity of land.

The temperature of the air was 40° F., and the water 39°, showing that there had been no considerable amount of ice in this portion of the bay for a long time.

As we neared the northern edge of the bay, the north-east wind filled our fore-and-afters, relieving the engines from the drag of the ship's spars and masts, the water was as smooth as glass, the little auks were flying and swimming about in every direction, and the firemen down in the stove-hole, incited by my promise of reward, were literally standing over the fire, raking the ashes here, putting fresh coal on there, stirring the fire in another place, and watching the steam gauge to see that the pressure never relaxed. It was an exhilarating sight to see the white foam rolling backward from the *Falcon's* iron-clad bow. Higher and higher the black cliffs of the cape rose straight before us. Farther and farther up to the westward towards Conical Rock, the familiar coast-line rose into view; and at last, at full speed, with the Stars and Stripes and the Expedition flag rustling in the breeze, the good ship *Falcon* dashed past the point of the cape into the bay just eastward. She had made the passage of Melville Bay in twenty-four hours and fifty minutes, the quickest run on record.



CHAPTER II.

HOUSE-BUILDING AND HUNTING.

NO NEWS OF VERHOEFF—CAPE YORK—NORTHWARD ALONG THE COAST—
BOWDOIN BAY — HOUSE-BUILDING — LANDING THE BERROS — DEATH OF
MEGIPSU—THE WALRUS HUNT—TONS OF MEAT—A NARROW ESCAPE—
CAPE ALEXANDER AND LITTLETON ISLAND—THE UNBROKEN PACK—SITE OF
POLARIS HOUSE—A DIRTY NIGHT—DEER PASTURES OF OLRIS BAY—BACK
TO FALCON HARBOUR.



MIDNIGHT OFF CAPE ALEXANDER.

CHAPTER II.

HOUSE-BUILDING AND HUNTING.



NONE of the natives at Cape York had seen or heard anything of Verhoeff.

I rowed out to the bluffs of the cape and climbed to their crest.

There is no trace of the summit ever having been visited by any except the natives, one or two of whose fox-traps I found on

top, and I do not recall any record of the ascent having been made, though it is quite likely that it has been accomplished, as it is not difficult. Certain it is, however, that never were the conditions more perfect for an outlook from the cape than now. The edge of the ice-cap came right down to the head of the ravine, up which we climbed, and as I stepped upon it I remembered that it was five days less than a year since I had stepped from its edge a little farther north on the completion of my trip to the north-east coast of Greenland. After enjoying the prospect for a few moments, a cairn was erected, and a bottle containing a record of the visit deposited in it. After a round of views from

38 Northward over the "Great Ice"

Cape York, I descended and pulled out to the ship, which then steamed west and north-west along the coast.

During August 1st and 2d, we steamed north along the coast, and two to five miles from it. On the afternoon of the second day, we were approaching bold Cape Parry, with its bristling, vertical wall facing the west and north-west, standing guard at the southern entrance of Whale Sound. Some time before rounding Cape Parry, the observer, coming north, sees Hakluyt and Northumberland Islands. During the



GLACIERS OF THE CRIMSON CLIFFS.

long summer days, the water about Cape Parry is alive with the whirring wings and gleaming white breasts of countless little auks that breed in that neighbourhood.

Rounding Cape Parry, the course of the *Falcon* was directly towards the opening between Herbert and Northumberland Islands. The Inland Ice beyond the glaciers in Omenak or Murchison Sound was distinctly visible. From Cape Parry, in pleasant weather, the bold bluffs of the Carey Islands are visible to the west.

Keeping along the shore to Barden Bay, I landed at the settlement of Netiulummi and took on board two Eskimos, Kessuh and Myah, whom I found there, with

their families and all their belongings. At eight A.M. on August 3d, we entered the mouth of Bowdoin Bay in Inglefield Gulf. The bay was dotted with icebergs, just as it was on August 4th last, when Astrup and I looked down into it from the Inland Ice. We found a fresh breeze blowing out of the bay against us, but as there was no pan ice, and the icebergs were scat-



CAPE POWLETT.

tered, we were able easily to avoid them and keep on to Anniversary Camp, in the eastern angle of the bay head. We reached the little rock-walled harbour at 9:30 A.M., and at ten o'clock the *Falcon* was safely moored within a stone's throw of the rocks, aft and on either beam, and with her head pointing straight down the bay.

The harbour is a perfect one. The anchor ahead was down in fifteen fathoms, and there were eight fathoms under the ship's stern.

As soon as the anchor went over I went ashore to decide upon the precise site of the house, so that the stores might be landed directly in front of it. I found the ring of stones, which had been used to hold our

tent down when Mrs. Peary and I were here on August 11th, a year ago, just as they had been left, and the site of the house was selected within fifty feet of the former site of our tent.

As soon as the reconnaissance for the house site was completed, I went back to the ship, and turned in to obtain a few hours of much-needed sleep, for I had been up the last two nights, taking advantage of the



THE "FALCON" AT HER MOORINGS.

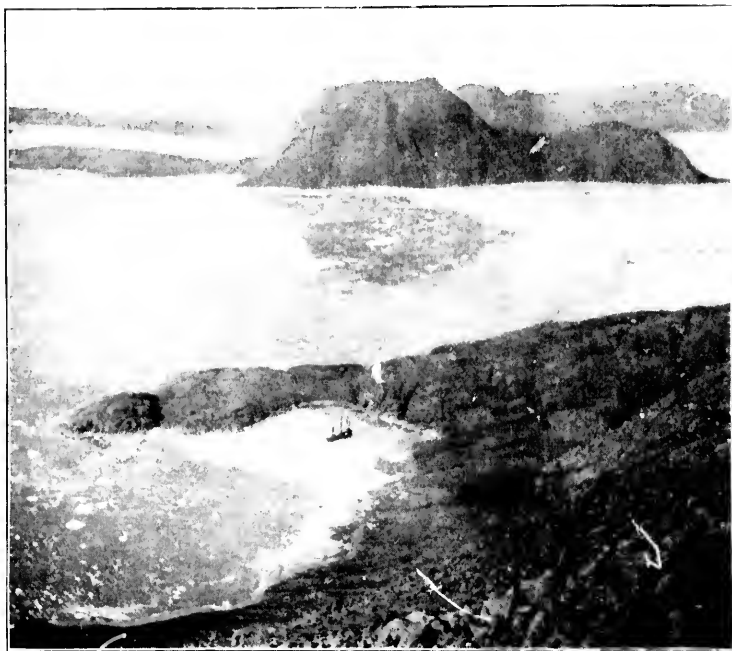
exquisite weather and the opportunity of making photographs, and noting the peculiarities of these shores.

Then began the work of unloading the stores and building the house. Sunday was a day of rest, and most of the party took advantage of it to sleep through a good part of the forenoon. It was a raw, disagreeable day.

Monday, August 7th, was another disagreeable day,

with occasional showers and one or two transitory glimpses of the sun. Everyone was at work upon the house, and every frame was up and in place when we went to dinner.

During the afternoon a start was made on the first shell of tarred-paper covering. With all the frames up, the work progressed more rapidly.



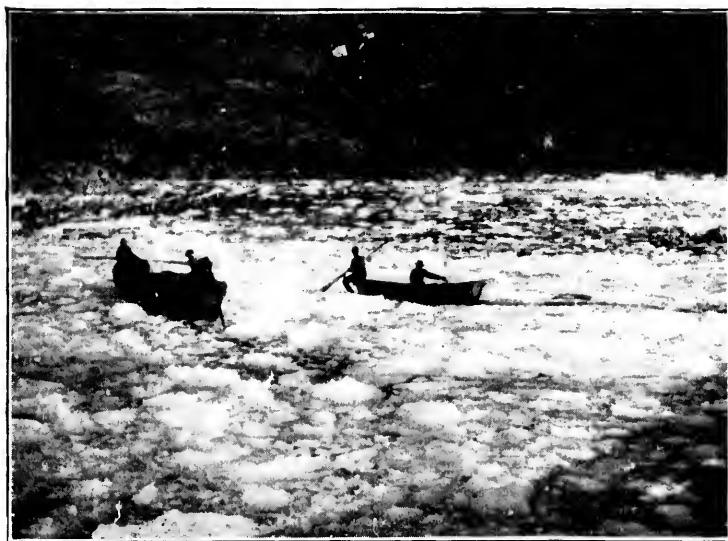
BIRD'S-EYE VIEW OF FALCON HARBOUR.

Bowdoin Glacier and Sentinel Nunatak in the Distance.

Late in the afternoon, the burros were landed, and immediately afterwards we had quite a little excitement in connection with them. Two were landed first and taken to their stables, built of bales of hay, where they were carelessly left by one of the younger

42 Northward over the "Great Ice"

members of the party, who went to the shore to bring up another burro that was coming off. A minute later, as I was standing near the house, I heard a shout from the ship and a commotion in the direction of the stable, and looking there I saw one of the poor burros coming at full speed over the rocks, braying at the top of his voice, and with thirty or forty of



DISCHARGING SHIP THROUGH TRASH ICE.

August 3-12, 1893.

the dogs after him. He was sensible enough to run directly towards us for protection. We drove the dogs off, and then hurried towards the stable, where we found a pack of the dogs worrying the second burro, which had been unable to free himself. Driving the dogs off, we found that this poor little fellow had been bitten quite seriously, though not dangerously. After this the burros were carefully guarded

from the ship to the stable, and a watch set over them there.

The dogs acted like wolves, and yet I think that I should have had little trouble with them if they had not already become accustomed to the scent and taste of the burros, two or three of them having been fed to the dogs while on board ship.

August 12th, about noon, the *Falcon* got under way on her cruise for our winter's meat supply. I had on board my two Eskimo hunters, Myah and Kessuh, with their kayaks, walrus harpoons, lines, lances, floats, and drags. I had told them the object of the ship's trip, and they were wild with excitement at the idea of going on the *oomiaksoak* (big ship) to hunt *awick* (walrus).

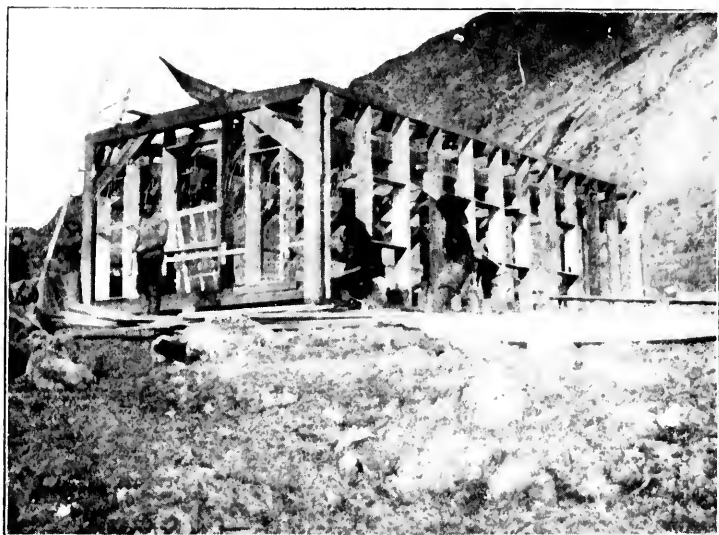
As we got under way, the sun broke through the morning clouds, bringing out in their most varied hues the brilliant and manifold colours of the cliffs of Bowdoin Bay. There was not a breath of air, and each iceberg in the bay found its double in a perfect mirror on the smooth water surface. A little more than an hour's winding in and out among the bergs brought us to the entrance of the bay, and, passing the brilliant red-brown Castle Cliffs on our left, we steamed along westward close under the grand, grey Sculptured Cliffs of Karnah.

Inglefield Gulf opened out behind us, deep blue in colour, dotted with occasional icebergs, and canopied with the sky of Italy. The Hurlbut and Hubbard Glaciers pushed their burnished fronts out from the cliffs on either side in the foreground; and far up at the head of the gulf, the mighty sweep of the great Heilprin Glacier glistened like a polished silver shield. At the western end of the Sculptured Cliffs of Karnah, the character of the shore changes completely from vertical grey cliffs, descending directly into the

44 Northward over the "Great Ice"

water, with the ice-cap showing at the very front of their crests, to a flat, low fore-shore, rising into gradually sloping hills, with hanging glaciers descending into the ravines between them.

Beginning at Karnah also, shoal water extends in a nearly semicircular curve along the northern shore of the Sound out to Cape Cleveland. Just where this change in the character of the coast takes place, in a



FRAMING THE HOUSE.

luxuriant grassy meadow coming directly to the shore, is the Eskimo settlement of Karnah, consisting, in the winter-time, of two double stone igloos close to the shore, and a third single one, perhaps a hundred yards back. In the summer-time, the settlement is composed of a variable number of tupiks, from two to a half-dozen. Just now, there were three tupiks, occupied, as we had already learned from the natives

with us, by Annowkah, Nipsangwah, his brother, and Arngoodloo, and their families. Annowkah, with his wife, Megipsu, the "Daisy," had been among the permanent attachés of Red Cliff House, and Nipsangwah, his brother, had visited Red Cliff on two or three occasions. Arngoodloo, however, was a new acquaintance, a strong, healthy, fresh-looking young fellow.



JIMMY AND THE DOGS.

I stopped here and went in a boat to get a couple of these men, with additional walrus harpoons and floats, to assist us in the hunt. As I landed I was met by the sorrowful news that Megipsu, our faithful, intelligent seamstress at Red Cliff House, had died only two days before, and Annowkah, with the little orphaned Koodlooktoo, was sitting silent and sorrowful in the gloomy tupik. Nipsangwah would not leave

46 Northward over the "Great Ice"

his brother, and so Arngoodloo was the only recruit whom I could obtain here. I brought him on board with his walrus-line, harpoon, lance, and float, and then steamed on towards the walrus grounds lying between the eastern end of Herbert Island and Cape Cleveland.

As we approached Herbert Island, we passed through the field of magnificent icebergs which always hover about this locality; and just before getting abreast of



LANDING A BURRO.

the eastern end of the island, the whole northern coast, from Peterahwik to distant, blue Cape Alexander, opened up past Cape Cleveland.

Nothing could present a greater contrast than the conditions here now and those we met in the two previous seasons. Two years ago this very day, Gibson, Dr. Cook, Astrüp, and Verhoeff started on their journey from Red Cliff House to Herbert, North-

umberland, and Hakluyt Islands, and were obliged to pick their way through several miles of floating ice. A year ago this very day, with Mrs. Peary and my Eskimo crew, in the whale-boat *Mary Peary*, I passed through the same waters, and found large quantities of floating ice and numbers of large floes. Now, not a pan or bit of floe ice was to be seen in any direction. There were only icebergs and the fragments which had been broken off from them. As ice-floes and cakes of ice are the favourite resorts of the walrus, it began to look as though we might not be successful in getting them, and both Captain Bartlett and I scanned the horizon very sharply.

It was 2:30 P.M. and we were just about abreast of the eastern end of Herbert Island, when we saw three walrus upon a little cake of ice which we had passed at some distance. Both whale-boats, the *Faith* and the *Mary Peary*, were lowered, with three or four men in each to pull, and one of the Eskimos with his harpoon, line, and float in the bow. Through my glasses I watched the boats approach the unsuspecting animals, which seemed to be asleep. A little later the sharp crack of a rifle from the Captain's boat, and the plunge of one animal only into the water, while the other two remained upon the ice-cake, showed me that the Captain had started the score with two of the great brutes to his credit.

By this time I had discovered numbers of other walrus, singly, and in groups of twos, threes, and tens, west of us, near the shores of Herbert Island; and as soon as the *Falcon* had swung round and hoisted the two dead walrus on board, we steamed away in that direction. Only a mile or so had been covered, when cakes of ice were seen on either bow, each carrying apparently ten or fifteen of the animals.

Boats were quickly lowered and pulled away, one

48 Northward over the "Great Ice"

in each direction. Soon the sharp reports of the rifles from both boats, and the hoarse bellowing of the walrus showed that the sport had really commenced.

For the next ten hours the sport continued. As fast as the walrus were killed they were either secured to a cake of ice, or to a sealskin or cask float, and were then left for the ship to pick up while the boat pulled away after more victims. The *Falcon* steamed



A TEAM OF DOGS.

about from float to float, and ice-cake to ice-cake, hoisting in dead animals and lowering them into the hold, and from time to time the boats came to the ship for lines and floats. At midnight, there were twenty-four of the great, unwieldy masses of flesh in the hold of the *Falcon*.

It was a strange sight to see these uncouth giants

of the deep as they were hoisted aboard ship by a rope passed through a loop cut in the inch-thick skin at the back of the neck, the savage tusks gleaming from the great mouths surrounded by coarse bristles, and the eyes bloodshot with the rage and pain of the death struggle. Sometimes a huge carcass would slip from the hook as it was being lowered through the hatchway, and, falling into the hold, the old *Falcon* would tremble from stem to stern with the shock.



GREY SANDSTONE CLIFFS.

Entrance of Bowdoin Bay.

The sight in the hold itself after the animals were all aboard was even more striking. Nearly twenty tons of brown, unwieldy, misshapen meat were piled in confusion, just as the animals had been lowered below decks. Yet to me it was a most pleasing sight, because it meant ample food for all my dogs and my native dependants through the winter.

The presence of the *Falcon* seemed to render the

animals a little less pugnacious than usual, and only in two instances was there any excitement.

An exciting event of the evening was the narrow escape of one of the ship's men. A walrus had been shot upon a cake of ice, and the boat was alongside with one man on the cake with the walrus. As the *Falcon* forged alongside she just touched the ice-cake, breaking off a piece from under water, which as it



A SCENE IN THE WALRUS HUNT.

rose struck the bow of the *Mary Peary*, lifting it high out of the water and sending the boat back fifty feet or more away from the cake. At the same instant the cake, with the man and the walrus on it, began rolling over, and an instant later had capsized completely, throwing the man into the water under the ship's stern, and, as it seemed from the bridge, directly upon the blades of the propeller, which at the instant was turning backward to stop the ship.

A jump for the engine lever on the bridge and the propeller was stopped, and the next instant everyone rushed aft to throw a line to the man. Suddenly we heard the cry, "I'm all right," coming up through the



HOISTING A HUGE BRUTE ON BOARD.

rudder well, and looking down we saw the sailor clinging to the rudder itself. By this time the boat had recovered from the impetus that sent it adrift, and, pulling up under the stern, released the man from his unpleasant position. A liberal portion of my best whiskey, which followed the plucky fellow as he went

dripping into the fore-castle to change his clothes, made him regard the affair much in the light of a joke.

At one A.M. on August 13th, the *Falcon* passed Cape Cleveland, steaming northward for Cape Alexander, and an hour later everyone on board, except the men on duty, turned in, thoroughly tired with the day's efforts and excitement. At 8:30 A.M., as I awoke, we were just passing Cape Alexander, and I could see the bold headland through my stateroom port, directly abeam, and only two or three miles distant.



CAPE ALEXANDER.

Going on deck, I had my first view of the Crystal Palace Glacier, then of Pandora Harbour; then a little farther along, I looked into Foulke Fjord, with Brother John's Glacier at its head, localities and objects that had been vividly pictured by the pen of Dr. Hayes. At 10 o'clock, we were abreast of Littleton Island. Off the entrance of Foulke Fjord, we saw a few pans of ice, and by the time we reached Littleton Island the water was covered with them, the passage between Littleton and the mainland being apparently blocked.

Though the morning was overcast and it was very black and thick to the south, the western shore from below Cape Isabella to Cape Sabine was distinctly visible, and Cape Hawkes could be made out to the northward. The *Falcon's* head was pointed directly at Cape Sabine, but at 11:30 A.M., in about the latitude of Cairn Point, we came up to the edge of the unbroken ice, and were compelled to bear away to the westward. A careful survey of the horizon, made



CRYSTAL PALACE GLACIER (KANE).
Typical Ice-Cap Reflection above Glacier.

with our best glasses from the masthead, showed the edge of the Kane Basin ice, extending in an unbroken line, unintersected by a single lead or crack, from Cairn Point to the western shore at Cape Isabella. A few large floes were out in the centre of the Sound, but with the exception of these there was no loose ice except along the eastern shore from Littleton Island up to Cairn Point. Although it looked very thick and black to the south of us, it was bright and

clear to the north. A fresh northerly breeze was blowing off the ice, and the temperature of the air was 34° F. Clouds hung over the upper portion of the shore from Cape Isabella south, but Cape Sabine was clear, and from the masthead could be seen Cape Louis Napoleon to the north, while Cape Ingersoll and Cape Frederick VII. stood out clearly.

Countless little auks were perched upon and swimming along the edge of the ice, a certain sign of the absence of any open pools of water in the ice. The ice did not appear particularly rough and hummocky, and a hundred yards or so of the edge of it were thin and rotten. It had evidently been absolutely undisturbed thus far this season.

At 11:45 A.M., we turned back towards the Greenland shore, and, keeping along the edge of the ice, came nearly into the coast a little below Cairn Point; then, coming down along the shore we saw numbers of walrus in the water, but owing to the overcast day and the fresh breeze none of them was out on the ice. When abreast of Lifeboat Cove the ship was stopped, and, with Mrs. Peary, the Captain, and all the rest of my party, I went ashore in the boat to the site of Polaris House.

One of the natives with us, Kessuh, as a boy of twelve or fifteen, had been here at Lifeboat Cove with his parents when the Polaris party were here. He took us at once to the site of the house, showed us where the ship was run on the rocks, and then told us how she afterwards floated off and drifted down nearly abreast of the upper end of Littleton Island, and sank out of sight. The site of the house and its neighbourhood were littered with a great variety of miscellaneous articles and ship's fittings, but everything in the way of wood or iron that could be made use of by the natives had disappeared. Each member of

the party obtained a souvenir of some kind, among them being a pair of ankle irons, a pair of handcuffs, a brass hose coupling, and various brass composition articles of ship fittings. A number of these articles bore the stamp of the United States Navy Yard at Washington, and were dated from 1865 to 1870.

In a little bight in the rocks, just north of the house, was a tangled mass of rope, and among the



ICE-PACK OFF LITTLETON ISLAND.

August 13, 1893.

rocks directly back from the shore there were scattered great quantities of loose leaves of various books. Nowhere along the coast of Greenland have I seen such a desolate strip of shore as the site of Polaris House and its neighbourhood, and the first glance shows that the selection of the site was not a matter of choice, but of the direst necessity.

After a couple of hours spent in examining these barren rocks, we returned to the ship, and then

steamed slowly south along the shore, looking for a night's anchorage for the ship. Passing down the channel between Littleton Island and the mainland, which was now practically free of ice, a look was taken at the little cove in the mainland abreast of Littleton Island, which has been referred to by some authorities as possibly a good refuge. The impression made by it was not satisfactory, so we steamed slowly round Cape Ohlsen and into the indentation in the shore just south of it. The appearance of this, too, was



EDGE OF THE UNBROKEN PACK.

Between Littleton Island and Cape Sabine. August 13, 1893.

not satisfactory, and as there was now a half-gale blowing down off the land, just the kind of weather, in fact, that Sir Allen Young experienced here in the *Pandora* in 1876, we stood out into the ice off Littleton Island for the night.

About one o'clock next morning, a party landed on McGary Island after eider-ducks, but it appeared to be a little bit late in the season, and, although they found numerous caches of eggs and birds made by the natives, the ducks themselves seemed scarce and wild, and only about twenty were bagged. Coming back

to the ship for breakfast, the ship then steamed a little north of Littleton Island into the walrus grounds, and four big fellows were obtained during the forenoon. As all the animals, however, were in the water, it was much more difficult to get them here than at Herbert Island. One of them drove both his tusks through the planking of the *Mary Peary* before he was killed.



SITE OF POLARIS HOUSE.

While the two whale-boats were out after walrus, I landed in a small boat upon the inside of Littleton Island, and climbed to its highest point. The ruins of two or three cairns were seen, but there was nothing in them, and I did not visit the site of the Nares Cairn on the north-western point of the island. It is a terribly desolate, barren-looking piece of rock, and yet in the little pond in its centre several ducks were swimming, and I saw also two ravens, two burgo-master gulls, and one hare, while all around the island the air and water were alive with little auks.

At three o'clock the weather began to come in thick

from the south, the walrus disappeared, the boats returned, and at four we started south from Sunrise Point for Hakluyt Island. At six o'clock we passed Cape Alexander, steaming against a stiff south-west breeze, with rain and a pronounced swell from the south. Sonntag Bay and George W. Childs Glacier were the last objects that we saw on shore before the rain and fog blotted it out. What sailors call a dirty night followed, the wind coming in a wild gale from the south-west, but, fortunately for our comfort, it did not reach its maximum intensity until after midnight, when we were already to a certain extent under the lee of Hakluyt Island, and getting more and more shelter from it every moment. At five o'clock in the morning the wind was whistling as only an arctic gale can whistle, but, with Hakluyt and Northumberland Islands as a wind-guard, we were very comfortable. The sea, however, made any attempt at landing on Hakluyt impracticable, so I was obliged to give up my proposed foray upon the bird colonies and bear away for Olriks Bay, on the south coast of Inglefield Gulf, for deer.

I know of no grander sight in all this Whale-Sound region than the savage, north-west-facing cliffs of Northumberland Island, that look like crouching black lions between the glaciers which sweep around their feet. The furious south-wester hid their summits in ominous grey clouds, and lashed the waves before them into a mist of flying spray. As we steamed eastward into Murchison Sound we left the storm behind us, and by the time we were abreast of the eastern end of Herbert Island we were sailing in a summer sea, with the warm sunlight beating down upon the deck.

It was amusing to watch the relieved expression of my faithful Eskimo hunters at this change. They

had been very sea-sick, as well as considerably disturbed mentally during the night.

Passing the eastern end of Herbert Island, two hours' steaming brought us to the mouth of Olriks Bay, which I had crossed on the sledge with Mrs. Peary a year ago last April. We steamed slowly up the centre of the bay, twelve or fourteen miles, and came to the reindeer haunts, of which my Eskimo friends had told me so many times at Red Cliff.



THE SAVAGE CLIFFS OF NORTHUMBERLAND ISLAND.

A long and wide stretch of gently rolling hills on the north side of the bay, facing south, gave every appearance of being a deer country, but at first neither the Captain nor myself with our glasses could make out any of the animals, though both Myah and Kesuh persisted in saying that there were *amisualh* (plenty) there. At last, however, two or three were discovered, then two or three more, and, as we slowly worked up the bay, a group of a dozen here, and fifteen or twenty there, until the Captain, in his excite-

ment, said he could not see the ground on account of the deer.

One party was dropped ashore in the *Mary Peary*, abreast of a group of six or seven. A little farther along, another was sent ashore not far from another group of the browsing animals. Still farther up the bay, I landed with faithful Myah, while the Captain and one or two of the men went a mile or two farther in the



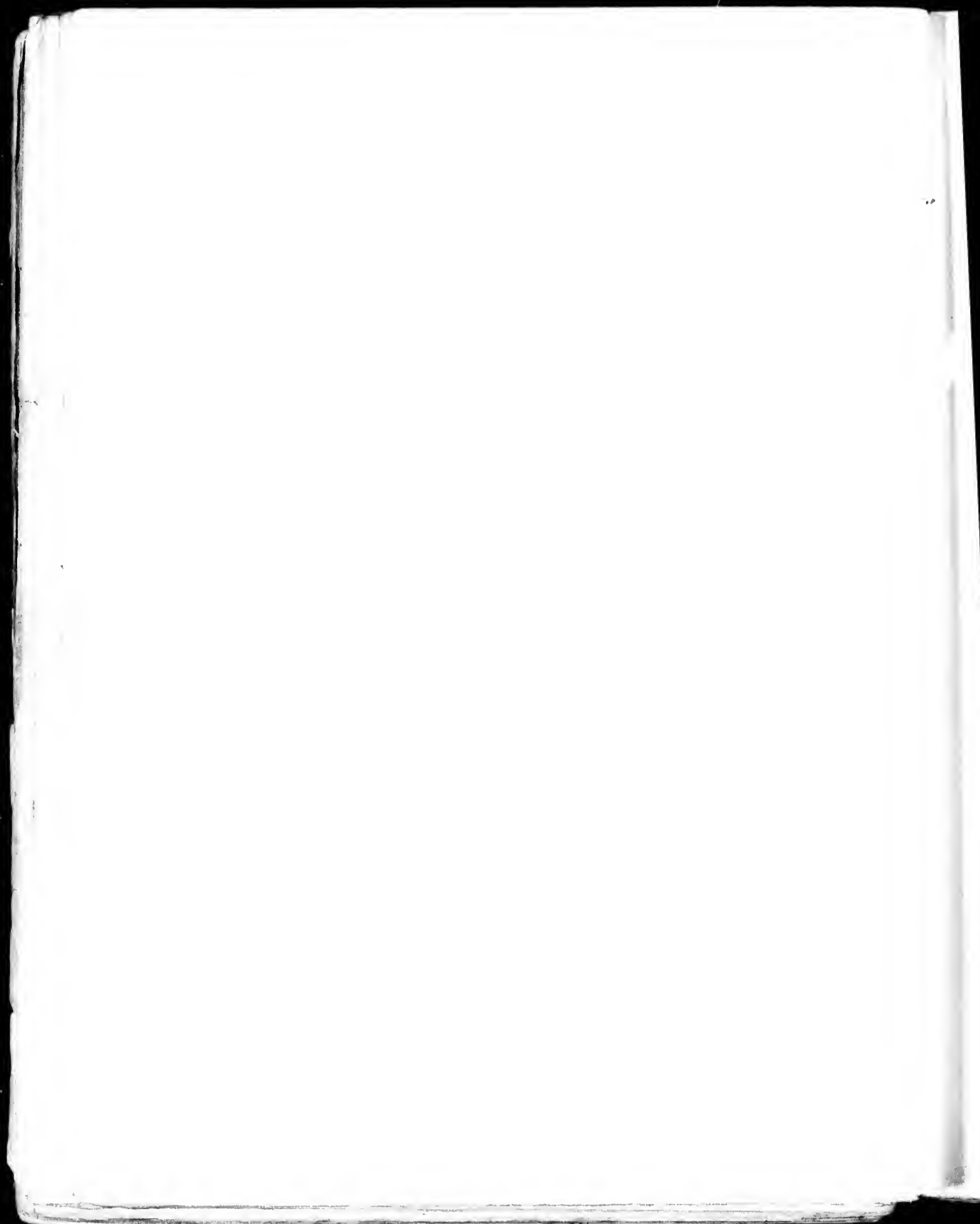
SCENE IN OLRIS BAY.

boat. Only a short time elapsed before the cracking of the rifles was heard, and the result of the night's hunt (the various parties getting back to the ship all the way from two to seven o'clock in the morning) was seventeen deer.

At ten o'clock we weighed anchor, and at one o'clock were rounding the cape at the entrance of Olriks Bay on our way back to Falcon Harbour.

This Orluks Bay, which is very inaccurately shown upon the charts, is different in its characteristics from any of the fjords which I have seen in this region. In its outer portion for a distance of some ten or twelve miles, its characteristics are very similar to those of other indentations of the Whale-Sound region, as, for instance, Bowdoin, McCormick, Robertson, and Academy Bays. Then it makes for a short distance rather a sharp turn to the left, then turns again back to its previous direction, and then for an unknown distance, though not less than fifteen miles, it stretches eastward into the land, a shallow, placid river of almost constant width, with rolling shores along its greater extent, giving place finally to black, vertical cliffs near its head. The extreme head of the fjord must be very near to the head of Academy Bay.

Four hours from the mouth of Orluks Bay, and the *Falcon* was back to her moorings in Falcon Harbour, with her four days' voyage completed. In these four days she had visited all the principal points of interest in this region, and obtained an ample supply of meat for the dogs and the natives of my settlement, and a good beginning on the meat supply for my own party. During these four days of navigation, we had seen not a single pan or floe of ice south of Littleton Island, nor a yard of ice-foot along the shore, nor a particle of ice at the head of any of the bays. This was a most unusual condition of things in these waters.



CHAPTER III.

AUTUMN AND WINTER WORK

DEPARTURE OF THE *FALCON*—COMMENCEMENT OF ICE-CAP WORK—AN ARRIVAL AT THE LODGE—STORMY WEATHER—DEER HUNTING—COMPLETION OF LODGE—GLACIER CONVULSION—IRREPARABLE DAMAGE—END OF FALL ICE-CAP WORK—WINTER SLEDGE TRIPS—WORK ON EQUIPMENT—RETURN OF THE SUN—RESUMPTION OF ICE-CAP WORK—LEE LOST ON THE ICE-CAP—TRANSPORTING DOG FOOD.



"SHE REACHED FOR THE GOLDEN BAR."

CHAPTER III.

AUTUMN AND WINTER WORK.



THE 20th of August, 1893, when the *Falcon* left the little harbour named after her, was a perfect arctic day, warm, clear, and brilliant. Three members of my party were on board her on their way to Igloodiowni, off which Eskimo settlement they were to be dropped in the whale-boat,

and whence they were to bring back as many natives as possible to pack the Inland-Ice supplies at the house, which we had decided to call "Anniversary Lodge," to the edge of the ice-cap some four miles away.

The rest of us stood about the rocks watching the good ship get under way, then gave her three cheers as she steamed southward, following her with our eyes till she disappeared round the point of Bowdoin Bay. Then every one of us, tired and sleepy from the almost constant wakefulness and letter-writing of the last thirty-six to forty-eight hours, fell asleep on the rocks in the warm sunshine.¹

¹ The party left thus by the *Falcon* numbered fourteen persons, as follows: Samuel J. Entrikin, my first assistant; Eivind Astrup, second assistant; Edward E. Vincent, surgeon; E. B. Baldwin, meteorologist; George H. Clark,

The Igloodiowni party returned in two days with seventeen natives, and during the rest of August the greater portion of these natives were engaged in packing the supplies to the ice-cap, while others were cutting up and caching the walrus we had secured for dog food. The main strength of the party was engaged in completing the house.

On August 29th Astrup received his orders placing him in command of the Inland-Ice party, and left the same day for the ice-cap with Carr, Davidson, and



THE DEPARTING "FALCON."

Lee, five sledges, and fifty dogs, to establish a depot of supplies as far in on the Inland Ice as possible in the direction of Independence Bay. This was the work for which his experience with me in the previous expedition especially fitted him, and I felt that I could leave the details to his judgment. The condition of the surface of the ice-cap, with the fine weather which we had been experiencing, and which, it seemed

taxidermist; Hugh J. Lee, George H. Carr, James Davidson, Walter F. Swain, Mrs. Peary, Mrs. Susan J. Cross; my coloured man, Matthew Henson, and myself, with Mr. F. A. Stokes, artist, an independent member of the Expedition.

likely, would continue, gave me reason for the most sanguine expectations for the result of the fall campaign, and I hoped that its end would see the supplies at least a hundred miles in on the ice, and possibly even abreast of Petermann Fjord.

The following day my native labourers were paid, and the same day Entrikin, with the launch *General H'istar* and two whale-boats, accompanied by three of the party, left the lodge to take them home, and on



UNCONCERNED ABOUT THE DEPARTURE OF THE "FALCON,"

the way to endeavour to obtain more walrus off Herbert Island. Though hampered by a succession of accidents to the launch, Entrikin carried out his instructions in a satisfactory manner, returning the natives to their homes and killing three walrus.

Immediately after his return from this trip, he started again in the whale-boat *Faith*, with a party for Olriks Bay after deer.

The Inland-Ice work progressed slowly. I kept posted as regards the movements of the party, at first

by means of my powerful binoculars, and then by trips of various members of the party, and on the night of September 7th, in response to a call from Astrüp for more dogs, the letter being brought by one of the carrier-pigeons, I visited him myself at his camp six miles in on the cap, and found him suffering from something in the nature of a chill, and the Doctor was immediately sent up to attend to him.



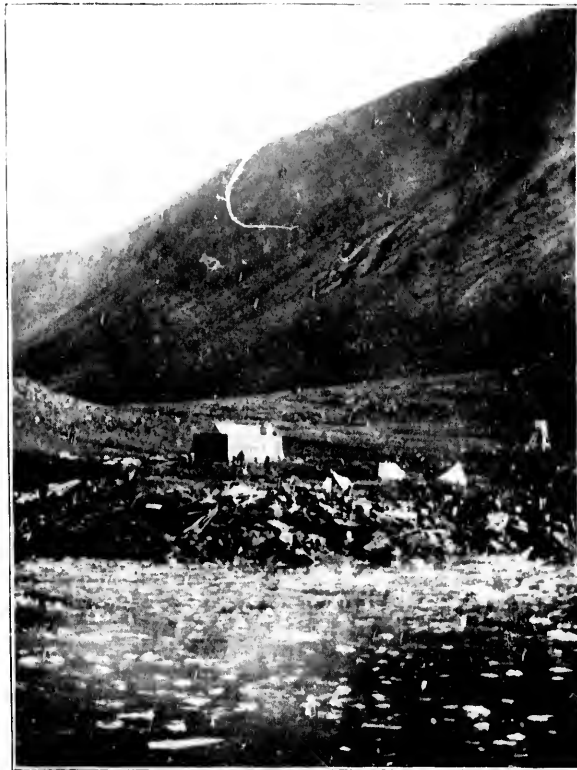
FIRST STAGES OF THE LODGE.

He returned a day or two later and reported Astrüp much better and able to continue the work.

On September 12th, an interesting event occurred at Anniversary Lodge in the arrival of a little nine-pound stranger, Marie Ahnighito Peary. Both mother and little one, as the result of the Doctor's care and Mrs. Cross's skilled nursing, passed through the ordeal in safety.

This little blue-eyed snowflake, born at the close of the arctic summer day, deep in the heart of the White North, far beyond the farthest limits of civilised people

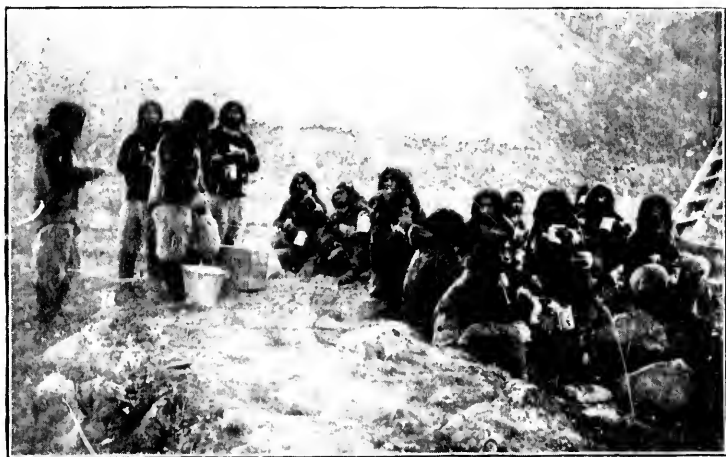
or habitations, saw the cold, grey light of the arctic autumn once only before the great night settled upon us. Then she was bundled deep in soft, warm arctic furs, and wrapped in the Stars and Stripes.



SURROUNDINGS OF THE LODGE.

The first six months of her life were spent in continuous lamplight. When the earliest ray of the returning sun pierced through the window of our tiny room, she reached for the golden bar as other children reach for a beautiful toy. Later, when the great night

of the arctic winter had given way to the great day of the arctic summer, and she lived constantly in the uninterrupted light and brilliant arctic sunshine, the effect upon her was the same as upon the hyacinth and tulip bulbs which, kept for weeks in a dark cellar and then placed in a window, expand and blossom with astonishing rapidity. When, at the age of eleven months, little Ahnighito left her native land, she was physically and mentally at least a year in advance of



THE DINNER HOUR.

her actual age. Throughout the winter she was the source of the liveliest interest to the natives. Entire families journeyed from far-away Cape York to the south, and from distant Etah to the north, to satisfy themselves by actual touch that she was really a creature of warm flesh and blood, and not of snow, as they at first believed.

My next news from the party on the ice-cap was on September 13th, when Astrup was brought down suffering from stomach trouble and threatened with what

was diagnosed as gastric fever. His tent and most of the supplies were then twelve miles in from the edge of the ice, with two sledge loads three miles farther in; but the precise location of the latter was not known, storms having covered them after they were left.

I decided immediately to let his party continue the work until he was in a condition to return, and, in case he should not be able to return to the cap at the end of the week, to take charge of the work myself. Carr



A BURRO TRAIN.

and Davidson, therefore, started back to rejoin Lee, who had remained at the tent on the ice-cap. They, however, encountered a storm, in which they lost their way, and after wandering about all night, being obliged to cache their loads, finally made their way down to the land and regained the lodge. Making a second attempt, a day or two later, they succeeded in reaching the tent, where Lee had been entirely alone for a week, just as another storm broke upon them and made all three of them prisoners in the tent for another week, when they were able to get out and re-

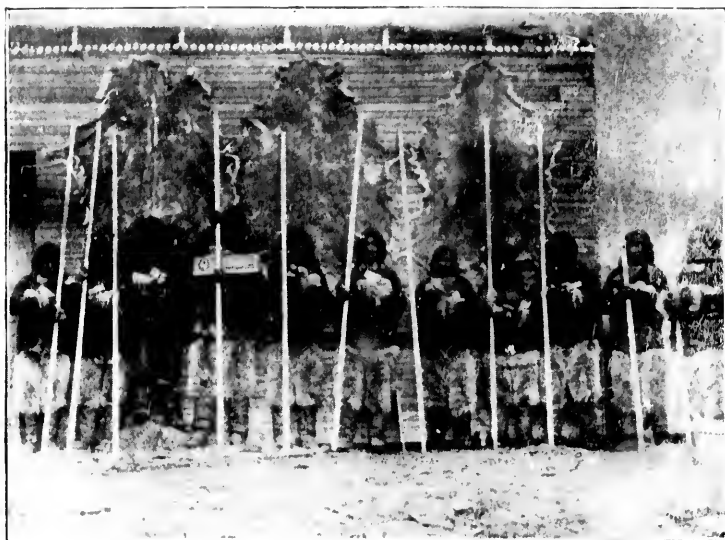
turn to the lodge, which they reached on September 23d.

Two days later I went back with the boys to take charge of the Inland-Ice work myself, and on arriving at the moraine, at the edge of the Inland Ice, found that all three of the sledges which they had brought out and left at the moraine had been blown away without leaving a vestige. This necessitated our return to the lodge to put together new sledges. While these mishaps were occurring in connection with the ice-cap work, Entrikin was hunting deer for our meat supply for the winter, and in bad weather attending to the interior fittings of the lodge. During the deer hunt in Olriks Bay, from which he returned on the 16th, he obtained thirty-three deer. On the 26th he started again in the *Mary Peary* for a deer hunt in the neighbourhood of Hubbard Glacier.

On September 30th I succeeded in reaching the camp on the ice-cap, accompanied by Davidson and Lee. The following day, after a few hours' search, we discovered the lost sledges and loads which had been advanced by Astrup beyond his tent.

This work successfully accomplished, we returned to the tent and thence to the lodge to get additional dogs. Returning to the ice-cap the following day we had, at the end of four days' work, advanced all the supplies twenty-six and one-half miles from the moraine. I was satisfied with the result of our work, for the three of us had in four days, with twenty dogs and in continuous stormy weather, moved the supplies a distance of fourteen miles. I intended on the following day to return to the lodge for two more men and additional dogs, and, with this addition to our force, move everything in to a point fifty miles from the moraine. If I could accomplish this I would feel satisfied with the fall work. The next morning, however,

brought a howling gale from the south-east, the snow flying in such a way as to make it impossible to keep a course. This confined us to camp for two days. On the third day, though the weather was still very thick, we started for the moraine, I in advance on snow-shoes, and the boys following with their teams and light sledges. The recent fall of snow had made the travelling so heavy that I out-distanced the dogs, and on



PAY DAY.

reaching the moraine the boys were not in sight. I thought they would have no difficulty in following me, and kept directly on to the lodge.

Here I found Entrikin just returned from the hunting trip to Hubbard Glacier with twenty-seven deer and skins.

My two boys did not come in until nine o'clock the next morning, when they arrived at the lodge looking

74 Northward over the "Great Ice"

like drowned rats. They had been caught just as they reached the moraine by a renewed outburst of the storm, and, unable to find the snow igloo or fix up any kind of a shelter, had crawled into their sleeping-bags, which soon drifted full of snow, and this melting from the warmth of their bodies, had soaked them thoroughly.

The storm of which this was the beginning lasted continuously for an entire week, when almost every



THE LODGE NEARING COMPLETION.

available man in the party went to the moraine camp with the dogs, sledges, burros, and all additional equipment needed for an increased ice-cap party. Three or four Eskimos accompanied us to build a new snow igloo at the moraine, to serve as a shelter during the remainder of the fall campaign. The demon of the storm was, however, still on duty at the moraine, and the furious driving drift across its top made it impossible to complete the igloo. The old one was unsafe, so, after making every-

thing secure for the night, everyone returned to the lodge.

Two days later we were able to get back to the moraine, and it took six of us the entire day to free the igloo and sledges from the deep deposit of snow of the last forty-eight hours. From this time, October 18th, until November 9th, there was a constant succession of snowstorms and high winds, and, although someone was constantly on "picket duty" at the moraine igloo, there was throughout all these days never a time when it was practicable to start upon the Inland Ice, wind, snow, and darkness relieving each other in defending that breastwork.



THE BABY'S FIRST OUTING.

On the night of October 31st, while I was at the moraine, waiting an opportunity to get on the ice-cap, a big wave, caused by the breaking of a huge iceberg from the Bowdoin Glacier, rushed into Falcon Harbour, burst up through the solid ice near the shore

in a roaring cataract of water and foam; rolled the steam launch, which had been hauled up for the winter at the head of the harbour, over and over and stove her in; dashed the whale-boat *Kaitik*, which had been hauled up at the mouth of the brook, a hundred yards up the valley and ruined her; then receding, carried down with it into a vortex of grinding ice-cakes all my oil barrels, the dory, several bales of hay from the burro stable, and a number of puppies. No trace



IN THE DINING-ROOM.

of the dory was seen afterwards, but all the oil barrels were accounted for, though three or four were smashed completely, and the contents entirely lost, and nearly all were injured and more or less of the oil lost. This loss of oil and some of the launch fittings put the installation of our electric-light plant entirely out of the question.

On November 9th, I went to the moraine with the idea of going in to the cache and fixing it up for the winter, it being too late in the season now to advance

the supplies any farther. The following day we started in on the ice-cap, travelling till long after dark. Before we had our tent fairly pitched, another storm began and kept us in the tent for about forty hours, we expecting every moment to have the tent torn from over us. Then a lull in the storm, although the barometer was still going down, enabled us to strike the tent and start back for the moraine, which we fortunately reached, and thence made our way

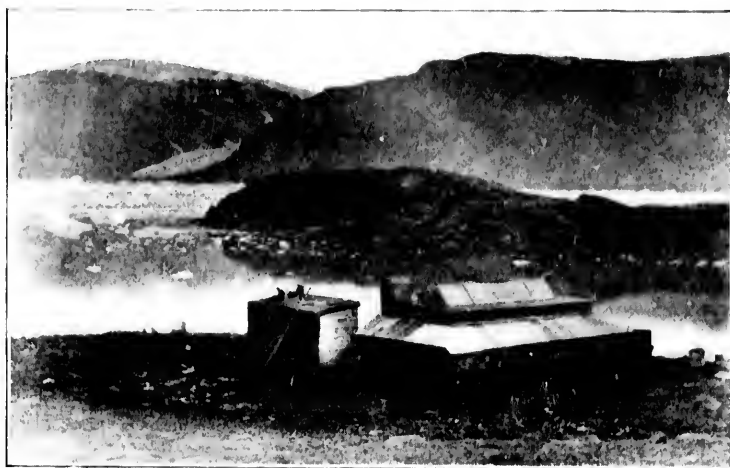


THE FAITH STOVE BY THE GLACIER CONVULSION.

down through the valley to the lodge. This ended the fall work on the ice-cap. The sun had been absent now for sixteen days. Soon after our return, the first sledges and natives arrived to visit us. The remainder of the month was almost continuously stormy and cloudy, and the month closed with our Thanksgiving celebration, the thermometer outside standing at -20° F.

The comparatively calm and clear weather of December was a very agreeable change from the con-

tinuous atmospheric disturbance of October and November. Work was commenced and steadily continued on the Inland-Ice equipment. Visits from the natives were numerous and of long duration, and these, with the care of our dogs, caused the first half of the month to pass rapidly. With the arrival of the December moon, we began sledge trips to the various native settlements for dog food. Everyone having returned from these trips, I gave the party a



THE COMPLETED LODGE.

two days' rest previous to Christmas and the athletic sports booked for that day.

The day after Christmas, I started for the settlements of Ooloosheen and Keate, on Herbert and Northumberland Islands, by way of Karnah. The object of the trip was to obtain a supply of dog food, and my programme contemplated sending home a load of meat which had been promised to me at Karnah, an examination of a cache of walrus meat made in the autumn on the eastern end of Herbert Island,

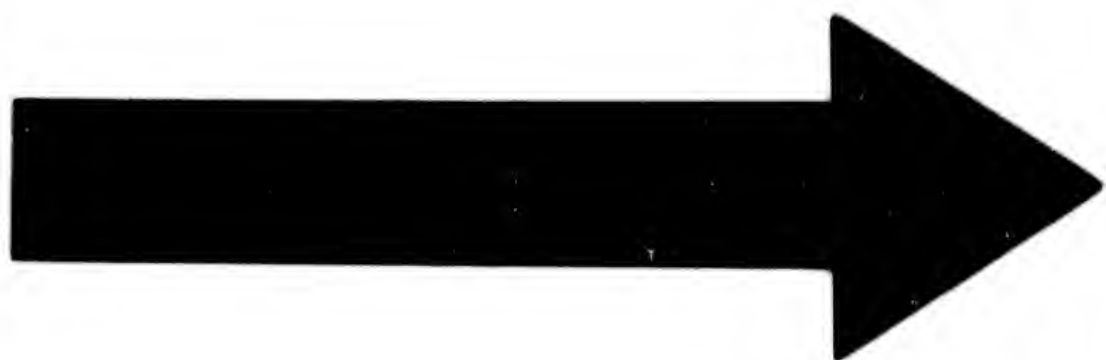
and the purchase of as much meat as I could bring back from Ooloosheen and Keate. This trip lasted five days, and resulted in bringing back to the lodge some sixteen hundred pounds of dog food.

Immediately after New Year's other sledge trips were made. All the parties were back at the lodge on January 7th, and this ended the sledging trips of this moon. They were not to be resumed until the appearance of the next one.

In these various sledge journeys some seven hundred miles were travelled, between twenty-five hundred and three thousand pounds of dog meat were brought to the lodge, and both men and dogs gained beneficial exercise and experience in the field. During all these journeys in the midnight hours of the arctic winter night no mishap occurred, and the members of the party, owing to the perfection of their fur clothing, experienced no discomforts whatever.

The sunless and moonless interval from now until January 21st was taken up with pushing the work on the clothing and sledges for the Inland-Ice trip. During the week commencing on that date, three parties were put into the field after deer. Thirty were obtained. The next week was also largely spent in the field.

The results of the week's work were to add twenty-one more deer to our larder. With the increased daylight of early February the natives began killing walrus off Peterahwik, and, with over thirty saddles of venison safely stored away, I turned my attention from the deer pastures of Kangerdlooksoah in Academy Bay to the walrus-haunted ice-floes of Peterahwik, and from early February until the party went on to the ice-cap this place furnished most of my dog food. Seven trips were made by members of the party to this settlement and the neighbouring one of Nerke.



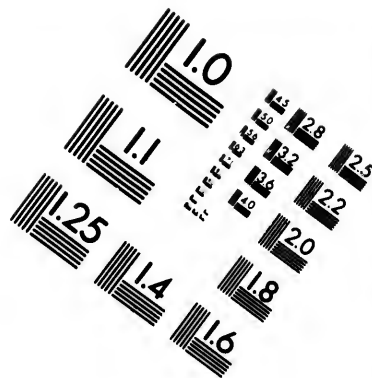
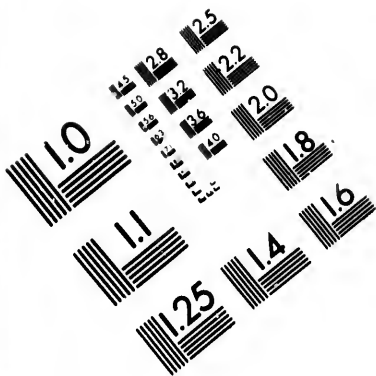
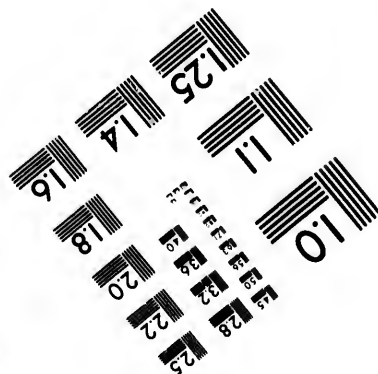
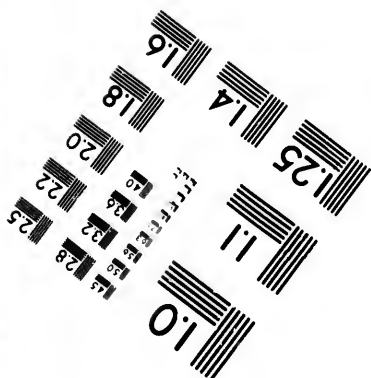
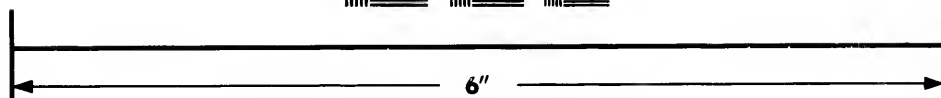
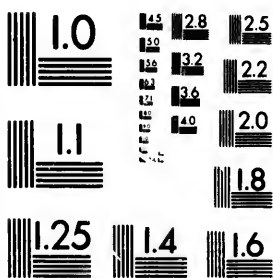


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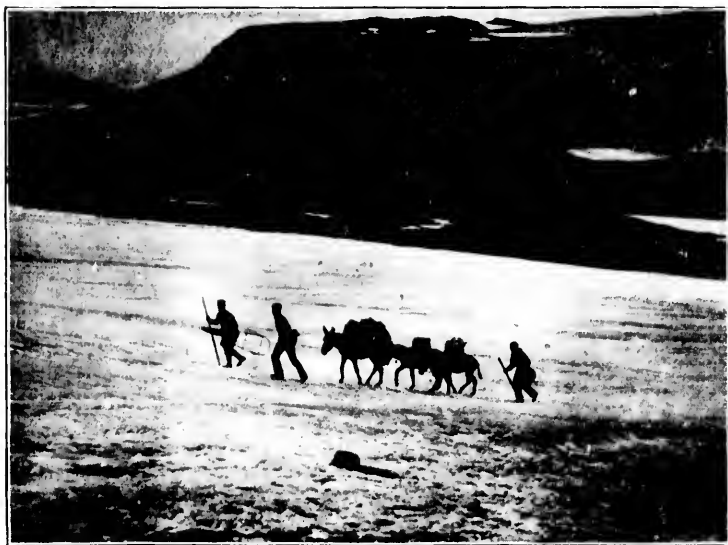
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80 Northward over the "Great Ice"

On the 15th of the month, by climbing the slopes of Mount Bartlett, Mrs. Peary and myself got our first glimpse of the sun, which we had last seen one hundred and fourteen days before. On February 18th, the sun shone again upon the lodge. On the same day, Lee, with two Eskimos and a team of dogs, started for the cache on the Inland Ice, and with the return of the



CLIMBING TO THE MORAINE.

god of day, work on the equipment was pushed with redoubled energy.

According to my original programme, I had expected to start from the cache established in the previous fall, twenty-six and one-half miles from the moraine, on March 1st; and in furtherance of this programme, Lee was going in to free the cache from the winter's snows, bag the pemmican, and construct snow igloos in readiness for the party when it arrived.

Unfortunately, while hunting for the cache, Lee lost his way during a storm, and after wandering about on the ice-cap for a night and a day, descended into Inglefield Gulf, and finally, after forty-four hours



LEE AT THE MORaine.

without food or sleep, reached the lodge by way of the Castle Cliffs in an exhausted condition and with a frozen toe.

This mishap disarranged my schedule somewhat, and the delay incident to it necessitated a second trip

to Nerke and Peterahwik for an additional supply of meat.

The magnitude of this work of transporting dog food will be appreciated when it is known that I had now a ravenous pack of eighty to ninety Eskimo dogs, all the food for which had to be hauled from either Nerke or Peterahwik, distances of fifty and sixty miles respectively. This pack had to be fed at least as often as once every other day, and it required for a single feed the maximum sledge load of meat that could be hauled from either of the above-mentioned places by the route through Tooktoo Valley and over the Kahkoktah Glacier. The weather all this time was cloudy and threatening.



CHAPTER IV.

ON THE "GREAT ICE."

THE START—GOOD-BYE—THE ICE-CAP CARAVAN—THE CACHE IGLOOS—*PIBLOKTO*—LEE AND ASTRUP DISABLED AND RETURN TO LODGE—"EQUINOCTIAL" CAMP—HAVOC OF THE FURIOUS STORM—MORE OF THE PARTY SENT BACK.



SUGAR-LOAF MOUNTAIN, MIRROR G'ACIER, AND ROUTE TO THE ICE-CAP.

(Picture taken September 13, 1893)

CHAPTER IV.

ON THE "GREAT ICE."



IT was on March 6, 1894, that the start was made for the long Inland-Ice trip. In the morning, eight members of my party with five Eskimos, some eighty dogs, and the last articles of equipment, left Anniversary Lodge in the morning for Moraine Camp.

The weather all through the first days of March was cloudy and threatening. The day on which the start was made, however, was bright and clear. The party was to push in on the Inland Ice from Moraine Camp as far as practicable, and I was to join them early the next morning and bring them hot tea in order to save their alcohol.

Two of the Eskimos were to return to me as soon as the party camped, and report their location. When these couriers came back to the lodge late in the evening, I saw that I could easily go up to the party in the morning and return to the lodge, overtaking them the next day. With the earliest dawn of light I was off with two Eskimos, carrying several gallons of

boiling-hot tea in canteens, and a big tin chart case, all closely wrapped in the winter coat of the reindeer, to keep the tea from freezing in transit.

I was encouraged on reaching the moraine to see no derelict dogs there, and though the encampment of the party was less than two miles beyond the moraine, I considered it a good omen that this Rubicon had finally been passed; that this Titan breastwork along which, throughout the previous fall, we had so per-



FIRST CAMP ON THE ICE-CAP.

sistently battled the triple demons of the ice-cap, cold, storm, and darkness, had at length been carried. As I approached the camp, which, with the sleeping-bags, sledges, and dogs, tethered in teams of five or six, occupied a very considerable area, I saw everything indistinctly through the white veil of the fine snow-drift which the biting wind from the interior was sweeping along to a height of three or four feet over the frozen surface. Entrikin, Astrüp, and Baldwin, who met me just on the outskirts of the camp, although closely enveloped in their heavy furs, had apparently felt the effects of the all-penetrating ice-cap wind on this their

first night on the cap, as was shown by the slightly pinched and cerulean tinge of what could be seen of their faces. This effect disappeared very quickly after a pull at the hot tea.

The boys had had a great deal of trouble with the numerous loose dogs, inevitable in such a pack, and had obtained but very little sleep.

I remained with the party until breakfast was finished, the dogs hitched in, and the line of march taken



THE CACHE IGLOOS.

up, and then, with Ingeropadu only, I turned back to the lodge. After going a short distance, I stopped to have another look at the caravan, and the memory of the scene, with the memory of a subsequent one, when farther on, will remain long with me. It was a sublime spectacle to see that company of thirteen men, a dozen sledges, and over ninety dogs, climbing the alabaster

slopes of the infinite ice-cap, their destination the frozen fastnesses of the north. Never before had such a sight been seen on the great, desolate ice; never, I thought to myself, would the scene be repeated.

On the morning of the 8th, I took my final departure from the lodge. I quote from my journal as follows:

"I was awakened at seven o'clock this morning, and after a light breakfast started, Mrs. Peary accompanying me, for, I hope, my last upward trip to the moraine camp. Matt had turned out an hour earlier, and had captured and harnessed seven dogs belonging to some of our Eskimo visitors. Koolootingwah and faithful old Ingeropadu, with Eskimo sledge and these dogs, had gone on ahead. I said 'Good-bye' to everyone at the lodge, including the little blue-eyed mite of a girl that looked up wonderingly at me from her bed. Of the natives, Etoo plainly answered back 'Good-bye' in English. Up past Kessuh's and Panikpah's igloos we walked, across Baby Lake, and up the valley to Glacier View, then to the Rock Turn, where I said 'Good-bye' to Mrs. Peary, as two years ago I had said 'Good-bye' to her in McCormick Bay, a few miles distant.

"Past the upper and lower mule caches, and so on over every foot of the well-known trail to the moraine.

"Here Ingeropadu turned back, leaving Koolootingwah to go on with me to the party. We left the bamboo pole, the first milestone (figuratively speaking) on the route, at noon. The day was clear and calm, the snow presented a firm surface, and although the temperature was in the neighbourhood of 30° below zero, the direct heat of the sun was so pronounced that while climbing the slope to Pigeon Camp I was obliged to take off my deerskin shirt in order to avoid getting into a perspiration.

"Some two miles beyond Pigeon Camp we passed the snow igloo and camp site occupied by the party the previous night, and at 4:30 P.M., a few miles beyond Plateau Camp, I saw the party in the distance ahead of us, a series of black dots crawling up the slope of one of the snow hummocks. At six P.M., we reached the boys just as they camped at the snow igloo which Lee's Eskimo companions had constructed and occupied in February the night before he was lost. The



THE PARTY AT THE IGLOOS.

western sky was a blaze of crimson and gold, the eastern dark with the purple shades of night. The camp itself, with the numerous dogs tied in groups of five and six, the harnesses and other items of sledge equipment supported upon tripods formed with the ski, the sledges scattered here and there, the snow igloo, the little silk tent, the sleeping-bags with their tent-like protections, and the many figures moving about hither and thither, all projected against the background of the glowing west, combined to form a scene which re-

minded me very strongly of an Indian encampment on the prairie at sunset."

By the time I had made a tour of inspection of the camp, Astrüp, who was utilising the snow igloo as a cook-house, had made the pea soup and tea, and, after disposing of a cupful of each with my ration of pemmican and biscuit, I pulled on my deerskin kooletah and combination deerskin boots and trousers, and lay down on the snow in the lee of one of the sledges. Here I was perfectly warm, though the temperature during the night was 30° below zero; but finding it impossible to protect myself from the annoyance of the drift, which eddied about the sledge and blew in my face in spite of every effort, I changed my position towards midnight for a semi-recumbent one on top of a sledge. Our Eskimo companions and one or two of the party slept in the igloo, the others in the little tent and the sleeping-bags. As I changed my position, the brilliant, scintillating stars overhead, and the sinuous, white drift banners of the "Great Ice," wakened to life by the sibilant breath of the north-east wind, rustling in and out through the sleeping encampment, formed a scene strikingly characteristic of this great white desert.

At sunrise I awakened Astrüp to make the tea, and at ten o'clock I left camp, with Lee and Ootooniah and their teams, to push forward to the cache, and construct an igloo while the main party followed later on. On the way to the cache we passed near the tent from which Lee had started out and got lost. Leaving Lee to strike the tent and bring it along on his sledge, I kept on with Ootooniah to the cache. While yet two miles distant, we saw the cache ahead of us, and on reaching it found that since October the snow had drifted about it to the depth of some four feet, and had also formed a drift upon its top, which was visible at some distance, even without the assist-

ance of the bar pole which had been erected beside the pile of supplies.

Ootooniah immediately went to work constructing an igloo, and had it completed just as the whole party arrived, the line of sledges winding along over the snow like a huge black centipede.

As soon as their dogs were tethered, all the Eskimos began a second igloo, adjoining the first, and when it was completed the two were united by an



MAKING CAMP.

arched opening. The tent which Lee had brought up was erected in a line with the igloos on one side, and the little kitchen-tent on the other. As we were likely to remain here at least two days digging out the cache, assigning the sledge loads, bagging the pemmican, and repairing the sledges, most of which had suffered more or less from the journey to the moraine, and thence over the rough, hard *sastrugi* up to Pigeon Camp, I had a snow fireplace, if such an anomaly can be imagined, built in each igloo, one for the alcohol

cooker and the other for wood, of which we had quite a supply in the shape of broken boxes.

The first night at this camp, some of the party slept in the igloos, others outside in their bags, and I in my sleeping-suit in the lee of the igloo. There was a continuous light wind and drift throughout the night.

The following day was clear, with a north wind and drift. It was devoted to digging out the cache and thoroughly overhauling and repairing the sledges. Tea was kept on tap all day to encourage the boys in their disagreeable work.

A serious incident of the day was the death of one of my dogs from the real *piblockto*, or dreaded dog disease of this region. I did not have him shot, as I wished to satisfy myself as to the character of his malady. Towards the last he nearly gnawed his legs off.

The next day, March 11th, was calm and clear, with no drift. Sledge loads were assigned, and the members of the party occupied themselves in sewing their respective shares of pemmican into bags containing twelve to fifteen eight-pound cans each, and arranging their loads. The Eskimes left at 4:30 A.M. to return to the lodge.

On Monday, March 12th, we finally got started away from the cache igloos, after losing at least two-thirds of the day by a series of hitches and mishaps, which seem to be the inevitable accompaniment of getting a large pack of Eskimo dogs under way after a day or two in camp.

We found the going very heavy, the ice-cap ahead of us having a considerable gradient. The surface of the snow was cloth-like in texture, and the dogs of the various teams were not accustomed to one another and were constantly fighting. Lee's toe, which he had nipped again, was in a very bad shape in the

morning, but he had grit and insisted upon pushing on. At night he was evidently in no condition to proceed farther. Astrup also came to me some time after we had made camp, saying that he was not able to go on, as he felt all the symptoms of an attack of illness such as sent him back from the ice-cap in September last.

The loss of two of my best men meant not only a serious impairment of the strength of the party, but reduced the party to the minimum number with which



SECURING A LOOSE DOG.

my original programme of work for the season could be carried out. As those who remember my plan as outlined before leaving the States will recall, it was my intention, after reaching the north-east coast, to start one party northward from Independence Bay, while another party simultaneously went south and east to Cape Bismarck, and thence back over the ice-cap to Whale Sound; and one or two men remained at Independence Bay to await there the return of the northern detachment, recuperate the exhausted dogs,

survey that region, and obtain a supply of musk-ox meat.

Eight in the entire party would give three, the most desirable number, in each of the travelling parties, and two for the Independence-Bay party. With six in the main expedition, each party would be reduced to the minimum number of two.

This serious crippling of my party at the very start caused me a sleepless night. I tried to hope against



TURNING OUT.

hope that the next day might bring some improvement in the condition of Astrup and Lee. The extent of my hope may, however, be judged from the fact that I cached here their share of the rations.

On the 13th, what with the up grade, the strong wind, the drift in our faces, and the two disabled men, we advanced only two miles. At this camp, eight of the least effective dogs, that evidently would not be able to stand the arduous work and exposure, were killed and utilised as food for the others. At the

conclusion of this march, it was certain that Lee and Astrüp must go back. At first I had intended to send them back by themselves, but on thinking the matter over during the night, I felt that my responsibility required that someone able to look out for them in case of mishap should accompany them, and as no one could make the trip to the lodge more rapidly than myself and one companion, I decided to take Clark with me and see them safely down.

At nine A.M. we left this camp, Astrüp¹ and Lee riding upon one of the seven-foot sledges drawn by eight dogs, with Clark driving, and myself in advance, setting the pace and encouraging the team. The day was clear and the travelling fair, what wind there was being at our backs, and we made good progress until we began to climb the slope to Pigeon Camp. The sun had set before we reached Pigeon Camp, but the long, brilliant arctic twilight lit the ice-cap and the valley and glaciers below.

By this time, Lee, in spite of his warm clothing, had become chilled from the long ride, and this, with the pounding and jarring of the sledge over the *sas-trugi*, caused him so much agony from his now greatly inflamed and swollen toe, that he thought he would attempt walking. He actually did walk from here to the moraine, a distance of six miles and a half, and then to the lodge, four miles farther, though every step, as I could see, caused the poor fellow to grit his teeth.

At the moraine, we left the sledge and fastened the

¹ Astrüp was an entirely different man on this Expedition from what he had been on the previous one. He seemed to have lost all the stamina which he possessed in '91-'92. The previous September he had come down from the ice-cap incapacitated after three weeks' work. Now he was disabled at the expiration of a week, and though during my absence he made a journey to Cape York, still, later in the season he was on two occasions taken ill soon after starting on trips upon which I had sent him, and obliged to return to the lodge.

dogs securely, and, while Clark remained behind to help the boys, I hurried on as rapidly as possible to have something hot in readiness for them. I reached the lodge at eleven p.m., healthily tired from the thirty-five-mile tramp. The others came in about midnight. It was bright moonlight as I came down the valley, and Baby Lake was a glistening sheet of white, and every stone and angle of the ledges were easily recognisable.

When leaving the ice-cap, I had intended to start



READY TO START.

back from the lodge the next morning, but reaching it as late as we did, and feeling that we needed a good sleep, I postponed our departure till the afternoon, and made use of the opportunity to get a meridian observation for rating my chronometers. It was about four p.m. when Clark and I started back to the ice-cap.

Before we left the moraine camp the sun had set, and before we reached Pigeon Camp we had only the moonlight to show us our downward tracks. These we followed till midnight, when we reached the snow

igloo beyond Pigeon Camp. Taking out a block or two from the side of this igloo, we pushed the sledge in as far as it would go, and partially reclosed the opening. I curled myself up on the extra harness and spare pemmican bag on one side of the igloo, while Clark stretched himself on the sledge, and thus disposed we slept until six o'clock the following morning in a temperature of -35° F. Resuming the march, we reached the party at two o'clock in the afternoon. In accordance with my instructions, Entrikin had pushed two sledges and loads five miles ahead, and had utilised the rest of his time during my absence in overhauling the equipment.

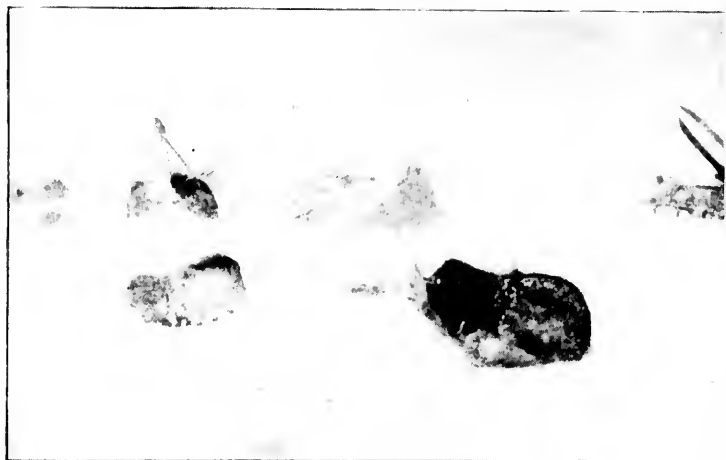
As soon as Clark and myself had had a cup of tea and some biscuit, camp was struck, the remaining sledges were loaded, and we pushed on to the two advanced sledges, where we camped.

The next morning, and through the three following days, snow, thick weather, and drift made it impossible for us to march. The time was occupied, however, in constructing a new sledge from two of the spruce runners and the uprights and cross-bars of our two seven-foot sledges. This work was done almost entirely by Entrikin, assisted to some extent by Clark. It was commenced and completed in temperatures of -35° to -40° F.

On Tuesday morning, March 22d, although the weather was still very unfavourable, we got under way, but the furious head-wind and stinging drift, with the temperature of -35° F., compelled us to halt after going only three miles, the dogs absolutely refusing to pull. Here we camped. Entrikin and Baldwin, with the alcohol cooker and myself, occupied the little protean tent, while the other three of the party occupied the silk tent. The dogs were fastened as usual, each team was divided into groups, and, dinner over,

we turned in. About five o'clock next morning, I was awakened by a sudden increase in the force of the wind, which now blew with such violence that, had not our tent been all in one piece, connected with the floor cloth on which we were lying, I should have expected to have had it blown away at any moment.

The drift which accompanied this storm was almost indescribable, and had the members of the party been any less perfectly clothed than they were, it would



CAMP EQUINOCTIAL.

have been impossible to have gone out of our shelter. As it was, however, Baldwin made his regular observations at the observatory sledge, about one hundred feet from the tent, and he and I took turns in carrying hot tea and pea soup to the three men in the silk tent, about fifty feet distant. Throughout the day and the following night, the wind steadily increased in violence, until it became impossible to shout so as to be heard from one tent to the other, even with the utmost effort of our lungs.

On Thursday afternoon, the drift forced an entrance into the silk tent, and in order to escape being smothered, its occupants were obliged to get out as best they could and retreat to the larger tent. In doing this, Davidson had his heel, and Clark a toe, two fingers, and a thumb, frost-bitten. As soon as they were safely in our tent Entrikin turned out of his bag and gave his place to Clark. I turned my deerskin sleeping trousers over to Davidson, and the Doctor curled



"THEIR FUR A MASS OF ICE AND SNOW."

himself up on the foot of the big bag. This left a small space between the pole and the tent opening, in which Entrikin and I could stand. This space was constantly decreasing in size from the drift, which, in spite of our best efforts, continued to force itself through the fly, after the entrance of the boys. After a time, there was room for only one of us, and we alternated in standing up, steadying ourselves by the pole, now and then curling up on the snow-drift for a few winks of sleep, and making tea several times dur-

ing the night to warm up the boys and keep up their spirits. The straining and flapping of the tent, the deafening roar of the wind, the devilish hissing of the drift, the howling and screaming of the poor dogs, made a pandemonium never to be forgotten.

One consoling feature was the fact that, owing to the quality and construction of our fur clothing, no one of the party suffered severely from the cold while in the tent. Personally, though without sleeping-bag or any other covering beyond my deerskin traveling garments, I was entirely warm and comfortable throughout the storm.

Early on Friday morning, March 23d, the wind began to subside, and at seven A.M. I was out looking upon a scene that made me sick at heart. Half my dogs were frozen fast in the snow, some by the legs, some by the tails, and some by both. Two were dead, and all were in a most pitiable condition, their fur a mass of ice and snow driven into it by the pitiless wind. Several had freed themselves and had destroyed the double sleeping-bag and many of the harnesses which had been blown off the tripods. Baldwin's anemometer, barograph, and thermograph, which, as the result of his ingenuity and perseverance, had kept on recording throughout the storm, showed that for thirty-four hours the average wind velocity had been over forty-eight miles per hour, and the average temperature about -50° F., with a minimum of over -60° F. When these figures are considered in connection with our elevation of some five thousand feet, the unobstructed sweep of the wind, and the well-known fact that ice-cap temperatures accompanied by wind are much more trying to animal life than the same temperatures at sea-level, it is believed that the judgment will be that this storm beats the record as the most severe ever experienced by any arctic party.

All Friday was spent in digging out the sledges, feeding the dogs, getting them in shape as far as practicable, and making and repairing harnesses.

Davidson's heel placed him entirely *hors de combat*, necessitating his return to the lodge, and as the Doctor two days before had confided to me that he felt he ought to be at the lodge looking after Lee, I decided to send him back with the Doctor. I made arrangements for them to start early on Saturday morning.



SOME FROZEN FAST.

Clark's frost-bitten hand was not injured to speak of, the effect being superficial only. His feet, however, were frost-bitten in several places, and, while their condition at present was not such as to incapacitate him from travelling, the chances were perhaps more than even that additional exposure might make them worse. As he, however, had said nothing of turning back, and I knew him to be desirous of keeping on, I felt that I could not send him back if he, after thor-

oughly understanding the *pros* and *cons* of the case, still wished to go ahead, and was willing to assume the entire risk and responsibility as to his own personal safety.

I told him, therefore, that if he went on beyond this point, and should have more trouble with his feet, he would be obliged to return alone on his ski, without sledge or dogs, as I could neither spare another member of the party nor dogs to take him back.

I told him to talk the matter over with the Doctor and let me know his decision. An hour or two later, finding him at work on some harnesses, I asked him if he had made up his mind. He answered in his deliberate Yankee way, as if anything different had never occurred to him :

"Oh, I guess I shall go ahead all right, sir," and go ahead he did.

Thick weather delayed the departure of Davidson and the Doctor till noon, when they finally left us, Davidson wrapped in a sleeping-bag and seated upon one of the seven-foot sledges, drawn by five dogs. This further reduction of my party to four destroyed all possibility of carrying out my original programme. I felt that the party thus reduced should remain a unit, and this meant either the entire abandonment of the east-coast work or its execution by the same party that did the northern work after its return to Independence Bay.

CHAPTER V.

ON THE "GREAT ICE" (*Continued*).

THE START FROM CAMP EQUINOCTIAL—CONTINUED MISHAPS—MIRAGE—
LOW TEMPERATURES—MORE STORMS—THE DREAD *Piblockto* IN FULL
FORCE—THE LAST ADVANCE CAMP—PROVISION CACHE—THE RETURN—
STRUGGLING BACK UNDER DIFFICULTIES—MANY DOGS GIVE OUT—THE
LODGE REACHED—CAUSES OF FAILURE.



AFTER THE RETURN.

CHAPTER V.

ON THE "GREAT ICE" (*Continued*).

AFTER they had gone, the afternoon was devoted to strengthening and sewing up holes in the tent, and repairing the torn sleeping-bags. A cache was also made of the supplies that were now superfluous, owing to the reduced size of the party. A complete readjustment was made of

sledges and loads. The next day we left camp, each of my companions with a large sledge, drawn by a team of eighteen dogs. This arrangement was necessary to enable us to take all of the supplies. What the handling of teams like this means only those who know something of the peculiarities of the Eskimo dog can understand. In spite, however, of their two days' rest after the storm, it troubled me to find that my dogs were not in condition, and after travelling seven miles in a temperature of -46° F., with a fresh southeasterly wind, we were obliged to halt and camp on their account.

The following day gave early promise of being a

favourable one, but we had travelled only a short distance when the wind and drift met us again, and at the end of three miles forced us to camp. Tuesday, the 27th of March, was a bright, sunshiny day, with just a light north-easterly breeze, and comparatively high temperature (-30° F.). The demon of the ice-cap, however, had only begun to play his cards.



THE SIGNAL AT THE CACHE.

Less than two miles away from the camp, one of the sledges, while going over a huge, marble-like *sastrugi*, broke in the bend of one of the runners, and we were delayed an hour or two lashing another sledge alongside it, making a three-runner sledge. At the end of the fifth mile another sledge, the *Long Serpent*, ran upon the sharp edge of an ugly, ragged *sastrugi*, and hung there broken-backed. This ended the day's march, and we went into camp to unload and repair both sledges.

This was the first day since leaving the cache ig-

loos that we had been able to see more than a few yards about us. The surface of the Inland Ice lay in long swells. Each successive one was slightly higher than the preceding, and all rose somewhat higher to our right, and descended somewhat lower to our left. The surface was firm, yet cloth-like in texture, and the rasping of the sledge runners over it came to my ears crisp and resonant, even when three-quarters of a mile away. At frequent intervals were huge *sastrugi*, offspring of the storm, marble-like in whiteness and hardness, all pointing towards Kane Basin, whence the equinoctial storm had issued, and, hurtling across the icy canopy of Prudhoe Land, had fallen upon the party at Equinoctial Camp.

Throughout the entire march there were constant mirage effects, causing curious distortions of the members of the party, sledges, and dogs; and a white frost-cloud of condensation accompanied each team. A brilliant parhelion also displayed its prismatic colours for an hour or two during the day. At this camp, three of the dogs that were unable to go on were killed and used as dog food. After the dogs were fastened and fed, I found that the boys were so discouraged by the mishaps of the day that I made no attempt to have the sledges repaired, but fixed up a milk punch, and had everyone turn in.

The next morning, the temperature by the spirit thermometer was -51° F., rising later to -36° F., but accompanied then by north-east wind and drift. In this weather and temperature, and without shelter, the sledges were repaired, and the harnesses overhauled and repaired. This simple statement conveys no idea of what this work really meant. While engaged in it, Entrikin got the bottoms of his feet nipped, and this was the beginning of his serious trouble.

After his work was done, the *Long Serpent* was a

much stiffer and easier-running sledge than before, and I had hopes that it would last to Independence Bay. Although it was after six o'clock when the sledges were completed, we harnessed up and went on for a few miles rather than camp a second night in the same place.

During this march, the wind and temperature, acting upon the moisture of Baldwin's breath, froze his kooletah so rigid that he could neither walk nor turn



ON THE RETURN.

his head, and was obliged to come into camp lying on his sledge. Here we came to his assistance, and removed the ice and snow, which had almost completely closed the face opening of his kooletah.

The next day was clear, with temperatures ranging from -36° F. to -40° F. With everything in repair and a fair surface over which to travel, we should have made good progress, but the wind and drift directly ahead were on hand again, and at the end of ten miles Entrikin's team balked, and, in spite of all efforts, re-

fused to go farther. In his efforts to start the sledge, Entrikin strained his back, and this, together with his frost-bitten feet, put him in a decidedly sober mood. The next morning, when we awoke, Clark's nose, which had projected too far through the face of his kooletah, was frozen to his sleeping-bag, and had to be thawed off by the warmth of his hands.

Entrikin was in no condition to march, so we remained in camp to give him a chance to rest and get in condition. The temperature during the day was well down in the minus forties, falling at seven P.M. to -55° F. and remaining throughout the night between -55° F. and -57° F.

Everyone except myself passed an exceedingly comfortable night. Being unencumbered by a sleeping-bag, I was able, if my feet got chilly, to restore the warmth by pounding them upon the snow.

The next day we pushed ahead five miles more, but the work showed that Entrikin was not yet in trim to stand a good day's march. The continued low temperature, too, in the forties and fifties below zero, with the almost constant wind, gave my dogs no chance to recover from the effects of the equinoctial storm, and had a perceptibly numbing effect upon the physical and mental faculties of my party. One of my best dogs died this day from the effects of that storm. Several had frost-bitten feet, and were unable to pull properly. Others were passing blood. Lion, the hardy veteran of the previous trip, was laid up with a sore leg, and almost all the animals still had more or less of the snow of the equinoctial storm remaining in their coats.

As a last resort, I decided to remain in this camp two days, to give Entrikin a final chance, and to see if it were possible to get the dogs in any better condition. Throughout these two days the temperature was well

110 Northward over the "Great Ice"

down in the forties below zero. The temperature in the tent at my head for the two mornings was -45° F. and -44° F., respectively.

On the morning of April 3d, Entrikin's feet and back were in much better condition, and I felt encouraged to think that he could now keep on without further trouble. The going during the day was very good, the surface hard, smooth, and level, interrupted only occasionally by the big *sastrugi*. At the end of



"SUMMER WEATHER,"

Temp. -4° F., in Direct Sun Rays, April 15, 1894.

the day's march we had covered fifteen miles, but the encouraging effect of this was more than counteracted by an occurrence which gave me more uneasiness than any other mishap thus far. One of the dogs was attacked by the *piblockto*, and bit nearly all the dogs in two other teams before he was shot.

On April 4th, for the first time, the day passed without mishap, and the end of the march found us fifteen and one-quarter miles from the last camp.

The next day again we advanced fifteen miles. Soon after making camp at the end of this march, it began snowing heavily, with a strong south wind. This was the beginning of a storm that confined us to the tent for the next three days, and gave the finishing stroke to my poor dogs. When the storm ceased many of them were buried completely in the snow, several frozen down, and two were dead from exposure. All our sledges were completely snowed in, and the tent itself half buried in a big drift.

The following march was only seven miles, and this distance was made with the utmost difficulty. The frost-bitten feet were much worse, and two more dogs with the *piblockto* had bitten nearly every dog in the pack. One of these dogs, the Agitator, a powerful, big, wolfish brute, the last survivor of the dogs purchased on the Labrador coast, presented just before he was killed as savage and gory a spectacle as I have ever seen. He had run amuck through the team, and, half blind as he was with froth and blood, had been mercilessly torn and shaken by the dogs that he had attacked. As the rifle was levelled at him, he stood exhausted and panting, with head and neck swollen to twice their natural size, ears torn in shreds, eyes bloodshot, bloody foam dripping from his jaws, and his entire body flecked with foam and blood and clotted tufts of fur. Though so weak that he could scarcely stand, he was just gathering himself for another spring at the dog nearest him, when the bullet passed through his brain, and he collapsed in a quivering heap on the blood-bespattered snow.

It was very evident that the dread disease had gained a firm foothold in my pack, and the end could not be far away.

On April 10th, after taking an account of stock, so to speak, and turning the whole matter over care-

fully, I decided that it was not advisable to attempt to proceed any farther this season. We were now 128 miles from the lodge. As to the condition of my party, one was now entirely out of the race with frosted feet, and must return to the lodge. Another was not entirely recovered from an attack of cramps at the last camp, and I feared another storm would bring them on again. The third had both heels and great toes frost-bitten, and was having daily attacks



KESUH THE LEADER.

of bleeding from the nose. All, however, showed true grit, and were willing to push on. But the crushing blow was the existence in my pack of the dreaded and incurable *piblockto*, induced by the extreme exposure of the past four weeks, and which, with continued work and exposure, might easily reduce my pack to half its present number, or even exterminate it entirely.

Another serious feature of the case was the lateness of the season. Instead of being at Independ-

ence Bay on the 1st of April, as I had planned, it was now the 10th, and we were only one-fourth of the way there. While I appreciated the fact that two, or perhaps three, of us might possibly get as far as Independence Bay, even in the existing state of affairs, anything beyond that would be entirely out of the question, and to do this would consume all of my pemmican, alcohol, and other provisions, which could not be replaced, and would thus destroy every chance of a second attempt next spring. So I regretfully turned my face towards the lodge.

Having decided that my journey to the north coast of Greenland must be given up for this season, the next thing to do was to cache the pemmican and mark its position by a prominent signal. This was done by piling the pemmican bags on each other around the base of a fourteen-foot bamboo pole, driven into the snow two and one-half feet till it came to a bearing upon an icy crust. The bags were then covered deep with snow, forming a pile some five feet high. The pole just above this was braced by a tripod formed of two ski and a sledge runner, and the top of the pole itself was surmounted by an empty cracker tin, firmly wired to it. This signal could be easily seen for a distance of between two and three miles under ordinary conditions, and with the sun in a favourable position, so as to have its rays reflected from the sides of the cracker tin, probably twice that distance.

This cache is situated 124 miles north-east, half-east (true), from the moraine camp, and is at an elevation of some 5500 feet above the sea-level. The surface of the Inland Ice before reaching this point had been practically level during the last two or three marches, and it was apparently the same in every direction from the cache, though probably still rising slightly to the north-east and east.

114 Northward over the "Great Ice"

The work of erecting the signal, together with the rearranging of the sledge loads and repairing the harnesses, took up the whole day, and the following morning we started back over our outward sledge tracks.



ENTRIKIN.

On our first return march we covered eighteen and a half miles, the result of our greatly reduced loads, and the fact that the wind was now behind us instead of in our faces. Then the dogs were played out and we camped. During this march another dog was

attacked with the *piblockto*. After reaching camp, three others that showed undoubted symptoms of the disease were shot. As we made camp, there were all the indications of another storm, a solid mass of dark, sullen clouds sweeping rapidly over us from the southeast. By the time our dinner was finished the storm burst upon us, and furious wind with snow and drift held sway throughout the night, and until late the following afternoon, when there came a lull which enabled us partially to dig out the sledges, and for a short time gave hopes of our being able to move on. Another dog was found at his last gasp and put out of misery. The lull was of short duration, and the wind and drift closed in on us and drove us back to the hut until the next morning.

Baldwin, in an attempt to reach the observatory sledge, was thrown down by the fury of the wind, nearly suffocated by the drift, and struggled back to the tent, his clothing driven full of the fine snow, and he himself numb and almost helpless with the cold. Early the next morning, the storm ceased, and I found two more of my dogs dead and another frozen to the stake to which he was fastened, and evidently not good for more than one more march. The entire forenoon was spent in digging out the sledges and tent and in untangling the dogs. In the afternoon we covered fourteen more miles on our return. Entrikin was obliged to ride all day on account of the condition of his feet.

Words are powerless to give an idea of the relief afforded us by the calm night which we passed at this camp, after the days and nights of storm and wind shrieking past the tent.

The next morning the thermometer at my head was up to -32° F., yet three more of my dogs were unable to travel, and were killed before we left camp. This reduction in the number of dogs, and the exhausted con-

116 Northward over the "Great Ice"

dition of those left, compelled me to cache here some three hundred pounds of supplies. During this day's march we covered sixteen miles in what seemed to us summer weather and complete calm, the thermometer



BALDWIN.

registering -4° F. when placed upon a piece of fur and exposed directly to the rays of the sun. This day again, Entrikin, in spite of repeated efforts to hobble along with his feet muffled in several thicknesses of fur, was obliged to ride the entire distance.

Monday, April 16th, was a clear, calm day, with the thermometer at -40° F. I found two more dogs nearly dead in the morning, and big Kessuh, the most powerful animal in the pack, was taken very sick soon after we started. Eleven miles from the camp I was obliged to cache one sledge and the greater portion of the load, and divide the dogs between the other two sledges. At the end of sixteen miles we went into camp.

The morning of the 17th found three more dogs in no condition to travel, and during the march we had for accompaniments heavy drift and wind. We were encouraged, however, soon after starting, by coming upon our old acquaintances, the giant *sastrugi* of the equinoctial, and an hour later we crossed the wind divide of Prudhoe Land, where the atmospheric currents from the interior separate, part flowing northward to Kane Basin and part southward to Inglefield Gulf and Whale Sound. Two hours after this, I came upon our outward sledge tracks, now twenty-three days old, still distinct and easily traceable. After following these tracks for three miles, another team gave out, and we encamped with fourteen miles to our credit. During this march, one of the dogs fell exhausted in his harness and was shot. The Kessuh dog continued very sick.

Wednesday, April 18th, was a brilliant, clear, calm day. Still another dog was found exhausted in the morning. At 10:30 A.M., while yet three miles distant, we saw the cache at Equinoctial Camp ahead of us, and reached it at noon. Here the observatory sledge was left, and after eating our lunch we hurried on in hopes of gaining the cache igloos for our next camp. At eight P.M., it was evident that we were past the cache igloos, our course having lain a little to the east, and we were now converging towards the well-

travelled route between the cache igloos and the moraine. The pronounced down grade was so favourable that we had already covered eighteen and one-half miles, and we fastened the dogs and erected the tent for what I intended, unless the weather was

of the very worst, should be our last camp on the ice-cap.

The march this day with the dazzling sun directly in our faces had seriously affected our eyes, and I knew that, to cover the twenty-four miles between our present camp and the moraine, we must be relieved from this annoyance by travelling at night. We therefore remained in this camp twenty-three hours. Then, leaving the three-runner sledge, and attaching the



CLARK.

twenty-five remaining dogs (big Kessuh having died during the night) to the long sledge, on which was packed nothing but our tent, cooking apparatus, and sleeping-gear, we began the last stage of our retreat.

About a mile and a quarter from camp, we came upon one of the bamboo mile posts on the trail from the moraine to the cache igloos, and taking up the familiar course from this to Pigeon Camp, we passed other poles and tent sites, and so on downward, with the ice-caps of Red Cliff Peninsula and those between



PEARY.

Inglefield Gulf and Orluks Bay gradually climbing above the edge of the ice-cap ahead of us.

Abreast of Pigeon Camp, we found the surface of the ice-cap scoured and tortured into frozen waves of such size and raggedness as to be impassable for the sledge, the crests of the waves constantly catch-

ing on the cross-bars. We were now only six miles from the moraine, so the dogs were detached from the sledge and divided among the boys, while I went ahead. We passed on down to the moraine camp, which we reached at seven o'clock in the morning. Here I left the boys to rest and to take a nap, and hurried on down the valley to the lodge, to get hot drink and stimulants ready for them against their arrival. I reached Anniversary Lodge about nine o'clock.

The causes of failure of the trip are to be found primarily in the extremely antagonistic weather, and secondarily in my failure to properly appreciate the limits of endurance of the Eskimo dog. With regard to the weather, the number and duration of the storms, the incessancy and violence of the wind, and the uninterrupted low temperatures were exceptional even for this region; and the exemption of the members of the party from permanent injury, as a result of their continued exposure, shows conclusively the perfection and adequateness of their clothing.

With regard to the second cause of our defeat, I confess that previous to this experience I had believed the Eskimo dog of Whale Sound capable of enduring the severest stress of weather possible in this latitude. This may hold true at sea-level, but on the ice-cap, when the weather is in its fiercest mood, the toughest Eskimo dog needs shelter.

The frost-bites of the members of the party were the result of inexperience, and had there been the slightest cessation of the low temperatures, they would have had an opportunity to yield to treatment.

CHAPTER VI.

DISCOVERY OF THE "SAVIKSUE."

RECUPERATING FROM THE ICE-CAP EXPOSURE—SLEDGE TRIP TO OLRIS BAY—WESTWARD TO PETIRAHWIK—OFF FOR CAPE YORK IN SEARCH OF THE "IRON MOUNTAIN"—ROUND CAPE PARRY—THE *IGNIMUT*—ACROSS WOLSTENHOLM SOUND—OVERLAND—THROUGH THE LEADS OFF PETOWIK—CAPE YORK—A YOUNG BACHELOR'S DEN—DISCOVERY OF THE "SAVIKSUE"—RETURN TO CAPE YORK—STORM-BOUND—ARDUOUS RETURN TRIP TO LODGE—A WILD TOBOGGAN RIDE—ARRIVAL OF THE *FALCON*—DEPARTURE OF THE PARTY.



THE "SAVIKSOAH" AS EXCAVATED FROM THE SNOW AND ICE.
(May 24, 1894.)

CHAPTER VI.

DISCOVERY OF THE "SAVIKSUE."



IT required something like two weeks for the ice-cap party to recover from the strain and exposure of the work and storms on the "Great Ice."

Inaction was unbearable to me, and as soon as my dogs were in condition to travel again, I started, accompanied by

Mrs. Peary, to explore and survey Olriks Bay.

In a sledge trip of five days' duration, we reached the very head of the bay, nearly fifty miles from its mouth.

We were the first white persons ever to penetrate the innermost recesses of this striking fjord, which winds like a great river between giant cliffs and rolling deer pastures, to its source against the face of the Marie Glacier sweeping down from the "Great Ice."

Olriks Bay, which is shown with absolute inaccuracy on all the charts of this region, is interesting in that it is different from any other bay or fjord in the

entire region from Melville Bay to the Humboldt Glacier. Its characteristics are more those of a river than of a bay or fjord, as will be seen at once from the map and the statement of its dimensions, which are: length fifty miles, and a maximum breadth at the mouth of five miles, narrowing in two places to about $1\frac{1}{4}$ miles, and an average width from mouth to head of little, if any, over $2\frac{1}{2}$ miles. The bay is di-



SLEDGING INTO OLRIKS BAY.

Mrs. Peary's Equipage.

vided naturally into three sections, namely, the outer, middle, and inner reaches, by the contractions of the outer and inner narrows. The head of the bay is but a short distance from the head of Academy Bay, the same ice-stream throwing down a branch into each. My desire to examine this inlet dated from April, 1892, when I crossed its mouth on a sledge, and this desire was much increased by the visual evidence from the ice-cap, during March and April of



SAVIKSOAH MOUNTAIN FROM SITE OF THE WOMAN.

this year, of its extension eastward far beyond the limits shown on the charts.

The absence of any bergs in this bay, at the time of the visit of the *Falcon* last August, led me to think there could be no discharging glaciers at or near its head. The present trip, however, discovered two discharging glaciers, only one of which, however, appears to produce bergs of any size, and the absence of bergs in the lower portion of the bay can easily be accounted for by the extreme shallowness of the



FACE OF MARIE GLACIER.

Head of Oirik Bay.

middle portion between the two narrows, which would prevent the bergs from passing out, and also the position and environment of the bay, which causes a concentration of the summer heat in such a way as undoubtedly rapidly melts the bergs. The glaciers of this bay, numbering six, include a very considerable one, Savage Glacier, near its mouth, directly opposite Kanga. This glacier is apparently the largest of the unique series of glaciers which occupies every break in the cliffs on the south shore of the Sound

from Netiulumi eastward, and in the number and extent of its crevasses it is certainly the most vicious-looking of them all.

In physical characteristics, the inner and outer sections of the bay are quite similar, but the middle is different from either. The two former are confined by high vertical cliffs and steep bluffs, standing at the maximum angle of repose possible for the coarse material of which their slopes are composed, while in the middle section the terrene reaches away from the shore in a succession of rounded hills and ridges, gradually increasing in height until it reaches the ice-cap on either side.

A day or two later I made another trip partly overland, westward to the scene of the spring walrus hunt at Peterahwik, to secure dog food for my teams, and survey the coast beyond McCormick Bay.

At Peterahwik, just abreast of the ruins of some fifty snow igloos, where a month before had been the bustling, populous village of the walrus hunt, I found the edge of the black North Water swirling, under a dense canopy of fog, against the rocks of the shore, and my further progress was stopped.

Completing my surveys to this point, and purchasing a considerable quantity of walrus meat, I returned to the lodge.

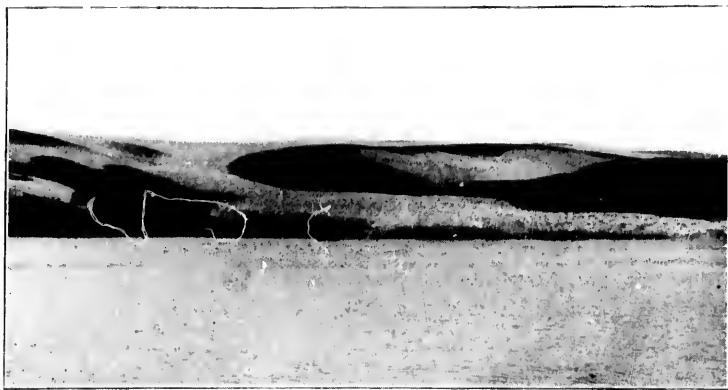
On the 16th of May, I left the lodge again with Lee, my iron-runner sledge, and ten dogs, in search of the "Iron Mountain," of Melville Bay.

When turning over in my mind the project for my 1891 and 1892 Expedition to Whale Sound, the discovery of this "Iron Mountain" was naturally one of the minor attractions of this region, and during the winter at Red Cliff House I obtained from the natives considerable information in regard to the mysterious object; learned that it had been visited by many of

the present generation of the natives; and made a bargain with one of the young men of the tribe to give him a gun if he would guide me to it when my party returned southward.

The lateness of the season, thick weather, and the presence of much ice when, in August, 1892, the *Kite* steamed southward past Cape York, rendered any delay inadvisable, so the attempt to locate it was abandoned for the time.

Again in 1893 and 1894, the discovery of this "moun-



SAVAGE GLACIER.

tain" had its place in the schedule of the work which I hoped to accomplish, and when, on the 1st of August, 1893, my ship the *Falcon* dropped anchor inside of Cape York, after the quickest passage on record through Melville Bay (24 hrs., 50 min.), and from the summit of Cape York itself I saw the coast to the eastward in the reputed locality of the "mountain" apparently free of heavy ice, I hesitated some time before deciding that it was hardly advisable to risk any delay to, or interference with, the main object of my Expedition by taking the *Falcon* out of her course.

Among the possibilities of my present trip was a return over the Inland Ice from Cape York or the "Iron Mountain," to some point in Olriks Bay, either as a matter of choice in the event of pleasant weather and a rapid down trip, or as a matter of compulsion in the event of the breaking up of the sea ice between Cape York and Wolstenholm Sound, before we were ready to return.



THE COAST EN ROUTE TO PETERAHWIK.

Behind the sledge trailed my new odometer, playfully known by the boys as "the locomotive," and warranted to stand all shocks from the ice or a following sledge.

It was a glittering wintry day, with fresh south wind, the temperature 25° F., and abundant cumuli casting cloud shadows on the white expanse of the bay and distant ice-caps.

At Castle Cliffs, on the ice-foot under the lee of a great sandstone boulder, we found the tupiks or seal-

skin tents of Panikpah and Koolootingwah. Panikpah was to be our driver from here on, and while I climbed up the rocks for a round of angles from the cairn at this point, he brought out his kooletah and extra kamiks and lashed them on the sledge, while Lee untangled the dogs.

From Castle Cliffs we drove, as the crow flies, straight across the gulf to Tigerahomi Point, the angle in the coast-line between the mouths of Olriks and Academy Bays. Half an hour before midnight we



FACSIMILE OF PAGE OF NOTE-BOOK.

reached the now deserted village of Narksami. This village is situated in a westward-facing cove fronting Herbert Island, and is walled by steeply sloping mountains. The habitations numbered four; stone igloos built against a bank just above high water, and just south of the boulder-strewn delta of a great *kook* (river) from the ice-cap. Here we stopped to repair the sledges and prepare supper, which was cooked on an open fireplace in front of the igloos, with seal blubber for fuel. This repast of seal meat, brown

bread, pea soup, and tea finished, we started on and at four A.M. arrived at the northern point of Olriks Bay. Here perched on sheltered shelves of the rocks we found three tupiks. In niches in the pudding-stone ledge were several fireplaces, and on the ice-foot two seals and numerous pieces of blubber and walrus meat. We were travelling in the season of sunshine and plenty. The big clean tupik of Ootooniah was vacant, he and his wife being away visiting, and this offered such a good opportunity for undisturbed sleep



"A GLITTERING WINTRY DAY."

after our nineteen hours' march, that we immediately availed ourselves of it and turned in.

Eight or nine hours of refreshing sleep put us in trim for the next day's work, and we pushed across the mouth of Olriks Bay to Ittibloo, where we found four tupiks occupied by about twice as many families.

Stopping but a short time at this place, we pushed on along the south shore towards Netiulumi. We had not proceeded more than three or four miles on our way when we were overtaken by two sledges.

These turnouts were so entirely different from each other that they are worthy of notice. One was a family conveyance, a large sledge upon which was piled the tupik, with all the hunting gear and household goods of the family, until the load was so high that it had been necessary to lash on a board to serve as an intermediate step by which to reach the top. Perched upon this sat Ootooniaksoah with his wife Ahkatakah and his four- or five-year-old boy Teddyling-



PANIKPAH.

wah. This load was drawn by seven small dogs, which were straining every muscle under the persuasive influence of Ootooniaksoah's twenty-foot rawhide lash, that played on and about them with reports like a volley from a seven-shooter.

A striking contrast, the other sledge; Nupsah out on a seal-hunt with three powerful brawny dogs and nothing on his sledge but his seal-chair. The former turnout reminded

me of those family picnic-wagons, so many of which may be seen entering Fairmount Park on Sunday morning; the latter, a bachelor in his sulky, speeding a favourite pacer.

At Netiulummi, we occupied the tupik of one-eyed Merktoshar and his kindly wife Ahma. Their tupik offered the advantage of being pitched on the ice of the bay, away from the filth and offal which surrounded

the tupiks of the village; of being free of children, and having a bed of clean fresh deerskins.

Among the natives here was Tallakoteah, who at Red Cliff, two years ago, had acted as my mail carrier, taking letters to Cape York to deliver to a whaler. He had fulfilled this mission faithfully as my letters had reached their destination after my own return home, and Tallakoteah now delivered to me a brief note from Capt. Allen of the *Terra Nova*, dated June 6, 1892, acknowledging the receipt of my mail.

This man was thoroughly conversant with the region about Cape York, having lived there several seasons, and professed to be well acquainted with the location of the "Iron Mountain," which he said he had seen repeatedly. He told me that there were three *saviksue* (great irons) of varying sizes, the smallest about the size of a *mikkie* (dog), indicating a dog curled up, the second considerably larger, and the third still larger than the second.

He also said that one of them was neither very high above the water-level nor very far from the water, while the other two were up on the side of the mountain. He agreed to go with us to Cape York and guide me to them.

He would take his own sledge and four dogs, and for the consideration of a knife I obtained from Ahngeenyah five more fine animals, which would give me sixteen dogs in all, three of my original team having been given to Panikpah to enable him to get back home.

At one A.M. of the 19th, we left Netiulum, Tallakoteah and myself on one sledge drawn by ten dogs, Lee following with the second sledge drawn by six. The midnight hours were gloomy and overcast, but this did not trouble us as long as fresh dogs and snow-free ice permitted us to dash at full gallop west-

ward for Cape Parry, the black promontory which stands guard at the southern entrance of Whale Sound.

Three hours later we rounded the cape, into the teeth of a driving snow-storm, whose fast-falling flakes hid everything from our eyes, but did not keep from our ears the sound of waves, and the puffing of narwhals in the open water close on our right. A few miles south of Cape Parry, the violence of the storm



TUPIK AT NETIULUMI.

had reached such a pitch that we could make no headway against it, and we sought the opportune shelter of an igloo which Tallakoteah had excavated in a snow-bank, during his upward trip from Cape York some weeks previous.

In these contracted quarters, we remained some twenty hours, when a loose dog walking over the roof of our shelter brought the whole thing down upon us, and drove us out into the storm, which had

fortunately abated somewhat at this time. A glance at the ruins decided me to attempt to push on. We found the snow deep and heavy, and underlaid with several inches of slush. Through this the dogs could scarcely drag the sledges alone, and riding for us was entirely out of the question.

Off Bell Rock, the summit of which looked down on us for a few moments through the mist and snow, Tallakoteah shot a seal, the less desirable portions of



TRAVELLING COMPANIONS.

which furnished the dogs an acceptable repast, while the choicer cuts were reserved for ourselves. Just below the entrance to Booth Sound, we found five tupiks pitched just above the ice-foot, the five families awaiting the cessation of the storm in order to continue their journey.

With our arrival the work of striking these tupiks was commenced, and we stopped long enough to have Tahwanah's wife, Nelleekah, cook our seal

meat, off which we made a hearty meal, and then pushed on again. It was still snowing, the travelling grew constantly heavier and heavier, and the ice was intersected by cracks which, masked by the deep snow, allowed us to step into them without warning. This kept us constantly wet to the hips. We passed the site of the winter hut of the boat party from the *Advance* in 1854, and a little farther on a snow igloo and tupik, the occupants of which immediately gathered up their belongings and joined our caravan.

At three p.m., we came up to open water impinging directly against the shore, and, crossing the ice-foot on a shaky bridge of floating ice-cakes, we reached the snow-covered shore, and followed it to the north point of Wolstenholm Sound, the "land of Noogli" and the neighbourhood of the *ignimut*, or firestone, of the natives. Guided by my Eskimo friends, I visited the site of this interesting deposit of pyrites, which the natives have used for steel in obtaining fire, but, owing to the unusual depth of snow, did not actually see it.

Leaving the point, we went along the shore a short distance, then descended into the slush-covered, crack-intersected ice of the Sound, inside the open water.

Our course was directed through the fog across the Sound towards Saunders Island, which, after a few hours, was faintly visible; then the sun broke through a rift in the clouds, and the island, with its regularly banded cliffs, loomed up before us like a huge carnelian. Before we reached it, a fresh south wind began to whirl the white drift over the surface of the bay and into our faces, and we sought shelter in a niche in the rocks forming its south-eastern shore. Three sledges overtook us just as we arrived here, and their occupants immediately began building a combination tupik and igloo, erecting a low snow

wall, and throwing over this the folded tupiks. While this was being done, Lee and myself were enjoying a luxurious repast of seal steaks and tea, cooked over a fireplace in a small cave in the rocks.

We obtained here six and a half hours' sleep, and started for Cape Athol at two in the afternoon.

At six p.m., we came upon open water off Cape Athol, a broad lead reaching from the cape clear across to Saunders Island. After a single glance at this lead, my driver whirled his team around and



THE CAVE AT PETOWIK.

Lee Feeding the Dogs.

started at full speed for Narksami, to cross overland to the ice south of the open water. Following up the valley of the great *kook* at the mouth of which the village is situated, we climbed to the snow-covered interior plateau some thousand feet above the sea-level, then southward across this plateau about six miles to another valley, descending which, we came out on the sea ice again in a little cove about five miles north of Petowik Glacier. While crossing this plateau, we saw seven deer, one of which was shot.

138 Northward over the "Great Ice"

The sea ice now was smooth and free of snow, and we swept at good speed along the wild shore cliffs, past the rookeries of little auks, past the contorted sides of Mt. Agony, to a cave close beside the Petowik Glacier, perhaps the very one in which Kane hauled up his boats. This cave is a regularly arched grotto in the solid gneissose rock at or just above



GETTING THE DOGS ACROSS A LEAD.

high-water mark. It is about twenty feet high and wide at the entrance and twenty feet deep, but only five feet high at the inner end. There is a still smaller extension of the cave back into the rocks, which is used by the natives as a cache, the entrance being closed by loose stones.

Above the mouth of the cave the cliff rises vertically for hundreds of feet, and on either side a projecting

buttress shields the mouth of the cave completely from the wind. This cave is a well-known and favourite half-way house of the natives in their travels along this coast, and at its inner end we found a quantity of dried grass forming a bed, and a well-blackened fireplace with remains of seals and birds.

After a "grand gorge," as Lee expressed it, of venison steaks, liver and bacon, seal meat, pea soup, tea, and corn bread, we stretched ourselves on the rocks in this shelter and slept soundly. While we slept, the sun shone in warmly, but by the time we had finished breakfast and were ready to start, our usual companion, bad weather, was on hand to accompany us, and we left the cave in a driving snow-squall. The blue-green wall of the great Petowik Glacier, projecting far



TYPICAL COAST SCENE.

out from the shore, compelled us to make a long detour seaward, and we soon encountered, in the shape of a broad lead, or lane, of water, a premonition of the obstacles that lay before us.

Some time was spent in discovering a practicable crossing, and beyond this were many other leads and a dreary expanse of deeply slush-covered and in places rotten ice. My driver proceeded with the greatest reluctance, and at last confessed to his fear of the ice, which, he said, was very thin, and at the least wind would be broken up and floated out into the North Water, the ominous blue-black loom of which was close at hand, we now being several miles off the face of the glacier. As it was now, however, just as far to retreat as to advance, I flattered him a little, telling him he was too big and too brave a man to turn back, and insisted on proceeding, which we did.

The slush and leads continued, and the wet and heavy travelling, combined with the haunting fear that we might strike an impassable lead, rendered the hours extremely trying to me. At last we were able to head in towards the shore south of the glacier, and ferrying across two broad leads on cakes of ice, we finally reached Cape Dudley Digges. In crossing the last lead, the odometer caught in the ice and was twisted out of shape.

From the cape, a broad outward-curving lead stretched clear across the unnamed bay which I will call Parker Snow Bay, between the Cape and Parker Snow Point, and drove us nearly out to Conical Rock, into an interminable network of leads caused by the strong tidal action between the rock and the shore.

At length we gained the shore ice a few miles south of Conical Rock, and from here on were troubled by no more leads. Deep snow, however, in front of each of the numerous glaciers which pour their icy currents

through every break in the Crimson Cliffs, retarded our progress, and at last, thoroughly tired and sleepy with the nervous tension of the day, I directed Tallakoteah when about fifteen miles from Cape York to run the sledge ashore beside a big rock for a few hours' rest. We had been thirteen and a half hours on the march. Along the entire shore from Petowik to where we stopped, the cliffs were alive with countless millions of little auks, and numerous looms, kittiwake gulls,



AT CAPE YORK.

burgomasters and Greenland falcons. One re-entrant angle in the cliffs was colonised on one side by looms, and on the other by kittiwake gulls and little auks, the former occupying the lower floor. Perched on every available rock and ledge, alight like swarms of insects or clouds of dust on the snow, the number of atoms of life was inconceivable. Again under way, with fairly decent going except in front of the glaciers, we reached the Cape York tupiks, four in number, at three

in the morning. During the entire journey from the cave to Cape York, we obtained only occasional glimpses of the summits of the cliffs through the fog and driving snow-squalls. I had told Tallakoteah before reaching Cape York that I wished to sleep in a tupik which was clean, roomy, and not infested with children, so I was immediately shown to the habitation of Tahweenyah, the oldest and most influential man of the village. Here after a supper of tea, bread, and boiled seal meat, Lee and myself turned in for a



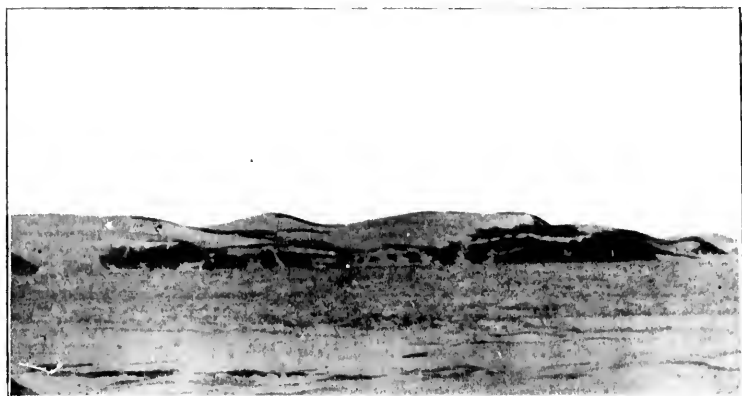
HEAD OF SAVIKSOAH BAY.

comfortable sleep, while the wind whistled and the snow beat against our skin shelter on a low rock point of this wild Arctic promontory, facing southward across the icy, bear-haunted wastes of Melville Bay. At last we had reached "Imnaminomen" (Cape York) after ten days of struggle with the difficulties of Arctic-spring travelling, but even now the outlook was not encouraging for a termination of our troubles, and there was every probability that we might be storm-bound here for several days.

Three days later, the storm had abated sufficiently

for us to start, and having left in charge of Tahweenyah everything that we would not absolutely need for a three days' trip, and with all sixteen of our dogs attached to Tallakoteah's sledge, we entered upon the last stage of our journey.

Skirting along the shore, we passed round the south-east point of Cape York with its numerous deserted igloos, to the village beside the glacier where the *Falcon* stopped last summer. From this point our course lay straight across the bay to the islands on



VIEW EAST FROM THE METEORITE.

the eastern side, where there were said to be four igloos, and where we thought to find my old acquaintance "little" Kessuh, the same youth that I had expected would be my guide two years ago. The snow was very deep, and Lee and myself were compelled to take turns in snow-shoeing ahead of the dogs. The entire circuit of this bay, which is certainly large enough to deserve a name on the charts, from the Eskimo village which we had just left, round to the islands ahead of us, is a glacier face broken by a few nunataks. Arrived at the island igloos, we

found them deserted, but a fresh sledge track led from them round the end of the island, and following this we soon came to a cave in the rocks, and in the cave was our little friend fast asleep upon a luxurious bed of bearskins with a deerskin thrown over him.

The habitation of this young bachelor was so unique that it merits some description. Just outside the cave was his sledge, just within the entrance



HARD AT WORK.

his dogs were fastened, then came his bed with his gun leaning against the rocks at his head. A niche in the rocks some four feet above the floor formed his fireplace, and in the inner extension of the cave behind his head were the carcasses of four or five seals, more bearskins, some bear meat, several birds, his harpoon, lines, and other belongings. As he said to me, he had no *koona* (wife) to make him a *tupik*, so he was obliged to find a ready-made one.

He jumped at the opportunity of accompanying us, and in a few moments was dressed and had his dogs fastened to his sledge. Six of my dogs were added to his four. Lee got on the sledge with him, and with this arrangement of loads, fresh dogs, and hard snow we left the cave at a gallop, which speed was kept up past the outer island and eastward along the shore till after midnight, when we reached the western point of the double-armed bay, running into the land north of Bushnan Island. There is another island, not shown on the charts, lying across the mouth of this bay inside of Bushnan, and passing inside of this we headed for the eastern arm of the bay.

By this time, under the influence of the clear cold night, the snow had become firm enough so that we were able to discard the ski from the runners, and this, with the numerous seals on the ice, kept the dogs in a constant state of excitement and at their utmost speed. Kessuh succeeded in shooting one seal, which gave the dogs a good feed and provided for our dinner.

At 4:15 in the morning, we had reached the head of the bay, the dogs were fast to the ice-foot, and Tallakoteah and myself were climbing over it in search of the "Iron Mountain."

After passing some five hundred yards up a narrow valley, Tallakoteah began looking about until a bit of blue trap-rock, projecting above the snow, caught his eye. Kicking aside the snow, he exposed more pieces, saying this was a pile of the stones used in pounding fragments from the "iron mountain." He then indicated a spot four or five feet distant as the location of the long-sought object. Returning to the sledge for the saw-knife, he began excavating the snow, and at last, after digging a pit some three feet deep and five feet in diameter, just at 5:30 Sunday morning,

146 Northward over the "Great Ice"

May 27, 1894, the brown mass, rudely awakened from its winter's sleep, found for the first time in its cycles of existence the eyes of a white man gazing upon it.

I kept Tallakoteah at work enlarging the pit and excavating about the meteorite until Lee and Kessuh arrived, when he was relieved by the latter. In addition to the thick blanket of snow, the meteorite was completely covered with a half-inch-thick coating of ice. The work of excavation satisfactorily completed, I spent the remainder of the perfect, cloudless day of



LOOKING NORTH ACROSS PETOWIK GLACIER.

Sunday, until four o'clock in the afternoon, in measuring, sketching, and photographing the heavenly visitor and taking angles for a rough map of the vicinity, and then descended to the sledge for a little needed sleep.

Tallakoteah tells me that the Innuits call the meteorite a woman in a sitting position, and says it used to be much larger and higher than it is now, but that his people have gradually worn it down, and that years ago natives from Peterahwik broke off the head and carried it away. He also voluntarily told how the ancient knives of his people used to be made, namely, by

inserting several small flattened pieces of the metal in a bone or ivory back, and then with a piece of trap lying near, showed me how the flakes of iron were detached. Nothing could be more interesting than his re-enacting of this ancient practice.

I scratched a rough "P" on the surface of the metal, as an indisputable proof of my having found the meteorite, in case I should not be able, later on, to reach it with my ship; and built a small cairn upon the top



COAST NORTH OF PETOWIK GLACIER.

of a big gneissose boulder, 112 yards distant, in which I placed a brief record:

"Sunday, May 27, 1894.

"This record is deposited to show that on the above date R. E. Peary, U. S. Navy, and Hugh J. Lee of the North-Greenland Expedition of 1893-94, with Tallakoteah, an Eskimo guide, discovered the famous 'Iron Mountain,' first mentioned by Capt. Ross, and have carefully examined the same.

[Signed] "R. E. Peary, U.S.N.,
"Comd'g Expedition."

Then, after a last look at the celestial straggler, I descended to the sledge where Lee had already preceded me, and stretching myself upon it immediately fell asleep. Two hours later, I awoke to find the entire sky overcast and a chill wind blowing up the bay. The weather demon had given us just one perfect day in which to learn the secret of the "Iron Mountain," and was now resuming his baleful sway.



PROF. CHAMBERLIN.

Supper, breakfast, or dinner, just as one chooses to call it, over, the dogs were hitched up and we started to locate the second and largest mass, which my guide told me was on the island at the entrance to the bay. Passing at a good pace down the bay, we soon reached the site of this second meteorite, some seven miles distant on the eastern end of the island. Its loca-

tion was pointed out to me, but the depth of snow covering the entire island was so great that I made no attempt to dig for it, satisfied to know where it was. At midnight we started on our return, and ten days later, on the 6th of June, were back at the lodge. This return journey was one of invaluable experience in spring sledging in the Arctic. Part of the time we were storm-bound, buried in drifts at the base of the wild shore cliffs. Then we were struggling at a snail's pace through deep slush, intersected by hidden cracks and wide leads of open water. The disintegration of the sea ice had proceeded so rapidly since our downward trip that we were repeatedly compelled to take to the shore, climb the shore bluffs, sometimes carrying sledges and outfit on our backs, and make long detours overland.

In one place, we were obliged to scale a nearly vertical curtain-like drift, the crest of which rose 1050 feet above sea-level.

Up this we carried the sledge loads on our backs, along zigzag steps cut in its face, then pushed and pulled the sledges and dogs after.

Open water at Cape Parry necessitated our going overland to Netiulumi from Booth Sound, and our course lay up a large glacier right in the teeth of a gale. The lee of the glacier face offered a grateful temporary shelter, and then we commenced the ascent of the lateral gorge along the south side of the glacier.

Confined in this gorge, the wind repeatedly nearly swept us from our feet, and when at last we scaled the glacier side to its surface, it was in much the same way that flies crawl up a wall. The surface of this glacier rises with a gradual slope straight away to the ice-cap domes overlooking Barden Bay, 3362 feet above sea-level.

It was four in the afternoon when we reached the

summit of one of these domes, and looked down into the bay at our feet, and out over the outer expanse of Whale Sound and its triple islands.

The direct descent from where we stood to the lower portion of the Tyndall Glacier was a nearly vertical ice-slope, surcharged upon a vertical cliff, and we were forced to make a detour southward to the more



THE "FALCON" IN THE HARBOUR AGAIN.

practicable slopes at the glacier head. After travelling some few miles in this direction, we seated ourselves upon the sledges for one of the grandest and most exhilarating of toboggan slides.

The start was a giant ice-dome, more than three thousand feet above the sea; the toboggan slide, the serpentine icy slope of the great Tyndall Glacier; the toboggan, one of the clippers of the new fleet of

sledges, built since the advent of the Peary expeditions, a sledge eight feet long, twenty inches wide, seven inches high, shod with tusks of the walrus, and fastened with thongs of the seal and walrus; the toboggan steerer, fur-clad Tallakoteah, with his matted black hair flying back from his face.

Seated, both of us, astride the sledge, with heels pressed into the snow, almost an instant after we started, the dogs were trailing in a confused mass behind the sledge, the ablest ones at full gallop to keep up with the sledge, the others dragged by their traces, whirling and tumbling over and over, in a cloud of flying snow.

Fans of blinding snow flew backward from our vibrating feet, and so, mile after mile, we dashed down our cyclopean toboggan chute, the great red-brown rock buttresses enclosing it, rich and warm with the glowing sunlight, whirling past us with dizzying rapidity.

The bay ice below rose rapidly to meet us, two or three bergs imprisoned in it grew as grows the locomotive of the lightning express when thundering straight at one at a speed of sixty miles per hour, the islands sank to the horizon, the ice-domes in our rear disappeared behind the slope of the glacier, and at last, veering sharply to the left into the snow-filled gorge beside the glacier, to avoid the crevasses in its lower portion, we reached the level of the bay, breathless, with clothing snow-filled, and our dogs animated snow-balls. Half an hour later, we were at Netiumi, the centre of an admiring group of natives, and my dusky driver was restored again to the arms of his anxious Ahwahtingwah.

June 6th we were back at the lodge. From this time till the last of July, the days passed, broken by occasional hunting trips, in looking for the arrival of the ship.

On July 31st, about six P.M., Mrs. Peary, while sweeping the bay with the binoculars, saw two sledges approaching, the drivers' whips playing upon the dogs constantly, urging them to their utmost speed. We at once surmised that they were bringing us news of the arrival of the ship off Karnah, twenty miles distant, beyond which the winter's ice



BRIDGMAN AT KANGERDLOOKSOAH.

still remained intact. At nine P.M. they arrived, but long before they reached us we heard their shouts of "*Oomiaksoah! oomiaksoah!*" ("A ship! a ship!") They could give us very little information, however, as they had no letter and did not know the names of anyone on board except "Larry," the steward.

I decided to send Entrikin off at once to ascertain the state of affairs and bring back the mail. Accord-

ingly he left the lodge about midnight, with instructions to return as quickly as possible. At 12:30 A.M. on August 2d he returned, accompanied by Messrs. H. G. Bryant, the commander of the Auxiliary Expedition, and Emil Diebitsch, Mrs. Peary's brother. They told us that the *Falcon* had arrived in Murchison Sound on July 25th, when farther progress was checked by the ice. Bryant and Diebitsch then tried to reach Anniversary Lodge by way of McCormick Bay and Tooktoo Valley on a dog sledge, piloted by old Myuh, one of the giants of the tribe, but owing to leads in the ice too wide to be crossed, they were compelled to give up the attempt. Then the ice gradually opened enough to allow the *Falcon* to get within about ten miles of Karnah. The natives from this settlement at once visited the ship, and Mr. Bryant tried to make two of the men understand that they should return to the settlement, get their dogs and sledges, bring them to the ship, and take him to Peary's igloo. This they agreed to do, but apparently misunderstood him, for instead of returning to the ship they proceeded directly to the lodge, while Mr. Bryant was patiently awaiting their return. On board the *Falcon* with Mr. Bryant was a party of six scientific gentlemen: Prof. T. C. Chamberlin, Prof. Wm. Libbey, Jr., Emil Diebitsch, H. L. Bridgman, Dr. H. E. Wetherell, and Dr. Axel Ohlin.

Bryant was anxious to get away to Ellesmere Land as quickly as possible to search for traces of the young Swedes, Björling and Kallstenius, and the next day I went back with him to the *Falcon*.

Snatching a few hours' sleep on board, I returned to the lodge accompanied by Prof. Chamberlin, who desired to pursue some special glacial investigations, and the *Falcon* steamed away westward for Ellesmere Land.

August 20th the *Falcon* was able to force her way up Bowdoin Bay to the lodge. The next two days were spent in putting coal ashore, and getting the baggage and those going home on board. At eleven A.M., on August 23d, she steamed out of Bowdoin Bay, leaving Matt in charge of the lodge, bound for Academy Bay, where I hoped we would be able to get a number of deer, the skins to be utilised in the outfit of my Inland-



CLIFFS OF LION ISLAND.

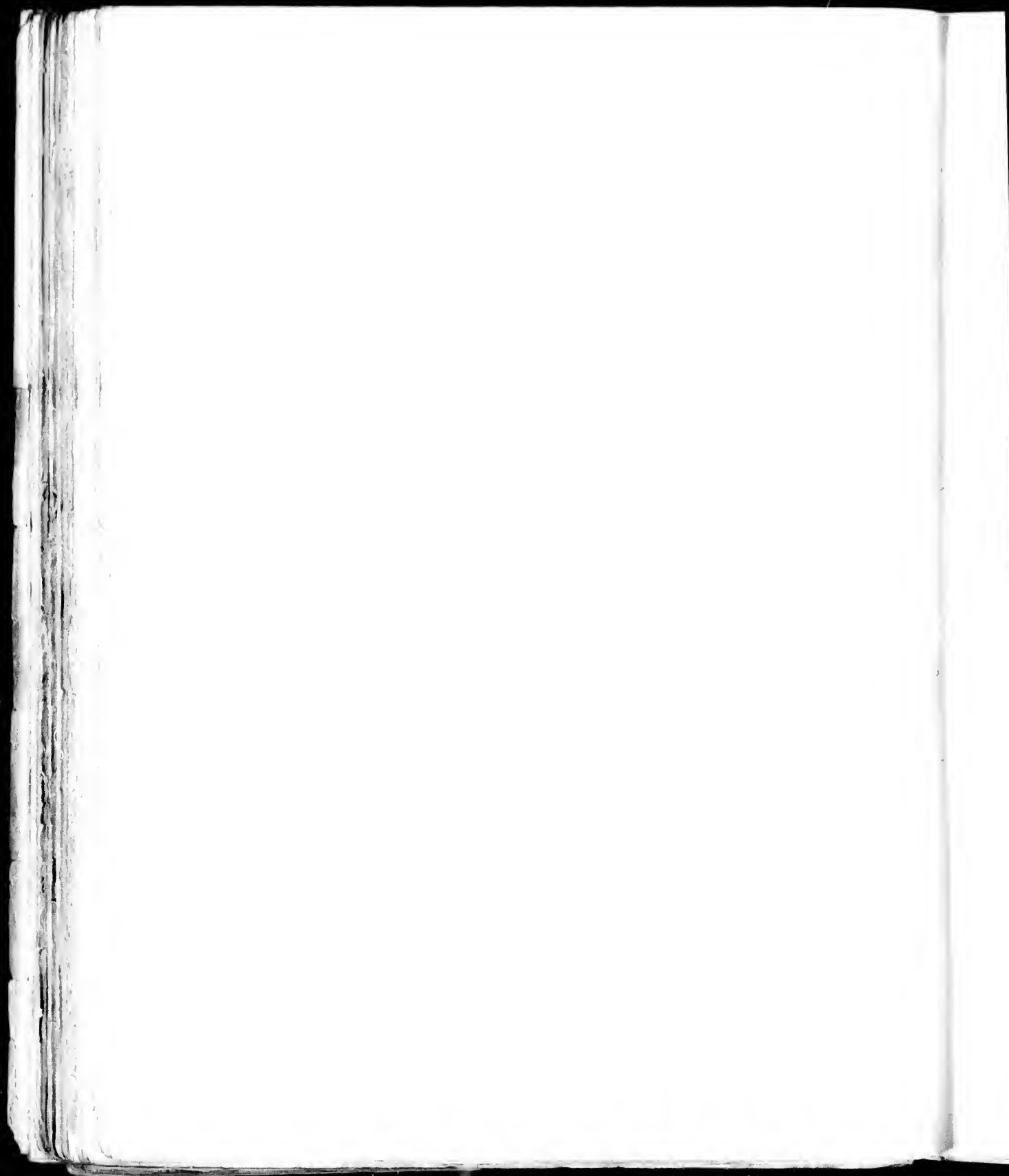
Head of Inglefield Gulf.

Ice party next spring, and the meat turned over to the party on the *Falcon*, as their fresh-meat supply had been exhausted. We met with little success in Academy Bay, and the next two days were spent in traversing new country in the hope of finding the deer, but not until the last day did we come upon their tracks, and found they were too far inland to make it desirable to hunt them now.

We therefore returned to the lodge on the 26th,

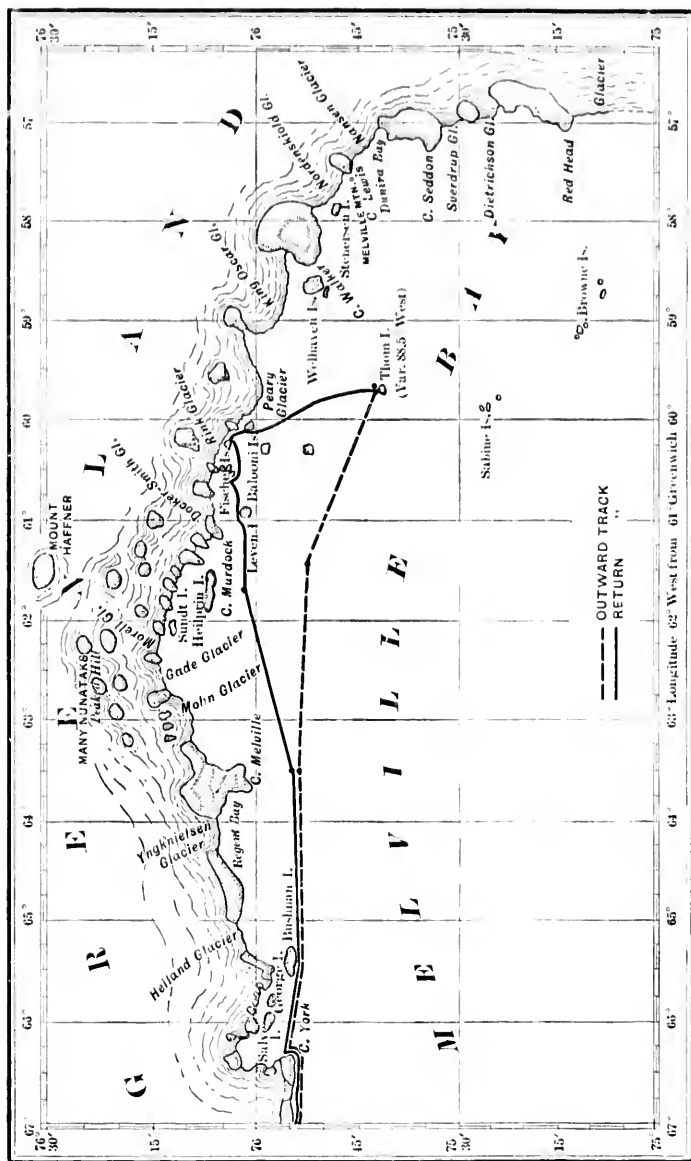
where I exchanged Lee for Matt, and then the *Falcon* steamed south with everyone else on board. Davidson and Carr were invalided, the former with a frosted heel, the latter with a weak back; the other members of my party had discovered that Arctic work was not entirely the picnic they had imagined, and wisely regarding discretion as the better part of valour, had decided to return home; Lee and Henson alone possessed the grit and loyalty to remain. My intention was to proceed in the *Falcon* to the site of the meteorites, endeavour to embark the smaller and send it home, then return from Cape York in my whale-boat. Unfortunately the heavy winter ice had not yet moved out of Melville Bay, and the ship was unable to get within twenty-five miles of the meteorites. I then had Captain Bartlett take me back as far as Petowik Glacier.





CHAPTER VII.

RECONNAISSANCE OF MELVILLE BAY—ASTRÛP.



MAP OF MELVILLE BAY.

Livingstone's
May 1874

May 1877

CHAPTER VII.

RECONNAISSANCE OF MELVILLE BAY¹—ASTRÛP.

ANNIVERSARY LODGE, May 1, 1894.

TO R. E. PEARY, U.S.N.



Sir:—I have the honour to submit the following report of my sledge journey to Melville Bay :

As soon after my return from the ice-cap as my physical condition permitted it, I decided to make a sledge journey to the Eskimo settlement at Cape York, and, if the conditions were favourable, proceed eastward along the coast to get, if possible, a close view of the unexplored shores of Melville Bay. Certain circumstances, however, seemed to be rather against the success of this project. All the pemmican had been taken on the ice-cap, so I would have to dispense with this valuable article of diet for a sledge

¹ The contents of this chapter have already been published, Astrup having disposed of his paper immediately after his return home in 1894.

Recognising, however, that his apparent discourtesy was only the natural result of youthful eagerness to see himself in print, I am only too glad to give his work what I hope will be a more permanent form and wide-spread circulation than it would be likely to obtain in the form in which he himself published it.

traveller and his dogs. In other words, for my meat supply I would have to rely entirely on the game I might find on my way. It therefore became essential for me to get a good native hunter for my companion, and this I found in my favourite native friend, Koolootingwah. Of instruments, I had only a railroad compass and a thermometer; besides this, a pocket compass, watch, a pair of field-glasses, snow-goggles, charts, tables, etc. The provisions I took with me were figured to last me four weeks, with additional fresh meat obtained on the road, and consisted of 25 lbs. army bread, 15 lbs. bacon, 18 tablets pea soup, 10 lbs. sugar, and 3 lbs. tea. Besides this, the outfit consisted of two Winchester carbines, 50 cartridges, cooking-gear, light sleeping-gear, hatchet, extra kamiks, etc. We had a new sledge built on the native pattern, and eight good dogs.

On the morning of April 6th everything was ready for a start, and at 9:30 we got off, although the weather was somewhat doubtful, with a cloudy sky, and the thermometer three above zero. The bay was full of heavy white fog banks, and a sharp north-east wind swept down over the naked hills behind the headquarters. As we travelled along, the weather improved, and the going being excellent we reached the settlement of Oloshynnia at the south-west corner of Herbert Island before midnight. We found but very few natives here, but nevertheless got a kind reception. The following morning, a mild but foggy one (+8° F.), we started for Netchilumi, where we arrived after a short day's journey. Here we remained until the morning of the 9th on account of stormy and thick weather, when we finally took leave of the place, accompanied by Telokoteah and wife, who also were bound for Cape York. They had seven fine dogs, and kept up with us all the way to their destination.

Instead of rounding Cape Parry, a route which was at this time impracticable on account of open water, we took refuge on the land in a little cove, a few miles west of Barden Bay, where the bed of a rivulet, higher up gradually forming a deep gorge, indicated a continuous mountain pass extending across to Booth Sound. Up through this gorge we laid our course and passed its highest part in an altitude of eight hundred to one thousand feet.

Although the weather was clear and beautiful when we left Netchilumi, we here entered a region of biting winds and dense fog, while on the other side of the divide we soon again descended into a more peaceful atmosphere. This condition of the atmosphere over the snow-capped and mountainous land tongue which we had just passed was no doubt caused by the close proximity of open water, which after the great equinoctial storms last month now extended from the south side of Barden Bay all around Cape Parry, and into Wolstenholm Sound as far as the western end of Saunders Island. In many places along the shore it left us only a narrow border of ice, often but a few feet in width, to travel upon, while in other places the ice was entirely gone, making it necessary for us to travel upon the land, which was here fortunately flat and smooth.

In the afternoon we passed the place where Dr. Hayes and his comrades of the Kane Expedition spent a few months of misery, after being obliged to give up their planned boat journey through Melville Bay. The place, marked by a few ruins of a stone hut, had a very desolate look, increased, perhaps, by the memory of the sad story of the men who once struggled for life over these shores. A few miles past this spot, we found the snow-covered ground near the beach literally covered with traces of deer.

We stopped for a short time while the two natives, who were very anxious to try their luck, set out over a little hill near by, each supplied with a Winchester rifle. I soon after heard a shot, and, on one of the natives signal, Telokoteah's wife and I drove the two dog teams up to the place, where a few minutes after the meat and the skin of a small deer, shot by Koolootingwah, were put on the sledges. We now continued our journey along the shore on the north side of Wolstenholm Sound until 6:30 p.m., when we camped after thirteen hours' steady travelling. A small snow house was built in a suitable snow-drift, and the night spent in perfect comfort.

The following morning we started in the most beautiful weather with the temperature of -1° F. only. When passing the eastern end of Saunders Island we discovered fresh tracks of three bears, the mother and two young ones. The natives and our dogs became quite excited, so we had a pretty lively time for four or five hours, sliding over the unbroken ice-field with unusual high speed. Finally, when no signs of the bears themselves could be seen, but only ravens and foxes, the bears' never-failing companions, the hunt was given up, and the course regained. The map appeared everywhere to be more or less wrong, but I did not attempt to correct it, as I had no time to spare. At 9 p.m. we passed Cape Athol, where the ice commenced to be free of snow. Koolootingwah told me that the natives, when obliged on account of open water, cross overland from Nexosimy, on the south side of Wolstenholm Sound, to Cape York, sleeping once on the way. At midnight we stopped at a place called Iglooduhungny, after sixteen hours of continued travelling, during which the dogs had been on a trot or a run most of the time. We had expected to find natives at the place, but could only

discover a deserted snow igloo. We were soon, however, comfortably quartered. Next day we reached Cape York. On the way we passed Petowik Glacier, which does not appear to be a very active one. This was also confirmed by Koolootingwah, who said that it produced but few icebergs. A couple of miles to the westward of the glacier, he also pointed out to me one of the places where the natives find material for the stone lamps and cooking pots. During the day we passed many seals sleeping on the ice in the warm sun rays. The travelling on the ice was excellent most of the way, but the endurance of the Eskimo dog will nevertheless remain a mystery to me forever. It was midnight before we reached Cape York, or, as it is called by the natives, Innonginumi. The temperature was there as low as -21° F., probably caused by the extensive glaciers situated everywhere to the north and north-eastwards of the colony. I could just discover one star in the sky at midnight, which reminded me agreeably of the near approach of continuous sunlight. The natives of the place received us with their customary kindness, and were all eager to assist us in spite of the night's broken sleep.

The 12th, 13th, and 14th of April, we remained at Cape York, partly to give our dogs a rest, partly kept there by stormy weather. During this stay I spent my time as best I could, conversing with the natives of the place, and attending to their home concerts, where nearly the whole colony, with the exception of the children, who were not admitted, were present, to listen to the very strange and, according to my opinion, far from attractive song of the *Angekok*.

On the 15th, in the morning at six o'clock, we finally set out for the islands in Melville Bay, from where I hoped to get a good view of the coast in case it should be impracticable to reach this itself. As

we travelled along we passed the two only settlements east of Cape York, both situated on good-sized islands not shown on the map. Bushmann Island we passed on the south side, taking from there almost a due easterly course. At six p.m. we camped, after having travelled something over forty miles. We were then almost due south of a black and very conspicuous mountain-wall a little to the east of Cape Melville, and not over eight miles from the nearest shore. In the beautifully clear and balmy evening we could sight already the distant glacier which I had anticipated finding on the north-eastern shores of Melville Bay. In fact, all the way from Cape York and eastward, as far as I then could see, I found the coastline continually broken by large and active glaciers. The ice over which we travelled this first day from Cape York was very smooth and quite different from what I had expected. With the exception of a border of ice about a mile in width, the surface of which was composed of broken and irregular ice-pieces, often obtaining a height of from four to six feet, all the rest of the way was perfectly level and smooth. I think, however, that this was largely due to Koolootingwah's experience in ice navigation, as we always seemed to have plenty of broken ice on each side of us, but usually a clear road ahead.

After a night's comfortable rest in a snow igloo, we continued our journey the following morning at eight o'clock, in calm but somewhat hazy weather. At noon, land could be seen indistinctly to the north-east, but in the afternoon everything was again hidden in mist. We camped at five p.m., after having covered a distance of something near thirty miles; it was then snowing heavily. Also that day we had very level ice, but the sledge did not run quite as easily over the sand-like snow-drifts and through the

loose snow we had now come into. When we started the next morning we found that a few inches of snow had fallen during the night. The weather was still hazy, so no land could be sighted during the early part of the day; but at noon, just as everything looked most gloomy, the fog suddenly cleared away, and revealed to us a grand and impressive scene. High, dark mountains, gigantic glaciers, and lofty bluish-tinted snow-peaks, all illuminated by the brilliant rays of the sun, lay scattered along the horizon in wild disorder, and formed the attractive picture of Melville Bay. By following the east-south-east course, which we had entered the same morning, we reached in the afternoon a small lonely island at six o'clock, where I decided to stop over a day for surveying purposes. The island proved to be identical with Thom Island, on the map, and had in its centre a cone-shaped rock formation three to four hundred feet high, which would afford an excellent spot for a series of bearings to the mainland.

After another comfortable night in a snow house, we awoke and found the day perfect for the purpose we had in view. The air was unusually clear, and the most distant cliffs could be seen with remarkable clearness. I got a good observation of the sun, and also all desirable bearings to different points on the shore. The latitude given to this island on the map was $75^{\circ} 40'$, while my observation was nearly the same, or $75^{\circ} 41'$ and $44''$. The compass variation I found to be $88\frac{1}{2}$ west. I also drew some rough sketches of the shore-line, including several new islands, to assist my memory later on if necessary. Of the one hundred and fifty miles of coast land between Cape Melville and Red Head, which I could overlook from the summit of the little island, more than ninety miles consisted of large or small glaciers, all of which, with

very few exceptions, perhaps, I judged to be very active ones, as well on account of their broken and irregular surface, as on account of the enormous number of icebergs which everywhere were visible along the coast.

While speaking of the glaciers of Melville Bay, I will also mention that I could sight to the south of Red Head, the indistinct outline of an apparently large glacier, the southern border of which was either entirely below the horizon or too far distant to be seen. There can be little doubt that this glacier extends almost unbroken down to the region of Devil's Thumb, thus completing the largest successive series of glaciers hitherto found in Greenland.

In regard to the coast land itself, which here and there projected through the icy crust, nothing of unusual interest in regard to its geological characteristics could be discovered, although there must be here, as everywhere in North Greenland, an open and productive field for scientific investigation. The trap formation, with its gloomy colour in sharp contrast with the white snow-domes, appeared to be of frequent occurrence, while the coast in general was as usual of the archæan structure. The steep bluffs of the coast land nearest to the sea had a regular height of a couple of thousand feet, while the land in the background, wherever there was any, rose up to a considerably higher elevation. Thus the dome of Cape Walker had probably an altitude of over three thousand feet, while a lofty snow-covered dome, at least fifteen miles back from the coast-line, had the appearance of being not far from five thousand feet high. At Cape Melville there was quite an area of low land running out in a tongue to the southward, and in the distance looking very much as if it consisted of several islands, a conjecture which was denied by Koolootingwah. He

afterwards made me a sketch of that vicinity, which I have made use of while outlining this cape. This low land, which I only saw in the distance, was apparently composed of crystalline rocks (granite gneiss), as were all the lower islands which I had observed to the south. When I was through with my observations on the island, I built a small cairn on the summit, and placed in its centre a tin can containing a few notes regarding my journey.

While I was thus occupied ashore, Koolootingwah was out seal-hunting, as we needed some meat, both for ourselves and the dogs. He succeeded in killing one medium-sized specimen in less than an hour's time. I watched him creeping up to the animal, through my field-glass, until at last it looked as if he could touch the seal with his hand, from which position he fired and killed it. At the same time I observed in another direction on the ice between twenty-five and thirty seals in one single herd. With this addition to our fuel, provisions, and dog food I thought then of continuing upon our journey the following day, southward in the direction of the cape named Red Head, which place would be very favourable for some additional observations. The same day we observed the first snow-bunting of the season. When we looked out the following morning at five o'clock the weather had changed entirely. A strong southerly wind was blowing, filling the air with drifting snow. We had therefore to spend the day indoors, which would have been little enough pleasure for me but for my native companion, who told me many interesting facts illustrating the extreme pluck of these people during their hard existence in this remote region. Among other things he told me that the bear hunters of the tribe very frequently went over to the east side of Melville Bay, and also that the present condition of the ice

for sledge travelling was not exceptionally favourable. Further, I found that every landmark, glacier, or little island had its own native name and was quite familiar to Koolootingwah. Some bear hunters had even this spring (March month) been ashore somewhere near Red Head where they had seen tracks of deer, and the young hunter Kooko told me while I was at Cape York of the remarkable mountain peak ("Devil's Thumb") which he had sighted last year on one of his trips to the south side. Melville Monument (native, "Ooshookshua"), a small peaked island between Cape Walker and Cape Seddon, which seen from the south-west is shaped very much like the Devil's Thumb, seem to be perfectly familiar to every man in the tribe. Judging from my own experience in Melville Bay, and further from the information I have gathered from the natives, but principally from what I have seen myself of the travelling ability of the Whale-Sound natives, which is truly remarkable, I believe that there is no reason why they should not be able to communicate every year regularly with the most northern Danish settlements, if the necessary attractions were at hand. It would perhaps necessitate overland travelling in one or more places, but as their attributed superstitious fright for the inland with its great ice-cap does not exceed that of the average white man, this circumstance would be no serious objection to the practicability of this journey. It is true that their hunting and exploring trips have hitherto been limited to the more northern part of the same, but, from what I have gathered from themselves, this is by no means caused by open water or other hindrances, but alone by their perfect ignorance of the *close proximity* of their long-lost southern brethren.¹

¹ Some of Astrup's observations are not entirely in accordance with my own information, but it is not necessary to call attention to these *seriatim*.

Next morning was the 20th of April. A strong wind was still blowing from the south. All our dog food was gone, and of our provisions we had but enough left to last us ten days. I therefore decided, instead of working farther southward, it would be wiser to go up in the unknown north-east corner of the bay and continue the observations there, touching the shore at different places, and in this way at the same time work my way back to Cape York. I therefore set out at seven A.M. with the course directly for Cape Murdock, that is, the distant bluffs which, according to the map, I considered to be this cape. As I got near, however, I discovered that these steep cliffs were nothing but a lonely nunatak, situated far into the broken, irregular surface of an imposing glacier. By following my course we reached, at 1:30 P.M., a little island which on the inside almost touched the glacier face. As the place commanded a good view of the surrounding country, and as the fog which we had encountered in the morning had mostly cleared away, I told Koolootingwah to build our usual little snow house near the beach while I took the instrument and ascended the three- to four-hundred-foot-high summit of the island to get a few compass bearings. After a while I was visited by Koolootingwah, who also wanted to get a good view of this desolate corner of the great ice-fields of Melville Bay. But even to the modest native this place seemed to offer no attraction. The rocky ground was everywhere covered with large snow-drifts, swept down there by the frequent winds from the near glaciers. In some places where the rocks projected through the snow the old markings of former glacial activity could be observed.

The sights I got were not many on account of the returning mist, therefore I soon returned to the igloo,

marking the summit with a small mound of the few stones that could be found. A couple of yards away from our camp were some deep marks in the snow-drift close to a little iceberg where a bear had been digging for a seal hole not a long time before. The same or another bear had curiously enough been on a trip up to the top of the very bluff I had just visited. Koolootingwah told me afterwards that these animals often visit the shores to get the necessary vegetable addition to their diet. When we ate our supper that night we were suddenly attracted by the barkings of the dogs outside, and imagined at once that this was caused by the approach of a bear. In one second we were outside, but were unable to discover the least suspicion of an enemy. When I turned my eyes back to the igloo, I found that during my quick but ungraceful motion through our twelve-inch door-hole I had torn down very nearly half of the house. Koolootingwah and I were both very sad when we realised the enormity of the wreckage, which also included an overturned teapot.

The following morning at seven o'clock, we continued our journey in calm, misty weather. We had hardly travelled two hours when rounding a point of a small island we discovered a bear, not over half a mile away. By repeating the native word "*nannuk*" a few times, the dogs caught on to the fact and soon we were on a wild hunt after the giant, who almost on first sight of us had understood the danger of his situation and now trotted away as fast as his heavy limbs would carry him. Our dogs, however, gained rapidly on him, and when we were about three hundred yards away, Koolootingwah, who was sitting in front of me on the sledge, cut the line which holds all the dog traces, so as to set the dogs free. It now took them but a few seconds to reach the bear and stop

him. It was a fine sight to see them form a half-circle in front of the large beast, which now was kept busy in trying to ward off his enemies. Every time the bear attempted to jump on a dog with his fore paws, the dog jumped twice as far away in order to escape the blow, and in the meanwhile the dogs on the other side took this opportunity to attack the bear. A couple of minutes after the dogs had overtaken him, Koolootingwah and myself arrived at the place, armed with our rifles. We shot each three times before we had finished him. The skin was a large one and very beautiful. When we were through with the skinning we gave the dogs a good feed, cut off a piece also for ourselves, packed the sledge, and at ten A.M. we were again under way, with the course for an island about ten miles W. S. W. of yesterday's camp. Here I stopped a couple of hours to get an observation of latitude, and also a set of bearings. The latitude of the place I found to be $76^{\circ} 4' 20''$, but this result is not absolutely reliable, as the glass spirit-level of the telescope, since the last observation, had received a small crack while passing over some hummocky ice and lengthened the air bubble so much that it projected a good deal beyond the ends of the marked scale on the same. At 5:30 P.M., we made camp after an interesting but also very toilsome day. The weather was then clear. The going was soft and heavy, and with the additional weight of a bearskin and meat on the sledge, the dogs went on slowly, although one of us was usually walking. I think we made upwards of twenty-five miles that day.

The two following days, the 22d and 23d of April, during which we enjoyed the best of weather, brought us safely to Cape York. Here we remained the two next days, as the weather was stormy, and the dogs needed some rest. First, on the 26th at six A.M., we re-

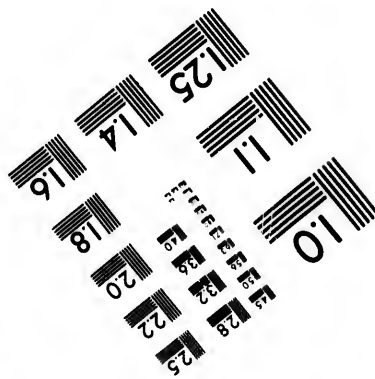
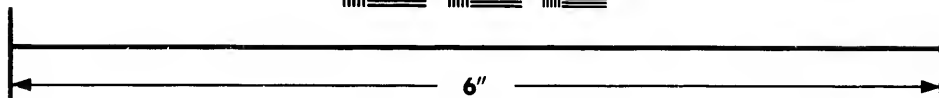
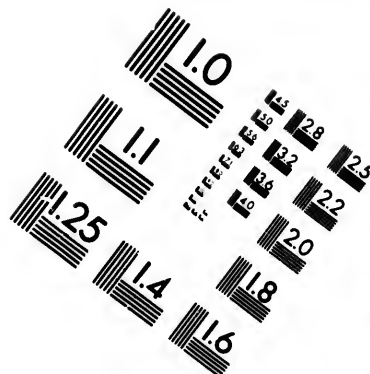
sumed our journey, no longer alone but in company with thirty-five natives, with eight sledges pulled by forty-five dogs. In other words, it was the whole Cape-York colony on the road, each family with their complete outfit of skins, harpoons, stoves, children, and meat. The cause for this great emigration was not scarcity of food at the colony, but rather a sudden attack of travelling fever, as the most of the families resolved to leave the place on the morning of the start. Before night many of them had left us, pitching their tents at different places along the coast. Only two sledges followed us to Whale Sound. We spent the night at the head of a little bay running into the west of Conical Rock (native, Ipsuischo). Here we also remained the following day, starting late in the afternoon to take advantage of the night for travelling. We advanced very rapidly and reached the western end of Saunders Island at four o'clock in the morning, where we made camp. On the south side of this island there is an Eskimo settlement named "Akpan," which, however, we did not visit as it was at that time deserted. There are here, as well as at Noxosimy, right opposite on the south side of Wolstenholm Sound, old igloos which long since have been abandoned by the natives on account of the intruding sea water.

Similar signs of a sinking coast-line were noticed near the Crimson Cliffs by Dr. Kane, who supposed the axis of the movement of oscillation, to which the whole Greenland land-mass is generally believed to be a subject, to be situated somewhere to the south of the 77th parallel. If there is really a depression of the southern and elevation of the northern part of the country going on, the position of the axis of this movement may, however, be situated somewhat farther to the north. My reasons for this supposition are partly based upon statements repeatedly made by a number

of reliable natives, some of whom were old men, namely, that the land is slowly sinking or, as they express it, "the water rising" both at Netchilumi and at the settlement Kieti on Northumberland Island (Lat. $77^{\circ} 15'$). It is only natural that these people, who invariably build their habitations so close to the beach-line, would observe even a comparatively slow change in the level of the sea, and I have no doubt about their reliability in this particular case. According to their statement, the axis would thus hardly be situated to the south of the 78th parallel.

Our camp on Saunders Island was situated in a large grotto, running in at sea-level under the south-west cape of the island, and was indeed a very picturesque one. According to Koolootingwah, the natives at times hunt walrus on a large scale in the open water to the westward of this island, principally on account of their tusks, as these animals are all full-grown males, while the walrus killed at Nerkey and Petowik usually are females and young ones. When we left Saunders Island the same night at 9:30 the sky was cloudless. Instead of going around the long crook of Cape Parry, I decided to go over the ice-cap from the head of Granville Bay to Whale Sound, as Koolootingwah knew this route and recommended it as very often being used by the natives. We therefore laid our course right in Granville Bay, the head of which we reached at six A.M. Here we started up the western of the two glaciers which come down almost to the water's edge at this place, and scaled the ice-cap due north until we reached a divide in an altitude which I should estimate to be fifteen hundred feet, and in a distance from the head of Granville Bay of about six miles. Our satisfaction was great when we sighted from this point the familiar scene of Whale Sound. After a quick slide of about two miles down the north side of the





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divide, and over a small and comparatively steep glacier on the west side of Olriks Bay at its mouth, we reached the sea ice at one P.M., and four hours afterwards the settlement of Noxomy. Here we ate our last meal and spent the last night of our pleasant journey.

The next morning we set out for home, where we were heartily welcomed, arriving, as I had carefully planned, in good time for supper.

In closing my report I will add with reference to the accompanying map that it is, as can be seen from the report, the result of a very rough and hurried survey, and can hardly be called more than a sketch map. The position of its main points around the north-east corner of Melville Bay are largely determined by sights taken from the three points of a large triangle, the sides of which were obtained by two single latitude observations. At your request, you will find enclosed also a profile of the coast-line, as seen from Thom Island.

Very respectfully

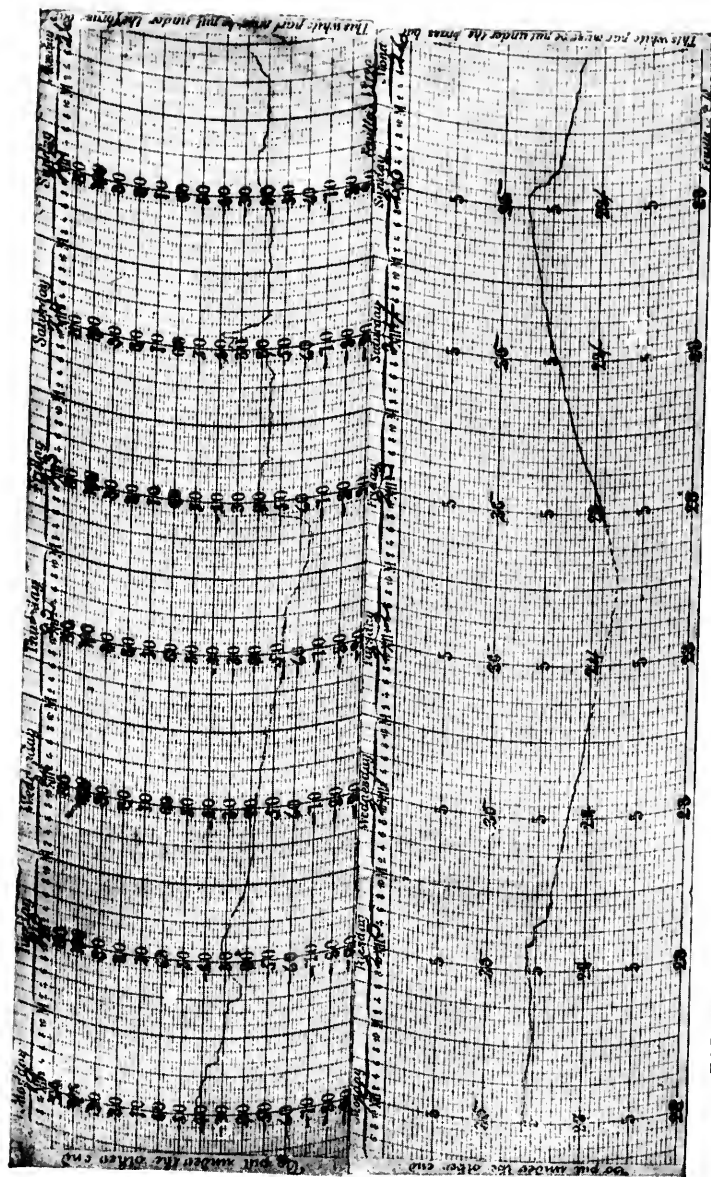
Your obedient servant,

EIVIND ASTRUP.



CHAPTER VIII.

METEOROLOGICAL AND AURORAL NOTES—BALDWIN.



FACSIMILE OF "THERMOGRAPH" AND "BAROGRAPH" SHEETS OF EQUINOCTIAL STORM,
MARCH 19 to 26, 1894.
One-half full size.

CHAPTER VIII.

METEOROLOGICAL AND AURORAL NOTES—BALDWIN.

ANNIVERSARY LODGE, August 15, 1894.



R. E. PEARY, C.E.,
U.S.N.,

*Commanding North-
Greenland Expedi-
tion, 1893-4.*

Sir:—I have the honour of submitting the following preliminary report of meteorological work done at this place from August 3, 1893, to August 1, 1894, and upon the Inland Ice from March 5 to April 27, 1894.

Through the courtesy of the Hon. Mark W. Harrington, Chief of the U. S. Weather Bureau, the meteorological equipment of the Expedition was supplemented by the use of an observatory, as required at all Weather-Bureau stations of the first order.

All deductions as to climatic conditions have fortunately been rendered more perfect by the satisfactory working of the barograph and thermograph, both during the Arctic night and the Inland-Ice sledge journey. Wind velocities are recorded as indicated

August, 1893.

Mean.	Maximum.	Minimum.
4.28°	59.0° on the 13th	29.0° on the 29th
29.713"	29.953" on the 27th	29.270" on the 25th

The weather was, in general, cloudy, with light showers on six different nights, from the south, pleasant and exhilarating, with light winds alternating from the north and south.

Mean.	Maximum.	Minimum.
30.5°	53.7° on the 4th	7.5° on the 30th
29.791"	30.373" on the 18th	29.032" on the 15th
<i>Temp. Soil :</i>	2 ft. . . . 36.4° on the 2d	31.6° on the 9th
	4 ft. . . . 33.8° on the 5th	30.3° on the 9th

From the 18th to the 20th, or during fifty-four consecutive hours, the wind velocity equalled 17.5 miles, attaining, on the 19th for eleven consecutive hours, a

Meteorological and Auroral Notes 179

velocity of 25.6 miles. Between eight A.M. and nine A.M. the velocity was thirty-eight miles, and for the next hour and a half a movement of sixty-three miles was registered (forty-two miles per hour).

On the 22d an average of seventeen miles (S. E.) for twenty-four hours, with a maximum average for the first eleven hours of twenty miles, was recorded.

High wind also prevailed during the 24th. It was at this time of violence that the boats *Mary Peary* and *Doris* were driven across the harbour, and the *Doris* hurled swiftly upon the rocks of the shore. The destruction of the observatory also was averted only by the prompt action of the natives, who clung bodily to its supports, just as it started from its fastenings. At this crisis I was assisting you in rescuing the boats, and could not, therefore, determine by register the maximum rate of the wind, but it was, beyond a doubt, for a space of fifteen minutes, from fifty-five to sixty miles per hour, as estimated by five-minute averages at various times during the storm.

October, 1893.

Temperature and Pressure :

Mean.	Maximum.	Minimum.
23.0°	45.0° on the 10th	1.5° on the 30th
29.804"	30.413" on the 4th	28.836" on the 26th
<i>Temp. Soil :</i>	2 ft. . . . 32.1° on the 13th	18.8° on the 31st
	4 ft. . . . 31.4° on the 1st	25.0° on the 29th

But three days of clear weather, viz., 2d, 17th, and 18th. Precipitation (in nearly every instance snow) inclusively as follows : 7th, 9-15th, 19-28th, and 31st. Notes :—16th, Sun bright ; clouds crimson and of various striking hues. One great cloud in the west appeared like a huge ball of fire resting upon the ice-cap. 21st : Weird aspects of the moon seen through

thick fall of snow; its reflection made it appear to be in the south-west on the snow-capped cliffs overlooking the bay. A moment later its cloud and snow shield passed away, and it shone forth in true arctic splendour directly in the south at the entrance of the bay. 22d: Beautiful clear moonlight night, pink-coloured horizon in the south, and stars shining like diamonds. Bay freezing and no motion of water perceptible. Silvery streak of moonlight extending southward on the forming ice, the entire length of the bay. 25th: High wind from eleven p.m. of yesterday to six p.m. to-day. Weather at this hour (nine p.m.) from effects of south-east cloud-blanketing, calm, warm, delightful. Moon endeavouring to wear corona. 26th: Last day of possible sunshine. Sun not visible, but position defined from 11:30 A.M. to twelve M. by bright streak of light on clouds in south. Moon hazy—coronal—during day. Clouds, driven by light wind, passed through cirro-cumulus, cirro-stratus, and stratus stages to nimbus, with snow from five p.m. to nine p.m. 27th, A.M.: Effects of sunlight on clouds over south of bay very fine—colouring of deep orange varying in intensity on clouds of changing form. 30th, forenoon: Reflection of clouds produced pleasing "just-before-sunrise" effects, and yet a depressing sensation as the thought that the sun would not rise grew upon one; it seemed as though it would and must appear.

From the 8th to the 31st inclusive, high south-east winds prevailed almost constantly, with an hourly average for the entire month of 11.1 miles. From two p.m. of the 9th to two p.m. of the 12th, the average velocity was 17.3 miles, with a maximum average velocity for eleven hours on the 9th and 10th of 25.1 miles. On the 17th for a space of nineteen hours the average velocity was 18.6 miles. Between eight A.M.

Meteorological and Auroral Notes 181

of the 19th and two P.M. of the 20th, the wind attained an average velocity of 20.9 miles, with a maximum eleven-hour velocity of 25.6 miles. Forty-three hours commencing at eight A.M. of the 23d, the average was 28.4 miles, with a maximum six-hourly average of 32.5 miles, ending at two P.M. of the 24th. From eight A.M. to nine P.M. of the 28th, the average velocity was 19.3 miles, while for seven hours preceding nine P.M. of the 31st it was 21.3 miles.

November, 1893.

Temperature and Pressure :

Mean.	Maximum.	Minimum.
-7.7°	30.0° on the 5th	-23.0° on the 29th
30.098"	30.318" on the 23d	29.045" on the 18th
<i>Temp. Soil:</i> {	2 ft., 18.2° on the 1st	6.0° on the 28th
	4 ft., 23.2° on the 1st	14.0° on the 28th

Notes:—1st: Temperature touched zero for the first time this season. Thickness of ice on lake north of lodge, 4.25 inches; on bay, 17.12 inches. 5th: Maximum temperature occurred. At 10:30 A.M. cumulo-stratus clouds over south portion of bay and over gulf beyond were gorgeously coloured: to the right and extending over the ice-capped cliffs was a vast canopy of the deepest rose-red; to the left, a rich field of gold; later these became rose-red, partially overveiled with a thin bronze-hued cloud. 6th, ten A.M. to two P.M.: Diffused daylight generated by snow-filled clouds; fine cloud colouring; nine P.M., "dead calm" and snow falling perpendicularly.

The wind this month made an hourly average of 10.7 miles for eleven-hour periods on the following dates (nine P.M. to eight A.M.): 1st-2d, 6th, 9-11th, 17th, 23d-24th; of 13.6 for six-hour periods on the 2d, 9th,

182 Northward over the "Great Ice"

18-19th. On the 5th occurred a maximum velocity of 26.7 miles for seven hours, with a maximum single-hour velocity of 33 miles between six and seven P.M. The average for all winds during the month was 6.7 miles per hour.

For September, October, and November the average for all winds was 7.5 miles per hour.

December, 1893.

Temperature and Pressure :

Mean.	Maximum.	Minimum.
-17.4°	14.7° on the 3d	-26.4° on the 18th
29.624"	30.300" on the 17th	29.117" on the 4th
<i>Temp. Soil :</i> { 2 ft. . . . 1.0° on the 4-6th -10.0° on the 26-30th		
{ 4 ft. . . . 12.0° on the 1st -2.0° on the 30th		

Prevailingly cloudless. Sky rich blue. 26th., A.M. : Very quiet, peculiarly arctic, clear, and pleasant. Light cirrus band in zenith extending in south and north-west direction ; bright southern horizon, the entire celestial dome richly contrasting in colour,—red of horizon, white of upper daylight as cast by the sun of more southern latitudes, and blue of the north polar sky. Auroral light and the silvery moon now circling the horizon,—beautiful moonlight days, and still more beautiful moonlight nights.

January, 1894.

Temperature and Pressure :

Mean.	Maximum.	Minimum.
-22.2°	5.0° on the 21st	-34.0° on the 17th
29.754"	30.219" on the 17th	28.923" on the 3d
<i>Temp. Soil :</i> { 2 ft. . . . -7.0° on the 3d -15.0° on the 19th		
{ 4 ft. . . . 1.0° on the 1st & 4th -4.0° on the 28th		

Meteorological and Auroral Notes 183

Generally "clear," with light falls of snow, usually from the south-east, on the following dates: 1st, 2d, 5th, 12-16th, and 21st.

On the first, the New Year opened with cloudy sky and general gloomy conditions of weather. At eight A.M., but two or three of the brightest stars were dimly visible. Snow from ten A.M. to nine P.M. Dark at three P.M. 5th: Light of returning sun much augmented at mid-day. Outlines of distant cliffs more clearly discernible and light thrown higher above southern horizon. 20th: Storm began at nine P.M. with wind blowing at twelve miles per hour. 21st: Storm continues; vast snow-clouds blowing from the north-east off ice-cap and over cliffs. Maximum single-hour velocity of wind twenty-four miles from seven to eight P.M.

February, 1894.

Temperature and Pressure:

Mean.	Maximum.	Minimum.
-24.0°	-3.0° on the 17th	-31.2° on the 1st
29.284"	30.014" on the 9th	28.849" on the 16th
<i>Temp. Soil:</i> { 2 ft. -13.0° on the 20th -21.0° on the 6th		
{ 4 ft. -6.0° on the 1st -10.0° on the 11th, 14th, 16th		

Clear during first half of the month, but cloudy, with frequent south-east snowfalls, during the second half.

5th: Barometer low (28.980", same as minimum observed at Fort Conger). 7th: Barometer again low (28.928"). 15th: Lunar corona visible in the east about 2:30 P.M., changing to halo somewhat later and visible as such till 8:30 P.M. Sunset clouds in the west of a beautiful rose colour. Sun barely visible near the lodge for the first time this year (1894).

184 Northward over the "Great Ice"

16th: Very low barometer. Pink colours on western sky remarkably fine, particularly those lying in bands, having the appearance of "pink auroras." Violet hues in the north, very striking, the returning sun re-painting the scenes of autumn.

March, 1894.

Temperature (eleven days last of month):

Mean.	Maximum.	Minimum.
-12.7°	10.0° on the 29th	-31.5° on the 20th
<i>Temp. Soil:</i> {	2 ft. . . . -14.0° on the 4th	-15.0° on the 2d
	4 ft. . . . -8.0° on the 4th	-8.5° on the 2d

The soil thermometers were read on the 2d and 4th only, just before my departure with you on the Inland-Ice sledging journey. These readings, however, in connection with others noted during the last of February, indicate a seasonal rise in the temperature of the soil.

Barometer readings at Anniversary Lodge incomplete, but may be practically obtained by reduction of barograph and aneroid readings made on the Inland Ice.

20th: High north wind at nine p.m., but calm and clear during the day. 21st: High north wind, with short calms. Air filled with snow crystals. Observatory destroyed during the night of 21st and 22d,—fragments of it having been blown two miles away on the ice of the bay. 28th: Violent storm on the Inland Ice, indicated by vast dark clouds of snow, carried with extreme velocity and at great height (above the loftiest surrounding peaks) far beyond the land border. 29th and 30th: Clear at the lodge, but still drifting violently on the ice-cap.

Meteorological and Auroral Notes 185

April, 1894.

Temperature and Pressure :

Mean.	Maximum.	Minimum.
-2.4°	17.0° on the 26th	-26.0° on the 1st
29.926"	30.615" on the 10th	29.098" on the 23d

Generally north-east wind (light at the lodge), but high on the 9th. Clear sky, with light snows on the 20th, 21st, and 26th.

May, 1894.

Temperature and Pressure :

Mean.	Maximum.	Minimum.						
27.0°	47.0° on the 24th	-2.0° on the 11th						
30.097"	30.860" on the 17th	29.602" on the 4th						
<i>Temp. soil :</i>								
<table> <tr> <td>2 ft. . . .</td><td>22.0° on the 31st</td><td>2.5° on the 4th</td></tr> <tr> <td>4 ft. . . .</td><td>13.0° on the 31st</td><td>0.5° on the 4th</td></tr> </table>			2 ft. . . .	22.0° on the 31st	2.5° on the 4th	4 ft. . . .	13.0° on the 31st	0.5° on the 4th
2 ft. . . .	22.0° on the 31st	2.5° on the 4th						
4 ft. . . .	13.0° on the 31st	0.5° on the 4th						

Generally calm, varied by light breezes from the south-east or south-west during the forenoons. Two p.m. and nine p.m. observations show frequent north-east or north-west winds with general cloudiness of sky and ten different days on which snow fell.

7th : Heavy snow-storm on the ice-cap. 24th, p.m. : Warm—oppressive to person exercising,—caused by thick cloud-blanketing. Clouds moving briskly from the south-east and having rainy appearance, followed by snow and much wind during the afternoon of the 25th. 27th : At evening, sky cloudless, but at six p.m. became gradually overcast with cirrus clouds. In the north-west, halo around sun, radius 26° and on upper limb, arc of second ring. Disappeared at end of two hours, with change of cirrus clouds to cirro-stratus form. 28th : Snow-storm ; thick on ice-cap. On the

186 Northward over the "Great Ice"

29th occurred high wind with velocity of twenty miles per hour. Snowfall; flakes large and beautiful. 30th. Storm continued—heavy on ice-cap; snowflakes small and round.

June, 1894.

Temperature and Pressure :

Mean.	Maximum.	Minimum.
35.5°	50.0° on the 9th	20.0° on the 5th
29.630"	30.163" on the 11th	29.168" on the 15th

Generally cloudy, with much fog, accompanied by light south-east breezes during the last ten days of the month. Leads and pools forming in the ice of the bay and gulf, and snow rapidly melting from the slopes.

10th: Brook east of lodge running in large volume. About four inches of snow fell during the night. 11th and 12th: Fog. 14th, 10:45 P.M.: Barometer (reduced) 29.235 (within .07 of the minimum), high north wind, with heavy drift on the Inland Ice and on the bay. Articles, such as boards, oars, barrels, and trunks, carried violently away.

July, 1894.

Temperature and Pressure :

Mean.	Maximum.	Minimum.
39.7°	52.0° on the 22d	25.0° on the 28th
29.765"	30.131" on the 30th	29.413" on the 21st

Cloudy, with fog during the first half, but clear and "calm"—delightful—during the last days of the month.

Meteorological and Auroral Notes 187

RÉSUMÉ

Month.	Temperature (in degrees).			*Pressure (in inches).		
	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.
August, 1893....	42.8	59.0	29.0	29.713	29.953	29.270
September, "	39.5	53.7	7.5	29.791	30.373	29.032
October, "	23.0	45.0	1.5	29.804	30.413	28.830
November, "	- 7.7	30.0	- 23.0	30.008	30.318	29.045
December, "	-17.4	14.7	-26.4	29.024	30.300	29.117
January, 1894....	-22.2	5.0	-34.0	29.754	30.219	28.923
February, "	-24.0	- 3.0	-34.2	29.284	30.014	28.849
March, "	-12.7	10.0	-31.5			
April, "	- 2.4	17.0	-26.0	29.926	30.615	29.008
May, "	27.0	47.0	- 2.0	30.097	30.860	29.602
June, "	35.5	50.0	20.0	29.630	30.163	29.168
July, "	39.7	52.0	25.0	29.765	30.131	29.413
Means.....	9.3	31.7	- 7.8	29.708	30.305	29.123

* Mean for August, eleven days (last of month); for year, eleven months (March wanting).

Very respectfully,

E. B. BALDWIN,

Meteorologist Expedition.

ANNIVERSARY LODGE, Aug. 7, 1894.

R. E. PEARY, C.E., U.S.N.,

Commanding North-Greenland Expedition, 1893-4.

Dear Sir:—In compliance with your request of July 12th, for separate special report of the equinoctial storm encountered by the Inland-Ice party, I have the honour to submit the following:

From seven P.M. of March 15th, the barograph (checked by aneroids) fell, with very slight variations, from a reading of 24.98 inches on that date, to one of 24.60 inches at four P.M. of March 20th, the observatory sledge meanwhile having been advanced a distance of five miles over a practically level surface at

an elevation of over six-sevenths of a mile. Thence seven miles to Camp No. 4, now better known as Camp Equinoctial. A rise in elevation caused a corresponding depression of the barograph pen to a reading of 24.40 inches at eight P.M. of the 20th. Taking this as an initial point for storm data, we find the following:

From eight P.M. of the 20th to nine A.M. of the 21st (thirteen hours), a barographic depression of .15 inch; constant thermographic depression from -32.0° to -39.5° (-42.0° by thermometer exposed to wind); average wind velocity, twenty-nine miles.

From nine A.M. to 4:30 P.M. ($7\frac{1}{2}$ hours), a barographic depression of .11 inch; thermographic -39.5° to -40.5° (-44.0° by thermometer exposed six feet above the thermograph); average wind velocity, 31.5 miles.

From 4:30 P.M. to 7:15 P.M. ($2\frac{3}{4}$ hours), a barographic depression of .04 inch; thermographic, -40.5° to -42.0° (-46.5° by thermometer); average wind velocity, 38.2 miles.

From 7:15 P.M. March 21st to four A.M. of the 22d, the barograph suffered a depression of .10 inch, at which time the pen passed below the 24-inch registration line, this being the limit to which the instrument had been set. The thermograph meanwhile continued to decline till eight A.M. of the 22d, at which hour the pen passed below the -50.0° line, the lowest at which it seemed advisable to set the instrument without injury to its mechanism through manipulation in such low temperatures.

During the 22d, the fury of the storm was at its worst, rendering it impossible to get at the instruments, the wind movement alone being noted by the dial of the anemometer. In these readings you kindly assisted, and great care was exercised in observing the regis-

tration numbers, the violence of the storm suggesting double vigilance. The four readings made from 7:15 P.M. March 21st to five A.M. March 23d give a total movement, in $33\frac{3}{4}$ consecutive hours, of 162.4 miles, or at an average of 48.1 miles per hour.

At ten A.M. of the 23d, a reading of the surveying aneroid, which for eight months had tallied closely with the barograph, indicated an atmospheric pressure of 23.90 inches, the tendency then being upward, in which manner it continued at a nearly uniform rate for fifty hours, or till noon of the 25th, at which time it registered 24.75 inches, this being nearly the normal for several days preceding the storm. We may therefore conclude that the barograph reached a minimum of at least 23.80 inches about midnight of the 22d, and that this low pressure, in connection with an induced gravity impulse of the colder and heavier atmosphere rushing from the Inland-Ice plateau lying to the east and north-east still another mile above the camp, gave rise to a storm of extraordinary violence.

The thermograph indicated a temperature constantly below the -50° line, rising to -43° (same by thermometer exposed) at ten A.M., and to a maximum for the day of -39° at one P.M.; the maximum for the mid-day hours of the two days preceding being -51° on the 22d and -42° on the 21st.

The minimum temperature for the night of the 22d was probably not higher than -60° .

For thirty-eight hours during which the thermograph fell to minimums for the three preceding nights, we obtain an average rate of decrease of temperature of $.79^{\circ}$ per hour. Owing to the tension of the spring which regulates the elevation of the pen of the thermograph increasing with a decrease of temperature, the thermograph registered from three degrees to

three and a half degrees too high when the thermometer (with corrections applied) indicated a true temperature of from -41.8° to -45.0° .

Instead, therefore, of a temperature of -50.0° at eight P.M. of the 22d we should have one of -53.0° . Adding to this 12° obtained as a total decrease of temperature for the fourteen hours succeeding, at a uniform rate of $.79^{\circ}$ per hour, we obtain *a minimum of -65° , and certainly not higher than -60° .* In all cases Fahrenheit degrees are meant.

The appended sheets from the barograph and thermograph indicate the atmospheric pressure and temperature from eleven A.M. March 19th to eleven A.M. March 26th. The dotted lines refer to interpolations. It will thus appear that *the average temperature during the thirty-four hours of greatest wind velocity was below -50° F.*

The wind direction was as follows: from the north-west during the night of the 19th and forenoon of the 20th; from the north-east thereafter, with much calm during the 24th, and again high from the east on the 25th. Wind velocities are given as indicated by Robinson's anemometer. This instrument, together with the thermograph and barograph, is of the same pattern as used at all U. S. Weather Bureau stations of the first order.

The thermometers used were specially manufactured for your Expedition of 1891-2 by Green of New York. They were at that time corrected by Professor Marvin of the Weather Bureau and recompared by the same high authority in June, 1893. They will again be tested upon the return of the present Expedition.

Very respectfully,

E. B. BALDWIN,

Meteorologist Expedition.

Meteorological and Auroral Notes 191

AURORAL NOTES.

October, 1893.

Hourly watch for the appearance of auroræ, and notes, whether visible or not, were begun on the 15th of this month, and continued regularly thereafter till the 1st of March. None occurred, however, during October.

November, 1893.

Auroræ visible: 10th, 6 A.M.; 11th, 5 A.M.; 16th, 3 A.M.; 27th, 4-8 P.M.; 29th, 7 P.M.; 30th, 11 P.M.—or on ten different watch hours.

10th.—The thermometer stands at 10° below zero, and a breeze from the north-east comes from the ice-cap. See that yellowish-white arch, perfect in form, uniform in density, spanning the heavens from west to east! *Leo, Cancer, Gemini, Taurus*,—this portion of the zodiac seems veiled in the golden hue.

Three minutes pass—the light is fading fast away. Now turn—look to the north! There, from ten to fifteen degrees below *Polaris*, before—even upon—*Cephus, Cassiopeia, Perseus*, and far towards *Auriga*, appears a series of ascending beams of light, a train of “merry dancers,” performing in the presence of this celestial audience. But two minutes pass, and arch and beam have alike disappeared forever in the east.

16th.—Aurora visible in the south between three and four A.M. Complete arch from west to east, much obscured by hazy condition of the atmosphere. Highest point of the convex edge 18° above the horizon. 4:10 A.M., arch becomes double, each one 2° in width, with dark space or segment 1° wide lying between. Lower arch passing over star *Procyon*, and both arches grad-

ually disappearing from the ends towards the middle points, vanishing, finally, as a luminous patch.

27th.—Aurora or auroræ began at 4:20 P.M., forming parallel bands or arches extending from north-west to south-east. Varying in tenuity, the arches appear to move as semicircles from the north-east to the south-west. Continuing as described till 7:45 to 8 P.M., one of the arches forms itself into a luminous curtain, covering *Pleiades*, *Polaris*, head of *Draco* and the body of *Hercules*. In the north a lunar halo accompanies the appearance of the aurora from 4:20 to 5:30 P.M.

29th.—At seven P.M. auroræ very similar to those noted on the 27th appear and continue for the space of fifteen minutes. Hanging as four luminous curtains of moderate brightness they extend from west to east across the sky, the northernmost at its middle convex point rising, in altitude, 10° above the horizon, and, appearing to wave from west to east, finally disappears in that quarter; the next, extending from horizon to the opposite point, gradually fades away equally at all points; the third and fourth, separated by a space of 5° , spread or rather vault from east to west, their middle convex points being elevated from the southern horizon about 45° and 40° respectively. All of these are noticed to be of greater luminosity in their eastern portions, their final disappearance being marked by luminous patches having the appearance of the glowing of distant fire.

Weather: cloudless, with slight breeze from the north-east.

A bright curtain at eleven P.M. extending from south-west to north-east, and covering the head of *Cetus*, body of *Orion*, and the feet of *Gemini*. A north-east breeze accompanies a temperature of -20° F. In ten minutes' time it has quite disap-

peared, only to reappear in four minutes as a bright curtain waving in the south-west and a luminous patch in the north-east. Now changes the curtain-like portion to a shining mass, forked like a Y at the most distant point in the south-west, the entire display soon ceasing up to the body of *Orion*, whence there suddenly springs an arch far into the north-east; which, disappearing, is immediately followed by streamers shooting up with lightning-like rapidity in the south-west, only to change into curtains folding themselves towards the north-east, encircling, as it were, *Orion* with a silvery vest, its upper edge ornamented by *Betelgeux* and *Bellatrix*, its lower, by the starry *Bell*. At 11:17 we note the changing tints of green in this particular place. Yet another minute and our curtain portion gives way to several beams, or "merry dancers," in the south-west, flitting farther towards the north-east and nearer bold *Orion*, and seeming to vie with each other in efforts to stand highest.

But their merry-making is of short duration. They vanish; a light from the deep south-west diffuses itself onward and upward, covering the head of *Cetus* with remarkable brightness, at which moment there suddenly plunges from near *Hyades* a brilliant meteor, precipitating itself in the direction of *Mekar* and *Mira*, and followed in like manner, three minutes later, by a second—both coursing through the over-spread brightness into the very jaws of the celestial *Whale*.

And now, progressing by degrees, this luminosity extends itself in one long belt, covering *Orion*, the limbs of *Pollux*, *Cancer* and the on-coming *Leo*, sinking lower and lower towards the southern horizon, seeming to form into illumined clouds of the stratus variety, which, finally dissipating themselves, leave the celestial dome again free and undimmed.

December, 1893.

Auroræ: 5th, 9-10 P.M.; 6th, 4 A.M.; 7th, 7-8 A.M., 10 A.M., 5 P.M.; 8th, 4 A.M.; 9th, 6 A.M.; 10th, 4 A.M.; 11th, 9-10 A.M.; 12th, 11 P.M.; 13th, 9-10 P.M., 12 midnight; 15th, 10 P.M., 3 A.M., 10 A.M.; 25th, 9 A.M.; 29th, 9-10 P.M.; 30th, 7-10 A.M., 10-11 P.M.—or on twenty-eight different hours.

We look upon the northern horizon at nine o'clock to-night and observe a yellowish light thinly veiling the stars, thence upward twenty degrees, and this bordered by a deeply contrasting *blackness* some four or five degrees wide, and it in turn gradually shading into a whitish mantle of cirrus gauze covering the remainder of radiant space through which the south seems to shine with the softened paleness of southern zones.

East is *Gemini* resting upon Mt. Bartlett. South-east is *Orion* slowly advancing westward. North are *Virgo* and *Coma Berenices* bathing in the flaxen flood. The *Leos*, *Major* and *Minor*, are submerged. They seem to rouse their shaggy selves and shaft and flame spring forth. The clock strikes the half-hour upon 9:30; 't is the death-knell of the unsuspecting *Lynx*! In quick succession *Cancer* and *Gemini* join the fray, hurling their burnished beams straight up. And now, directing their fiery flight by true-eyed *Betelgeux* and *Bellatrix*, from giant *Orion*, handsome hunter of the heavens, red and green-edged lances leap. "The very 'Pillars of Hercules'!" exclaims Lieutenant Peary as he views the scene. And so think all of us, as we continue to gaze till the last lance is thrown, till the final flare ceases at the stroke of ten, and we are again awed by the accustomed stillness of the arctic night.

7th.—It is three o'clock in the afternoon and a thin

band of whitish light stretches across the sky from north-east to south-west, thus forming a complete arch. Not a cloud is to be seen, and therefore we cannot attribute its existence to cloud illumination.

In tracing its course with reference to the constellations and the brighter stars, you begin at *Alpha* and *Delta Persei*, pass along this elevated pathway across the limbs of *Cassiopeia*, loins of *Cepheus*, body and head of *Draco*, and body of *Hercules*, where, between *Ras Al Gethi* (α *Herculis*) and *Ras Al Hague* (α *Ophiuchi*), it terminates.

Immediately in our zenith it revolves as a vast semicircle, uniformly to the westward, or at right angles to its projection in the heavens, when, arriving at *Polaris*, it gradually dies away. The surface wind meanwhile has been from the north-west.

It scarcely dissolves itself ere, at 4:15, there appears a second, forming itself as an undulating curtain, spiked on high by the golden *Unuk* and *Serpens*, *Alpheta* (α *Corona Borealis*), *Mirac*, *Cor Caroli*, at which point the curtain form ceases; it thence passing over *Ursa Major*, and finally settling on the rump of the *Lynx*, completes itself as an arch. Incidentally we note the flight of a brighter meteor from its convex point and directly along its course to the south-west. We should also have noticed the descent in the opposite direction of two meteors which followed the track of the former arch.

At 4:25 all this vanishes, and we wait till 4:55, when from the *Sickle*, or head of *Leo*, now in the west of north, there is seen a clear tinge of red spreading to the head of *Leo Minor*, and thence passing into a diffused white light, extending completely round the horizon. A moment after five o'clock we note the reappearance of the glow in the north-west, red-green in colour, and soon followed by a red beam shooting

suddenly upward eight or ten degrees from the jaws of *Leo*. These fading away, naught auroral is visible save the yellowish light which rests everywhere upon the horizon.

The watch ticks its way to 5:18, a semicircle of light once more grows downward from our almost polar zenith, westward to *Ras Al Gethi* and *Ras Al Hague*, eastward to *Alpha* and *Delta Persci*.

Thus it occupies, with reference to the constellations, almost the same position as at first—two hours eighteen minutes earlier. In other words, it has followed the sun in his course *westward*, or, plainer, remained stationary during the revolution of the earth two hours eighteen minutes *eastward*.

At 5:28 we observe that it has split into two semicircles separated by an intervening space of two degrees' width, the terminal points, however, still resting, as stated, on *Perscus* and *Hercules*. Three minutes later these again integrate, revolving steadily north-westward, till, hanging upon the *Big Dipper*, or *Ursa Major*, we mark a total disappearance of the band at 5:45 P.M.

11th.—Light-coloured arch, appearing in the west at 9:45 A.M., extending from north to south generally, follows the course of stars *Lambda* and *Gamma Geminorum*, *Cancer*, body of *Leo Major*, rises at ten A.M. to *Leo Minor*, revolving thence to *Psi Ursa Major*, *Cor Caroli*, *Mirac*, *Alpheta*, and finishes at *Beta* and *Zeta Herculis*. Visible one hour.

13th.—Aurora of arch form visible from nine P.M. to 10:20 P.M. extends from *Mira* and *Menkar* to *Mirac* and *Arcturus*, covering stars immediately below *Algenib* and *Markab*, *Pisces*, *Equuleus*, *Delphinus*, *Aquila*, *Taurus*, *Pons*, *Ras Al Hague*, *Ras Al Gethi*, and *Alpheta*.

15th.—Auroral arch noted at 2:30 A.M., covering

stars in the head of *Hydra*, *Canis Minor*, head of *Monoceros* and body of *Orion*. Luminous spots alternating at ten-minute intervals in the south-east. At 3:30 the arch covers the hind quarters of *Leo Major*, *Sextans*, neck of *Hydra*, hind-quarters and limb of *Monoceros* and upper portion of *Argo*, from which at 3:40 A.M., a bright light diffuses itself, the entire arch gradually disappearing shortly afterwards.

Between ten A.M. and 10:12 A.M. an evanescent auroral arch, covering *Pleiades*, *Perseus*, *Camelopardus*, *Polaris*, *Ursa Minor*, *Draco*, and *Hercules*, revolves as a vast semicircle to *Auriga*, head of the *Lynx*, *Ursa Major*, *Corona Borealis*, and the head of *Serpens*.

29th.—9:50 P.M. auroral beams, twenty degrees in height, visible in the south-west, shift rapidly eastward, and seem to cross, in stately file by means of a bridge of dark, low-lying stratus clouds, the ice and waters of Inglefield Gulf in the south, and to terminate in the south-east, covering, as they march, *Menkar* and *Mira* (*Alpha* and *Theta Ceti*), belt of *Orion* (*Delta*, *Epsilon*, *Zeta*) and *Procyon* (*Alpha Canis Minoris*).

10:05 P.M. These form themselves into an arch from *Orion* to *Procyon*, and extending thence in close array to the limbs of *Gemini*.

10:18 P.M. Nearly vanish, but almost immediately reappear.

10:24 P.M. Disappears, but succeeded by a single ghost-like tower of light stalking from the south-west towards *Rigel* (*Beta Orionis*), and finally, at 10:30 P.M., dissipating itself with a hazy group of beams near the lower limbs of *Orion*.

30th.—7:55 A.M. brings us a gentle breeze from the north-east and a temperature of -19° F. Stretching gracefully across the sky from north-west to south-east, hangs a complete auroral curtain, its light somewhat dimmed by the reflected light of the moon, just now

sunk beneath the horizon in the south-west, and the refracted light of the slowly returning sun. *Gemini*, *Cancer*, *Leo Minor*, *Canes Venatici*, *Boötes*, *Serpens*, *Hercules*, and *Ophiuchus* combine to agitate it into greater intensity and richer contrast against the clear dark-blue of the northern heavens.

But now the silvery curtain-folds knot themselves into a series of electric balls suspended in the same arch order. One of them descends, covering the head of *Leo Major*, which also now receives a meteoric arrow direct from *Boötes*. A second mass is seen resting upon the rump of *Ursa Major*, filling the bowl of the *Big Dipper*, and rising in luminous fermentation to the lips of *Ursa Minor*.

Now to the south-east see that reddish tinge. To the north-west behold the delicate intermingling of red and green. Yet look still farther beyond yon rocky ridge, past the awful chasms of Bowdoin Glacier, over and upon the silent fields of the eternal ice-cap—*what spectacle rises there!* A bright spot, a fiery mass, a gorgeous tabernacle of colour, red and green, it grows, elevating itself from the low-circling *Gemini* to *Canes Venatici*, a coruscating semi-arch of splendour. 8:15 A.M. arrives, and this too has crumbled, all save a grotesque patch resting upon *Cancer*, whence there presently protrudes a long arm, reaching even to *Polaris*, and soon followed by a second, grasping finally *Cor Caroli*. Here imagination at once associates these protuberances with the claws of the celestial *Crab*, greatly elongated.

We note 9:30 o'clock. Form vanishes; distortion succeeds. Broken shafts, walls, columns, and heaps of the electric debris lie scattered where former symmetry prevailed. Slowly northward, past *Polaris*, even to *Cassiopeia*, are these evanescent and scattered ruins carried.

Meanwhile the *Gemini*, undiscouraged, have constructed a second house of purple and scarlet and pushed it likewise onward and upward, only to see it fall rapidly into destruction as the watch notes 10:50 A.M.

30th.—We have just "turned in" at 1:30 P.M., when Mr. Lee calls us to view a scene of weird grandeur. A double aurora, parallel arches spanning the heavens from south to north: the easternmost arch springing from the feet of *Gemini*, crossing *Auriga*, *Cassiopeia*, and *Cepheus*, and resting finally upon *Lyra*; the westernmost, o'ervaulting *Taurus*, *Algol Persei*, *Andromeda*, *Lacerta*, and *Cygnus*.

The clouds afire! we exclaim, as the electric flames flash upon and among the forms of black stratus clouds, now scudding away in scattered planes before a brisk vapour-laden wind from the south-east.

January, 1894.

Observation of auroras as follows:

2d, 7-10 A.M., 6-8 P.M.; 3d, 6-7 A.M.; 4th, 5-7 A.M.; 12th, 4 P.M., 6 P.M., 9 P.M.-12 M.; 13th, 12 midnight to 5 A.M.; 27th, 5-6 A.M.—or on twenty-six different hours.

2d.—At 6:15 P.M. of January 2d, our nation's Capitol and the Agricultural Building at the World's Columbian Exposition are vividly brought to mind by the appearance, in the south, of an aurora taking the form and proportions of the main pediments to those structures, the figure of speech in the second instance being intensified by the tympanum ornamentation formed over the constellations, *Taurus*, *Aries*, *Pisces*, and *Pegasus*—the *Bull*, the *Ram*, the *Fishes*, and the *Winged Horse*.

Five, —six, —seven minutes pass, and three parallel arches succeed one another in o'erspanning the south-

ern heavens. 6:23 by the watch, a bright nebulous space surrounds the pole star. But now, between this and the third arch, a fourth, even more radiant than the rest, bids us exclaim, "The Golden Door!" as we recall the feature of the now world-famed Transportation Building.

Beams, "patches," striæ of light ensue. At 6:45 the entire southern half of the heavens is illuminated, the rays converging towards the zenith. Northward moves this spacious semi-dome, meeting finally a fifth arch and countless beams now quickly evolving from the vaulted north, till, the rays meeting in the zenith, the vast expanse of heaven becomes a corona of glory. Meanwhile, a cold north-east wind blows and meteors dart at intervals from the constellation *Pegasus*, till, at eight o'clock, the display ceases with the decadence of auroral beams which shoot upward fifteen degrees above the north arc of the horizon.

3d.—The ushering of the Old Year out and the New Year in, has certainly been attended with auroral displays remarkable for the latitude and longitude of Anniversary Lodge, alike for duration, variety of form, and beauty of colouring.

At seven A.M., from *Sextans* to *Serpens* (to *Unuk, Alpha Serpentis*) curves an arch composed of the union of three luminous segments, the central one covering *Coma Berenices*, and the right or northern wing of *Virgo*; the other two, the places above designated, while from each bright mass there radiate upward, for a space of fifteen or twenty degrees, converging rays of colour, the whole suggesting swinging censers. Unconnected with these there soon appears a fourth, suspended just above *Cancer*, now in the west.

Still higher and quite in our zenith, uniting *Lyra*, head of *Draco*, *Ursa Minor* and the space thence to the right arm of *Auriga*, is one broad belt of silvery light.

At 7:40 by the clock, we note the fall of a meteor in the vicinity of the *Sickle* and the birth of nebulous clouds in various localities of the clearest blue.

Unlike the movement of the auroræ heretofore described, in this instance the general motion of the swaying masses is towards the south-west. A gentle wind meanwhile blows from the opposite quarter. Yet we must not conclude that the propulsion of the aurora in this particular direction is due to this circumstance.

We successively note 8:30 and 9:30 o'clock, at which times the display is still visible as a sheet of fine rays in the west and as a nebulous haze in the south, but finally disappearing with the decadence at ten P.M. of a nebulous cloud just above the northern horizon.

12th.—6:30–6:40 P.M. : Faint auroral beams in the south-east generally below *Taurus*. Cloudy ; wind from south-east.

Again, nine P.M. : Observed auroral fires in the south, south-west, west, and north-west, covering *Orion*, *Cetus*, *Pegasus*, and space below *Lyra*, spreading northward and limiting itself as a vast twisted roll of light from *Lyra* and covering *Draco*, *Ursa Major*, and *Gemini*, the roll at ten P.M. resembling in its northern half a deeply serrated band of light. Five minutes later it gathers itself into huge balls of light having a puffing, rushing motion southward as of luminous clouds of steam.

We note, 10:35 : Nearly vanished, very faint haze in the west of zenith. Eleven P.M. Again as a band across *Gemini*, *Ursa Major*, and *Draco*. Twelve midnight, continues ; one A.M., faint ; two A.M., faint in the north-west ; three A.M., faint in the south and south-east ; four A.M., faint in south-west. Clear ; north-east wind. Five A.M., faint in the south-east ; six A.M., faint in south-east and south ; seven A.M., faint in south-

east, south, and south-west. At eight and nine A.M. still faintly visible. Ten A.M., not visible; 10:30 A.M., reappears as parallel cream-coloured bands from the south to the north, in the zenith and west. Eleven A.M. : Visible as a faint stream of light from the south, northward past the zenith. Twelve noon, faint; one P.M., not visible; two P.M., again faintly visible; three P.M., faint; four P.M., faint and having fan shape in the south. Five P.M. : Faintly covering *Lynx*, *Camelopardus* and *Cepheus*, thereafter gradually disappearing.

February, 1894.

22d.—Washington's Birthday remembered in thought and speech as the writer journeyed by sledge across the frozen surface of McCormick Bay; celebrated in colour and grandeur as an aurora flashed across the sky from south-west to north-east! Now dancing, now darting, and, shuttle-like, frequently alternating in direction, the otherwise clear sky is resplendent. A light north-east wind blows and night prevails; nevertheless, seemingly in a very low atmosphere and extending generally over the heavens in irregularly shaped curtains of folds and particularly noticeable from *Taurus*, across *Ursa Major* to *Boötes*, this brilliant display continues from 6:30 P.M. to ten P.M.

24th.—Returning from the above-mentioned sledge journey the writer, with dog driver Sipsu, had crossed Robertson Bay during the day and McCormick Bay the following night, having to face a blinding snow-drift during the early morning hours. Darkness and uncertainty of way were our lot as we at last arrived at the head of the bay and hesitated to cross the wide and numerous tide cracks in the ice. Suddenly, an aurora, certainly of great beauty and power of light, appeared in the S. S. W. and gave us illumination sufficient to deliver us from our perplexity. The stars

Meteorological and Auroral Notes 203

were invisible by reason of the falling snow and we could only guess at the time,—probably six A.M.

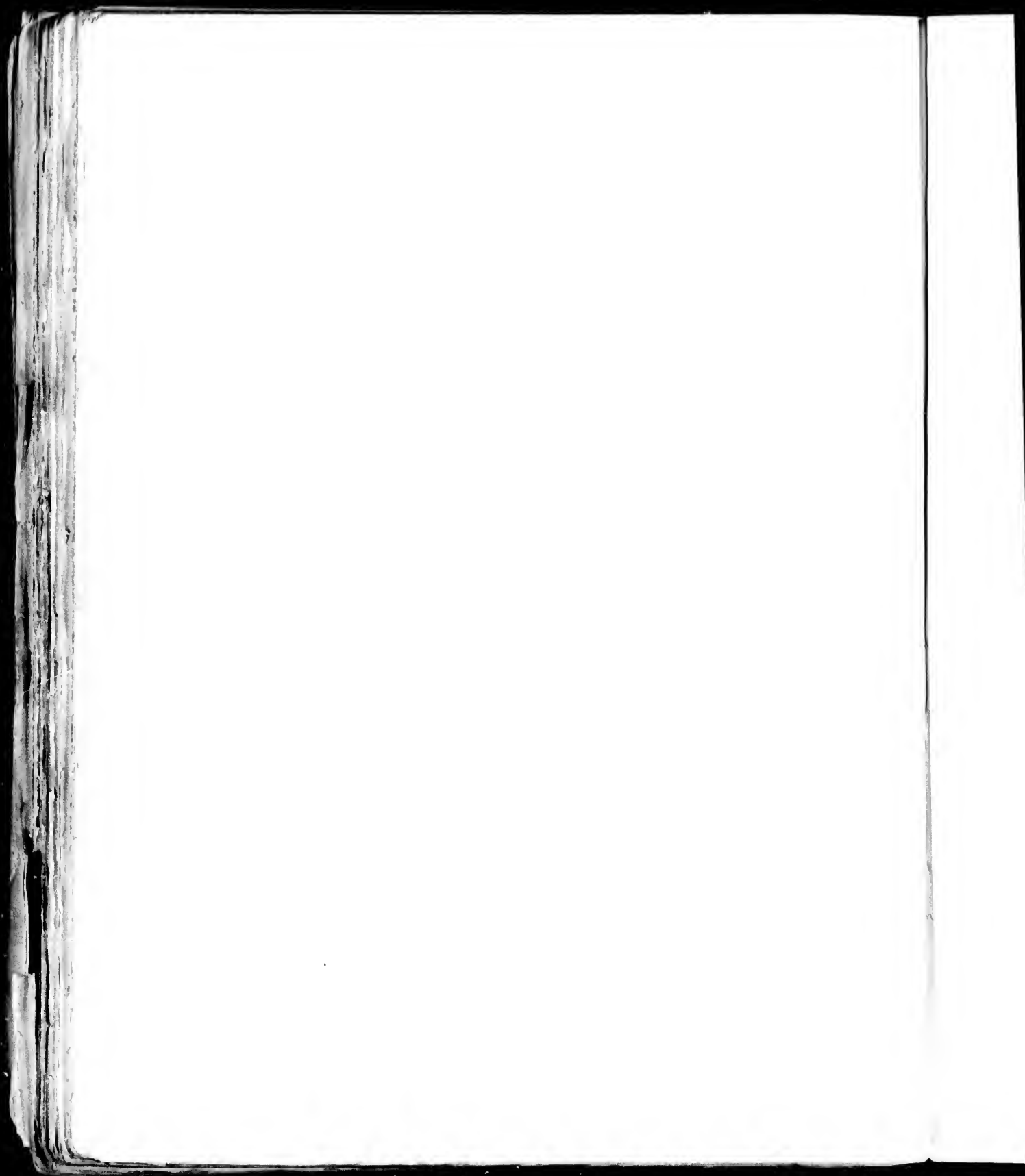
27th.—5:10 A.M. to 7 A.M. The night has been far spent in travelling by sledge across Inglefield Gulf. Cloud and space low. At the lodge, bright auroral beams were reported over the southern sky from an elevation of 45° to the zenith. At six A.M., the phenomenon took the form of two parallel bows extending in a true east and west direction, the brighter one passing nearly through the zenith, the lower one to within 30° above the southern horizon.

March, 1894.

Auroræ: The light of the arctic day too strong for determination of their existence. Still, on a few occasions, during the earlier days of the month, what seemed to be auroral light was observed on the Inland Ice.

E. B. BALDWIN.





PART IV.

NORTH-GREENLAND EXPEDITION 1894-1895.

CHAPTER I.

BOAT VOYAGE *FALCON* TO LODGE.

FAREWELL TO THE *FALCON*—MY PROGRAM—ALONG THE ARCTIC COAST IN
A WHALE-BOAT—HUT OF THE *ADVANCE* BOAT PARTY—MY ESKIMO CREW—
"LAND OF NOOGLI"—ANCIENT INHABITANTS—BARDEN BAY—THE NAL-
GAKSOAH—A WILD SUNSET.



MARIE AHNIGHITO PEARY, AGED 16 MONTHS.
Born September 12, 1893, at Anniversary Lodge, 77° 40' N. Lat.

CHAPTER I.

BOAT VOYAGE *FALCON* TO LODGE.



WHEN on the 28th of August, 1894, I pulled away in my whale-boat *General Wistar* from the side of the ill-fated whaler *Falcon*,¹ lying-to in Smith Sound, off the glistening wall of the Petowik Glacier, my feelings were not of the cheeriest.

Yet I had no reason to think that my chances of carrying out my cherished plans were, barring unavoidable accidents, other than good.

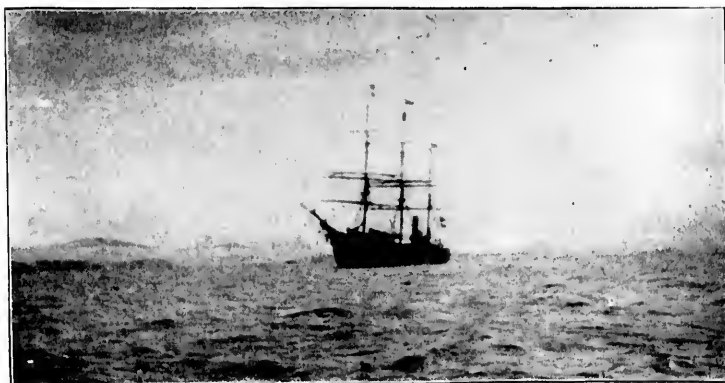
Though the *Falcon* was separating me from those near and dear to me, she was carrying them to safety and comfort, and she was leaving me with a small but experienced, effective, homogeneous, and *loyal* party.

In the boat with me was my coloured man, Henson, a dark-skinned, kinky-haired child of the Equator, and five of my faithful, trusty Eskimo allies, dusky child-

¹ Less than two months later the *Falcon*, after landing my party in Philadelphia, was lost with all on board, while returning from that port to St. John's.

ren of the Pole. Nearly two hundred miles north, at the lodge, at the head of Bowdoin Bay, was my other companion, brave, loyal Lee, awaiting my return. At the lodge with him was an ample supply of all the essentials of life, except meat, requisite to carry us through the winter and early spring.

Cached on the "Great Ice," at various distances of from twenty-six to one hundred and twenty-eight miles from the lodge, were all except a few minor



"THE 'FALCON' SWUNG ON HER HEEL."

supplies needed for the white march across the "Great Ice" the following spring and summer.

My general program was, as soon as I should have regained the lodge, to proceed with some of my native allies to the deer pastures of Kangerdlooksoah, and draw upon them for our own meat supply for the coming winter; then levy tribute on the walrus at their feeding-grounds in Omenak Sound, for my winter supply of dog food. After that I would visit those of the caches upon the "Great Ice" located within a distance of fifty miles from the lodge, dig them out, rearrange them again upon the surface of

the snow, and re-erect any signals that might have been broken off or blown down by the wind.

I should then endeavour to pass the winter, leisurely working upon our equipment for the long sledge journey; exercising the utmost care to keep ourselves in physical condition; and conserving every energy, physical and mental, for a fight to the finish, when once again we attacked the "Great Ice."

All the time I recognised two eventualities which might defeat everything. The first was the breaking



CONICAL ROCK.

out of the *piblockto*, or epidemic dog madness, among the native dogs, which, if the attack was serious, might almost exterminate the animals of the tribe, and render it impossible for me to obtain dogs for the journey across the ice-cap. Second, the arrival to either one of us of that end which, in the words of brave Horatio, of that other three, "comes to each man soon or late."

I placed the latter possibility second intentionally, because without dogs it would be folly to think of attempting the conquest of the "Great Ice," while the

reduction of our number to two would not necessarily mean the same.

The journey to Independence Bay had once before been made by two men, and there seemed no reason why it should not be made by the same number again.

As I stood in the stern-sheets of my boat watching the black form of the *Falcon*, her propeller began



"A WILD-FUR-CLAD CREW."

again its monotonous pulsations, she swung on her heel, gradually gathered headway, and threading her way among the bergs and floes, disappeared in the ice of the southern horizon, bearing those dear to me south to the lands of the sun.

I fancy it was an impressive sight to those on board to see my little boat dashing away northward

into the rapidly gathering gloom of the arctic winter night.¹

The setting of the picture was appropriate. The long, crystalline blue wall of Petowik directly abreast, with the slope of the mighty ice-stream above it; northward, in declining perspective, Mt. Agony, Red Mountain, and their companions, buttresses of a savage, precipitous shore, terminating in distant Cape



"BLACK CLIFFS OF THE IRON-BOUND SHORE."

Athol, with Wolstenholm Island off-lying; southward the sharp point of "Jenna" (Conical Rock) rising from the water; and beyond it the black fire-born coast cliffs that end in Cape York.

As I turned in the opposite direction, northward

¹ "As vision failed and lineaments became indistinct, our last view was of the tall, erect, fur-clad explorer, standing amidships, and again by the signal code, bidding us good-bye and good fortune, as his crew was pointed northward and poleward.

"Half an hour later, we saw a white speck on the dark expanse of waters, telling us that the boat had set her sail to the favouring breeze, and that all was going well with her gallant party."—*From letter by H. L. Bridgman.*

towards the gloom of the coming arctic night, for which my boat was heading, my eyes rested upon my Eskimo crew, pulling with all the strength of their iron-muscled backs for the shelter of the bleak rocks of Cape Athol. A strange, wild, fur-clad crew, yet sturdy and faithful.

Kardah, or "Three-ply," as we called him because of his habit of repeating everything three times; Ingopahdo, or "Freckles," the father of a healthy family of six; quiet, honest Kahdahsu; round-faced



CAPE ATHOL.

Akpudisoahho, and faithful old Nooktah,—the latter father of "Miss Bill," the Eskimo girl who accompanied Mrs. Peary home, and son of Koolootoonah, the old chief of Netiulum, who gave the boat party from the *Advance* such a fright by an alleged plot to murder them.

With an American leader, an African coxswain, and an Eskimo crew, I had the Equator, the Temperate Zone, and the Pole, all compressed into a space of twenty-eight feet.

The brief arctic summer was at an end, and the lifeless grey sky hanging low over the black, snow-capped cliffs of the iron-bound shore and the icy waves of the North Water, made my crew as anxious as myself to reach the lodge at the earliest possible moment, and lessen the chance of being caught in one of the violent storms which frequently mark this season of the year.

The morning calm freshened to a stiff off-shore breeze, and shaking out our sail, the *General Wistar*



A STREAM OF DRIFT ICE.

gathered fresh speed, and went dashing merrily through the racing whitecaps towards Cape Athol.

It was a striking coincidence that, forty years (less half an hour) before, the "boat party" had left Kane's ship the *Advance* in Rensselaer Harbour, in an attempt to fight their way along this same coast to Upernavik. But that party was bound south, in retreat, while I was bound north, to commence a new campaign. The coincidence was more strongly accentuated by the fact that my first landing, twenty hours after separating from the *Falcon*, was at the place where that party had been stopped by the ice, and where they were

obliged to build a small stone shelter, in which they lived some three months, until forced by starvation to return to the ship.

The tumbling whitecaps were anything but soothing to the nerves of my dusky crew, as evidenced by the grey pallor of their faces, and they were more than



BIRD CLIFFS OF SAUNDERS ISLAND.

pleased when, forced by off-lying ice to run in close under the shore, we lost the wind, and they were obliged to run out the oars and raise Paddy's "ash breeze."

We reached the bare, grey, wave- and ice-worn rocks of Cape Athol at 1:30 P.M., and climbing to an elevation of one hundred feet or more to reconnoitre Wol-

stenholm Sound, I saw a wide stream of rather closely packed ice lying between the cape and Saunders Island, and extending out against Wolstenholm Island. As the only way to avoid this ice was to make a detour entirely around the latter island, and force our way through another perhaps equally or more difficult stream outside, I determined to push



NUMEROUS KITTIWAKES ON THEIR NESTS.

straight on for Saunders Island and not stop until compelled to. The now strongly running ebb-tide would, I knew, assist us. Descending to the boat, by the time we reached the ice the tidal effect was already being felt in loosening the pressure of the pans, and as we advanced our progress became easier, until finally we emerged into placid, ice-free water off Saunders Island.

Pulling along the outer shore of this island over a lazy, glassy swell from the south-west, we passed the site of the, for several years, unoccupied settlement of "Vikpani," and reached, late in the afternoon, the great bird cliffs of Saunders Island, where I stopped a few hours to shoot some of the looms or guillemots which breed there in countless thousands.

There were numerous young looms, or *akpah*, and kittiwakes here, many of the former swimming with their mothers, and emitting an almost continuous shrill, tremulous whistle, while the latter were all on the nests, some of which were so low down as to be reached from the boat.

The northern end of Saunders Island is a huge, semi-detached mass of rock, a thousand feet or more in height, called by the natives Tooloogsoah (Rock of the Great Raven).

At 8:30 P.M., after landing my crew a few minutes for water on a flat berg, I left the base of towering Tooloogsoah, in whose sea-hewn caverns the blue-green swells were roaring sleepily, and pulled away northward for the "land of Noogli."

Before us lay the wide and usually wind-swept mouth of Wolstenholm Sound, which, with its floating ice and swift tidal currents, is under unfavourable circumstances a disagreeable stretch of navigation. Fortunately now it was very calm and not a piece of ice was visible, only a fleet of great bergs, against whose polished sides the glassy swell rose and fell languidly. Ahead of us in the blue distance rose snow-capped Oobloodahingwah, and black Pooenyah in the arms of its circling glacier; with the low "land of Noogli," land of the *ignimut*, the precious fire-stone of the natives, at their feet, invisible below the horizon. On our right lay the placid expanse of the Sound, reaching eastward to the mot-

tled Nuna Kahlilowah, and into the cliff- and glacier-prisoned depths of Granville Bay.

To our left, far out on the western horizon floated the outlines of the sombre Carey Islands, with their tragic secret of the fate of young Björling and his brave companions.

Behind us, the vivid red- and yellow-banded cliffs of Saunders Island, a Titan agate set in lapis-lazuli.

Long before we had crossed the Sound, the roar of the heavy North-Water swell breaking in foaming



"THE CLIFF- AND GLACIER-PRISONED DEPTHS OF GRANVILLE BAY."

thunder upon the low, iron shore of Noogli, came out through the calm night-air to meet us. No landing was possible until we reached the little bifurcated inlet known by the natives as Tessuissak (the Lake), a few miles above Noogli. Pulling into this through a labyrinth of half-submerged boulders, we found at the head of the northern arm a tiny sheltered bight, where at 4:30 A.M. of the 29th we landed for food and rest.

After our simple supper (or breakfast?) of salt beef, biscuit, and tea, Matt and four of my huskies fell

asleep lying about the fire, while I went with Nook-tah westward across the low land to the seaward side, and examined the remains of the hut built by the boat party from the *Advance* in September, 1854. It was the first time a white man had looked upon the place since that party left it in December of the same year. The inclosure between the low stone walls was about



RUINS OF BOAT-PARTY HUT.

Hayes, 1854.

9 x 15 feet, and the appearance of the walls, and the pieces of wood, iron, cloth, crockery, etc., in and about them, hardly looked as if they had been there forty years.

The hut is not over a mile above the entrance to the inlet, and is but a short distance from high-water level. The spray from heavy seas reaches it. Poppies and purple flowers were blooming near.

On the way back to the boat and about half-way across the strip of land, I found the bones of a whale (*argæo*), and Nooktah told me that generations ago they were abundant here, and that years ago one was seen off Cape York, but that now they are all gone.

From a neighbouring ridge of cobble and coarse gravel a hundred and twenty-five feet above sea-level, the eye commands the whole of this peculiar strip of low foreshore, lying at the foot of the mountains from Wolstenholm Sound to Cape Parry.



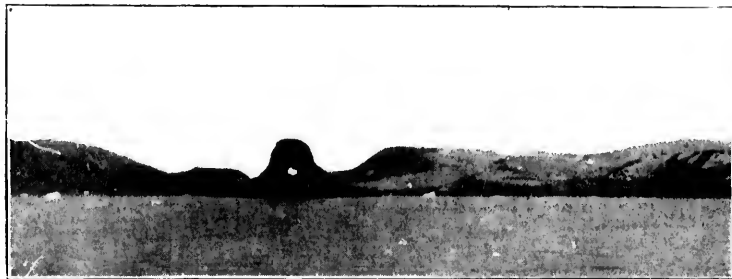
BLACK POOEENYAH AND THE IGNIMUT GLACIER.

To the south, Pooeenyah rears its black sides from the centre of the Ignimut Glacier standing guard over the precious fire-stone and the "land of Noogli." One arm of the glacier bends southward to the little cove just inside the point of Noogli, and here, in a limestone escarpment fronting the glacier, is the *ignimut* or fire-stone, a vein of pyrites, which for unnumbered generations has furnished the natives of this region with the means of obtaining fire.

The other arm bends northward towards the inlet in which my boat was moored.

Eastward, the narrow, shallow southern arm of Booth Sound reaches up a valley, towards the head of which sweep down two or three glaciers. Up this valley, over the glaciers and across the ice-cap, is a trail to Barden Bay and Netiulami.

Northward is land-locked Booth Sound, with the well-remembered Anoah Glacier flowing down to its north-eastern angle, and the remarkable Bell Rock rising from its centre. This Bell Rock is the largest and most striking of those sharp-pointed rocks rising directly out of the sea, of which there are several in this region, as Dalrymple and Conical Rocks, and the



"REMARKABLE BELL ROCK."

Little Matterhorn. All are known by the natives as "Jenna."

Beyond Booth Sound, the grim, sable bastion of Cape Parry closes the view.

We left the little bight at noon, and after pulling out of the inlet had a light southerly air, to which we spread our sail, thus assisting the oars very materially as we resumed our northward course towards Cape Parry.

While passing the mouth of Booth Sound, my natives told me of the burial-place of a long-past generation of Eskimos on the northern point of the

entrance, and of igloos of the same period near the shore a short distance farther north. Just below Cape Parry, Nooktah pointed out the sites of ancient stone igloos, and told of their being inhabited years and years ago by very large men who came from a distant land in the west, and ate many of the Eskimos (!!), then went away again.

The frowning black cliffs of Cape Parry, Kangahsuk (the Great Cape) of the natives, was rounded at



KANGAHSUK (THE GREAT CAPE).

Cape Parry.

7:40 P.M., and, pulling in the teeth of the fresh breeze which came rushing out of Whale Sound, we arrived at Netiuhami late in the evening. The rock formation at Cape Parry, crystalline superimposed upon stratified, is the same as that of Bell Rock, and the latter might almost be a fragment of the former, sundered by some cataclysm and swept southward to its present site.

When half-way across Barden Bay, two natives, Myah and Aletta, met us in their kayaks. They had been across the glacier to Booth Sound for deer, and each had upon the after-part of his kayak a deer-skin and saddle of venison. They kept us company as we approached the village.

A heavy ground-swell was rolling in from the North



TWO KAYAKERS MET US.

Water, raising such a surf along the rocky shore, that we could land in but one place, a bit of partially sheltered beach a few rods up the bay from the village.

Here, after I had shouted instructions to the crowd of men gathered on the beach, my steering oar held the *General* straight to her course while the ash blades drove her swiftly in upon the foaming crest of a breaker, and the moment the bow touched the beach, half a

hundred willing hands, led by Kyogwito the Nalegaksoah in the frock-coat and slouch hat which I had given him, seized painter and gunwale and dragged the boat up beyond the reach of the next breaker. Then she was shored up on an even keel, and Ingo-pahdo kindled a fire against the rocks which enclosed the beach, while I distributed biscuit among the natives, and purchased the deerskins and venison



"ONE OF THOSE WILD SUNSETS."

of our escorts, for a couple of hatfuls of the same commodity.

I was much amused by the actions of my friend the Nalegaksoah. The winter before I had given him a Prince-Albert coat, a black sombrero, and a sabre bayonet, and with them bestowed upon him the title of Nalegaksoah (Great Chief), and now, after he had liquidated the claims of hospitality by helping to drag my boat through the surf, and had seen me and my crew safely landed, he climbed in solitary state up the bank and sat there in his royal garments, till I invited

him to descend and accept my hand and a few handfuls of biscuit.

It was a picturesque scene : a crowd of natives about the boat, leaning over the gunwale, and looking at everything with eager interest ; another group about the yellow flames of the fire ; while still others were perched upon the rocks that walled the beach.

While all this was in progress, southward, above the death-pale ice-cap, hung dense blue-black clouds ; northward, across the turbulent Sound, the splendour of one of those wild sunset afterglows, regal with savage colour, such as can be seen only in the Arctic regions at the end of the brief summer, flamed through the gateway between Herbert and Northumberland Islands, bringing the gloomy, foreboding day to a close ; and all around the hoarse shore of the bay sounded the intermittent roar of the surf



CHAPTER II.

BOAT VOYAGE *FALCON* TO LODGE (*Continued*).

DEATH IN AN ESKIMO VILLAGE—HAPPY NATIVES—A GLACIER EPISODE—
HEAVY WEATHER—OLUKS BAY—THE ANOAHTAKSOAH—THE DEER HUNT
—SCHOOL OF NARWHAL—ACROSS THE SOUND—ICE-BLOCKADE IN BOWDOIN
BAY—BACK TO THE LODGE.



MI-SÚ-MI-SÚ GLACIER.

CHAPTER II.

BOAT VOYAGE *FALCON* TO LODGE (Continued).

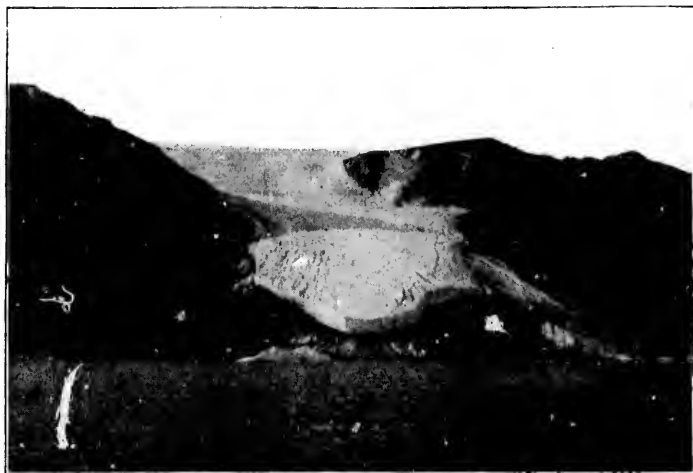


WE left Netiulumi at 6:30 A.M. for Ittibloo, and though the flood-tide was in our favour, the head-wind, which we met as soon as we got out of the bay, made the pull a long and tedious one. At Narksami, seven miles east of Netiulumi, we landed and found large quantities of narwhal

meat, some cached under stones, and some unprotected. There were several tupiks here until the day before, when the death of a woman caused all the inhabitants to move precipitately to Netiulumi. I saw the never-again-to-be-used tupik in which she had died. The poles had been removed, allowing the tupik to collapse, but otherwise it and its contents were, and would remain, untouched by human hand, just as when the woman died. I saw her grave also, a pile of stones upon a ledge of rock back of the tupik. Lying beside it were the woman's drying frame, two tin cups, and her one dog, which had been strangled. Her young baby had also been strangled, and buried under the

stones with its mother. Strange custom of a strange people. Scattered about were several old graves containing fragments of bones. Leaving Narksami after my crew had laid in a good supply of their great delicacy, the *maktah*, or skin of the narwhal, I tried beating up the Sound, but found it of no avail, and was obliged to resort to the oars again and hug the shore, taking advantage of the lee of every point.

Through all this laborious work, my happy, child-like crew was a constant source of interest to me.



"ONE OF THE ICE-STREAMS OF THIS PRECIPITOUS SHORE."

Glacier West of Ittibloo.

During the first two days of the voyage, they had been very quiet. Perhaps the rhythmic lift and dip of the boat upon the long North-Water swells, heaving against the outer coast, had disturbed them; perhaps they were suspicious of the September vagaries of wild "Immaksoah" (the North Water).

But now, well within the limits of "Ikarestungwah"

(Whale Sound), and hugging the shore within a boat's length, they were garrulous as so many sparrows. The regular stroke of the oars seemed an incentive to continuous chatter. Spicy gossip of the tribe, the wonderful ship, incidents of our voyage, speculations as to my plans, apostrophes to the waves, the sky, the shore, the birds,—an incessant stream. Never did an inquisitive burgomaster gull stoop with wide white wings to inspect the boat but what he was chaffed and derided; not a flock of bustling little auks whirled past but they were followed by encouraging words equivalent to "Go it, little ones," "That's right," "You'll get there"; and the sight of a seal's glistening black head emerging from the water, would be the signal for a volley of "*Taku!*" "*Taku-u-u!*" ("Look"), "*Puisse!*" in inimitable accents, and as much excitement as if it was the first seal of their lives. Yet, at a word of caution from me, the noise would cease, the broad backs strain and sway till the oars bent like whalebone, and the boat forged slowly through the boiling tide-rip round a projecting point.

Creeping laboriously along, we reached glittering Misumisu, the largest berg-forming glacier of the numerous ice-streams which flow down the gorges of this precipitous shore.

This glacier projects well out into the sea, and a short distance back from its face it was pierced from side to side by a magnificent tunnel, which would have spanned a four-track railway.

The air between the crystal roof and liquid floor of this tunnel was blue as indigo. I had an idea of passing through this royal arch, and the boat was heading for it and about to enter, when an enormous block of ice from the keystone fell with a crash and roar into the water, sending peals of thunder and white-capped breakers through the archway, and we incontinently

turned straight out into the Sound, my crew pulling as I never saw them before or since.

This *débâcle* was the signal for a general disintegration along the glacier face, and though no large berg was born, fragment after fragment flew outward, and buttress after buttress cracked, toppled, and fell, till the entire glacier face was hidden in a fury of crashing ice, leaping waves, and hissing spray, as if the glacier were some huge white marine monster entangled upon the shore, and beating the sea into foam with its gleaming head, in its effort to escape.



"PIERCED BY A MAGNIFICENT TUNNEL."

Even when several miles away, we could still hear the loud reports of the rending ice, and the muffled roar of the waves hurling themselves into the newly formed crevasses and caverns.

It was eight p.m. when we arrived at Ittibloo, after thirteen hours of tedious work. Here I found the three tupiks of Ootooniah, Ikwah, and Mahsotia.

Big brown-eyed Ahrinyahloo, Ootooniah's wife, informed me with a significant gesture, and as unconcern-

edly as she would have told me that she didn't sleep well the night before, that her unborn babe had been dead for several days, killed by her exertions in lifting stones while at work on the winter igloo. This house-building of these women, coming as it does at a critical period of the year, is perhaps one of the most effective obstacles to the increase of the tribe.



HEADING FOR THE ARCHWAY.

Again a brilliant sunset flamed on us for a little time through the wide gateway of Murchison Sound, then was quenched in rapidly gathering leaden clouds.

Here I accepted the hospitality of Ootooniah's large and cleanly tupic, while Matt occupied the anything but downy thwarts of the boat, drawn up on the beach.

At seven A.M., we left Ittibloo with the flood-tide, to pull across the mouth of Olriks Bay to Kanga, seven miles distant, and then up the north shore of the bay to the deer pastures.

When we started, the sea was perfectly calm, but before we had gone two miles the wind came rushing out of the bay, and increased in fury until it became a question whether we would reach the shore. I was

towing Kahdahsu's kayak astern, and the drag of this made the *General* very sluggish in meeting the waves, till I hauled it up and lashed it alongside. Finally we were able to gain a partial shelter behind the rock point of Kanga and haul the boat out through the surf. Though we had wind and wave in quantity to make it amply exciting, we by no means got the worst, or even my staunch whale-boat would scarcely have lived through the wicked chop-sea that rose from the meeting of the strong flood-tide and furious wind. On the south side of the bay, where the wind fell in fiercest force from the mountains above the Savage Glacier, the tops were shaved from the waves, and whirled aloft in clouds and revolving pillars of spray, while over the crests and through every gorge of the mountains swept a dark cataract of drift, its ominous roar reaching us above the fury of wind and sea.

Through all this turmoil the sun was shining brilliantly, and blue sky canopied the wild scene. It was just such another *anoah taksoah* (great wind) as we had in Academy and again in McCormick Bay two years ago. While Matt and the Eskimos spread their soaked outer clothing and the contents of the boat on the rocks to dry in the sun and wind, I climbed to a sheltered nook between huge blocks, a hundred feet up the rocky side of Kanga. Below me the turbulent blue ice-free waters of the great fjord reached away to the giant bastion of Herbert Island, then out through the ample channels of Whale and Murchison Sounds, broken here and there by an occasional gleaming berg.

To my right, northward across the Sound, rose the soft grey battlements of the Sculptured Cliffs of Karnah, and the flowing lines of the Red Cliff Peninsula ice-cap and its pendent glaciers.

To my left, the dazzling white faces of the south-shore glaciers protruded through every rift in the

black cliffs; and beneath my perch the waves roared as they dashed against the primeval foundations of dark Kanga.

Gradually wind and sea subsided, and at 4:45 P.M. we ran the boat down, loaded her, and pushed off into the swirling flood-tide, leaving Kahdahsu's kayak weighted down with big stones, well above high-water



ITTIBLOO GLACIER.

The Only Example, in this Region, of a Sea-Level Glacier with Terminal Moraine.

mark. The surface of the bay was now almost smooth, and, urged by oars and the tidal current, we slipped rapidly past the steep bluffs of the north shore.

These bluffs at first glance seem to be a talus slope of loose rock, but the inclination is so steep as to invite a critical examination, which shows them to be really sandstone cliffs, veiled by a layer of disintegrated material held in position by the narrow ledges of the numerous strata.

234 Northward over the "Great Ice"

When some five miles up the bay, the evening land breeze began drawing inward. I had the sail shaken out, the oars were taken in, my dusky crew disposed themselves for sleep between the thwarts, and we sped rapidly along, passing through the outer narrows and reaching the delta of the Salmon River, more than half-way up the middle bay, before the wind deserted us. As it subsided, the bay filled with dense fog. Later it began snowing, and at two A.M. we were



VIEW IN OLRICKS BAY.

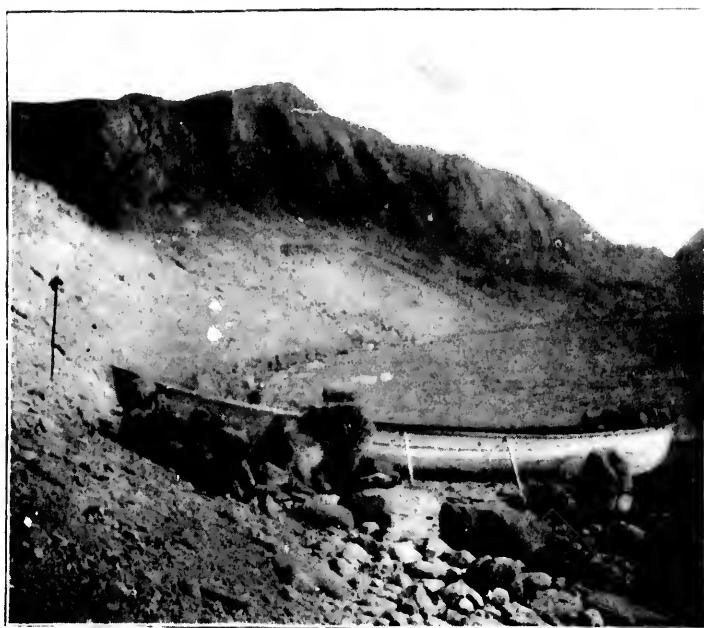
Looking through the Upper Narrows.

obliged to land and pull the boat up, the rapid current of the ebb-tide making progress against it an impossibility. As "Ingo" said, "*Imaksoah timatu kooksoah*" ("The sea here runs like a great river").

After a venison supper, we spread the tarpaulin over the stern-sheets of the boat and turned in, to be awakened at nine A.M. by my natives, when I found the usual morning gale blowing out of the bay, the tide rapidly rising, and the white-capped waves rushing directly in upon our shore. Retreat by hauling the boat farther up was impossible, as steep gravel

banks rose directly from high-water mark to a height of thirty to forty feet.

The best we could do was to force the bow of the boat into this bank at high-water mark. Then everyone worked with a will to carry the cargo up the bank, load the stern of the boat down with half a ton or more of stones, and carry out spring lines each way to big boulders to hold her immovable.



BOAT CAMP IN OLRIS BAY.

These preparations were scarcely completed and the waves breaking heavily against the boat, when the wind ceased, the waves subsided as if by magic, and quickly reloading we pushed off and pulled up the bay on the tail of the flood-tide, to a sheltered rock cove under Mt. Gyrfalco, close by the upper narrows.

As soon as the boat was hauled up and secured I gave four of my Eskimos a rifle each, and started them away after deer. All that night, the next day, and the next night it snowed silently and steadily, obliterating the last trace of summer.

My forced inaction here showed me for the first time how weary I was in mind and body, and I did not find it amiss to while away the time in full measure of sleep, alternating with strolls up the valley. Henson did a little scouting and killed three hare and a fox. A big snowy owl also floated for a moment near the camp like a huge snowflake.

In the early morning of the third day it was calm and apparently trying to clear. The clouds and falling snow gave way to a sky of hammered steel, then the demon of the "Great Ice" descended from his lair in another *anoahlaksoah*. A mighty cataract of drifting snow, its surface glistening like liquid silver, its depths blue-black as a thunder-cloud, came pouring with the roar of a hundred Niagaras over the crests of the southern cliffs into the bay, and mingled with the sheets of hissing spray torn from the tortured water.

The narrows became a cave of the winds, through which the shrieking gusts hurtled in solid walls, and the entire bay, from sea to mountain summit, became a deafening, blinding Arctic Inferno.

Our little cove was the only sheltered spot in the entire bay, and even here it was impossible to stand against the climax of the gusts. So imminent was the danger of the boat being picked up bodily and smashed against the rocks, that, with the assistance of Matt and Kahdahsu, I piled rocks in her stern, passed the grapnel rope across the bow, and weighted it down on each side with stones, and then ran out spring lines each way from the stern to big boulders. My hunters

had not come back yet, and as it was now fifty hours since they went out, I felt sure they had found deer. Matt started up the valley in hopes of meeting them, but soon came back saying that in exposed places the wind was picking up the gravel and small stones and hurling them with such force that he could not stand it. About noon I worked my way, between the squalls, up to a completely protected spot under the cliffs. Here, seated in a niche in hoary lichen-covered rocks, with the cold wind whistling past me, wild clouds



SALMON-RIVER GLACIER.

Oliks Bay.

scurrying overhead, and the huge ribs of mother earth, gaunt with the cold and starvation of centuries, protruding in every direction, I was besieged by a host of unpleasant fancies, from which the necessity of caring for the boat finally rescued me. As the tide rose, and the waves, rolling into the cove, began to lift the boat, Matt and myself took turns in fending her off from the rocks with the sail-sprit. At last the *anoah-*

*taksoah*¹ subsided and we thoroughly enjoyed a supper of broiled hare.

During the night, the ice of the bay above the narrows, shattered by the fierce blows of the *anoahhtak*-



MT. GYRFALCO.

soah, began drifting out through the narrows and past our camp.

¹ The vicious but fortunately short-lived fury of the "Great Winds" of Northern Greenland is astonishing. A sudden local tilting of the atmospheric balance, perhaps its own accumulated weight, starts a section of the cold heavy air of the interior ice-cap towards the nearest point of the coast. Gravity constantly accelerates its motion as it moves down the incline of the ice-cap, till at last it plunges a roaring snow-laden torrent down the steep landward slopes of the ice, and falling into the deep bays or fjords, compressed between their precipitous and frequently converging cliffs, and going screaming and hissing to the open sea, a huge air-jet under a pressure capable of moving all but the heaviest objects, and comparable in its effects to the destructive water-jet from the monitors of Western hydraulic mining.

This made me very anxious to get away and down the bay ahead of it, but I could not leave till my hunters came in. At three A.M., Ingeropahdu and Akpalisoaho came in with three skins and two saddles of venison. The former had shot one deer, the latter two.



"THE NARROWS BECAME A CAVE OF THE WINDS."

They said they had been all the way across to Kangerdlooksoah, and saw many deer. Matt and myself turned out to have breakfast with them, and after this I shot a faicon, and Matt went up the valley again and got two more hare and a white fox.

Nooktah and Kardah kept me waiting till nine A.M., when they came in with three skins and three saddles, all obtained by Nooktah.

As soon as they arrived we hurried off to get ahead of the ice. Their tardy arrival lost us the ebb-tide, and compelled us to start with wind and tide against us.

While passing down the bay we saw four *oogsook* (*phoca barbata*) on the ice, but failed to secure any. While passing through the outer narrows I shot a hare on the north point, thus adding one day's meat supply to our larder.

It is a novel and by no means unpleasant sensation, this of feeling that the crack of your rifle or shotgun has added a meal, or a day's or even (in the case of a deer) a week's rations to your meat supply.

The delta point midway of the outer bay was reached about midnight, and in the shelter of this point I threw the grapnel out in shoal water and a sandy bottom, and we got a few hours' sleep while waiting for the tide to turn in our favour.

Here, while lying stretched out in the open boat, I saw at midnight the first star of the season.

With the beginning of the ebb-tide, we left our moorings. The wind was against us, but we reached Ittibloo in five or six hours, and got ourselves a hot breakfast. Ootooniah, during our absence, had been somewhere on the south side of the bay, and obtained three deer. Their skins, with one saddle of venison, I purchased. While we were here, there was a heavy surf rolling in from the northward, and apparently increasing somewhat. There was no wind to speak of, yet my huskies seemed rather nervous about starting. However, we got away, and reached Kanga without trouble in the early afternoon. Here we remained four hours for sleep and the turning of the tide. Kahdahsu's kayak, left on our way up the bay, had been swept away, only the harpoon line, tangled in

the rocks, remaining; and the entire aspect of the beach had been changed by the furious waves which had in places eaten into the mountain slope itself.

When the flood-tide began to run, we pushed off, and, hugging the shore to avoid the fresh head-wind as much as possible, crept slowly along to Narksami, and then to Tigerahomi, where we arrived at midnight.

The *kooks* (rivers) at both these places had water running under the ice, but small streams had been



GREAT LAKE IN THE DEER PASTURES.

frozen now for several days. I had hoped to find the wind at Tigerahomi blowing directly out of the gulf, so that we could stand across for the entrance to Bowdoin Bay; but, instead, it was blowing fresh from the Castle Cliffs, directly against us, so that if we started across we could at best only make the Sculptured-Cliffs Glacier, and then have to pull up to the mouth of the bay.

Hauling the boat high upon the lee side of the Tigerahomi delta, and making her secure against the

event of another blow, which the lowering aspect of the clouds indicated as possible, we turned in. Ever since leaving Kanga the clouds had been heavy overhead, and dark and low and savage above the black distances of Whale and Murchison Sounds; yet, while rounding the convexity of the shore between Kanga and Narksami, where we could look well up the gulf, I could see the sun shining brightly on the distant ice-cap beyond Josephine Peary Island.

I woke at nine, to find the wind less strong, and veered some to the eastward. After breakfast we got away, and pulled up to Tigerahomi Point, where we set sail and stood across to Bowdoin Bay. Just as we were pushing off, a school of narwhal passed us, and it was an interesting sight to see them dashing to windward, their long white horns flashing out of the water in regular cadence, and the waves dashing in jets of spray from their bluff foreheads. There were at least six magnificent horns in the school.

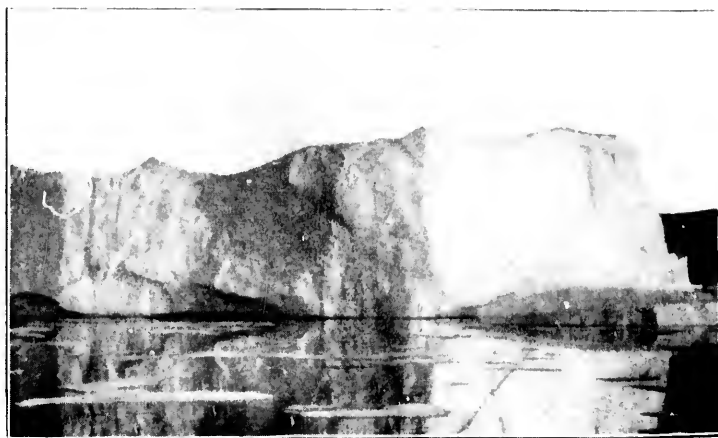
We were on a line with the Castle Cliffs at two P.M., when we encountered ice.

The new ice was now rapidly forming in every place where the water was not constantly agitated by the wind, and cementing the fragments of the last winter's ice firmly together.

The entire bay was a chaos of trash ice, icebergs, and large fields of last winter's ice, cemented by this heavy young ice; an utter contrast to the condition of the bay last year at this time. There was practically no water at all, and it was only after six hours of the most arduous efforts that I got my boat to a point just above the East Glacier, and within five miles of the lodge.

Here the boat was hauled up and secured, our meat cached, and we walked the remainder of the distance to the lodge, the Eskimos carrying the deer-

skins. I went on ahead, and as I came over East-Harbour Point I saw the blue smoke curling up from the lodge and got a whiff of the bituminous-coal flavour. This assured me that all was well there. It was a cheerful sight to see this evidence of home in this wild, wintry land. And yet a wave of utter loneliness swept over me as I thought of the aching void there; the absent brown eyes and baby blue eyes.



BERGS AND TRASH ICE.

I reached the lodge at ten p.m. and found Lee writing by the light of a bit of candle.

He looked badly and told me he had not been feeling well since the ship left, and that the previous Saturday he was confined to his bed. He thought it malaria, but after talking with him awhile, I found it to be a pronounced case of nostalgia. Poor boy, he had been very homesick and lonesome, had eaten but little, and that irregularly, and was all out of sorts.

Matt and the Eskimos came in an hour later, and after a hearty meal, with ample coffee and biscuits for my faithful crew, everyone turned in.

Thus ended this boat journey of over two hundred miles at the end of the Arctic summer. A journey entirely free from hardships, and with but a single critical episode, the passage of the mouth of Olriks Bay. Yet other boat journeys along the same coast, at the same season of the year, have been fraught with appalling hardships and dangers.

And the reason for this difference? I think it can be summed up in the words *fitness* and *experience*.

My boat was fit, my clothing and equipment were fit, the party was fit, both on the thwarts and in the stern-sheets, and I was thoroughly acquainted with my boat, my men, the coast, and the sea and shore craft of the region.

CHAPTER III.

THE WALRUS HUNT.

A SEASON OF ABUNDANT ICE—FROM THE LODGE TO KARNAH—AN ARCTIC FLEET—STORMY WEATHER—THE WALRUS GROUNDS—READY FOR BUSINESS—HARPOONING A BIG BULL—ATTACK OF THE HERD—VICTORY AT LAST—ESKIMO BUTCHERY—A NARROW ESCAPE—MORE CAPTURES—ATHLETIC SPORTS—YOUNG ICE—BACK TO KARNAH—WELCOME TO "ANGESOK."



WALRUS HEAD.

CHAPTER III.

THE WALRUS HUNT.



THOUGH back to the lodge in safety, after an arduous trip, there was no time for rest or dallying. The accumulation of my winter's supply of meat—reindeer, and Arctic hare for ourselves, and walrus meat for my dogs—called for the exercise of all our energies. My faithful Eski-

mos were ready to start off again at once, if only they might first be allowed to visit their families at Karnah, and let them know that they had returned safely from stormy "Imnaminomen" (Cape York).

Last year at this time there were only occasional fragments of heavy ice floating in the dark wind-swept waters of Bowdoin Bay. Now from the face of the Bowdoin Glacier, well down beyond South Point and East Glacier, the bay was a compact mass of heavy, last winter's ice, and beyond that a zone of scattered pans, cemented together by young ice, which was hourly increasing in thickness. Not a moment was to be lost if the whale-boat was to be taken out of the

bay. In twenty hours after our arrival, my dusky crew was off, in charge of Matt, for the deer pastures of Kangerdlooksoah, leaving Lee, Nooktah and myself at the lodge. A week later, Matt returned with six deer and several hare. Then for the walrus hunt.

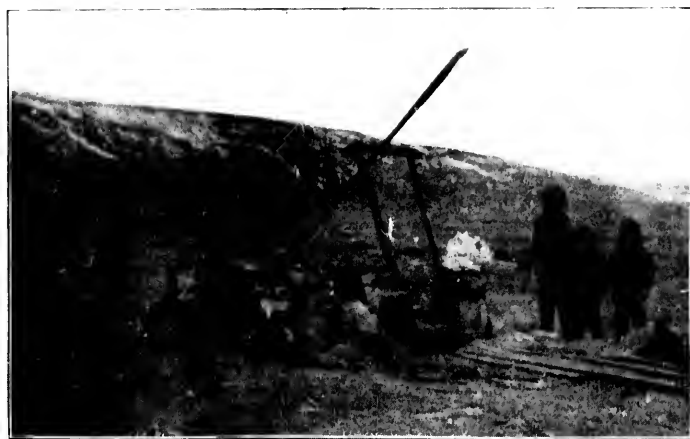


A KARNAH TUPIK.

Typical Summer Tent.

The day after Matt returned was Sunday. The following morning, Monday, the 17th, I left the lodge with Lee and seven Eskimos—Kardahsu, Panikpah, Elingwah, Iokudi, the boys Poodloonah and Sipsu, and Iokudi's wife Tookoomingwah—in the *General Wistar* for Karnah *en route* to the walrus grounds. The morning was dark and threatening, but the wind of Sunday having pushed the ice away from the east

shore of the bay, presented an opportunity which could not be lost. As we started, the ice borne upon the flood-tide was already swinging back against the shore, and it was only by dint of hardest pulling, that we kept ahead of it and got into clear water beyond East-Glacier Cove. From here we had open water and a stern breeze across the bay and along the Sculptured Cliffs to Karnah, where we arrived in the afternoon, and the natives turned out *en masse* to haul my boat up out of reach of



DISMANTLING A TUPIK.

waves and ice. The wind had been steadily increasing for some time before my arrival, then it began snowing, and as I climbed the bank to the tupiks, the eye could penetrate but a few yards through the driving flakes, into the roaring wilderness of white-capped waves, tossing ice-pans, and detonating bergs. I made arrangements for Lee to be domiciled in the tupik of round-faced, smiling Akpudisoahho, while I occupied that of Kardah, my last winter's host at Ooloosheen.

A stormy night, with furious snow-laden squalls rushing out of the gulf, was followed by a day so dark and windy that it was useless to start for the walrus grounds, as none of the animals would be out on the ice, and I devoted the day to a study of the village. Another stormy night and then the weather moderated so that I could get away. Assembling all the able-bodied boys and men of the village, with



MY PICKED CREW.

both my whale-boats and five kayaks, I pushed off from the ice-fringed shore. In the *General Wistar* were Lee, myself, and five picked Eskimos, while the *Mary Peary* was manned by eight Eskimos.

Such an imposing flotilla had never before sailed from an Eskimo village in these high northern regions, and it marked an enormous forward stride in development. Hitherto the native hunting had of necessity been confined to single-handed efforts, each man for

himself, or at most two comrades working together. Now my whale-boats offered facilities for an entire settlement to combine forces for a common object.

It was a dirty afternoon, vicious snow-squalls chasing each other in rapid succession out of the gulf and down the Sound, giving only occasional glimpses of the sharp ridge of Bastion Point, the eastern end of Herbert Island. About two miles and a half east of Cape Cleveland, the bluffs end against the regular convex of a boulder delta, formed by an ice-cap tor-



ONE OF MY KAYAKERS.

rent, which for a month or two in early summer roars down a deep ravine with a burden of stones and gravel. Just in the angle where bluffs and delta meet, there are a few paces of sandy beach across which a boat may be drawn up until her stem is against the base of the bluff, and she is sheltered from the drifting ice, the rabid waves, and the furious east winds by the breakwater of the delta. Niches in the rock offer facilities for fires, and from a perch well up the bluffs the eye commands the entire Sound

eastward till it merges into Inglefield Gulf, westward until it is lost in the expanse of Smith Sound, and southward to the shore of Herbert Island. With the aid of a good glass, a walrus or an *oogsook* can be picked out upon the floating ice anywhere within those limits. I had camped in this very spot in September three years before, after my memorable first encounter with the walrus, and here, late at night, I now directed the course of my fleet. It was long after dark when we beached the whale-boats and kayaks, and dragged them up above high-water mark. A supper of venison, hardtack, and cocoa took the edge off the day's



EASTERN END OF HERBERT ISLAND.
Bastion Point.

work, and everyone had crawled in under the tarpaulins and sails thrown over the boats, as falling snow aided the darkness to obliterate the desolate world.

The next morning we were up and had eaten our breakfast long before the late morning light was sufficient to enable us to start. Everything except oars, rifles, harpoons, and lines, was left at the camp. The Eskimos were too slow and cautious with the walrus

to suit me, and I had made up my mind to handle a harpoon myself, and arranged my boat accordingly, with, I must confess, some degree of confidence, as I had already tried my skill at throwing the harpoon with the natives, and found that I had nothing to be ashamed of, either as regards range or accuracy.¹ Lee held the tiller, five of the best Eskimos manned the oars, and I took my stand in the space forward of the bow oar.

Lee had beside him, in the stern, another repeater carrying the same cartridge. Both boats and the three kayaks left camp at the same time, but soon separated, my boat going in one direction, accompanied by one kayaker, and the other boat and two kayaks taking another.

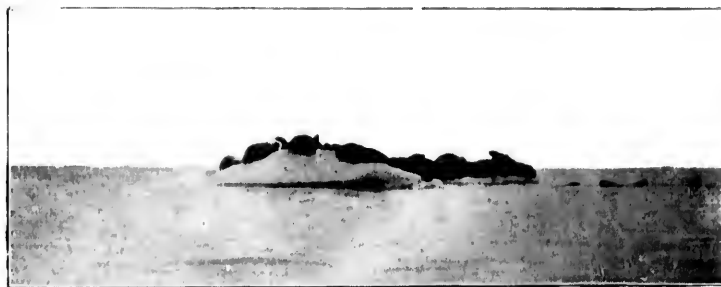
It was another dirty morning, with the snow-squalls still chasing each other through the Sound, and the air tremulous with a low continuous roar, as of distant surf, above which from time to time rose the crash and thunder of capsizing and disrupting icebergs.

The setting of the scene was savage in the extreme. The barren, snow-covered shores, the dead-white, ghastly ice-floes, and spectral bergs, driven here and there by winds and currents, and the black water swirling between, were rendered tenfold more dismal and desolate by the sombre twilight of the Arctic autumn.

¹ On the small, triangular decking at the bow was coiled my long, stout walrus line, one end fastened to the boat-ring, the other, with its steel-edged ivory barb, attached to the harpoon shaft, which lay across the gunwales against two small pins. Five or six coils of the line were detached from the rest and lay a little apart, so that they could be easily grasped and held in my left hand at the instant of launching the harpoon. On the deck, also, were a score of loose rifle cartridges and my three-barrelled gun, reduced now, since its last accident, to a length of eighteen inches, a regular Mafia weapon, in fact. Just behind me, and leaning against the starboard gunwale, was my Winchester repeater. It and the three-barrel both carried the powerful 45-90-300 cartridge. I expected to do most of my killing with the three-barrel, but the repeater was in readiness to repel the attack of a herd.

We soon sighted a herd of some fifty of the animals upon a cake of ice, but the day was too raw and cold for them to sleep comfortably, and they were restless, constantly fighting among themselves.

We pulled noiselessly towards them behind the screen of a small berg, till concealment was no longer possible; then with a low "Shake her up, *innuk-sue*," from me, the boat swerved out past it, and with all the speed of five iron backs and powerful pairs of arms, dashed at the quarrelling monsters. For an instant they were too startled to move; then the huge half-frightened, half-enraged brutes plunged bellowing for the water.



A HERD OF WALRUS.

But I was already within range, and springing to my full height, with a motion that called every muscle from scalp to toes into play, I hurled my harpoon at the nearest, a big bull that had plunged directly at the boat. The heavy shaft with its trailing line flew through the air, and caught the huge fellow fair in the shoulder, the iron-edged head pierced the tough hide, the shaft disengaged itself and floated loose, and, with a roar, the animal disappeared in a vortex of blood-stained foam and water.

Rapidly I tossed the remaining coils of line over-

board. The boat's headway had now carried her close to the ice, and she was dancing like a cork in the waves made by the plunging animals. The next instant the ponderous brute, with the momentum of a hundred feet of pain, rage, and fright-inspired motion, set the line taut, and changed it from a sinuous, flexible thong to a vibrant rod of steel singing like a deep colian, with a fierce note that sent every drop of blood leaping through my distended veins, and set every nerve and fibre in my body quivering with suppressed excitement.



FAST TO A WALRUS.

The boat reeled, quivered, whirled as on a pivot, her bow crashed into the ice with a shock which sent my excited Eskimo crew sprawling on their backs between the thwarts, then slid off, and the next moment we were tearing through the water, with the foam spurting from our bows, and the water boiling under our stern.

For the first few yards, only the head of the animal, to which we were fast, was visible; then, with a rush and a splash, the herd rose like one animal close to and all about the boat. What savage-looking brutes

they were! Their great heads armed with gleaming white tusks, their small, deep-set, bloodshot eyes, and their thick, bristle-studded lips, opening to give vent to the most vicious roars.

A well-directed volley from the two Winchesters at the most pugnacious of the animals, Lee taking one side of the boat and I the other, sent the herd under again, and enabled me to cast a rapid glance about me, to see that everything was all right, and that we were not in danger of being smashed against any of the ragged cakes of ice which lay in our swift course.

The respite was only for a moment, but it gave us the opportunity to replenish the magazines of our rifles, and when the herd again, with a simultaneous rush that threw their bodies half out of the water, rose roaring among the oar blades, the flash of the rifles in their very faces, and the bullets crashing against their massive heads, sent them under again.

Several times after this they returned to the attack, but even their iron skulls and savage pertinacity were no match for the almost continuous fire of our Winchesters, and at last, with three or four of their number dead, and several others leaving crimson trails behind them, the herd left the boat, and gathered about the one to which we were fast.

Then, as opportunity offered, when the captive animal rose to the surface again, a single bullet from my three-barrel penetrated the base of his skull. There was an interrupted bellow as his head sank into the water, a few big bubbles rose to the surface, and then the dead weight of two tons settled slowly upon the line, until it hung straight down from the bow of the boat, while the remainder of the herd dashed, roaring and bellowing, away among the icebergs. The struggle was at an end.

Then the dead animal was towed to the nearest

suitable cake of ice, a flat pan some fifty feet across, when everyone landed; the lines were transferred to the ice, the walrus pulled up till its head was out of water, and then, with the deftness born of long experience, my Eskimos cut holes in the surface of the ice-cake, a couple of slits in the thick hide of the walrus, rove an impromptu tackle and fall from the lines, and then all hands swaying on the line, and laughing and shouting, like fur-clad demons, gradually warped the lifeless mass of the dead "elephant of the north" out upon the surface of the ice. As the hind flippers came fairly on the ice, the Eskimos dropped the lines, seized their knives, and swarming upon the carcass, in an extremely short time had it dismembered and piled in pieces suitable for passing into the boat, each piece having a handle made with a slash of the knife through the edge of the tough skin. None too soon was the work accomplished.

Absorbed in watching the dismemberment of the huge animal, I paid no attention to our surroundings. Now looking up, I saw that, while our ice-raft was rapidly drifting out of the Sound before the wind, a giant berg, with its massive pale-green base a hundred fathoms or more down in the swift grasp of the



WARPING A WALRUS UPON AN
ICE-PAN.

flood-tide, was rushing resistlessly in the opposite direction, and bearing directly down upon us.

Already it seemed to tower over us. A collision was inevitable. I raised a quick alarm.

Again a series of frantic demonstrations from my Eskimo comrades, as they literally fell over themselves in their efforts to get the meat thrown into the boat. Scarcely had we pushed off and gained a hundred feet from our blood-stained raft, when the



OUR ICE-RAFT.

great berg, like an ocean liner rushing upon a pilot-boat, crashed into it and shattered it into a dozen crimson fragments.

Next in the midst of a nest of bergs near Herbert Island we found four together upon a cake of ice that was completely hidden by their great bodies. There was considerable trash ice about, which bothered us in approaching them. I succeeded, however, in

getting within range, and Kardahsu and myself both drove harpoons at the largest, a grizzly yet tuskless monster that came straight at the boat as he plunged from the ice. Kardahsu's harpoon failed, and, for an instant, I was uncertain as to my own, which followed the animal into a whirlpool of foam. The next instant the hissing line told me that my aim had been true. This animal was a powerful one, but the quantity of ice close about us gave it



"A GREAT BERG LIKE AN OCEAN LINER."

no chance to tow us. Kardahsu, fearing that its struggles might break my line, seized his harpoon and line, leaped nimbly out upon the ice, ran to the place where his unerring instinct told him the animal would appear, and, as its head emerged from the water, drove his harpoon into its neck. Then taking a quick turn about a projecting piece of ice, the great brute was securely anchored, and despatched with

the lance. When, at last, the huge carcass hung limp and inert upon the lines, crimsoning the ice and water for yards around, we lost no time in hauling it on to the ice and cutting it up, as our position was anything



but agreeable, rapid motions of disintegration by which the bergs were rounded. This was to be extremely the oldest the they had ever entirely hair was grey, corrugated, and both broken off close jaw-bone. The getting fresher moment, the errand and ominous the bergs by

"PUTTING THE STONE."

were surrounded were increasing, the *débâcles* were becoming more and more frequent, and I hastened to get out of the dangerous neighbourhood. It was too dark now for further hunting, and we pulled

owing to the and continuation of the we were surprised proved old and large, natives said, seen. It was less, the skin gated, and its tusks were down to the wind was every motion cracking of which we

away across the Sound to camp, with my boat loaded to the gunwale with the rich, dark meat and oily blubber which was to support my dogs through the winter.

During several stormy, disagreeable days the hunt was continued with varied success and adventures. Sipsu fastened one animal by the merest "fluke," his harpoon piercing the web of the hind flipper within two inches of its edge; Akpudisoahho secured a



MY WALRUS FLEET.

big bull by a magnificent long, left-handed throw; a cow and calf were obtained on a bit of ice directly under the overhanging cliffs of a gigantic berg; and once I sent the kayakers in advance to harpoon one of the animals, and give me an opportunity to observe their tactics. The two boats followed slowly in their rear. Paddling noiselessly and keeping as much as possible behind cakes of ice, the kayakers approached the huge game until Ingeropadoo saw an opportunity to flank the ice on which the animals rested, and,

hidden from them by its inequalities, climbed out of his kayak upon it. Seeing this, the other men immediately climbed out upon other cakes of ice, and pulled their kayaks after them for safety. Carefully adjusting harpoon, line, float, and drag, Ingeropadoo began crawling across the ice with harpoon ready in his right hand, the coiled line in his left, and the float and drag trailing behind him. The boats still kept creeping nearer.

Two or three bulls in the herd were uneasy, and kept lifting their ponderous heads, looking about and bellowing. This uneasiness on their part led Ingeropadoo to make his final rush for them too soon, and before he could get within certain harpoon range, the herd was in the water.

When it was too stormy for the boats to go out I whiled away the time with a series of athletic games among the natives on the strip of level beach. There were running and standing high and long jumps, throwing the harpoon, putting the stone, lifting, etc., and the eagerly sought prize for each event was a biscuit.

But at last there came a clear, calm, bitter night, and the next morning the surface of the little bight beside the delta was glazed and motionless, and on the beach behind the receding tide a vitreous film, the certain and immediate precursor of the formation of permanent young ice throughout the Sound. It was evident our departure could not be longer delayed if I wished to get my meat near the lodge by boat. I kept one of the Eskimos up the bluffs with the binoculars all the forenoon looking for walrus, but, though he commanded the entire width of the Sound and up and down for twelve or fifteen miles each way, he failed to discover a single animal. Reluctantly at last I gave the word to launch and load the boats, and we left for Karnah with gunwales scarcely

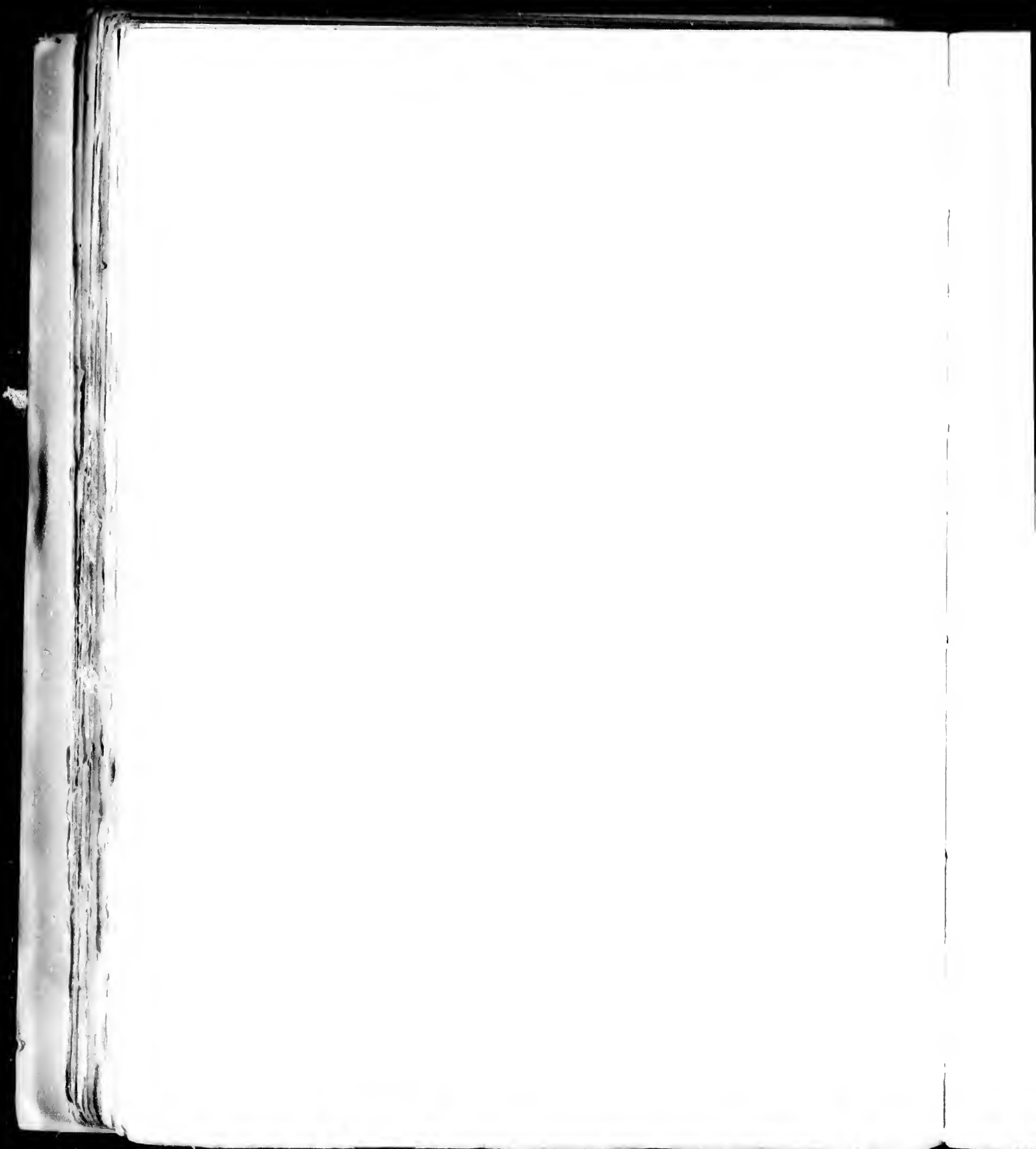
out of water, and after breaking our way through several miles of young ice, reached the settlement at dark.

As soon as we were within ear-shot of the place, one of my crew shouted at the top of his voice, "*Angesok ahwiaksue shadago*" ("The 'big one' has killed many walrus"), and at the call all the women and



WELCOME BACK TO KARNAH.

children and old men of the village rushed down to the beach to greet me and receive into full fellowship one who was now the peer of any hunter in the tribe, —one who in true Inuit fashion, with harpoon and line, had met and conquered their most formidable game, the great *ahwik* (walrus).



CHAPTER IV.

TRANSPORTING MEAT TO THE LODGE.

FALL MOVING OF THE ESKIMOS—WINTER HABITATIONS—A TEMPORARY
FRIGHT—UNDER THE KARNAH CLIFFS—DISCOMFORTS OF FALL NAVIGATION
—AN ARCTIC "RETURN FROM THE HUNT"—A PERILOUS JAM—JUST IN THE
NICK OF TIME—SATISFACTION—CUTTING UP THE MEAT—A WALRUS INFERNO
—WALRUS MEAT.



IN FULL WINTER RIG.

CHAPTER IV.

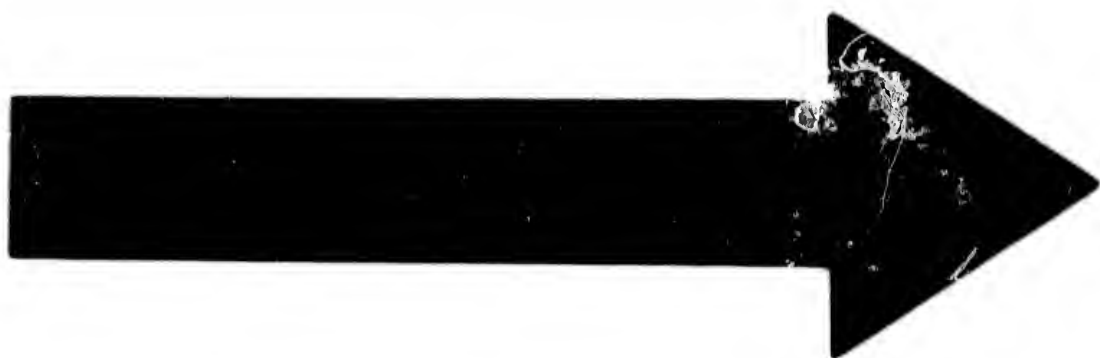
TRANSPORTING MEAT TO THE LODGE.



ALL night again, as during our previous stay at Karnah, the wind blew violently out of the gulf, as if it were a veritable cave of the winds, and the tardy grey morning light showed the black waters of the Sound, beyond the line of grounded bergs which marks the edge of

Karnah shoals, covered with racing whitecaps. It was no weather for my heavily loaded boats to face, and I utilised the day in making sketches and measurements of the igloos, and obtaining various information from the people. Karnah was evidently going to be a populous place during the winter. The population numbered sixty-one, of whom nineteen were men and young men, fifteen women and young women, and twenty-seven children; the proportion of the sexes being thirty-four males to twenty-seven females.

The village was still in summer garb, that is, the inhabitants, with the exception of one family, were



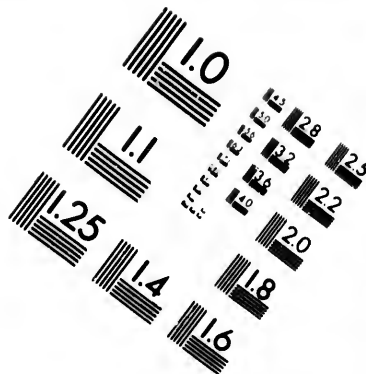
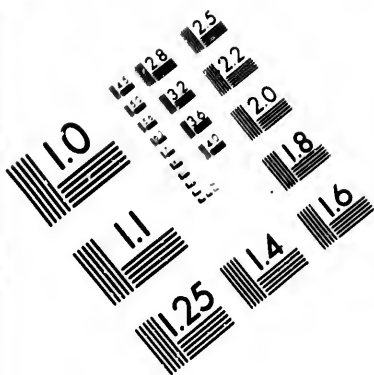
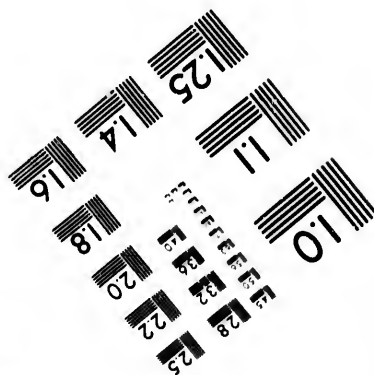
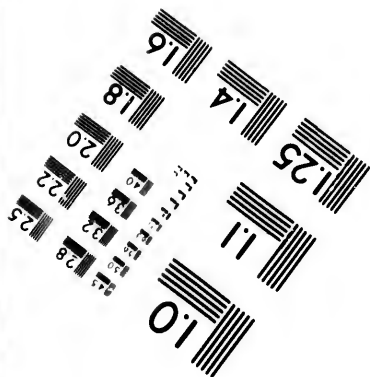
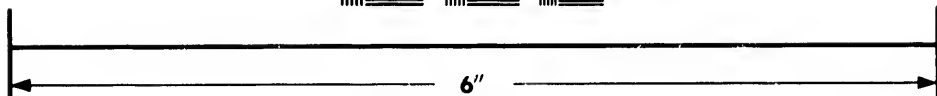
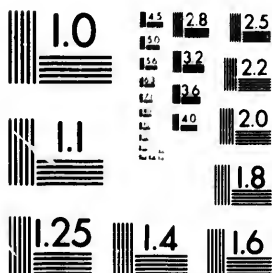


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still living in tupiks, of which there were ten; but the construction of winter residences was well under way. The five old igloos here, only two of which were occupied last winter, were all being repaired and rebuilt, and five new ones were nearly completed. All



THE MISTRESS OF THE TUPIK.

the roof and bed platform stones, which must be large, flat, and thin, as well as many of those for the walls, had to be brought by the men on their backs from the mountains, sometimes a distance of several miles. The construction of the igloos falls very largely upon the women, and in an emergency they even assist in bringing stones. These igloos vary in size, from nine to fourteen feet in length inside, and occasionally two, more rarely three, are built close together, the party wall doing double duty and thus economising material and labour. In plan and method of construction, each igloo is built like all the others. There is a long, low, narrow stone

tunnel of an entrance ; a small standing room ; a shallow platformed alcove on either side for meat and the stone lamps ; and a large platformed alcove in the rear,—the family bed. A single small window of seal intestines over the entrance admits a little light.

The construction of one of these primitive habitations, half excavated beneath, half built above the surface, would seem at first glance to demand nothing



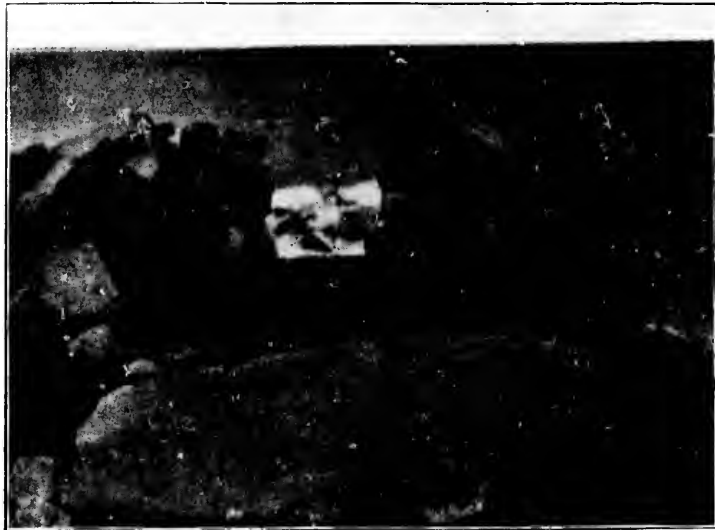
WOMEN BUILDING IGLOOS.

beyond a considerable outlay of manual labour in transporting and arranging the stones. Yet the spanning of a space twelve by fourteen feet in such a way as to support a heavy load of stones, turf, and snow, is not an entirely simple problem in a country where there is literally not a splinter of wood or anything that can serve as a substitute for it. Yet these children of the ice have met and solved this problem

A diagram of a rectangular structure, possibly a gate or a window, with dimensions indicated by dashed lines. The width is labeled 3' and the height is labeled 4'. The structure is flanked by two mounds of earth or stone, each labeled 'TUM'. The top of the structure is labeled 'X' and 'Y'.

PLAN & SECTION OF STONE IGLOO
KARNAH SEPT. 19 94 R.E.P.

with the cantilever principle, and the roofs of these old stone houses are everyone supported with massive stone cantilevers, firm and unyielding as a masonry arch. In the plan and arrangement of his house, too, the Eskimo has met and solved each problem that confronted him, and though the entrance is never closed, yet no draught or current of air disturbs the quiet interior, the thick non-conducting walls of stone



IGLOO UNDER CONSTRUCTION.

Rafter Stones on the Right.

and turf are perfect insulators from the savage cold, and the heat from every drop of the precious oil burned in the stone lamps is fully conserved. Many of these igloos have every appearance of being centuries old. Vertebrae of the now extinct whale are almost invariably built into their walls, and frequently such enormous stones are used in supporting the roofs, that it seems impossible they could have been handled without mechanical appliances.

These stone dwellings are occupied from the latter part of September till April or May, depending upon the season, locality, and movements of the occupants. By May they become very damp, and then the family betakes itself to its tupik, removing, at its departure



WINTER IGLOO.

Entrance and Window not Completed.

from the igloo, the window and a portion of the roof, so that throughout the summer the sun and wind may have free access to the interior. There is no ownership of these igloos beyond the period of actual occupancy. Any one of them is free to each and all, and

it is the exception rather than the rule that a family lives in the same igloo, or in fact in the same place, two years in succession. It is, this year, say, at Etah, the next at Cape York, the next at Ittibloo, and so on. The building of a new igloo is rather a rarity also, and is necessary only when, for some special reason, as this year at Karnah, an unusually large number of natives are attracted to one place. Usually no more families locate in a place than the existing igloos will shelter.

As the day was darkening into twilight, and Lee and Panikpah were cooking supper over a blubber fire built against the side of a big boulder, I saw two strange figures coming along the distant westward shore, and my exclamation of surprise being caught by the natives nearest me, in a moment the entire village was in a state of excitement. Who could it be coming from that direction, where there were no settlements except beyond McCormick and Robertson Bays? Advancing with some of the men to meet the strangers, I recognised at a distance the peculiar cut of a Cumberland-Gulf deerskin coat which I had given to Nooktah, and at once the thought flashed through my mind that the lodge had caught fire and been destroyed, or that Matt had met with some serious accident, and faithful Nooktah and old Ahtungahnah, as I now identified the second comical figure (dressed in a nondescript rig composed partly of her own last year's fur, much the worse for wear, and partly in cast-off garments given her by members of my party), had come overland by the well-known route through Tooktoo Valley and down McCormick Bay to bring me the news. It took me but a few moments after this to get within speaking distance and make the hurried inquiries which happily set my mind at rest. They had left the lodge to hunt deer in Took-

too Valley, and not finding any, and with mouths watering for a feast of fresh walrus meat, had tramped for two days and nights along the roundabout trail to the village. In the evening I went to a large, unoccupied igloo, which was utilised by the young people

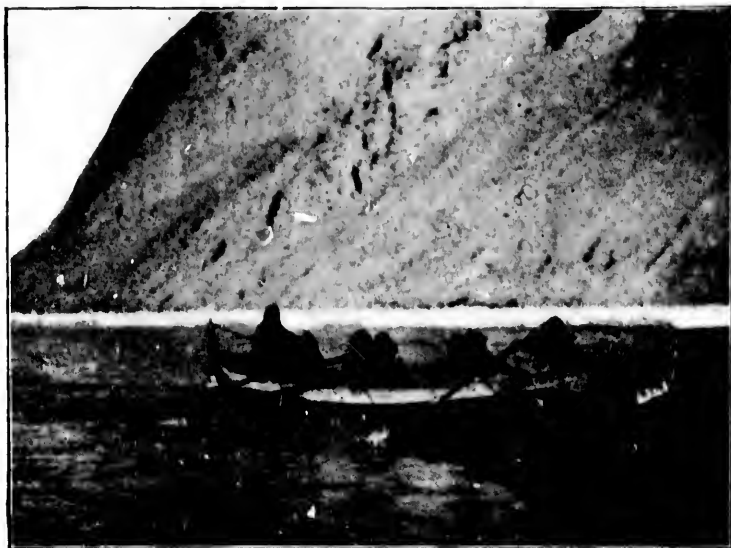


"DRESSED IN A NONDESCRIPT RIG."

of the settlement as a sort of playroom. Here I found assembled all the children of the village, engaged in various games and larking just like so many country children at home. Though at first somewhat awed and stilled by my entrance, they soon recovered and went on with their sport.

The following morning I got under way in the face of a fresh head-wind, but, by keeping close to the shore under the shelter of the Sculptured Cliffs, came along very comfortably as far as the entrance to Bowdoin Bay. Here I stopped for a few moments for Akpudisoahho to land and bring down three fine narwhal horns which he had cached here. In crossing the bay to the east side, we encountered young ice, much of which was so firm that we found it impossible to break a channel for the boat in the usual manner, with feet and boat-hooks. Working round these heavy areas entailed much loss of work and time, and it was dark when we came to the end of navigation, where a narrow shore lead ceased half-way between the Castle Cliffs and East Glacier. The steep talus slope at this place afforded absolutely no foothold, and we were obliged to effect a landing upon a still remaining fragment of last year's ice-foot. Here we made tea and supped on a few biscuit, then, as our landing-place afforded no facilities for lying down, we half sat, half reclined against the angular fragments of the talus, wherever our bodies could be made to adapt themselves to their irregularities. It was much like a night on a sleeperless "owl" train with the steam-pipes frozen. Yet, in spite of these little drawbacks and the fact that it was snowing merrily, the night was by no means the most uncomfortable that I have experienced. As soon as it was light enough to see, the load of the *Mary Peary* was thrown upon the ice-foot, so that her crew might hurry back in her to Karnah before they were beset by the young ice. With the change of the tide, a very narrow shore lead began to open, into which the *General Wistar* was put. As we worked our way along this lead, it slowly widened under the influence of wind and tide, so that we passed the East-Glacier Cove without difficulty,

and on up the shore a mile beyond. Here a sudden motion of the ice crushed my boat against the ice-foot until her ribs cracked, her seams began to open, and my Eskimos tumbled precipitately ashore. After a few moments of suspense the pressure relaxed, and we extricated the boat from her dangerous position. Then she was towed like a canal-boat, by the men climbing along the shore, as far as the Middle-River



THE "MARY PEARY" AND HER CREW.

Delta. Looking backward and down upon them, the men and the boat made a picturesque Arctic "Return from the Hunt." The boat, with its heaped-up load of vivid crimson meat, floating in the narrow ribbon of black water close to the shore, was the only bit of colour in the wide expanse of grey cliffs, dead-white ice, and lead-coloured sky. Tossed about on top of the load were the walrus heads with their powerful tusks, a blotch of white in the stern was a string of

Arctic hare, two or three purplish-black spots indicated the meat of an *oogsook* (bearded seal), while the bow was graced, not by the branching antlers of a great stag, but by three glittering, white, polished ivory shafts, straight as arrows and sharp as lances,



UNDER THE SCULPTURED CLIFFS.

the eight-feet-long tusks of the narwhal or fabled unicorn.

From the Middle-River Delta I hurried on ahead to the lodge, and sent Matt back to relieve Lee and carry him something to eat. By dark, everyone had reached the lodge. Soon after I left the boat the

lead closed up entirely, and Lee cached the meat and hauled the boat up out of danger. A clear, starlit night, fresh with wind from a bank of black clouds in the south, paled gradually into morning light, which showed me from the windows, close to my couch, a



A GIANT BASTION.

narrow lead forming at East-Harbour Point, and by the time we had hurriedly finished our coffee, the increasing wind was fretting tiny whitecaps upon it. This was evidently our opportunity to bring the *General Wistar* and its load to the lodge, and Lee, Matt, and the Eskimos hastened away down the

shore. A few hours later the *General*, under full sail, rounded the point at a racing pace, and was worked up to within a few hundred yards of the brook, whence the Eskimos backed the meat to the lodge. Then, after dinner, everyone started off to bring up the load of the *Mary Peary*, left below the East Glacier. The attempt was frustrated, however, by the jamming of the ice upon the shore at the Middle-River Delta, closing the lead completely. For three days after this, a snow-laden south-easter held full sway. We had reached the bay just in the nick of time, for the storm was making wild work along the lee shore of the savage Karnah cliffs. Sunday morning the wind subsided and shifted in direction, and the outward swing of the ice began to open the shore lead, which we were eagerly waiting for. The *General Wistar* was again launched and, with everyone working like beavers, forced to the meat cache, loaded, and brought up to the rocks directly in front of the lodge, where the cargo was removed, and she was then warped to the head of the harbour and dragged well up the rocks to her winter quarters. The season of navigation was closed.

The bringing of the meat to the lodge at this time was the seizure of a golden opportunity. With the turning of the tide the ice settled back again upon the east shore, and at daylight the next morning there was not a particle of open water between the lodge and the East Glacier, and the shore lead never opened again until the following summer.

It was with a feeling of satisfaction that I realised the fact that all the results of the September hunting were safely housed, the venison, birds, and hare hanging frozen in long rows in the corridor, and the walrus meat stacked in the large east room of the lodge.

This room presented a unique appearance : the great

hams, fore shoulders, rib and flank and neck pieces, piled high around the walls, till scarcely room was left for the stove, a passageway, and a small working place in the centre. Huge rubber-like flippers as



NARWHAL SKULL.

large as snow-shovels, narrowing down to wrists like propeller shafts, reached out of the mass at the passer-by; and from the top of the pile glared the splendid trophies of the hunt,—the savage heads with the fire-light glancing from the gleaming ivory tusks, blotched with the blood and froth of the death struggle.

But now that the harvesting was done, the husking of the corn, the threshing of the grain, was in order. The big chunks of meat, already frozen, would, with the steadily increasing cold, become more refractory than stone, because equally as hard and much tougher. In its present shape, too, the meat was entirely unavailable for sledge work, because of the useless weight of bones and skin.

No time could be more propitious than the present, with my merry gang of Eskimos eager for the work, to get it all in the most compact and effective shape. The coal-bin in the corner of the room was filled to overflowing with coal from the pile out on the rocks. Then the stove was fired till it glowed like a gigantic carbuncle, and meat heaped round it.

Transporting Meat to the Lodge 281

When this had thawed out, it was dragged into the centre of the room, other pieces put in its place, and then everyone fell to with sharpened knives, cutting the rich dark meat and heat-giving blubber into small pieces and pressing solidly into empty flour or biscuit tins, for use on the ice-cap; cutting the tough, almost indestructible, yet nutritious skin into strips which could be swallowed whole by a dog, for use during the winter at the lodge; and putting the bones aside for their own use.



LONG-TAILED DUCKS AND BLACK GUILLEMOT.

About six o'clock each day a pail of coffee and a pan of biscuits would be taken in to the Eskimos by Lee or Matt, a big iron pot would be placed half full of water upon the stove, into which each one would drop some special tidbit which he had laid aside during the day; then the pot filled up with juicy bones. While this was getting hot, other bones would be toasted before the fire, and the feast, interspersed

with laughter and gossip, would continue until the word "*Sinnimenahdowah*" ("I want to sleep") from me would quiet everyone, the matted heads would find a resting-place against the nearest piece of walrus, the black eyes would close, and silence reign un-

til stertorous snores set the atmosphere vibrating.

Another time a walrus head, one of their great delicacies, would be the *pièce de résistance* of the evening's feast. Placed in the midst of the eager group, one would carve lumps from the thick gelatinous lips, another slice the rich tongue, another gouge an eye and, puncturing it with his knife, suck it as we suck the pulp from a grape-skin, while another, with a deftly shaped bit of board, would extract the exquisite omelette of the brain, till finally the massive skull would be left as bare and white as if cleaned by ants or shrimps.

At these times I doubt if Dante or Doré could

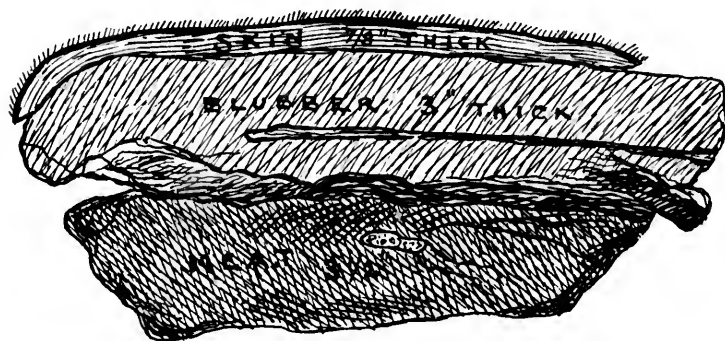
have done justice to the scene: The air heavy with the peculiar flabby-musky odour of the lifeless yet fresh walrus blood and flesh; the glowing stove, the sullen red eye of the quintessence of all evil, filling the room with bloodshot gloom, through which showed the



ARCTIC HARE.

blood-smeared faces, white teeth, and glittering eyes of the group of fur-clad demons quarrelling over the massive skull; while from the background, hideous misshapen deformities of webbed hands reached out for them; and from above, heavily mustached faces, with white-fanged mouths, glared at them.

The completion of this work left me with nearly two clear, solid tons of the richest, most substantial, nutritious food for man and dog that this region af-



A WALRUS STEAK.

fords—the dark, firm meat and dense blubber of the North-Atlantic walrus.

The accompanying sketch of a steak from the fore shoulder of a walrus will give an idea of the relative proportions of skin, blubber, and meat on these huge inhabitants of Arctic waters.

The meat of the walrus ranks second to that of the seal, as regards flavour and also as regards quantity consumed; though the reason for this latter is, that the seal, being more numerous, and an inoffensive animal, can be captured by young men and timid hunters, while only the strongest and most fearless hunters dare attack the walrus.

284 Northward over the "Great Ice"

Next to the meat of the bear, that of the walrus, the natives insist, stays by them the longest when engaged in arduous work; and dogs well fed upon it continue in prime condition under the hardest work and in the severest temperatures.



CHAPTER V.

FALL ICE-CAP WORK.

ATTEMPT TO REHABILITATE MY CACHES—LEE AND MATT UNSUCCESSFUL—
MY OWN ATTEMPT—A SIX DAYS' SNOW-STORM ON THE ICE-CAP FIVE
THOUSAND FEET ABOVE THE SEA—BITTER FANCIES—MY CACHES IRREVO-
CABLY LOST—A STUNNING BLOW—THE STRUGGLE TO GET BACK—THE
LAND BURIED IN SNOW—LIKE A SHIPWRECKED CASTAWAY—MAKESHIFTS
CAUSED BY THE CATASTROPHE—APPREHENSIONS.



BOWDOIN GLACIER IN OCTOBER.

CHAPTER V.

FALL ICE-CAP WORK.



THE next work on my programme was the rehabilitation of the nearer of the caches of provisions which I had left on the Inland Ice the previous spring and summer. Had it not been imperative that I should first assure my winter's meat supply for both men and dogs, I should have

searched for these caches immediately after my return from the ship; but there had been no alternative left me. Now was the first opportunity.

The last day of September having seen all my walrus meat safely housed, Lee, Henson, and Nooktah started the 2d of October, with sledge and twelve dogs, to visit the caches as far as Camp Equinoctial, dig them out, rearrange them upon the surface of the snow, and re-erect such signals as might have been blown down. The weather for the next few days was clear and comparatively calm, and I was congratulating myself upon its favouring character, when late in the fourth day the party returned without having

found any caches, and without having gotten farther than the first or alcohol cache.

They reported a most extraordinary depth of new snow on the ice-cap. They found two bamboo pole signals, one at Plateau Camp and one this side. When first erected last spring these poles stood eight



LEE AND HENSON STARTING FOR THE ICE-CAP.

and nine feet above the snow, now only about a foot was visible.

This was all very serious news and required that I should myself personally start for the ice-cap as soon as practicable. I should have started the next day, had it not been that the dogs needed food and rest.

It was late Friday when the party returned.

Monday morning, October 8th, at daylight I was on my way up the familiar trail across Baby Lake, past the mule cache, and up to the moraine with

Matt, Maksudwah, more familiarly known as "Flaherty," and ten of my best dogs.

It was very late in the season now; we had but a few hours of daylight, and work upon the ice-cap could be prosecuted only under serious disadvantages.

The morning was calm, bright, and clear after the two previous cloudy and threatening days, and we reached the moraine in fairly good time. Before noon we were under way up the heavy littoral gradient of the ice-cap in the face of a light north-east breeze, over a surface very suitable for snow-shoes, and pushed on as far as the two ski points which, now barely projecting above the snow, marked the old site of Plateau Camp. When we reached these, it was nearly dark, the evening air was decidedly sharp, the thermometer standing at -16° F.; we had covered sixteen miles of an up-hill road, and I gave the word to camp. To pitch the tent and fasten and feed the dogs took but a short time, and we were soon in the tent waiting for the boiling of our tea. This accomplished, and the tea utilised to wash down two or three biscuits apiece, we lost no time in going to sleep.

The next morning we were up long before sun-



"FLAHERTY."

rise, and after a repetition of the tea and biscuit, reinforced by some frozen seal meat, we were again under way. For this trip I did not feel that we could encroach upon my limited sledge supplies for the spring journey, so our rations consisted, besides tea and a scant allowance of biscuit, of seal meat, frozen to the consistency of a stone. No more signals were seen, but at four o'clock my pacing indicated the vicinity of the first cache, and as I swept the circuit of the snow-field, I thought that I had found the object of my search, for sharp and clear against the western sky, now yellow from the departed sun, stood up a pole, projecting from the snow apparently about a foot, and seemingly some few hundred yards distant. Directing my steps towards it, the few hundred yards lengthened to a mile, and the little pole to four, standing nine feet high and marking the cache which Lee had left a few days before.

When I got back to my sledge, the cold blue shadow of night, sweeping down from the north-east, had taken full possession of the field surrendered by the light, and I gave the word to stake out the dogs and pitch the tent. The day was a repetition of the previous one, bright and clear, with a fresh and biting north-east breeze. The snow, as we increased our elevation, had grown softer, and the snow-shoes sank deeply, making the travelling decidedly heavy. Tea having been made and despatched, we stretched upon the snow with draw-strings of kooletah and trousers pulled tight, arms withdrawn from the sleeves and folded upon the chest, and were soon sleeping comfortably.

At midnight, Matt, who had gone outside, reported a cloudless sky, the stars shining brightly, and a low but brilliant aurora to the north. At six o'clock fog and clouds had obliterated everything, the wind had

veered to the south-east, and that dead grey emptiness of minute snow particles, which I knew so well, shrouded the universe. I had the tent turned to bring its back to the wind, the sledge brought alongside, the dogs refastened in front of the tent, and everything carried inside,—preparations which more than one disagreeable experience had taught me to



CLIMBING TO THE MORaine.

make. These completed, I re-entered the tent and Matt followed me.

Absorbed in my thoughts, I did not notice for some time that Maksingwah had not entered with us, and that I had heard no sounds from him outside. The suspicion at once came to me that he had decamped, rather than take the chances of an October storm on the dreaded *sermiksoak* (ice-cap). Looking

out and seeing nothing of him, I tied on my snow-shoes, and, picking up our sledge tracks, found his footprints overlying them, and pointing down the back track. I did not follow him for any distance, as, if we were booked for a long storm, he would be of no earthly use to us, while his absence would very materially economise our food supply, and enable us to stand a longer siege. Poor fellow, I learned afterwards that it took him four days to reach the lodge, arriving at the end of that time so weak with hunger and cold that he could barely crawl.

The wind increased to a steady whistling gale, the air became saturated with horizontally flying snow, and those Arctic barometers, the dogs, were every one curled in a ball, backs to the wind, and noses and feet buried in their bushy tails. Reluctantly I resigned myself to the prospect of another of those dreary storm-bound episodes upon the "Great Ice," only hoping that I might be as fortunate as hitherto in sleeping away the majority of the long hours. All day and night the monotonous music of the storm continued. Late in the afternoon of the next day, the wind slackened a little and enabled us to get out, feed and untangle the dogs, and muzzle several suspicious members of the team that might be expected, under the influence of that arch-devil of mischief and destruction which in storms on the "Great Ice" possesses the Eskimo dog, to eat their harnesses and traces. Then the fury began again and continued till six weary gnawing days and nights, the most accursed I ever spent upon the ice-cap, had crawled their slow lengths into the past.

My little tent, pitched at an elevation of five thousand feet above the sea-level, stood upon the absolutely unbroken, unobstructed surface of the "Great Ice." The fury of the wind drove the snow through

the walls of the tent in a constant shower of impalpable white dust, which settled upon us and everything in it. The clouds and the driving snow combined to almost completely obliterate the little daylight remaining at this season of the year, and kept us in continual gloom. About twice in each twenty-four hours we lit the little oil-stove, and made a cup of



CARRYING A SLEDGE.

tea, ate a biscuit and some of the seal meat, then put out the stove, pulled our hands and arms inside our fur sleeves, and, rolling on our faces to avoid the snow-dust, tried to sleep again.

But after the first three days I could not sleep and could only lie and listen to the infernal driving of the snow against the tent, knowing that the demoniac white down-pour was destroying the last chance of

finding my caches, destroying all the work of the previous year on which I had counted so largely to assist me the next spring, reducing my resources to the very minimum, and perhaps even destroying every chance of success next year. Plans for the future failed me. Interest in anything refused to be aroused; thoughts of wife and blue-eyed baby, of mother, pictures of boyhood, happy scenes and memories, before this devil of Arctic Exploration took possession of me, rose and ranged themselves opposite to the precious hours of my life being wasted, the sacrifices of me and mine, all perhaps to end in nought, till it seemed as if with this, and the unceasing hissing of the wind and snow, I should lose my reason. Sunday evening especially, I thought of dear brown eyes and blue baby-eyes until I could stand it no longer, and by brute force turned my thoughts elsewhere.

At last, at midnight of Monday, the stars were shining in a nearly cloudless sky, and soft yellow moonlight tinted the infinite marble plain and fell upon my sleeping dogs, while a light but bitter north-east breeze rustled past the tent. The work of digging out sledge and tent, beating the tent free of its frost coating, and repairing harnesses and traces consumed several hours. The snowfall, as measured on the poles at Lee's cache, had been a little over three feet on a level. When, towards noon, the sun at length rolled up above the rim of the great feeder basin of the Heilprin, Tracy, Melville, and Farquhar Glaciers, it fretted every inequality of the "Great Ice" with burnished gold. With the disappearance of the clouds and the return of the north-east breeze, the temperature had dropped again to -12° F., equivalent at least to -25° F. at the sea-level.

The signal at the Cache Igloos, a yellow bamboo pole projecting in the previous march ten to twelve

feet above the snow surface, would, I hoped, be only partially submerged by even the enormous snow precipitation of the intervening months, and if this were found I knew I could find the cache of provisions one mile beyond, while, if it were buried in the excessive snowfall, it would be useless to waste time in looking for any other signals. I feared from the first that my search would be unavailing, for during this last storm alone over three feet of snow on the level had



PACKING.

fallen. Yet through every minute of the precious daylight we diligently quartered the surface of the desert of snow, straining our eyes in the effort to detect a bit of the top of the pole which had been left to mark the position of the cache.

All our efforts were in vain; and blue-black night again folded the "Great Ice" in its embrace.

The sole result of nine days of wasted time and effort had been to satisfy me beyond a doubt that all my essential supplies for the next spring's sledge jour-

ney, nearly a ton and a half in all, including every ounce of my alcohol and pemmican, were irrevocably and forever buried in the insatiate maw of the "Great Ice," and that all of the work of the past year had been completely blotted out. I was almost stunned by my loss; I felt like a man shipwrecked upon an uninhabited shore, with nothing left him but the



DOGS AT THE MORaine.

clothes upon his back. Listlessly I pitched my tent, to rest even though I could not sleep, through the thickest of the darkness before commencing the return march.

However, our troubles were not yet over. When the twilight of the following day had grown enough for us to move, I found that one of those indescribable opaque sightless fogs had settled upon the ice-cap, and

in every direction was only blank nothingness. We must make an effort to get back to the lodge, for we were on the last round of our provisions. With compass in hand I started off, and travelled as far as I could without losing sight of Matt and the team, which might be two hundred feet, then with the compass put myself on the course, then at the word Matt would drive the team up to me. The dogs wallowed to their chins in the soft snow, and the sledge, though loaded with nothing but the tent, oil-stove, and shovels, dragged like a snow-plough.



VIEW FROM THE ICE-CAP.

Two days of this kind of work brought us twenty miles nearer the lodge, and on the third morning I was delighted to find that we were just beneath the cloud level, and could make out ahead of us, beyond the ghastly white stretch of the ice-cap, the sullen shapes of the snow-covered land, barely discernible in the dead light.

From the landward crest of the ice-cap where it begins to slope sharply down to the surrounding moraine, the bold capes and points of land jutting out into the gulf and Sound seemed, in the dim, grey

sunless light, like huge Arctic monsters crouching at each other.

Tooktoo Valley was almost unrecognisable, so deeply was it shrouded in snow, blown into it from the surrounding ice-cap. The lodge itself, drifted in, was almost invisible from the rear, but before reaching it we met all the inmates of the place. Our dogs, loosened from the sledge at the moraine as usual, with their traces coiled about their necks, had gone on ahead of us to the lodge and heralded our approach.

With the return from the ice-cap in gloomy spirits,



HARD AT WORK.

began the long winter night. While on the ice-cap, a mile above sea-level, we had several hours of daylight; down at the lodge, under the shadow of the mountains, the duration of daylight at noon was but an hour or two. We were already on the confines of the valley of the shadow of death, the great, the indescribable night of the Arctic regions.

The loss of my caches was a blow which dazed me for a time. We had been badly enough off before in regard to equipment, having only odds and ends and wreckage, so to speak, from which to evolve it; all the

flower of my material having been expended on the fall work of 1893 and the attempt of the previous spring. I had, however, seen my way clear to obtain from the material at hand such an equipment as I believed would meet our requirements. Now practically all of my provisions were gone. Every ounce of pemmican and alcohol, the two prime essentials of an Arctic sledge ration under any condition, and doubly so for ice-cap work, were lost. What should I, what could I do?—and yet the idea of abandoning the jour-



IN CAMP.

ney, even in the face of this apparently overwhelming disaster, never for a moment occurred to me, nor, I think, to either of my companions.

It would be necessary to revert to first principles as to rations, and then leave the result to the Almighty. An account of stock at the lodge showed the following:—raw, frozen venison for ourselves and frozen walrus meat for our dogs must take the place of pemmican; and coal oil must serve as a substitute for alcohol. We could make out rations of tea, biscuit, oil, and raw meat for ourselves and dogs for two

months, *i.e.*, sufficient for the journey to and from Independence Bay under favourable conditions; and have a little tea, biscuit, and oil still remaining for use beyond that point. For dog food and our own meat rations beyond that point, our entire dependence must be upon the country beyond the ice-cap.

I had in my 1891-1892 Expedition demonstrated that one pound of pemmican per dog and three-fourths pound per man per diem would keep both in good working condition. The values of walrus meat



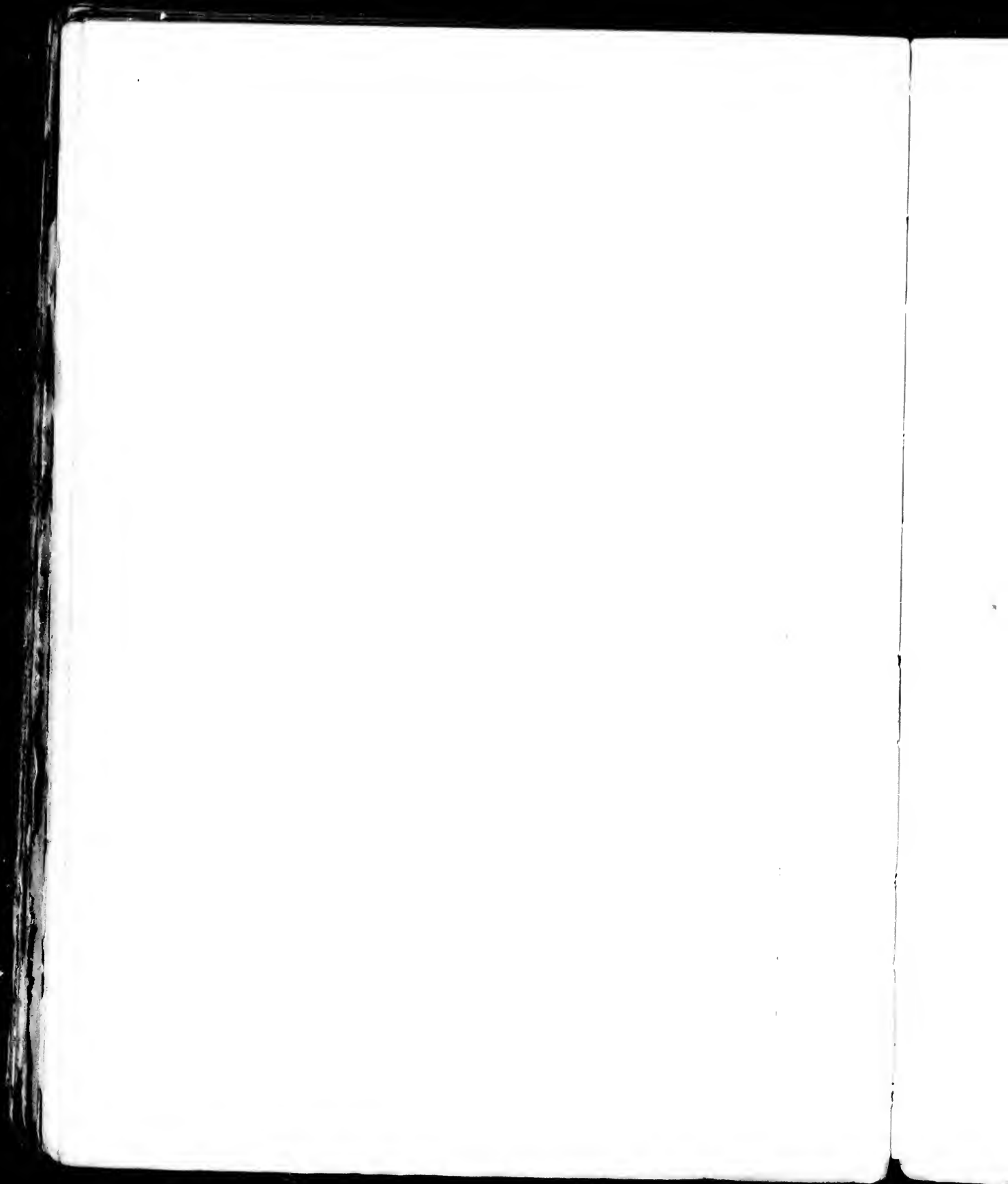
"THE DIM, GREY SUNLESS LIGHT."

and venison for such work were unknown quantities, though unquestionably much inferior to pemmican, yet I felt that we stood at least an even chance of reaching Independence Bay, and that chance we would take. Beyond there everything would depend upon circumstances. Still, by a favourable combination of these we might yet accomplish something.

Heavily handicapped at best, my chances for accomplishing anything beyond Independence Bay depending entirely upon the most fortuitous combination of

circumstances, my haunting fear was that something would happen to prevent our even starting from the lodge. Had the problem before us been merely the passing of the winter in comfort and safety, I should not have had a care. As it was, my favourite nightmare during the winter was to dream that I was back home again without having been able to make another attack upon the ice-cap, and I would waken with a feeling of positive relief to find myself stretched on my bearskin couch, with the howling wind of the great night tearing at the house, and realise that I still had the struggle before me. That I had reason for this fear will be understood from our utter lack of any margin for accidents or mishaps, either to ourselves, our material, or our supplies.

Should the dog-madness descend upon the dogs, it would end everything completely; should I happen to be disabled, it would result in the same way; should Lee or Henson meet with an accident or die (and we had no doctor), it would be a crushing blow; should the house catch fire and our scant material and remaining sledge supplies be destroyed, it would cripple us. And I had reason for these fears. Lee came home from a late October surveying trip so used up that it took weeks to get him in shape again. Matt entered the New Year with an attack which at home would have been called the grip. And I, going out in one of the furious winter blizzards to see that everything was securely lashed, was nearly brained by a heavy box of frozen meat, which, blown from the roof, just grazed my temple and struck a glancing blow upon my arm that rendered it useless for a week. I should have liked to put my comrades in fire- and burglar-proof safes, and had them fed with a spoon until the day arrived to start upon the ice.



CHAPTER VI.

FALL HUNTING, ARCTIC DAY AND NIGHT.

PREPARATION OF THE HOUSE FOR WINTER—INTERIOR DETAILS—A GUEST-CHAMBER—MY OWN SUITE OF APARTMENTS—THE WANING OF THE SUMMER DAY—THE DEPARTURE OF THE SUN.



GARGOYLE CLIFF, MT. BARTLETT.

CHAPTER VI.

FALL HUNTING, ARCTIC DAY AND NIGHT.



THE supply of meat obtained during my return from Cape York, and in the grand walrus hunt, was by no means all that was secured during the fall. Every possible opportunity for hunting was utilised, and every ounce of meat was cared for and put away as carefully as a

miser hoards his gold.

The meat secured during the boat trip consisted of eight saddles of venison weighing 249 lbs., together with four tongues, four livers, and three hearts, also thirty-eight looms, one duck, one brant, and six Arctic hares.

A few days after my return, I shot two more hares not far from the lodge.

The hunting trip to Kangerdlooksoah doubled our meat supply, adding to it six saddles of venison (a total weight of 215 lbs.), together with six hearts, six tongues, two livers, some thirty pounds of sirloin, and nine hares weighing 64½ lbs. A doe and a fawn, killed



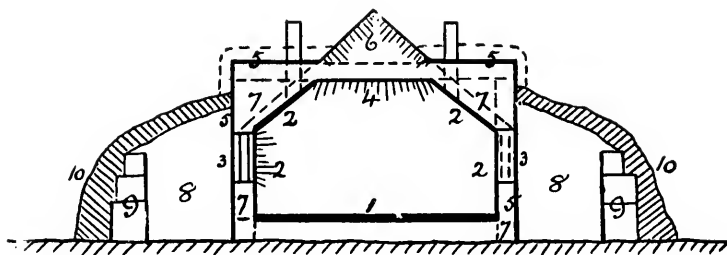
ICEBERG AND YOUNG ICE.

by Nooktah on the day Matt returned, added fifty pounds more, making a total of 353 lbs. obtained in a week. Three more hares I obtained at Cape Cleveland during the walrus hunt. An *oogsook*, killed during the walrus hunt, netted me eighty-four pounds of clear edible meat.

On the 27th of October, Matt obtained two more deer in Tooktoo Valley, weighing about 150 lbs. gross, and ninety to one hundred pounds net. On the 1st of November, eighteen pounds more of venison were added to my supply, from a fawn shot by Nooktah and Panikpah in Five-Glacier Valley. The week ending November 15th added two hundred pounds more of venison to my stock, from three deer, killed by Panikpah and Matt at Kangerdlooksoah, during the last of the twilight.

Next after an abundant supply of food, the most important item affecting the comfort of the Arctic traveller is his winter quarters. The houses erected for my expeditions have been constructed after a new design, and possess new features. They have consisted of an inner shell made as nearly air-tight as possible; separated, by an air space of from one to three feet, from an outer shell, also air-tight. The roof is practically flat, and the entire structure surrounded by a continuous, closed, nearly flat-roofed corridor, four to six feet wide, the outer wall built of the boxes containing supplies, and banked with snow outside. By this method of construction, the house is protected completely from the fierce assaults of the winter storms. In severe stress of weather it can, like the Eskimo huts, be completely covered in with snow. Every package of supplies is perfectly accessible, and the corridor affords ample room for work upon and storage of equipment.

The most advantageous way of modifying the

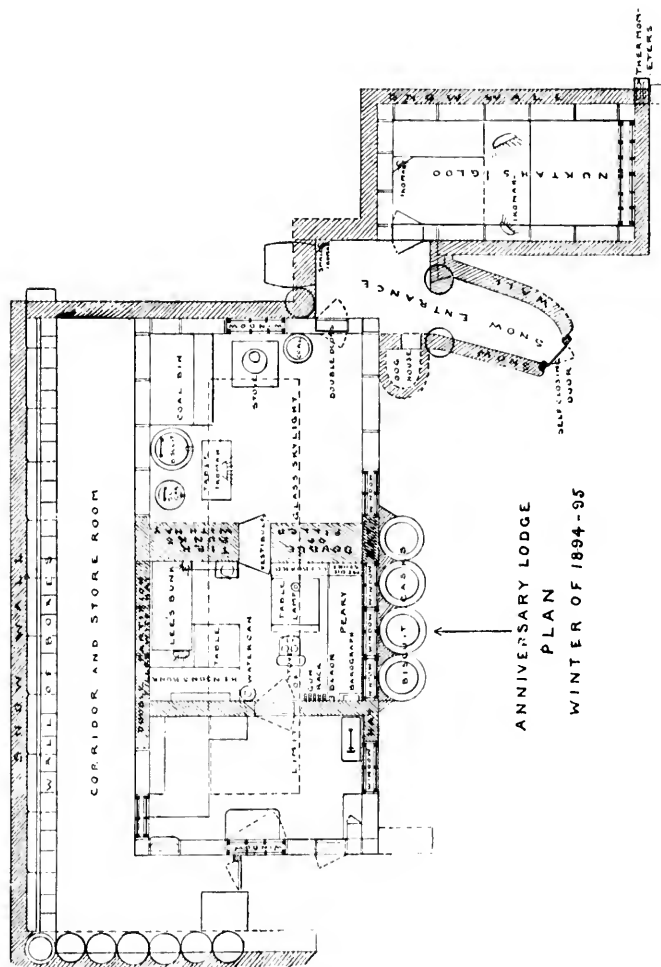


TYPICAL CROSS-SECTION OF PEARY ARCTIC HOUSE SHOWING PRINCIPLES OF CONSTRUCTION.

1. Double floor, tongued and grooved, with tarred paper between.
- 2, 2, 2. Inner sheathing, tongued and grooved, and lined with blankets or felt.
- 3, 3. Double windows.
4. Overhead sash to prolong Arctic day as much as possible, covered with hay in winter.
- 5, 5, 5. Outer sheathing, tongued and grooved, with tarred paper nailed to it inside and out, and outer joints covered with battens.
6. Lantern or skylight.
- 7, 7, 7. Air spaces between inner and outer sheathing, from 1 to 3 feet wide.
- 8, 8. Corridors, 5 to 6 feet wide, and 6 to 7 feet high, extending entirely round house, and serving both as a protection from cold and as storehouses.
- 9, 9. Walls formed of the boxes of supplies, enclosing these corridors. These boxes are all opened and laid on their sides so that their contents can be removed as from so many shelves.
- 10, 10. Snow embankments; blanketing the corridors. If necessary this snow blanket can be carried over the roof as shown by the dotted lines.

lodge to meet the requirements of my little party during the winter of 1894-95 was quickly decided upon, and the work carried on from time to time in the intervals of outdoor work, until everything was completed. The central portion of the main house, nine by fourteen feet, and eight feet high, which during the previous winter had been the kitchen and dining-room, was selected for our use. On the west side of this, and separated from it by a double partition one foot thick, was the room formerly occupied by Mrs. Peary and myself, and on the east side, separated by a single partition, the large room formerly occupied by the party. A window three feet high extended clear across the front of the room, and a skylight, six feet wide, ran across the centre of the ceiling.

A door opened into each of these adjacent rooms, and two ventilating shafts led through the ceiling and roof to the open air. To adapt this space to our needs, the partition between the former kitchen and dining-room was removed, the table cut down to half its original size, and a small stove set up nearly in the centre of the front half of the room. The stove-pipe, a home-made affair, constructed of two sheets of corrugated iron wired and riveted together, was carried up through one of the ventilator shafts, where it was wrapped with asbestos to prevent the possibility of igniting the woodwork, and perhaps turning us out homeless into the Arctic night. Under the windows a wide bench was built, extending the entire width of the room. A big bearskin was thrown over this, and by day it served as a seat, while at night it formed my couch. From it, up to the time that the intense cold compelled me to nail a blanket across the windows, and paper over them, I could, without rising, look out in twilight, or moonlight, or starlight, upon my frozen world.



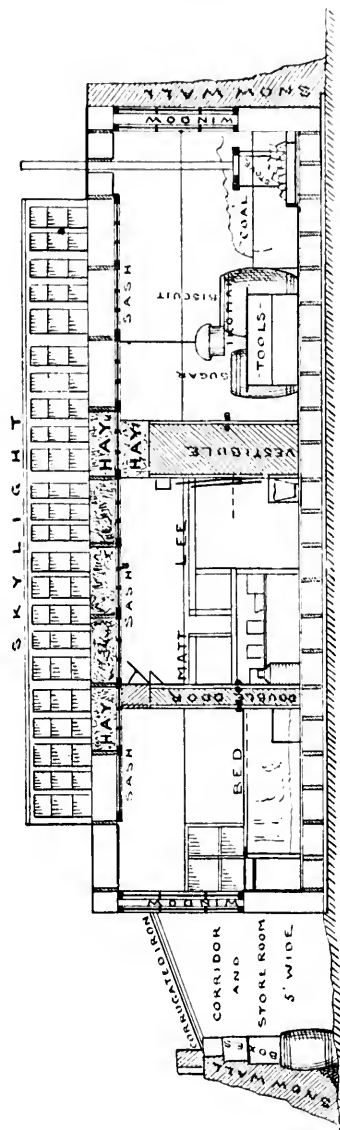
ANNIVERSARY LODGE
PLAN
WINTER OF 1894-95

The rear portion of the room was to serve as a sleeping apartment for Lee and Matt, and a platform was constructed across the front of it, three feet above the floor, and six feet from the rear wall. The heads of the cots rested on this platform, and their feet were supported on a cleat fastened to the rear wall. This arrangement of the cots was something after the Eskimo method, lifting the occupants out of the low temperature near the floor, and permitting a free circulation of air. Blanket curtains to these cots and my couch, which could be drawn at will, rendered them quite cosy. Under the platform and near the stove, shelves were put up for the current supplies of flour, corn-meal, sugar, coffee, etc., and the space back of these offered a convenient storage room. Along the east wall of the room were two cupboards, one for dishes and books, the other for medicines. Along the floor on the west wall were our water tank (a ten-gallon milk-can), and the gun-rack, containing two Winchester 10-gauge shotguns, two 45-calibre Winchester repeaters, three 44-calibre Winchester carbines, and a Daly three-barrel, which, after having twice burst, and twice been cut down, was now seventeen and a half inches long in the barrel, and looked like a Mafia weapon.

This arsenal with filled magazines represented sixty-four shots. A pair of six-shooters hanging in the corner under the barograph, and Matt's carbine slung over his bed, added twenty-four more, or a total of eighty-eight shots, in immediate readiness for an attack by bears, deer, foxes, natives, or other equally dangerous animals.

Above the gun-rack were the clock, thermometers, barometers, barograph, and chronometers. Finally, the entire walls and ceiling were papered by Lee with full-page pictures from our store of illustrated papers,

ANNIVERSARY LODGE
LONGITUDINAL SECTION
WINTER OF 1894-95



partly to stop the cracks and keep out the cold, partly as a decoration. These pictures, with three barrel hoops suspended around the stovepipe near the ceiling, for drying mittens, kamiks (boots), stockings, and so on; one of the nets used in catching little auks, suspended near the ceiling, for drying grass for our kamiks; a coal bucket; and a molasses keg for a chair, completed the furniture and adornments of the room.

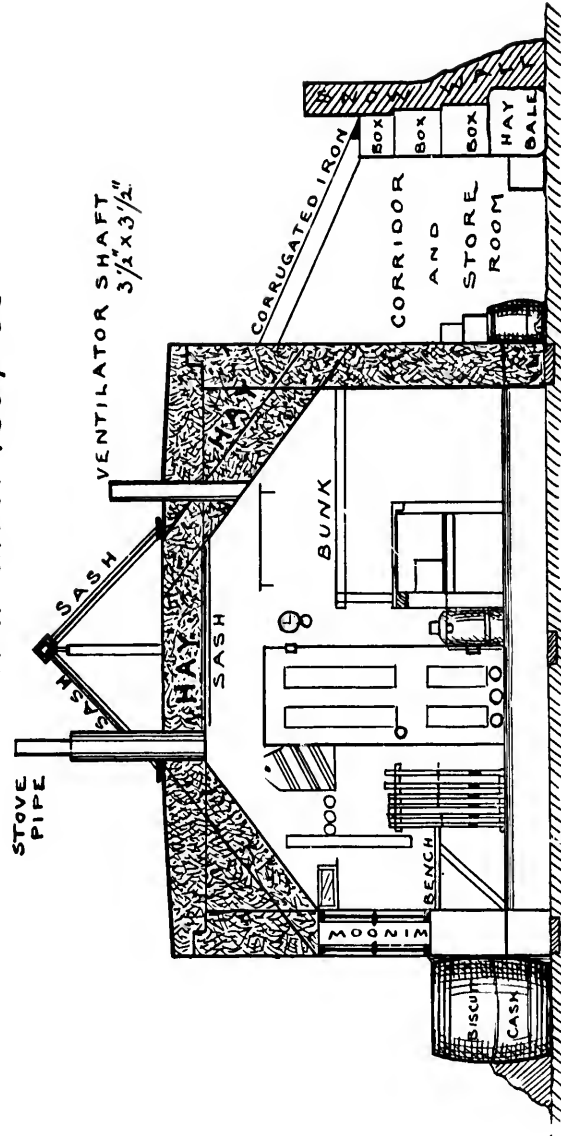
The bulk of this work was done by Lee during my absence on the boat trip, the minor details were added from time to time, as necessity suggested and opportunity permitted. So much for the interior.

The consumption of the supplies, and the utilisation of the boxes and barrels containing them for fuel the previous year, had done away with the greater portion of the corridor wall surrounding the house, leaving only that along the rear and a portion of the west end. Deprived of this outer line of defence against the cold, it became necessary to devise some other method of insulating and protecting our room. The rooms on either side were a great assistance, but were not sufficient. Immediately after my return from Cape York, and while Matt was away at Kangerdlooksoah, the remaining bales of hay were opened, spread upon the rocks, thoroughly dried in the wind and last of the sunshine, and the spaces between the inner and outer shells of the house filled with the hay. Later, when the long night commenced, and daylight had vanished, the skylight was covered a foot thick with the same material.

The partition between our quarters and the main room was re-enforced by a wall of hay two and a half feet thick, extending from floor to ceiling. A small vestibule with double doors completed the protection on this side. The double partition between our room

ANNIVERSARY LODGE CROSS SECTION

WINTER OF 1894-95



and the one on the west was made tight by closely packing with furs. In the west room, our furs, fur clothing, and lighter and more important articles of equipment were kept, while the large eastern room served as storeroom, workroom, and guest-chamber. At the end of the latter, stood a rude stove of corrugated iron, supported on the base-plate of the launch boiler; and the back part of the room was occupied by the coal-bin, a cask of biscuit, a barrel of sugar, and a rude table, on which burned constantly an Eskimo stone lamp. There was a broad seat also, covered with a deerskin, for the accommodation of our seamstresses; a seat on which they could sit tailor-fashion while sewing. Entrance to our quarters was effected through this room. Here my walrus meat was cut up and packed; here my tent was made; my sledges assembled and lashed; and here the natives gathered and made merry.

The best that we could do in the way of exterior protection was to range my four big biscuit-casks side by side against the house under the windows of our room, with their tops just level with the windowsills, pack the spaces between them and the house, also the junction of the house and the ground, with hay, then, after a sufficient quantity of snow had fallen, bank everything with it to a height of three or four feet, build a wall of snow blocks against the eastern end of the house, and enclose the outer door with a roomy storm entrance, from which a narrow snow passage, closed by a second door, led to the outer air. This snow vestibule also afforded entrance to the smaller building, formerly the studio, but now the domicile of my faithful hunter and dog-driver, Nooktah,—the father of "Bill," the little girl whom Mrs. Peary took home with her,—and his family. Should the winter prove unusually severe, I intended to pro-



THE LODGE.

tect the house still further by a belt of snow armour amidships, extending from the ground up the walls, over the roof, and down to the ground again, but the necessity for this never arose.

Thus, in our little house within a house, we lived without serious discomforts.

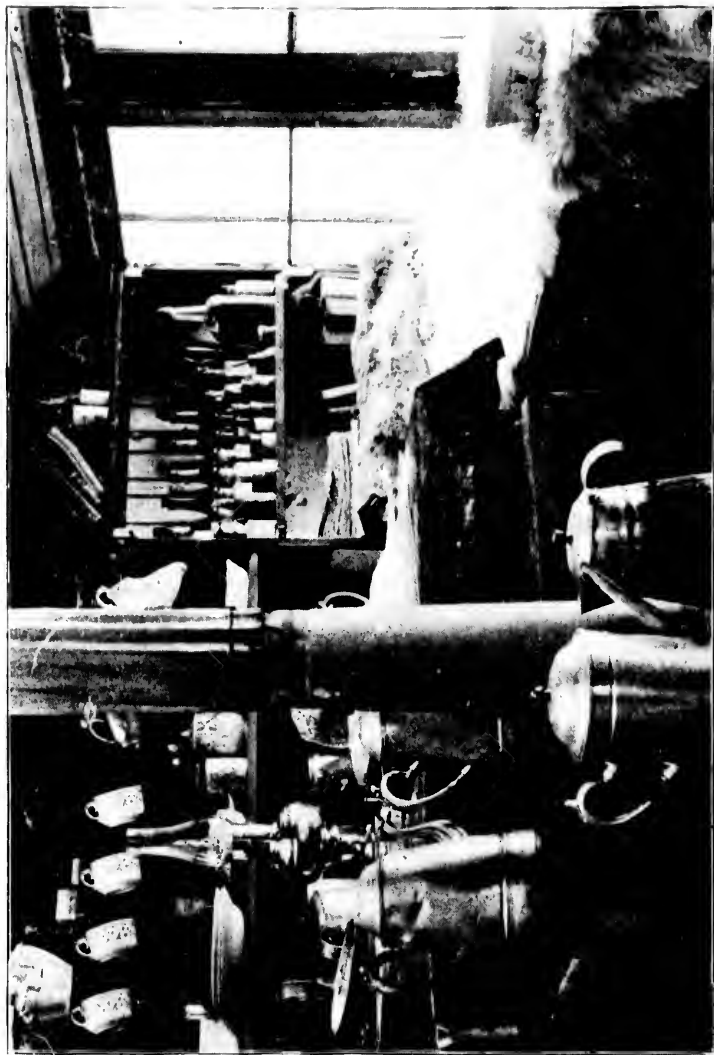
At first, the quality of my coal gave me some trouble; but after I commenced screening it through a discarded wire mattress, thus removing the dust and dirt, our tiny stove kept the room too warm for comfort, until I bored three three-inch holes in the bottom of the door leading into the west room. This caused a powerful and steady circulation, and kept the room entirely comfortable. At no time was there any condensation of moisture or formation of ice in the room. The temperature of the room, at all times when there was a fire in the stove, was high enough for comfort. But, as the fire was allowed to go out when we turned in, the temperature would fall considerably by the time the fire was started the next morning, frequently reaching 12° and 13° F., and, on one occasion, 8° F.

A single picture of my own corner in the house where we spent the winter,—a corner which served as parlour, sitting-room, library, dining-room, kitchen, workshop, and bedroom,—will give an idea of our interior surroundings.¹

The phenomena of night and day in the Arctic regions are clear to very few. I think I should be not far from the truth if I said that they are fully understood only by those who have spent a year there.

There is a vague appreciation of the fact, that in very high latitudes there is a long period in summer

¹ When I left the lodge in August, 1895, I gave it to the faithful Eskimos who went on the ice-cap with me, and they moved into it. In the fall, through the carelessness of Ahtungahnaksoah, it caught fire, and was totally consumed.



MY SUITE OF APARTMENTS.

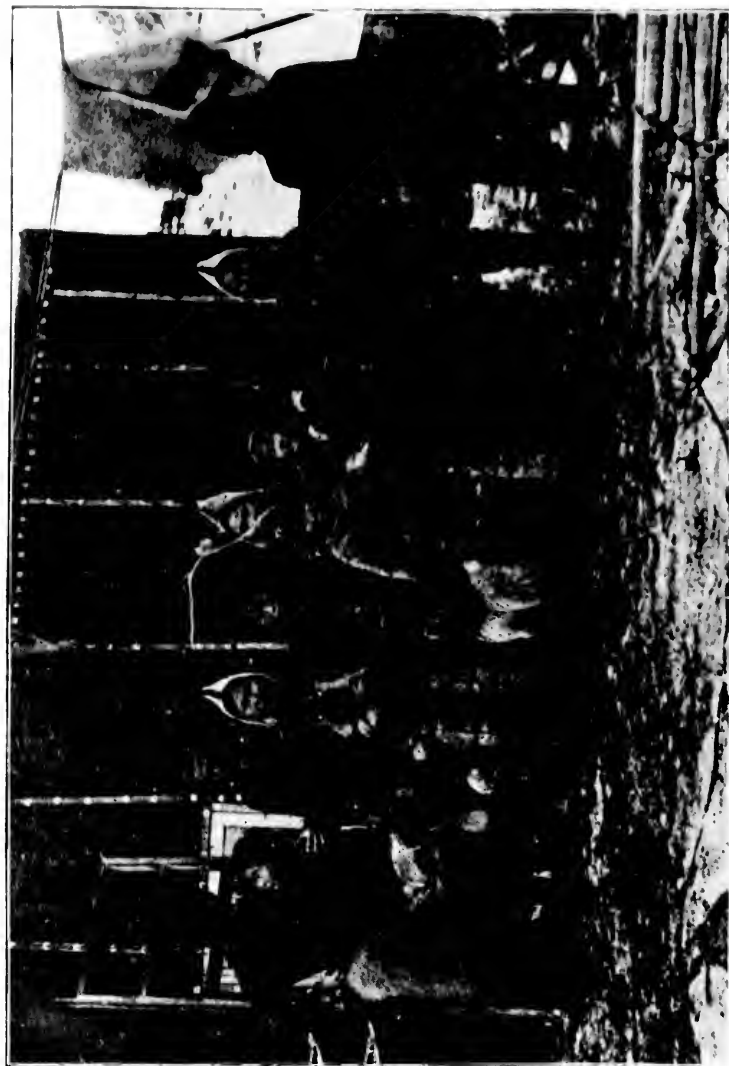
during which the sun never sets, and it is constant day; and another long period in winter during which it never rises, and it is constant night.

We hear the terms, midnight sun and noonday night, and remember that our geographies say that at the Pole there is only one night and one day in the year. Yet, after all, we have no clear conception of how this can be.

Let us see if we can come to a somewhat clearer understanding of the subject. Let us place ourselves at the lodge, the latitude of which is $77^{\circ} 40' N.$, and its distance from the Pole, therefore, the difference between that latitude and 90° , or $12^{\circ} 20'$. We grasp the fact, that were we standing at the Pole, our actual visual horizon would coincide with the celestial equator, and that every heavenly body above (north of) that equator would be visible to us, and that every heavenly body below (south of) that equator would be invisible.

At the lodge, as already noted, we are $12^{\circ} 20'$ south of the Pole; consequently, our southern (or noon) horizon has dropped $12^{\circ} 20'$ below the celestial equator, while our northern (or midnight) horizon has been raised an equal amount above the celestial equator. What results from this?

Any heavenly body that is more than $12^{\circ} 20'$ below (south of) the celestial equator will be continuously invisible (*i. e.*, will never rise); a body just $12^{\circ} 20'$ below the equator will be visible only for a moment when it is precisely south of us; a body more than $12^{\circ} 20'$ above (north of) the celestial equator will be continuously visible (*i. e.*, will never set); a body just $12^{\circ} 20'$ above the equator will be invisible only for a moment when it is precisely north of us; and a heavenly body anywhere between the limits of $12^{\circ} 20' N.$ and $12^{\circ} 20' S.$ of the equator will rise and set in the



DEPARTURE OF SUN.
Population at Lodge, October 25, 1894.

usual way. We all know that the sun is north of the equator during a portion of the year, and south of it the remainder. It swings back and forth like a sentinel on his beat, in a path extending from $23\frac{1}{2}^{\circ}$ north of the equator to $23\frac{1}{2}^{\circ}$ south of it, and is at the northern extremity of its beat on the 21st of June and at the southern on the 21st of December.

Now what is the effect of these facts, and these movements of the god of day upon our days at the lodge?

Just as long as the sun is more than $12^{\circ} 20'$ north of the equator, he will be continuously above the horizon day after day throughout the twenty-four hours (the long Arctic summer day); just as long as he is between $12^{\circ} 20'$ north, and $12^{\circ} 20'$ south, he will be visible part of the twenty-four hours and invisible the remainder, *i. e.*, will rise and set in the way familiar to us here at home; and just as long as the sun is more than $12^{\circ} 20'$ south of the equator, he will be continuously below the horizon and entirely invisible day after day throughout the twenty-four hours (the long Arctic winter night).

Let us assume it to be the 21st of June at the lodge, mid-noon of the summer; the sun is at its maximum northern declination, $23^{\circ} 27'$, and at noon on that day is $35^{\circ} 47'$ above the southern horizon, and at midnight is $11^{\circ} 7'$ above the northern horizon.

Slowly, day by day, the sun drops lower (goes south) until on August 20th its northern declination is but $12^{\circ} 20'$, and at midnight it is just on the northern horizon; the next night it disappears entirely for a few moments, and the long summer day (four months for this latitude) is at an end. Each day, the time that the sun remains invisible rapidly increases, though it is bright daylight all the time, until on September 21st the sun reaches the equator, sets at six



"THE GHASTLY PALLOR OF A WHITE AND FROZEN LANDSCAPE."

o'clock, rises at six the next morning, and day and night, as everywhere else on the earth, from north pole to south pole, are equal in length. Even now, however, there is a brilliant twilight, amounting to almost full daylight, for some three hours after sunset, and an equal time before sunrise.

Still farther and farther southward drops the sun, and each day the light with startling rapidity shrinks and dwindles in the cruel grasp of night.

On the 25th of October, the sun's declination is $12^{\circ} 20'$ south, and if it is clear on that day he will be seen for a moment at noon on the southern horizon; the next day he does not appear, and the long Arctic winter night has commenced.

There are still a few hours of twilight at noon, but the sun is yet a long distance from the southern limit of his beat, and day by day this twilight fades and sinks below the horizon, until at last there is no difference between the southern and the northern horizon at noon, and the midnight of the "Great Night" (December 21st) arrives and passes. By January 15th, a faint narrow band of twilight is visible in the south; on February 14th, the sun has returned to $12^{\circ} 20'$ south declination, and peeps for a moment at noon above the southern horizon.

Rapidly now the darkness recedes. March 21st, day and night are again equal throughout the globe, and now the exultant light rapidly drives its antagonist from the field. April 26th, the sun has reached $12^{\circ} 20'$ north declination, and is now continuously above the horizon; it is dawn of the "Great Day"; the brilliant glowing Arctic summer has commenced, and the wild reaches of snow and ice and ragged cliffs which surround the Pole lie in incessant light.

Every sojourner for a winter within the Arctic Circle has made the departure and return of the sun

324 Northward over the "Great Ice"

occasions for a display of thoughts and emotions, gloomy and sad in the former instance, and bright and joyous in the latter.

With an experience of three winters in high Arctic latitudes, my own sensations have never been similar. The departure of the sun has never seriously impressed me; in fact the Arctic landscape then does not show half the savage sombreness that it does when seen through the dead-grey noon twilight of two or three weeks later, especially if viewed from the ice-cap. Neither has the return of the sun seemed joyous, but quite the contrary. Of the two events, the latter to me is the sadder. At the departure of the sun, one does not realise its meaning. We look upon the landscape, as upon the face of a dear one just dead. It is yet warm and soft, perhaps there is still a slight flush, we cannot believe the light is gone forever; while the steely rays of the returning sun light the ghastly pallor of a white and frozen landscape, a corpse stiff with rigor mortis, revealing every drawn feature, every harsh line, that life and warmth had masked.



CHAPTER VII.

DECEMBER JOURNEY TO CAPE YORK.

BRILLIANT MOONLIGHT—KARNAH, NETIULUM, AND CAPE PARRY—ALONG
THE OUTER COAST—A FALSE ALARM—RAISEI BEACHES—AN ARCTIC TRAG-
EDY—A WINTER *ANOHTAKSOAH*—*PIBLOCKTO*—CAPE YORK—*KYOAHFAHPU*.
THE MEDICINE MAN.



SLEDGE DOGS.

CHAPTER VII.

DECEMBER JOURNEY TO CAPE YORK.



DURING the December moon, Lee and myself went to Cape York, leaving the lodge on the 10th and returning on the 24th.

One of the main objects of the trip was to determine accurately the positions of the prominent points of the coast, as Capes Parry, Athol, and

York, Conical Rock, etc., but the frozen condensation from the North Water, which was steaming like a huge black cauldron, shrouded the coast in a silvery veil, and rendered the stars invisible most of the time.

At two A.M. of the 10th, I left the lodge with Lee, Ingeropahdoo (or "Freckles"), and Alakasingwah for Karnah. Lee had "Freckles's" sledge and three dogs, while the rest of us, together with the impedimenta of our trip, occupied the big sledge recently purchased from Tellikotinah, drawn by six dogs. The last observations for time had just been completed and the transit taken down and lashed on the

sledge. The snow on the bay was firm and fairly smooth. Orion, blazing in scintillant splendour above the Tigerahomi cliffs, dominated the southern sky; and the surface of the bay, and every line of the dark guarding cliffs, stood out sharp and clear in the brilliant moonlight.

The giant statues of the Sculptured Cliffs of Karnah were still holding silent communion with each other as we passed beneath them. Just outside of Karnah, in the rough ice lying against the shore, a piece of my ivory sledge shoe was torn off, and while "Freckles" was repairing it, I walked on ahead to



"NUMEROUS GLACIERS IN GLISTENING SPLENDOUR."

the village, and proceeded at once to the commodious igloo of Kardah.

Remembering vividly my last experience in his igloo, I politely requested the master of the house to keep children out and maintain quiet while I slept. This he did effectually, and once or twice I was half conscious of his voice silencing the gossiping women with "*Okahlooktoo naggah*" ("Stop your talking"). At six p.m., with only "Freckles" and myself on my big sledge drawn now by nine dogs, I bumped over the broad Karnah ice-foot, and dashed out upon the dazzling moonlit expanse of the Sound, for Netiulumi on the south shore. Lee with "Freck-

les's" wife and child, and Myah and Ihrllie, accompanied us on two sledges.

The broad Sound was a sea of silvery light, and the brilliant moonlight brought out in glistening splendour the numerous glaciers of the distant south shore. Our course lay straight past the eastern end of Herbert Island, and in a patch of rough ice off the great bluff, "Freckles's" sledge lost a piece of shoe, and this caused a long delay for repairs.

Finally at three in the morning I reached Netiumi, and went at once to the igloo of Tellikotinah. By the time Madame Tellikotinah had the water on for our coffee, Lee came in from a tour of the village, and a call upon the happy young mother Ahwe-aungwonah (alias Jessie).

I was anxious to get to Cape Parry by three in the afternoon, to use certain stars for my observations, and our hours for sleep were therefore limited. While we were sleeping, the lady of the house melted snow for our coffee, and the water was hot when at eleven A.M. I was awakened by my alarm clock, taken on this trip as an experiment. Necessary repairs to the sledge, which "Freckles" had failed to make when we first arrived, delayed me somewhat, and irritated by this, I discharged him and engaged a new driver. At last I dashed away from the ice-foot, and with fresh dogs, over smooth ice, in the bright moonlight, galloped westward for the black front of Kangahsuk (the Great Cape, Cape Parry).

Tellikotinah, wife, and daughter on one sledge, and little Kessuh on another, accompanied us. With favourable conditions of ice, and ample light, the dogs were pushed rapidly along, and in two hours and a half we whirled around the now ice-bound black angle of the Great Cape. Half an hour previous a bank of clouds from the south-west had blotted out

330 Northward over the "Great Ice"

the stars, and a raw wind was blowing round the cape, just as it did the day that Lee, Tellikotinah, and I rounded it on our way to Cape York the previous May.

Observations were out of the question, but a short stop was made under the beetling cliff for Kessuh to

repair his sledge, and while he was doing this, Tellikotinah took me up over the ice-foot and showed me a cave, which, like the one near Petowik Glacier, is a frequent refuge and sleeping-place for the natives journeying along the coast.

From the cape we went directly westward to get outside of the rough ice lying jammed against the shore; but, scarcely a mile distant from the



MADAME TELLIKOTINAH.

cape, we came upon young ice, so thin as to be unsafe, the point of the seal harpoon, with which it was tested, penetrating it at the least blow. A few hundred yards farther was the inky North Water. We were thus compelled to stick to the old rough ice, but, aided by the bright moonlight, a practicable route was found

through the crystal chaos, and I drove southward past the familiar points of this coast, Anoah Glacier, Iennah, Tessuissak, black Pooeenyah, Ignimut Glacier, Oobloodahingwah, and the Land of Noogli. Opposite the point of the latter, we emerged from the rough ice upon the smooth expanse of Wolstenholm Sound, extending white and glistening to the carnelian cliffs of Saunders Island and the shadowy form of Wolstenholm Island.

Several bear tracks were seen: in one place two big fellows had followed an old sledge track for some distance, and once we had a bit of excitement when Kessuh's team, two of the dogs in which I knew to be experienced bear hunters, swerved suddenly from the course, and dashed madly over the ice to



MISS TELLIKOTINAH.

windward. In a few moments I saw Kessuh lean forward and cut a trace. The dog thus liberated leaped rapidly forward and disappeared in the broken ice, while the others, with Lee and Kessuh running at the upstanders of the sledge, followed on his trail. Thrllie and I both jumped off our sledge, and each with a hand on an upstander, urged on our team, excited,

but handicapped by the heavy load. Tellikotinah, who was ahead, observing the excitement, dumped his wife and daughter unceremoniously in the snow, and came dashing back to join the chase. When we again caught a glimpse of Kessuh's team I saw that another dog had been cut loose, and soon we saw the two tearing about in the broken ice.

We could see no bear, but his colour might easily make him invisible, and I hurried forward as fast as I could run to have a shot at him. As I passed Kessuh the dogs ceased their antics, and when I came up to them were eating snow at a seal's breathing hole. My breathless disgust at such a finale, after running in my furs through the heavy snow, is not necessary of description.

I fear that I expended some of my little remaining wind in unbecoming language concerning the intellectual calibre of Kessuh's favourites.

However, the episode enlivened the monotony of the long journey, and knowing that there was a warm igloo at its end, and a *café-au-lait* hostess to dry my perspiration-saturated clothes over her lamp while I slept, I soon recovered my equanimity, and when we came up with disconsolate Mrs. and Miss Tellikotinah, everyone was in good humour again.

While crossing the Sound more bear tracks were seen, some of them quite fresh, then we reached the shadow of the Saunders Island Cliffs, and after winding along under them a few miles, arrived at the settlement of Akpani, fourteen hours from Netiulumi.

There was but one igloo in commission here, and that occupied by Ahngeenyah and Ahngodoblaho and their families. The snow houses and enclosures for meat and dogs gave the place the appearance, from the ice-foot, of quite a village. A snow igloo was built, into which the younger inmates of the house

December Journey to Cape York 33

were bundled, to make room for my party in the stone mansion.

At three p.m. I was up again setting up the transit, and between my star sights I strolled over the flat, raised, triangular patch of detritus lying at the foot of the western cliffs of the island. This triangular bit of foreshore seems to be identical in appearance with the one which I noticed on the eastern side of the island during last spring's sledge trip to Cape



RAISED BEACHES.

York, formed originally under water by tidal eddies, and then raised to its present position by the gradual elevation of this region.

On the very crest of the bank, at the outer or western apex of the triangle, is located the group of igloos (three double and three single) forming the village.

Northward from the village to the northern end of the island, extend the great bird cliffs rising perpendicularly from the sea. In summer on these cliffs the

sea-birds are "thick as leaves in Vallombrosa"; now the great rampart was death-like in its frozen stillness. Several of the natives have lost their lives while getting birds and eggs here, and the last of these tragedies was the result of those fierce human passions, which are the same the world over, whether the setting be tropical or hyperborean. One of two friends coveted the other's wife, but lacked the strength or courage to take possession of her, as is the custom of these people.

At last one summer day his opportunity came. He and his friend were gathering birds' eggs from the great cliffs, he on the summit holding one end of a long rawhide line, his friend suspended from the other down the face of the cliff. Nothing was simpler than to loosen his grasp. The rope slipped through his hands; the sound of a soft shapeless mass falling from ledge to ledge, and changing colour from brown to red, was drowned in the roar of millions of startled sea-birds' wings; a spot of blood-stained foam, with circles widening from it, flashed for an instant upon the deep green water hundreds of feet below; and to-day the murderer is living with his victim's widow.

The two natives at Akpani had been very successful in their fall hunting. In addition to several seals, they had killed six walrus, a bear, and an *oogsook*, out to the westward; and piles of meat were stacked on the level top of the ice-foot, in front of the igloo.

While I slept, Ahngodoblaho fed my dogs and repaired my sledge, reinforcing the points with walrus hide, which, when frozen, is the toughest and most unbreakable of all substances.

Leaving the village of Akpani, three and a half hours of good travelling, across the southern arm of Wolstenholm Sound, brought us at midnight to Cape

Athol, where on my return from the ship last August I had landed from my whale-boat to reconnoitre the ice.

The night was perfect for my observations, not a breath of air stirring, and while I set up the transit and took my first sight, Tellikotinah built a small snow igloo in which he started two lamps, and during the five hours' stop here, several cups of hot coffee took the chill off the night air most effectually. From Cape Athol I again drove southward, past the well-



THE BIRD CLIFFS.

known landmarks of this coast, all sharp and distinct in the brilliant moonlight; crossed without difficulty in front of the Petowik Glacier, where last May I had toiled so wearily through the slush and round the leads; and reached the settlement of Ipsueshaw, at the head of Parker Snow Bay, at 12:30 P.M.

One stone and two snow igloos comprised the village here; the former occupied by two families, the latter by one each.

In the stone igloo was our old friend of Red Cliff, Nuikingwah, with three children; one a bright-faced manly boy of perhaps twelve years, another equally bright-faced laughing little girl of perhaps four years, and the third, the baby *Bur-off* (Verhoeff). The other family in the igloo was that of her married son Kahutah.

This woman Nuikingwah is a model woman, plump, matronly, cleanly, and smiling; the mother of a little girl and four handsome, intelligent, active



PARKER SNOW BAY.

sons, two married and all good hunters; the two still with her dressed in the best manner with nicely made kapetahs, nannookies, and kamiks. The arrival of our party of nine was quite a tax on the accommodations of the place, but Lee found room in one of the snow igloos occupied by our host of last May at Cape York, good old Tahweenyah, and his equally good old wife Simiah; while I lodged in the stone igloo, and Tellikotinah built a snow one for himself and family. After a good sleep and a cup of coffee, I was out at five A.M. of Monday the 14th, to make, with Lee's

assistance, my observations. The observations were not entirely satisfactory, owing to a fresh breeze blowing down from the glacier at the head of the bay, and sweeping noisily over the village, loaded with fine drift. I had hoped to start immediately after the observations, but the increasing force of the wind, the glistening silver mist which was gradually hiding the crest of the cliffs on the opposite side of the bay, and the low murmur coming from the same direction, were unfailing signs that an *anoataksoah* was next in order, and that it would be folly to start for Cape York until its force was spent, so we resigned ourselves, as best we could, to the inevitable delay.



CHILDREN OF NUIKINGWAH.

The crest of the cliffs withdrew behind a veil of silvery haze, the sigh grew to a continuous roar, the light of the moon paled and disappeared, and then the demon of the Great Ice, wrapped in blinding clouds of snow, rushed down from his lair, beat against the unyielding cliffs, shrieked through their clefts, and carved the frozen snow into marble waves, throwing the stinging foam aloft till neither man nor beast might face the fury and live.

This settlement of Ipsueshaw, so named from the abundance of grass in the vicinity, is located at the western end of a low shore, curving round the head of Parker Snow Bay, from the vertical bird cliffs which wall it to the north; and comprises two permanent stone igloos.

Additional snow igloos were half built, half excavated in the overhanging drift formed under the steep bank of the shore.

So close to the water were these igloos, that the entrance and part of the front wall of one of them were shattered while we were there, by the lifting of the ice-foot under the enormous pressure of the spring tides. Just back of the igloos, at the foot of the bluff, there grows such an abundance of long soft grass, that Tellikotinah, in less than half an hour, cut enough to cover the bed platform in his igloo a foot thick. The proximity of the bird cliffs makes the foxes numerous here, and there are deer in abundance on the uplands. All Friday afternoon and night, Saturday and Saturday night, and Sunday forenoon the storm continued, keeping us unwilling prisoners.

The incessant cutting wind made the dogs uneasy, and twice they chewed their harnesses and traces to almost utter destruction.

Then our provisions got so low that we were obliged to begin upon walrus meat.

About six P.M. Sunday we started southward again. When the dogs were being harnessed, I discovered that the affectionate white Ikwah dog had been seized by the dread *piblockto* or Arctic hydrophobia, and I was obliged to shoot him.

Passing out of the bay, we went close under the cliffs of Parker Snow Point to its southern extremity, known as Akpani by the natives, then from Conical Rock headed seaward to avoid the deep snow and

rough ice near the shore. The moon did not rise to give us the benefit of its light until towards midnight. After that we had little trouble in avoiding the patches of roughest ice, except in one instance when we got caught in a pocket, and had to traverse something like half a mile of it. This was enough to rip two or three pieces of ivory off the bottom of my sledge, and cause a long delay in repairing.

The rough ice in this vicinity was apparently the



CAPE YORK IN WINTER GARB.

same that was lying along this coast, when I was here in the *Falcon*, August 27th and 28th, and to avoid it we travelled almost due south until abreast of the cape, then turned directly eastward towards it.

After the moon rose, the savage coast, broken by its numerous glaciers, stood out so sharp and clear, that though several miles distant it seemed close at hand. We arrived at the most southerly of the igloos comprising the winter's settlement at Cape York, about six A.M. of Monday the 17th. Two stone ig-

loos, one occupied by Tahwana and his numerous family, and the other by Kyoahpahdu the *angakok*, were situated a hundred feet or more above sea-level, on a slope so steep, that now, when it was covered with snow, it was almost impossible to maintain a footing.

Tellikotinah and his family went to Tahwana's igloo, while Lee and I went to the more cleanly and less crowded residence of Kyo.

Here we were most hospitably entertained, the great medicine-man laying aside his dignity like a garment in the presence of his distinguished guests, and in return for the privilege of sharing our coffee, prepared with his own hand our repast of boiled seal meat, cleaning the stone pot carefully, selecting the choicest pieces, and using the cleanest snow from which to melt the water.



CHAPTER VIII.

RETURN FROM CAPE YORK.

ROUGH ICE AND UNPROFITIOUS WEATHER—STEERING BY THE STARS—
ESKIMO HOSPITALITY—AN ARCTIC CARAVAN—A MIDNIGHT CATACLYSM—
INDESCRIBABLE GOING—*PASSÉ* MEAT—A FORCED MARCH WITHOUT FOOD
OR SLEEP.



TRAVELLING COMPANIONS.

CHAPTER VIII.

RETURN FROM CAPE YORK.



WHEN, on awakening from my first sleep at Cape York, I stepped out of the igloo, I found every star blotted out, the wind whistling past the face of the cliffs, and a light dust of snow falling.

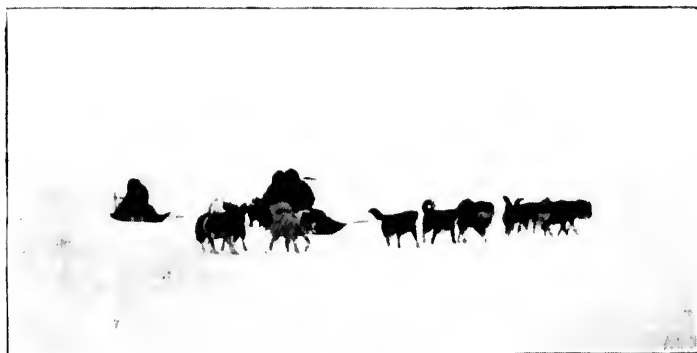
Again I was obliged to possess my soul in patience, and await the pleasure of the weather demon that haunts this infernal cape. Finally, on Tuesday afternoon and Wednesday morning, I was able to make my observations, though not under the most favourable conditions, and at 10:45 A.M. I started on my return.

I had on the sledge a good supply of bearskin for our ice-cap costumes, and had filled the gap made in my team by the death of the Ikwah dog, with the powerful big Panikpah dog that escaped from Lee's team near Petowik last May, and had been caught and kept by Kyoahpahdu since.

As I rounded the cape, I found the wind blowing with much violence, though, fortunately, somewhat

at our backs. Out to the westward it was too thick with the flying drift for me to risk the outside passage. My young driver was much frightened at the prospect, and said he was afraid he should be cold and die. With many misgivings, and visions of broken sledges, and a comfortable (?) night or two behind some rock, without fire, drink, or food, I told him to take the inside passage, through the rough ice, close to the shore.

Late in the afternoon, my team suddenly quickened its pace, and, looking shoreward, I saw a faint



HOMeward BOUND.

light, which proved to be that from the snow igloo of Annowkah. He and his wife were sleeping soundly when I crawled into the entrance, as I could see through a hole in the sealskin with which they had closed the door. I made no attempt to enter, as I did not wish to stop here, but told Ihrlie to borrow a piece of blubber that would enable us to make a fire, in the event of our becoming storm-bound.

So far, the going had been fairly good; but, on leaving the igloo, we entered on a patch of rough ice, which seemed of such extent that I told the driver to

turn to the westward and get outside of it. To my great satisfaction, the wind had now moderated, the stars were shining brilliantly, undimmed by haze or flying snow, and once outside of the rough ice I knew we would have plain sailing. In a short time we were through it, and then, through the darkness, steered northward by the stars, without mishaps or delays, other than those resulting from my driver's falling asleep, dropping his whip, and then being obliged to run back and hunt for it, till the shadowy needle of Conical Rock rose out of the darkness ahead. Then the base of the great Cliffs of Akpani were traversed, Parker Snow Bay re-entered, and at five A.M. of Thursday, as the rapidly waning moon was climbing over the southern bluffs, and lighting the ice and northern shore, we reached the village. After our journey of twenty-four hours, we were in con-



WOMAN IN FULL WINTER COSTUME.

dition to do full justice to an ample meal of boiled walrus meat.

My sledge had lost several pieces of the ivory shoeing on the upward trip, so old Tahweenyah took it into the entrance of his igloo, and, with the assistance of Accommodingwah, began repairing it. The stock of ivory in the settlement was so small, however, that it was necessary to eke it out with walrus-skin, and this, after being put on, must have time to freeze solid, so there was another delay.

I had rather an annoying experience here of the effect of a heavy snow blanket in increasing the warmth of an igloo, for I was awakened from sound sleep by a gallon or two of ice-water dashing in my face. This water had collected on the upper side of the skin lining of the igloo, until at last it found an outlet, which was unfortunately directly over my head.

The going was good, and the march from Parker Snow Bay to Saunders Island was made comfortably in about twelve hours.

While I slept uneasily (owing to bugs!) at the Saunders-Island village, Ahhu, the plump, comfortable wife of burly Ahngeenyah, dried my rabbit-skin stockings, mended my kamiks and kooletah, and made me a mitten to replace the one lost during the day. From Ahngeenyah himself, I obtained a big feed for my dogs, a fine long, heavy walrus line, a coil of *sinnigshah*, and a large piece of bearskin, more than enough to make a fine pair of trousers for Lee.

Visiting here was the oldest man in the tribe, Ahgotah of the wooden leg, from his igloo near the head of the Sound.

At 5:30 A.M. of the 22d, I left Akpani for the northward.

The travelling party had received accessions at

Parker Snow Bay, and again here, and one or two families had been added at intermediate points, so that, as we groped our way along to the northern end of the island, through the almost tangible gloom at the base of the bird cliffs, we formed a caravan of eighteen persons, eight sledges, and fifty dogs; a microscopic speck of life and warmth and animation,



"PLUMP, COMFORTABLE AHHU."

in the midst of a world of ice and frozen stillness. From the extremity of the island we headed northward through the darkness, across the grey waste of Wolstenholm Sound, towards the invisible "Land of Noogli."

Only a few miles from the island, my, as it proved, very fallible native companions led the way into a patch of the roughest ice, where two or three of

the sledges were crippled, and the caravan was obliged to wait while they were repaired. Then it came my turn in the loss of several sections of my ivory sledge shoes. This happened just at a time when my sledge was a little behind the rest, owing to the loss of one of the strongest dogs, the untamed Panikpah, who broke his trace and disappeared in the darkness; and in a few moments the caravan had vanished from



ACCESSIONS TO OUR PARTY.

sight and hearing. It was a long time before the work of repairing was completed, and then the faint noon twilight enabled me to make some selection of a route, and in a short time extricate ourselves from the rough ice. For some time we followed the trail of the caravan, and then, during a few moments of inattention on my part, my driver wandered away from it, and without wasting time in the effort to re-

gain it, I headed north-westward for the outer edge of the rough ice, which, from the experience of the down trip, I knew lay all along the coast northward from the land of Noogli.

Good progress was made over the hard and level surface, the almost imperceptible noon twilight enabling us to avoid bergs and areas of rough ice. The cliffs of Oobloodahingwah, the great rock Pooeenyah, and then the low land of Noogli loomed on our right, and soon we reached the south-western angle of the rough ice, bounded to the west by young ice, covered by efflorescence. Here we recovered the trail of the caravan. Knowing that this young ice extended northward about parallel with the coast, well up to Cape Parry, I wanted to go out on it and follow along its edge, thus avoiding all the rough country.

My young driver, however, was so extremely reluctant to go upon it, and offered so many objections, "that it was unsafe," "that the efflorescence would injure the dogs' feet," etc., that I followed the caravan trail along the edge of the old ice, going upon the young ice only when absolutely necessary, and then leaving it again at the earliest moment.

I was amused at the persistence with which the natives had stuck to the more difficult travelling on the old snow-covered ice. It is true the young ice when we came down had been unsafe, but the several days of cold weather since then had strengthened it to absolute safety, yet it was like pulling teeth to keep dogs or driver on it. Thus alternately on and off the young ice, we made our way northward till nearly up to Cape Parry, the repairs to the sledge enduring beyond my utmost expectations. Here, just as we were crossing an arm of the young ice, a sudden roar as of distant thunder came crashing through the trembling

western blackness. My driver uttered a cry of fear, pushed at the sledge with all his force, urging the dogs with whip and voice, for the old ice.

We had scarcely gained a few yards on this, when



"AHGOTAH OF THE WOODEN LEG."

the young ice behind us rose and fell, broke into cakes from between which the black water spouted in hissing sheets; the heavy ice on which we stood heaved and groaned, cracks formed reverberating through it in every direction; the dogs stopped, whining, regardless of whip or voice; a big berg close by burst the bonds of the surrounding ice with a vicious grinding, grating sound, and rocked and

groaned till it seemed about to topple over upon us. Then the infernal tumult passed on through the darkness toward the savage shore. An enormous berg out in the North Water had disrupted. When the excitement was over I looked at my watch. It lacked

but a few minutes of midnight of the 22d of December, the midnight of the Arctic night.

The sun had turned back in his course, and there, in sight of mighty, frowning Kangahsuk, I had been a pigmy witness of a cataclysm, which may perhaps have been the responsive thrill of this Arctic Cimmeria.

After the commotion had subsided, I struck a bee line for the black shadow of Kangahsuk, and for hours toiled towards the great headland over a chaos of broken ice, which rapidly reduced my sledge to a state of almost complete wreckage.

The nearly indistinguishable dark mass of the dogs, climbing skyward just in front of the sledge, would be the only warning before the sledge

came to a dead stop against a ragged block of blue ice; cries from the dogs as they disappeared downwards, the instantaneous prelude to a headlong plunge of the sledge, only to stop with a shock and crash, with its nose wedged under a rock of ice. The only warning of the presence of icebergs in our path was the sudden blotting out of the stars. Then by putting my head to the snow, some idea of the berg's extent could be obtained from the size of the starless area.



IHRLLIE.

When almost up to the cape, the sledge was so badly wrecked as to necessitate a stop for repairs, and my driver was so discouraged by this, that I found a resort to the kitchen box necessary, and turned him loose upon the few crumbs of biscuit and spoonfuls of molasses left in it, which perceptibly improved his feelings. Soon after starting again, we turned the savage black angle of Kangahsuk, and from here to Netiulumi had a comparatively easy time, although the completely shattered front of the sledge caused every lump of ice to bring us up standing.

Several times between Cape Parry and Netiulumi, Ihrlie was very solicitous about my battered tin cup which hung at the upstanders, and finally intimated that perhaps I was well enough satisfied with his services during the journey to give it to him. In spite of the munificence of the remuneration I readily answered yes.

It was 6:30 A.M. when I climbed over the Netiulumi ice-foot, having been twenty-five hours on the road.

The caravan had arrived long before us, and I found that Lee had stopped just long enough to engage a sledge and fresh driver, Ooblooyah, and had then hastened on to the lodge. I soon discovered the reason for this. I had expected to sleep and obtain a meal of walrus or seal here, but found almost everyone away, and the only food in the place very *passé* narwhalmeat, which even my pretty well acclimated stomach objected to. My own provisions had been exhausted at Saunders Island, so there was nothing to do but to keep on. Yet my sledge was a complete wreck, and neither my dogs nor driver were in condition to proceed.

At this juncture big Kyogwito, the Nalegaksoah, came in from a visit to his fox-traps, his round face

glowing, in its halo of blue foxtails, like a molten bronze sun. He offered to take me to the lodge. I was only too glad to accept, and after a delay of scarcely an hour, I started on the last stage of the journey, the sixty-mile ride to the lodge, where I arrived early the next morning, having been forty-six hours without food or sleep.



"ROUND FACE GLOWING LIKE A BRONZE SUN."

During this sledge trip, made in the depth of the Arctic night, from my lodge at the head of Bowdoin Bay, to Cape York, a distance of about two hundred miles, and return, we slept in the stone huts of the natives, or, if none of these was convenient, in snow houses which we built ourselves. We lived upon tea, biscuit, and walrus meat, and yet suffered no serious discomfort from extreme cold, or other causes, except

354 Northward over the "Great Ice"

during the last return march, when I travelled for forty-six hours without food or sleep; and we were in no special danger except for the few moments when the big berg capsized while I was rounding Cape Parry.



CHAPTER IX.

WINTER ROUTINE.

ARCTIC DETAILS—BEGINNING WINTER ROUTINE—OCCUPATIONS—FLASH-
LIGHT STUDIES—VISITS FROM THE NATIVES—THE "GREAT NIGHT"—
AURORAS—A NEW YEAR'S PARTY—END OF THE OLD YEAR AND BEGINNING
OF THE NEW—"LASSIE" AND "LADY."



TYPE COSTUMES.

Summer.

Winter.

CHAPTER IX.

WINTER ROUTINE.



THE details of everyday life, the dull routine of getting up and going to bed, of eating and drinking, of small talk, of ever-recurring and never-finished work, of dressing, sleeping, and all the other nothings, is a subject which, when the scene is laid in any of God's coun-

tries, demands the pen of a master to make attractive.

But when the scene is in some place beyond the pale, and especially when under the stress of the polar night, the eager curiosity of the human animal as to how his brother human animal manages to achieve these humdrum yet vital matters, gives an interest to the subject which enables it to survive prosaic presentation.

I remember, when my years were less than now, and everything within that magic circle that bounds the northern disc of midnight suns and noonday nights possessed a glamour, I read with deepest interest every trifle with regard to the Arctic winter life in the

narratives of those who had penetrated the mysterious region. Now, looking back through several years of life in those self-same regions, where savage black cliffs and treacherous crevasse-riven glaciers take the place of neighbours, screaming sea-birds and howling dogs serve as friends, and man and his highest aspirations shrivel into utter insignificance among the huge shattered bones of mother earth's primeval skeleton, lying ghastly in the frozen starlight, a description of



WINTER VISITORS.

life's daily routine seems a waste of ink. Yet there are doubtless many others who feel to-day as I did in those earlier years, and for them I write.

With the departure of the sun in the latter part of October our winter routine began. This routine was simple, and our thorough knowledge of the country, and adoption of Eskimo methods, enabled us to interrupt it frequently by sledge journeys of greater or less length, so that it did not become seriously wear-

ing in its monotony. The alarm rang at 6:45 A.M., and whoever was on morning duty for the week rose, built the fire, and prepared the simple breakfast, of hardtack, or corn-meal mush, and coffee. The breakfast hour was eight A.M. After breakfast, the coal and water supply for the day was brought, the meat for dinner taken in so that it would have a chance to thaw, and any outdoor work attended to.

Up to the first of January our water supply was brought on sledges from Baby Lake, up the valley, but on that date a well, dug through the ice to the rock bottom in the deepest part of the lake (seven feet), showed the entire contents of the lake to have been transformed into flint-like ice. After that our water supply was brought in the form of ice, and a large box full of this was kept in the outer room, from which we drew to melt into water.



AN ARCTIC LAUNDRESS.

Our coal, the soft steamer grade, contained so much dust and dirt and snow, that I found it necessary to screen it in order to obtain satisfactory results in our tiny stove. These things, and in the first of the winter the banking-in of the house and construction of the snow entrances, gave us occupation for the hours immediately following breakfast. Lunch of griddle cakes, of venison stew, or beans and brown bread, tea, and biscuit was eaten at twelve, and then work commenced on our equipment.



FLASH-LIGHT STUDY.

It is surprising how much work there is in the equipment of even a party of three, when everything must be made from the raw material.

First, there were the sledges, five in number, then the tent, the cooking apparatus, the odometer (for measuring the distance travelled during the sledge journey), the dog-harnesses, traces, boots, whips, etc., the clothing, the packing of the rations, fitting of snow-shoes and ski, and the thousand trifling, yet vital, details.

The plans for the sledges, the construction of the tent and cooker, and the designs for the clothing fell

to my lot. Lee built one of the sledges, constructed the odometer wheel, and packed the rations. Henson built three of the sledges, made the whips, and superintended the manufacture of the harnesses, traces, etc., by the natives. Each one looked after the sewing of his own costume, the work being done by the willing, faithful Eskimo women. With these various occupations, the time from lunch till dinner was taken up.

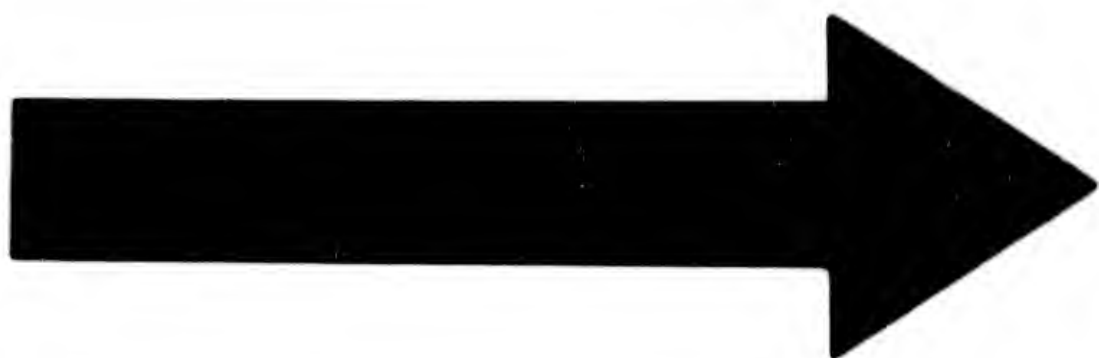
At five P.M. we sat down to our principal meal, the menu of which varied from day to day, though the chief dish was usually reindeer steak. After dinner, interest in our equipment frequently led us to continue work on it through the evening, or if not, there were books to read, notes to write, plans and details of further work to be perfected, and when, as frequently happened, a considerable number of natives was visiting us, there was always information to be obtained from them, and more or less amusement in taking their pictures.

I continued work on the ethnological photographic record of the tribe as in the previous winters, but now that new subjects were comparatively scarce, it gave me an opportunity for an auxiliary series of pictures showing action, special positions, characteristics, etc.

Some of these photos scattered through this chapter, will give an idea of the work. Many others, while not adapted for a narrative of the nature of this, are of much interest to the artist and ethnologist, and contain many surprises.

Usually about ten P.M. a cup of tea and a biscuit were in order, and by eleven or twelve o'clock lights were out, fires expiring, and quiet reigned in the lodge.

Besides the sledge trips which we took during each of the winter moons, we had the nearly constant visits of the Eskimos, and the two together destroyed al-



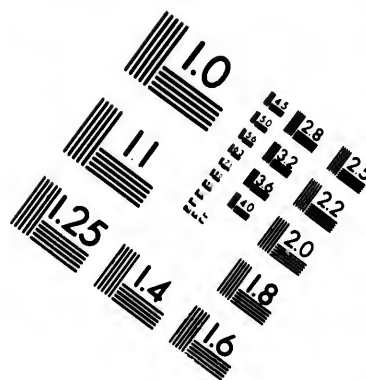
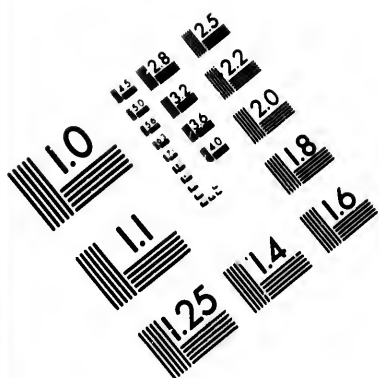
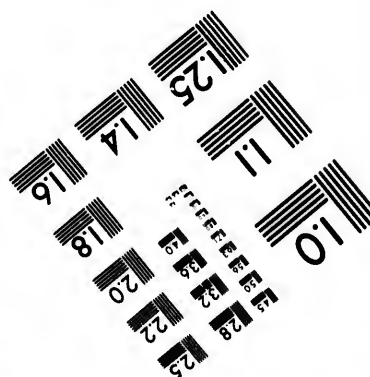
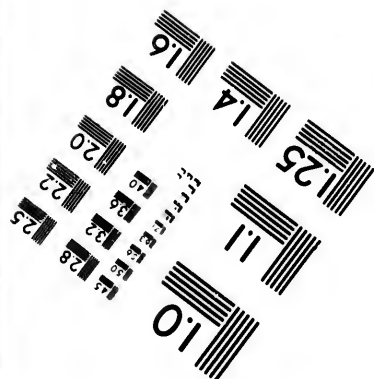
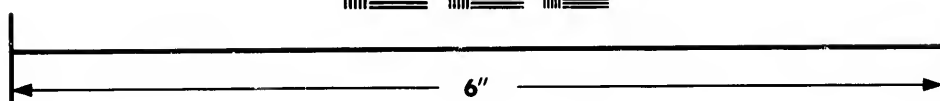
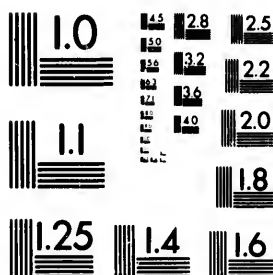


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most completely the wearying monotony of the long night. The large east room was assigned to our visitors, a fire being built in it for their comfort. The attractions of this palatial guest-chamber, combined with the presence of an abundant food supply at Kar-



FLASH-LIGHT STUDY.

nah, about twenty miles from the lodge, resulted in that place being, during the winter, the metropolis of the country, about one-fourth of the entire tribe residing there.

Some of these people were running back and forth all the time. Sometimes it would be a couple of young sports out partly to exercise their dogs, largely to get a drink of much-prized coffee and a biscuit; sometimes a hunter bringing something to trade; sometimes a family anxious to have a taste of biscuit and coffee and get a lump of sugar; and sometimes,

as was the case at Christmas, an entire picnic party of several families, children and all, would descend upon us and completely fill the big room.

I can see such a party now—the large room, but partially lit by the yellow flame of an Eskimo lamp and the glow of the soft-coal fire; the red-brown faces, with black eyes and dazzling teeth, gleaming like

living bronzes. Here a woman nursing her baby, there another mending a kamik, perhaps a third tending the lamp, and another washing towels and stockings for us. Perched on the edge of a bunk, their feet swinging over the edge, two girls, guying, in audible asides, a third who, stretched on the cover of the biscuit cask, took their personal remarks with smiling good-humour. Near the lamp a man fashioning ivory toggles for dog-harnesses from a walrus tusk; mixed up about his feet two boys pulling fingers to see who was the stronger; and in the warmest corner near the stove two old men gossiping volubly, cracking jokes at each other's expense, and emphasising specially good hits by friendly pokes in the ribs.

The "Great Night," as well as the vagaries of the sun, is one of the common phenomena of the Arctic regions in regard to which there exist variant and erroneous ideas.

Though the long night begins technically on the day when the sun sinks for the last time below the horizon, yet he is still so little below the southern horizon at noon of each day for some time longer, that there are several hours of twilight, practically equivalent to daylight, in the middle of the day. But this twilight rapidly pales and fades, and then the



FLASH-LIGHT STUDY.

gloomy night for weeks holds full sway throughout every hour of the twenty-four, unbroken except by the brilliant moons, of which there are three, in every Arctic winter night, and the Aurora.

And what is this months-long "Great Night" like? Words cannot describe it, and no one who has not himself felt its savage pressure and Luciferian beauty can correctly imagine it.

The Arctic world, stern and savage and desolate enough even in the dazzling summer sunlight, changes in the Cimmerian grasp of the "Great Night" to an



FLASH-LIGHT STUDY.

inferno of universal death, eternal silence, deadly cold, and crushing darkness beyond all conception of the liveliest imagination.

True there is a devilish beauty in this night when storm-free, and the blue-black sky, set with indescribable brilliants, arches above the black cliffs and the ghastly surface of the fettered sea; and when the white moon lights the same, its splendour is unearthly; even as it is when the devil dancers of the Aurora people sky and frozen sea with spectral-flitting wraiths.

But when day after day and week after week pass without a benign ray from the great alchemist and mist dissipator, the sun, then the animal feels the effect and the machinery begins to jar.

Nine out of every ten people the first time they meet me ask, "How did you stand the cold?" As a matter of fact, the cold of the Arctic regions to a well man, properly fed and properly clothed, is no more serious than is the cold of our own winters to us here. But the darkness, the months-long winter night! That is different. Just so long as man remains an animal, just so long can he never entirely avoid the effects of the long-continued gloom. We all know that a plant will grow in darkness, but it does not grow properly, and is weak and colourless.

So, too, man will live through the Arctic night, but he does not live properly. No temperament can avoid its effects entirely. The man of sanguine temperament, full of plans for the future, gifted with self-contained resources, feels it least, while, on the other hand, there are nervous temperaments upon which the stress of the Arctic night would bring complete and literal insanity.

Try and imagine, if you can, what it would be like if, here at home, the sun set every year on the 26th



FLASH-LIGHT STUDY.

of October, not to rise again until the 14th of February!! Yet it is not the fact of absolute darkness, not that it is impossible to see anything during all this long night, that gives it its awful power. By no means. During each of the three winter moons, the



FLASH-LIGHT STUDY.

Arctic landscape is flooded with the most brilliant light, and at other times, the darkness is somewhat less than that of our starlit winter nights at home, owing to the nearly unbroken snow expanse which reflects instead of absorbing the starlight. Only during the fierce winter storms is the darkness of the Arctic night a tangible, oppressive, ponderable substance. No, it is not the inability to see, it is the absence of the chemical, the actinic, the physiological effects of the magic rays of the great source of light.

In regard to the Aurora of high northern latitudes, the popular idea is almost as erroneous as in regard to the night. In the Whale-Sound region, a dazzling auroral display is of extreme rarity. Usually the display takes the form of curtains and streamers of moderate intensity, and as frequently in the south as elsewhere.

But when one of the rare brilliant Auroras does occur in the heart of the "Great Night," the effect is infinitely grand and inspiring.

For days, or even weeks, the great northern constellations, Cassiopeia, Orion, the Great Bear, Gemini, and those sparkling brilliants, Arcturus, Aldebaran, Vega, and the rest, have glittered undimmed by rival light, when suddenly the ebon dome of the "Great Night" is rent and slashed by flashing blades of light which dart like rapiers athwart the blue-black sky, then rush together to form a blazing arch, spanning the heavens, and bristling with points which leap and flash like the uplifted sabres of charging cavalry. Then arch and sabres melt into a faint luminous cloud, which breaks into a hundred tenuous fluttering banners. Then, as the celestial electrician turns the current on full force, with an instant, simultaneous movement, the banners leap and merge into a rayant waving curtain, the folds of which sway to and fro far out across the desolate, rigid sea.

As the ghostly undulations sweep along the curtain's edge, pale flashes of red and green spring out, and, standing in the utter silence of the frozen night, one almost fancies that he hears the waving of the mighty folds shaping itself to sound.

Then instant as it came, it vanishes, and the stars, the ebon dome, and the uplifted desolation of the "Great Ice" hold full sway again.



FLASH-LIGHT STUDY.

368 Northward over the "Great Ice"

The last day of the year was one of inky darkness, sable clouds blotting out all starlight.



AN ESKIMO MOTHER'S BURDEN.

In view of a prospective storm, I had Lee and Nook-tah commence the construction of a covered passage between the two houses, with snow-blocks which Nook-

tah and Koko have been cutting. I myself undertook the job of getting the coal pile, which the Eskimos, in bringing coal for the house, have scattered over considerable ground, into more compact shape.

While at work on this I heard voices down the bay, and in a short time a whole contingent of Eskimos arrived. Oomah, wife and two children; Kio, wife and two children; Elingwah, wife and child; Sipsu, Akpalisoaho, and two boys. The men, after they had fastened their dogs, went to work immediately assisting Lee and Nooktah, and in a short time the entrance to the house was completely protected from the wind.



"LASSIE."

These natives brought blubber with them, and I gave them an iron pot and molasses, and during the evening they have been making and drinking coffee to their hearts' content. They have helped out what would, I fear, have been otherwise a sad day for at least one of the party.

The year just coming to a close has been the dark-

est one in my life; it has brought me more care, more worry, more disappointment, more heartache, than all the others put together. It has through me brought to those near and dear to me much sorrow. I trust I may see no more like it. And yet, what is the outlook for the coming year? Matt is sick, Lee is in no condition either physical or mental, and I have, I fear, lost my former élan and sanguineness. These feelings *may* be only the effect of this hellish Arctic night. I hope they are.

Just before midnight I got out my remaining stock of fireworks, a few Roman candles and pin-wheels, and set them off for the amusement of my Eskimo friends, the display closing just after midnight. Their *ahnannans* were loud and numerous when I held the blazing wheels in my hand, and let them flash their coruscating lives out there.

The wind blew strongly as the old year passed away. New Year's Day was clear with the exception of a bank of clouds in the south.

I dreamed last night of home and mother. Is it a favourable omen for the coming year? I shall take it as such.

Among the dogs that arrived last night were Baby's two, "Lassie" and "Lady," who in the brilliant days six months ago, hauled her about the place on her little sledge. I have given them to-day a good feed for the dear child's sake.

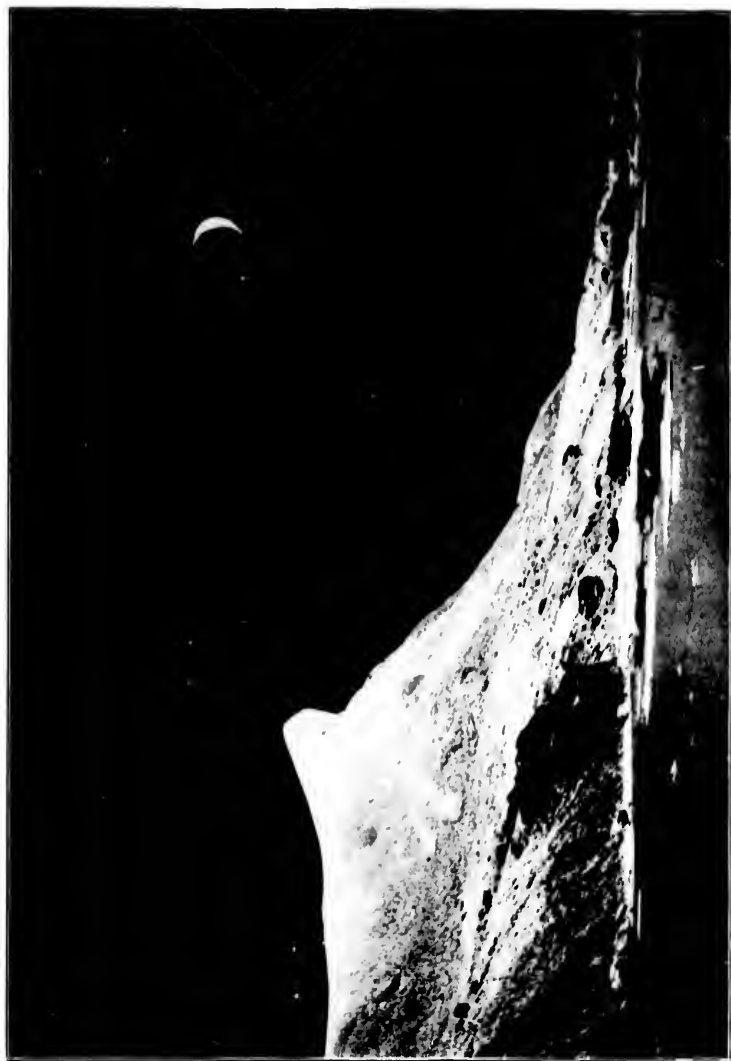
The wind last night was accompanied by a rise in the temperature to 14° F.

The crowd of native visitors had intended to leave to-day, but the south-easterly wind has detained them, and they will not go till to-morrow. They have solaced themselves with constant coffee-making. The New Year's dinner menu was beans and brown bread, peas, kippered herring, pears, and tea. Matt is feeling better to-night, and Lee is more like himself.

CHAPTER X.

SLEDGE TRIPS OF THE LONG NIGHT.

SEVENTY MILES FOR A DEER—BEAR TRACKS—THE LONELIEST LIGHT THE
WORLD CAN SHOW—EGYPTIAN KARNAK AND GREENLAND KARNAK—ESKIMO
CHILDREN AT PLAY—AN ESKIMO LEGEND—AN OGRE—THE WINTER NORTH
WATER—AN EXCITING RIDE—SAVAGE SCENERY—A BELLE (?)—FEASTING,
ASTRONOMY, AND GOSSIP—DEATH OF LION.



A WINTER NIGHT.

CHAPTER X.

SLEDGE TRIPS OF THE LONG NIGHT.



BESIDE the long sledge journey to Cape York in the midnight of the winter night, numerous shorter journeys were made from time to time during the autumn and winter months. A description of two of these will give a general idea of all.

At 7:30 A.M., November 14th, with Matt, Panikpah, sledge, and nine dogs, I left the lodge for Kangerdlooksoah to bring home a deer killed and cached by Panikpah. The temperature was -11° F., and the gritty snow covering the ice made the sledge pull heavily. Still we covered the five miles to the East Glacier in an hour. An hour later, we were rattling along under the shadow of the Castle Cliffs. The twilight of dawn was just appearing in the east, vying with the brilliant moonlight, and the numerous grim stone faces of the cliffs stood in sharp silhouette against the silver sky, changing their expression as we passed.

The going across the Sound was fairly good, inter-



rupted only occasionally by patches of rough ice, and we covered the thirty-five miles to Kangerdlooksoah in six hours. Fastening the dogs to the ice-foot, and taking a hasty lunch of biscuit, corned beef, and pork, we clambered to the shore, and commenced the climb up the rough, rapidly rising, boulder-littered hills which lie back of Kangerdlooksoah. The moonlight and the noon twilight together gave us ample light, so that even a raven's track could be seen some yards distant. Hare, fox, and deer tracks were numerous, and about a mile from the shore, a broad track, like the trail of a man on snow-shoes, was seen winding down the slope ahead of us. I was at a loss to account for this, until we reached it and found the huge plantigrade footprints of a polar bear or *nanook*. The width of the actual

tracks was just the length of my kamik, and their length twice as much, *i.e.*, 11x22 inches, while the dragging of the toes and the hair of the heel through the snow made the trail fully as large as that by a pair of snow-shoes. The tracks had been made the day before, but what the brute could have been after in that locality, so far away from the open water, I could not imagine, unless—and a sudden fear came to me—it might be the cached deer, and I quickened my steps.

A little farther on, we came upon the track of the puny Lord of Creation, man; and just beyond this, the little pile of stones (much to my relief, undisturbed) and a patch of blood-stained and trampled snow, marking the place where the deer had met his fate. Detaching a small stone with his heel, Panikpah used it as a hammer with which to loosen others, and soon the soft grey pelt and bright-red meat were exposed to view. Distributing these between us, we turned our faces towards the shore.

The scene before us was a brilliant one: the snow lay dazzling white in the rays of the full moon, broken here and there by the jet-black rocks projecting through it; almost at our feet lay the little black speck of Ptarmigan Island, and beyond it the marble sea of Inglefield Gulf, reaching to the glaciers and black nunataks of the north shore. Above these, the rolling swells of the "Great Ice" threw back the moon-light like burnished silver; the loneliest, weirdest, most desolate light the world can show.

At eleven p.m., we were at the lodge, having made the round trip of seventy miles in thirteen travelling hours.

At noon of January 7th, I left the lodge on my iron-shod sledge drawn by eight dogs, upon a trip round Whale Sound, the object of which was to determine astronomically the positions of certain salient points,

as Kanga, the point at the mouth of Olriks Bay; Kangahsuk, or Cape Parry, the southern portal of Whale Sound; Akpasuni, the western extremity of Hakluyt Island; Kiaktoksuami, the eastern end of Herbert Island, and perhaps also the eastern end of



ELATINGWAH.

Northumberland Island. Just before we started, Ootooniah arrived with news of having killed a bear out near Peterahwik.

The moon was shining brightly, but the going on the bay was hard, and the iron-runner sledge pulled so heavily that Matt and I walked the first eight miles, turning the sledge over to the two girls, Alakahsingwah and Elatingwah, who had seized this opportunity to get a ride home. Out in the Sound the

ice was free of snow and we all rode, dashing rapidly along under the towering Sculptured Cliffs, whose colossal statues, holding silent communion with each other across the intervening chasms and amphitheatres, re-

mind me of Turgeneff's dialogue between the Yungfrau and Finsteraarhorn, and afforded endless amusement to the girls, as they named one after another of the great stone faces after members of their tribe.

Strange antithesis of names—Egyptian Karnak and its statues, buried in eternal tropic sands; Greenland Karnah and its statues, towering above eternal hyperborean snows. One carved by man and buried by great Nature; the other carved by Nature herself, never to be buried or hidden until the last day.

A squad of the Karnah children met us some distance beyond the ice-foot, and their shout of recognition brought the entire population out of their houses. All

along the ice-foot in front of the village, seals were stacked in great piles, like bags of grain, for the harvest this year has been very bountiful. The double light, shining through sealskin window and

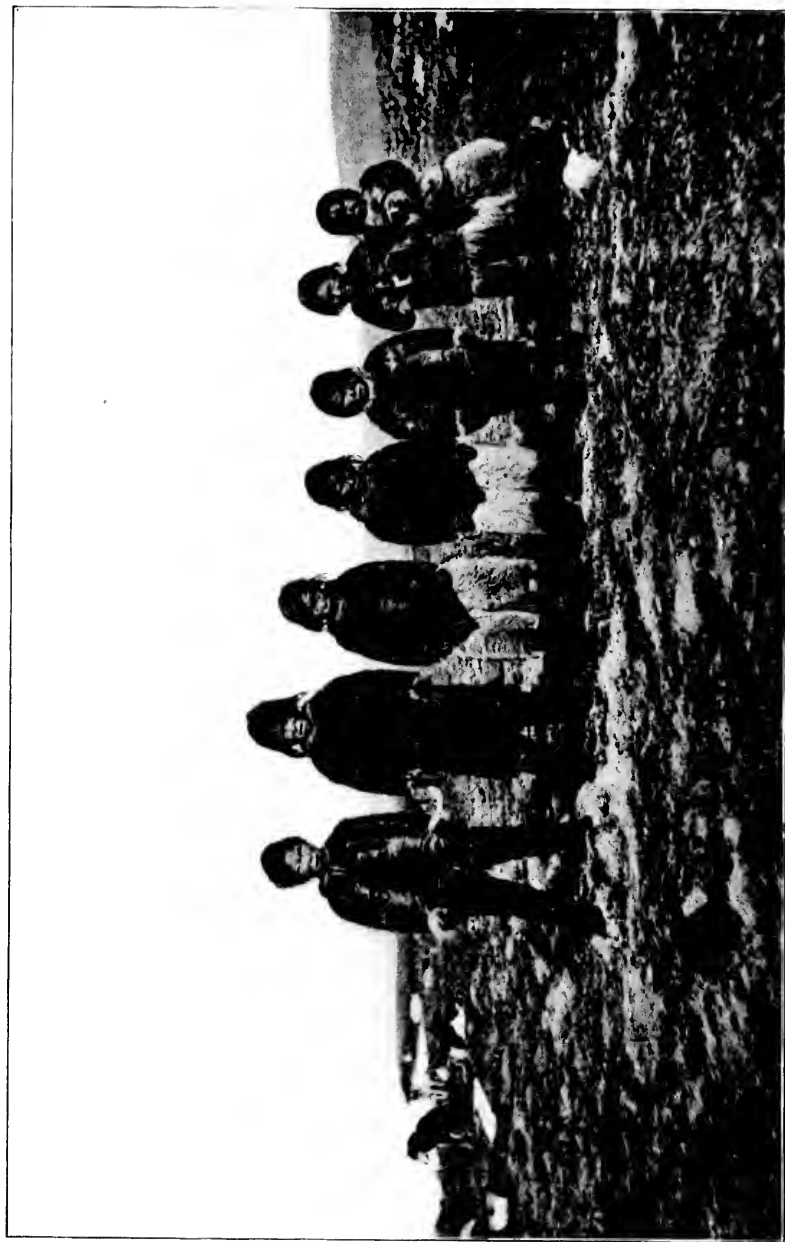


MYOUKSOAH.

open *tossut* (entrance) of each of the ten igloos, gave ample ground for applying the term "Arctic Metropolis" to the settlement. Everywhere about the place dressed sealskins were hanging out to dry, and the women were all at work on others, a striking contrast to the dearth of last season.

On my way to Kardah's igloo, I stopped to watch the children at play on the level ground back of the igloos. Standing there in the grey darkness of the early afternoon, I had difficulty in realising my position. In every direction glowed the yellow lights from the igloo windows and *tossuts*; and the merry cries of a score of children playing tag, snap the whip, etc., and their shouts of "*Tessa*" (stop), "*Karr*" (come on), "*Akshui*" (pull), "*Toioi*" (hurry), "*Ahtudo*" (again), filled the air. In spite of the strange little furry figures, the boys bare-headed and unkempt, the girls with little pointed sealskin hoods, their voices were the same children voices that sound the world over. Yet here I was among a race of savages, under the shadow of barren, eternally frozen cliffs, the temperature far below zero, and the gloom of the "Great Night" enveloping me. When I entered the igloo, I found an entirely nude boy of some five years, standing upon the bed platform, playing the *kiloon*, the solitary musical instrument of these people.

Early the next morning, I galloped away from Karnah, bound for Kanga, at the entrance to Ollriks Bay. The ice was smooth and almost snow-free, and we reached the point in good time. All the way from the lodge to Karnah, and while crossing the Sound from Karnah to Kanga, the sky had been cloudless, but as we reached the ice-foot at the latter place, a silvery veil began forming over the sky, obscuring the stars, and just the faintest breath of air



ESKIMO CHILDREN.

issued from the bay. There was no snow at Kanga from which an igloo could be built, so I drove across the mouth of the bay to Ittibloo, seven miles distant, to sleep and return in the morning. There were three igloos here, and I went at once to that of my friend, Ootooniah. After I had finished my dinner (fortunately), Ootooniah brought in half a seal, which, judging from the perfume, had been buried several summers, and with the assistance of a hatchet



"A CANAL OF BLACK WATER AT ITS FOOT."

dispensed the hospitality of his mansion to some native guests who had just arrived from the westward, in the shape of great chunks of the frozen, putrid meat. Words fail me. The proverb here is not "kill the fatted calf," but "bring in the fetid seal." In the walls of this igloo, as in nearly all the old ones of this region, I observed bones of the whale, now extinct in these waters.

It was past midnight when I turned in after setting my little alarm clock for six A.M. Before that time I

wakened to hear, even in the cavern of the igloo, the wind roaring overhead. Stepping outside, I found the stars completely blotted out, and the wind howling down from the crest of Kirsirviahsuk as the wind can howl only at Ittibloo, hurling the snow along in blinding clouds. Observations were out of the question, so after a generous meal of salt beef, mush, and coffee, we started for Kangahsuk (Cape Parry) via Netiulumi, in a gloom through which the trail was recognisable only to the keen instincts of my dogs.

I did not go up to the igloos at Netiulumi, but had the fire for our mush and coffee built under the overhanging rocks of the shore, just above the ice-foot. While these were preparing, I arranged with Kyoguito, the Nalegaksoah, to take me on his big sledge with his powerful team of dogs to Cape Parry, while Nooktah, my driver, and my dogs rested at Netiulumi. The consideration for this service was a dish of mush and a cup of coffee. As soon as our meal was finished I started westward, determined to see for myself the open water reported by the natives here, and the existence of which was unquestionable, as evidenced by the bank of dense, inky water-clouds visible from the village through the faintly filtering moonlight. We came upon it sooner than I had expected, its edge located eastward of the little bay half-way between Netiulumi and Cape Parry, and curving away northward towards Northumberland Island. Standing upon the frozen shore of this Stygian sea, I could hear the occasional long-drawn puff of a *kahlilowah* (narwhal), like the sigh of some weary spirit.

Reluctantly I turned back, and with the Nalegaksoah's cracking whip urging his dogs to their best pace, we were soon back to Netiulumi, and I went at once to Tellikotinah's igloo, the inner compart-

ment of a large, well-warmed, and lighted double igloo, the other half of which was occupied by Myah and Myouksoah, with their families. Kessuh and Koodlah with their wives were here from Koinisuni visiting, but they were hustled off to other igloos for the night, leaving me in possession of an undivided half of the igloo, the other half being occupied by Tellikotinah, his wife, and daughter. Both My-



"THE SAVAGE BLACK LOVER OF THE NORTH WATER."

ouksoah and Tellikotinah had killed a seal during the day, and while I was obtaining from the latter a map and list of all the settlements and igloos from Humboldt Glacier to Melville Bay, Myouksoah was cutting up his seal in the adjoining igloo. When the catechism was ended, I gave Tellikotinah a mouthful of whiskey, and then called Myouksoah for the same dose. Fresh from the dissection of the seal, hands, arms, body, face, and neck covered with blood,

he looked, as he came forward and put out his great mouth for me to pour the whiskey into, like some horrible ogre.

My star sights finished here, I started for Keate, the settlement on the south side of Northumberland Island. The open water precluded any possibility of getting to Hakluyt Island or even to the western end of Northumberland.



MENDING A KAMIK.

It was nearly midnight when I left Netiulummi in a flood of brilliant moonlight. The water-clouds, mountains of burnished lead, hung on our left and almost ahead of us, hiding the western end of Northumberland completely. At first, I headed direct for Keate, but soon saw a black bight of the open water extending up the Sound well across our course. Reaching it, I found it bordered by a ribbon of glassy ice, several yards in width, formed by the flying spray of the waves in the last gale. On this the sledge moved without resistance, and, as is their custom, my dogs



DECEMBER MOONLIGHT ON THE NORTH WATER.

broke into a wild gallop. Close to the sledge on the left dashed and murmured the inky waves of this mid-winter North Water, and my dogs, with their invariable and unaccountable perversity, acted as if nothing on earth would satisfy them except to dash into it. The slewing of the sledge caused by their rapid movements more than once brought the heel of the runner over this water, and once, when there was a particularly sharp turn, only the quick and concerted action of my driver and myself prevented the sledge, and ourselves with it, from going in. This incident, together with some pertinent remarks from me, waked my driver up, and after this he kept at a safe distance from the danger line. When we reached the ice-foot about a mile east from Keate, the ebb of the spring tides had left it a formidable vertical wall of ice, with a canal of black water at its foot. Some time was consumed in hunting for a place



KIOSHOO.

where the ice-foot was scalable, but once on top of it we had a fairly good road all the way to the foot of the slope which reaches down from the igloos. With a chorus of savage yelps and howls, my team dashed straight up this slope, halting only at the entrance to the igloo. Looking back from here toward the open water, I beheld a scene of the most savage grandeur.

Behind, on either side, lay the snow-white land; below, the white surface of the upper Sound; the southern cliffs seemed only a few miles distant, they were so sharp and clear. Along the shore at my

feet the waves of the North Water, silver in the wake of the moon, ink everywhere else, dashed against the ebony rocks, in the depth of the iron Arctic winter. Almost due south, across the Sound, stood out the dark mass of Kangahsuk, the savage black lover of the North Water, who, ever when the full moon lights his iron features, wakens in amorous fury, and, aided by the rushing torrents of the spring-tides sweeping out of the Sound, shatters the steely-white fetters of his mistress like thinnest glass, till she can heave and throb against his breast, and waken in his caverned heart fierce sighs and muffled roarings, the passion language of this frozen world.

Were we at westward-reaching Peterahwik now, we would see, at noon, a dim ribbon of light upon the sea horizon to the south, the faint reflection of the distant sun. Here in the Sound the cliffs of the south shore rise far above this narrow zone of twilight, and the reign of the "Great Night" will be undisputed for weeks yet.

Only one of the Keate igloos was in commission. It was occupied by a family no member of which I had seen. The man, a shiftless, lazy, dirty specimen, according to all reports, was said to have obtained his wife by allowing her husband, his friend, to fall over the bird cliffs. She was a sister of Ikwah, my native hunter at Red Cliff. They had a nearly grown daughter who had never seen a *koblunah* or white man. It was with considerable interest, therefore, that I followed Lee through the long, narrow *tos-sut*, or entrance, and emerged into the igloo. I was expecting to find a dirty and disreputable igloo, and in this I was not disappointed. With all that I had seen of the physical beauty (?) of this tribe, I was not prepared for the face (belonging to the daughter) which met my eyes as I looked towards

the bed platform where she sat tailor fashion and nearly nude, chewing the sole of her step-father's kamik preparatory to sewing a patch on it. As Lee expressed it, "It would fry eggs." Its radiance in the igloo made the wind-swept snow and rocks outside seem a heaven. The igloo was too small to accommodate all of us, even had it been more attractive, and I instructed the men to build a snow igloo for us.



"EETOO" AND "TOOKY"

This brought out the information that one of the unoccupied stone igloos was available for us, and here our impedimenta were taken. This igloo was the storehouse of the family, and in it were several seal-skin bags pressed full of hundreds of little auks, feathers and all, just as killed,—the winter food supply of the family.



KEATE GLACIER.

Though bleak and savage now, in summer Keate is a garden-spot: a little southward-facing niche beside a glacier, protected by bluffs and cliffs on either side and behind from the wind, the breeding-place of millions of little auks, the stream beside the glacier furnishing abundance of water, and the southern exposure, together with the protection of the cliffs and the presence of the little auks, carpeting the little nook with flowers and an abundance of grass.

After my star sights here, which were abruptly curtailed by an intruding bank of fog from the open water, I started for the eastern end of Herbert Island. At the eastern end of Northumberland, we had outpaced the fog, and emerged into brilliant moonlight, and then, passing along the stratified bluffs of Herbert, we started our fires and erected a rude snow house under the overhanging shore rocks at the eastern end of Herbert.



TOWSER.

The following day, we galloped back to Karnah, arriving just as Kaiwingwah and Kioshoo, the cripple, came in from Kookan; the former with a sledge-load of little auks, the latter with his stalwart wife, and a pair of black eyes which she had given him in some family misunderstanding. In the evening the village was a scene of feasting. A fetid seal-feed was in progress in Kardah's igloo; in Akpalisoah's a little-auk spread was laid out; and in Inger-

opahdoo's another feasting crowd was gathered about a huge walrus-ham, which took up nearly all the floor. Ootooniah and Tellikotinah, and their wives, visitors from the south shore of the Sound, now on a round of social visits, were making calls from igloo to igloo, sampling all the feasts, and gathering all the gossip.

Finally, I managed to get a comfortable place in Ingeropahdoo's igloo, and, seated beside Ectooshok-shua, his wife, drew from her the simple astronomy



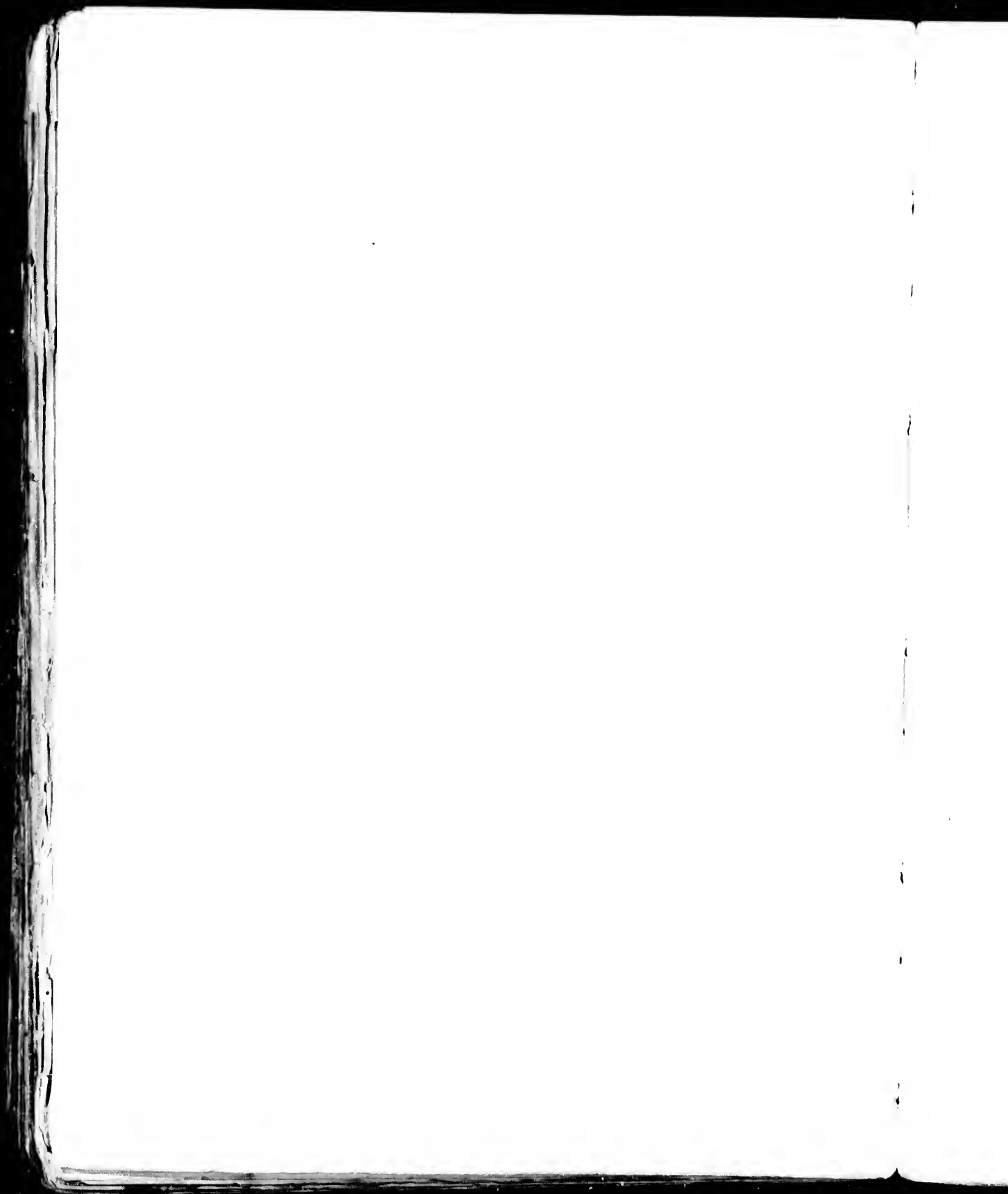
LION.

of her people, and learned about *Tooktoksue*, the celestial herd of reindeer (Ursa Major), *Pitoochen*, the lamp stones (Cassiopeia), the Bear and Dogs (Pleiades), etc. Some material was still needed for my sledge equipment, such as sealskin, rawhide line, etc., and I made a tour of the igloos to obtain the articles. A present of a few biscuit to Tah-tahrah, the incurable invalid, lightened his poor,

emaciated face wonderfully. Little Koodlooktoo's heart was also made glad by a deerskin for his kooletah (winter coat), and Eetooshokshua by enough little-auk skins to make herself a shirt. Towser, Hector's little pup, was the honoured guest in the igloo of Ingeropahdoo, to whom I had given him. He eats when the family eats, quarrels with the children if they step too near him when eating, and when he is through, stretches himself full length on the bed platform and objects strenuously if anyone has the temerity to sit down there and disturb his slumbers. These royal attentions and bed of roses, as it were, are due to his possession of drooping ears, a peculiarity greatly prized by these Eskimos in a dog.

To my great regret I found old Lion dead. Poor old fellow, the only dog of his kind in the tribe, big, powerful, thick-furred, maned like a lion, yet white as an Arctic wolf, I had hoped to keep him through the winter and take him to the States again. He had seen much of the world, but, more fortunate than many other travellers, died on his native heath, in the heart of the "Great Night," which he knew so well. Only two of the five noble brutes that made the first journey across the frozen Sahara of the "Great Ice" are left now, and one of them is not likely to survive the winter.

The next day we were back at the lodge.



CHAPTER XI.

MISCELLANEA.

CHARACTERISTIC OCCUPATIONS OF A DAY—MISSIONARY WORK—PANIKPAH OF THE OLD GUARD—FROST PHANTASIES—AN ESKIMO LEGEND—THE SEAL HARVEST, WIVES, AND A BABY—A YOUNG GIRL'S TRAMP—LA GRIPPE—AN ESKIMO DUEL—THE STILLNESS OF DEATH—AT LAST THE SUN—A FÖHN STORM—BRILLIANT PARHELION—KOKOYAH (THE ESKIMO DEVIL)—STORY OF THE THERMOGRAPH—PESSIMISM.



AN ARCTIC BRONZE.

CHAPTER XI.

MISCELLANEA.



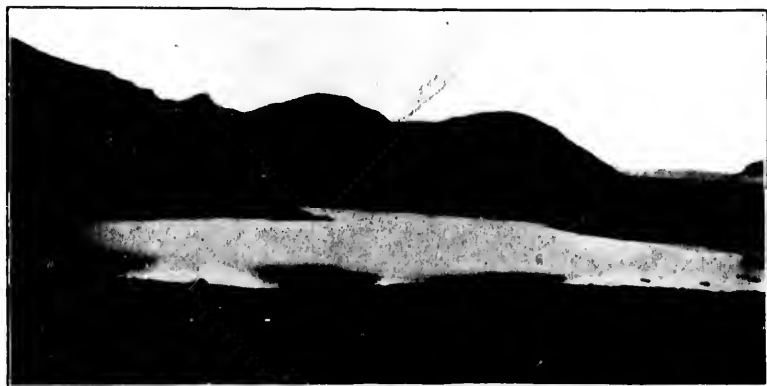
SANDWICHED in between the more important events of the preceding chapters, and sometimes occurring simultaneously with them, were many interesting and essential, even though trifling, incidents of our life and work. The following extracts from the pages of my journal will

give an idea of these :

Skating on Baby Lake.—September 9, 1894. The ice on Baby Lake has formed with astonishing rapidity. The lake was not frozen over when I returned from Cape York three days ago, and yet this afternoon the ice on it is three inches thick, and Lee has been skating there.

Characteristic Occupations of a Day.—September 11, 1894. Lee contracts the coal pile, spreads some hay to dry for filling the house walls, and does his year's washing. Nooktah goes deer-hunting and returns about midnight unsuccessful. The last of the green deerskins nailed up to dry to-day. In spite of the low temperatures, these skins dry in twenty-four hours.

After lunch, I take my folding kodak and scale the southern face of Mt. Bartlett for a round of views, returning down the north slope via the mule cache. The summit and the surrounding plateau are covered with snow. The prospect down the bay is very discouraging for boat work. The cold weather since I returned from Cape York has been extremely favourable for the formation of new ice, and in the entire bay there is no open water. The bergs and trash ice, cemented by a glassy young ice, extend well out into



BABY LAKE.

the Sound. Matt will have a difficult job getting back from Kangerdlooksoah. McCormick Bay, in its upper portion at least, is entirely free of ice, and the wind-swept lakes of Tooktoo Valley are apparently still open. On the way up Mt. Bartlett, I see a hare, and while returning, another just above Baby Lake. I get my gun and go back after the latter. He weighs eight pounds.

Alnighito's Birthday.—September 12, 1894. Baby is a year old to-day, and Lee and I have had a modest spread in her honour: venison steak, corn, hard-

tack, peaches, coffee, nuts, candy, figs, and oranges. She and her mother must be nearly to St. John's now.

An Eskimo Myth.—September 28, 1894. Adah-rahingwah tells me to-day that her people have heard of large men living far to the north, who wear *netchehs* (fur jackets) made of *oogsook* (bearded-seal) skin. She also tells me that the Eskimos are very curious to know why I am so persistent in going on the ice-cap, and if, perhaps, it is because I wish to see these men.

Missionary Work.—October 2, 1894. I began to-day an attempt to reclaim and partially civilise my aboriginal retinue here. Everyone was required

to take a thorough bath with hot water, plenty of soap, and scrubbing-brush. I was surprised at the lightness of some of the skins. Panikpah is nearly white. The cuticle of the two girls was almost freed of the dirt accumulations of years, though some of it will have to wear off. After Adahrahingwah had washed and combed her hair persistently, till it was presumably uninhabited, I gave her an old undershirt, and a bit of red cloth to tie about her head, and as she sits tailor-fashion, sewing upon a pair of new fur trousers,



"HE WEIGHS EIGHT POUNDS."

which she is making for herself from scraps of fox- and coonskins, she would compare quite favourably with many of the South-Greenland half-breed belles. I shall endeavour to get new clothes on these girls, who are accomplished seamstresses, so that they can make our ice-cap costume; without danger of colonising



AHWEAH.
Daughter of Nooktah.

them. It is possible, also, that they may be taught to wash dishes, towels, etc., sweep, and perhaps cook. Little Koodlooktoo I must clothe for the winter; and also the children of Nooktah, who has worked so steadily and faithfully for me that he has had no time to look after them. I feel that I have quite a responsibility upon me.

Panikpah of the Old Guard.

—Oct. 3, 1894.
All my dogs, except Panikpah, of that noble Old

Guard which survived the battle with the "Great Ice" in 1892, and Lassie's surviving pup, are on the

ice-cap with Lee and Matt. Their absence, and the abundant food since the return from the walrus hunt, has made Panikpah act something like his old self; and when I go out, he jumps before me, wags his tail, shakes his poor scarred head, growls affectionately, and licks my hands as of old. When the other younger and stronger dogs are here, they punish the old veteran so much he does not dare to move. He will never recover from his last starvation experience, when two brave (?) members of my party, in a fiasco trip to Tooktoo Valley, left him across the bay, and the poor dog was two weeks without food, reaching the lodge at the end of that time in a pitiable condition. It is a waste of meat to feed him, yet he shall be fed until he dies, for his splendid work in the past.

An Experiment.—Oct. 24, 1894. This afternoon I put my liquid boat-compass on a sledge, and pushed



KOODLOOKTOO.

it down the bay before me, to get an idea of its availability for use on the ice-cap. I think I can utilise it.

Frost Phantasies.—Oct. 30, 1894. While lying on my bearskin divan this afternoon, close to the windows, thinking out a design for my sledge tent, my attention was attracted by the frostwork on the windows. On one of the outer of the double windows, the incisive Arctic artist has chosen for his theme a deformed



"PANIKPAH OF THE OLD GUARD."

evergreen tree, such as cling to crevices and narrow ledges on mountain cliffs, or fringe barren summits, or straggle along bleak sandy sea-coasts; trees that have been scorched and frozen and storm-beaten their entire life, whose branches are all on one side, and perhaps one of them a monstrous deformity as large as all the others, and even vying with the parent

trunk; trees that are hung with grey moss and crusted with lichen, whose every branch-extremity is a lance, and every twig an arrow, acute with defiance of the world and mutiny at their own hard lot. The

pane looks as if an entire forest of such had suddenly betaken itself to a wild witch's ride, and at every possible inclination, in twos, and threes, and singly, was careering across the crystal field. On another pane the design is like that on galvanised iron, but far more dainty and crystalline. On an inner pane, to which the moisture of the room has free access, and which is protected from the radiation of the stove by one of the side boards of my divan, is an exquisitely pure and simple design in bas-relief, fit for a frieze, or the decoration of an heroic vase; its theme, the curving stalks and spiral-coiled heads of young ferns, just pushing their heads through moist spring forest carpets. The stalks of these glittering Arctic prototypes of their living Southern brethren are fully one-fourth inch thick. And down the bay, on the new ice which continually forms and breaks again around the big bergs as they surge to and fro with the spring tides, is an abundance of the most exquisite frozen vegetation: large, feathery, fern-like crystals, some in bunches several inches across, looking like baskets of skeletonised leaves; others in dense ribbons, like the coleus borders in West Fairmount Park. Given favourable conditions, these boreal flowers grow with the rapidity of the bean-stalk of the fairy tale.

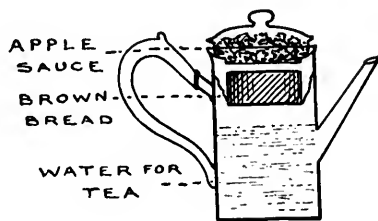


FROST
EVERGREENS.

Concentrated Cooking.—Oct. 30, 1894. When I am here alone I evade and avoid, in every possible way, the drudgery of cooking, and some of the home folks would be amused at the way in which I made the coffee-pot do simultaneously treble duty in getting my dinner to-day. The little stove has but two holes for cooking, and on one was a large iron pot, in which I was cooking venison stew enough to last me the rest of the week. This left me but one hole

over which to consummate the rest of my dinner, which, according to my mental menu, was to comprise brown bread, apple-sauce, and tea. While the water for the tea was heating in the bottom of the coffee-pot, a half-loaf of brown bread was being steamed in the coffee-bag at the top, and above that a saucerful of frozen apple-sauce was thawing, covered with the lid of the coffee-pot.

An Eskimo Legend.—Nov. 1, 1894. Nooktah relates to me the following legendary conversation



MY COFFEE-POT.

between an Eskimo and a raven flying over with something in its mouth. "*Sunah kingmiahpen?*" ("What have you in your mouth?") asks the man. "*Inukkoktoah mahmaktoksah. Ecoquatw; ecoquatw*" ("The

thigh-bone of a man. It is very sweet. Caw, caw"), answers the raven.

The Seal Harvest, Wives, and a Baby.—Nov. 4, 1894. Matt returned this morning from Karnah alone, Nooktah remaining there to hunt seals. The natives are making the most of the new ice in the Sound, before snow comes to cover it and bring the harvest to an end. Every man and boy that can raise a *pussy-mut* (seal spear) is living on the ice night and day, clad in his heaviest furs, his feet muffled with noiseless bearskin pads, and with his little three-legged stool, on which at a pinch he sits for hours, waiting for the unsuspecting seal to come to its breathing-hole, and

receive the murderous spear-thrust. In the afternoon Panikpah returns and tells me he has killed sixteen seals off the Castle Cliffs, and Koolootingwah an equal number. Over a hundred seals have already been killed by the natives of Karnah and Koinisuni, and if the snow holds off a few days longer, it is likely that, in addition to their store of walrus and



SEAL AND HUNTER.

narwhal meat, there will be two seals apiece for each man, woman, and child at these settlements. Panikpah also tells me that Koodlah's wife has a boy baby, and that he saw Myah on his way from Netiulum, up the gulf to Koinisuni, to exchange wives with Kessuh. This shows that the Sound is frozen over as far out as Netiulum, and that Myah has a soul above monotony.

An Embarrassing Position.—Nov. 10, 1894. Lee, Matt, and Panikpah, with two sledges and all the dogs, got away at 9:30 this morning for Kangerdlooksoah, to endeavour to get a few more deer in the last of the rapidly waning twilight. Their departure puts me in the somewhat embarrassing position of being left, alone and unprotected, with five buxom and oleaginous ladies, of a race of naïve children of nature, who are hampered by no feelings of false modesty or bash-



"A BUXOM AND OLEAGINOUS LADY."

fulness in expressing their tender feelings. My years, and at present semi-crippled condition from a fall on the rocks, will, I trust, protect me.

A Young Girl's Tramp.—Dec. 1, 1894. After starting the fire this morning, I went out in the big room where the natives sleep, and found that Alakahsingwah, one of the girls, was gone. Inquiries brought out that she had gone to Karnah. Seized by one of those sudden impulses which sway these children of

nature, she had risen during the night, and started off, with nothing to eat, and without a word to anyone, to walk the distance of twenty miles alone in the bitter cold and dim starlight. What would any of our fourteen-year-old girls at home think of such a constitutional?

Aurora and Meteor.—Dec. 27, 1894. Early this morning there was a brilliant curtain aurora extending across the sky from south-east to north-west, somewhat west of the lodge at first, but shifting later to directly overhead; and about noon, as I stepped out of the house, a brilliant meteor fell from near the zenith southward into the mouth of the bay, leaving a long trail behind it, and bursting finally into several fragments.

La Grippe.—Dec. 27, 1894. Almost everyone at Karnah has a severe cold and sore throat, some of the people being completely laid up with it and unable to talk. It is doubtless similar to the Grippe which appeared among the natives, and my own party as well, at Red Cliff, in March, 1892.



ALAKAH SINGWAH.

Tales of Blood.—Dec. 27, 1894. Nooktah tells me to-night that Koodlah, father of Eetookashoo and grandfather of Panikpah, killed a native, Ahwahtingwah, at Peterahwik, years ago. Also that Ahwahtingwah himself, years before, had killed a man at the western end of Northumberland Island.

An Eskimo Duel.—Dec. 28, 1894. Oomah and his family left this morning, and Koko and his latest wife, the recent widow, arrived in the afternoon.



AHTOOKSUNGWAH.

"Her Curves Were a Trifle Heavy."

And hereon hangs a tale. During the autumn, Mak-sah, one of the Cape York hunters, had his side torn open by the claws of a polar bear, and, after lingering along for weeks, finally died. His widow, Ahtooksungwah, came north with her young daughter, in the cavalcade which accompanied me back in December, and her arrival in the metropolis of Karnah caused great excitement among the masculine element. Ahtooksungwah was quite light (in colour)

and had a form like a walrus. Her glistening face was considerably broader than it was long, she stood about four feet six inches high, and weighed about three hundred pounds, her figure resembling a number of stuffed pillows fastened together. To my mind, her curves were a trifle heavy, but she evidently realised the Eskimo ideal of beauty, and being a widow besides, she was irresistible. Many were her suitors, but the most favoured ones were Koko, a several-times divorcé, and Nowdingyah, or Akpudia ("Jumbo," we called him), who, since the death of his wife, several years before, had had no eyes for the opposite sex beyond his little apple-cheeked daughter Ahweahgoodloo, on whom all his affections seemed centred. Yet his heart had incontinently melted with the warmth of the widow's oleaginous smile, like a piece of frozen blubber in the flame of an ikomar.

The rivalry between these two waxed so intense that it was evident something serious would occur, and no one was surprised when Koko entered the igloo where Nowdingyah, seated upon the edge of the bed-platform, was trimming a whip-lash, jerked the lash from his hands, and seating himself beside him, threw his arms about his waist, and attempted to force him upon his back upon the platform. Not a word was said by either or by anyone in the igloo, yet everyone knew, as the two strained and twisted with quick, loud breath, that the struggle was for the widow. For several minutes the struggle continued, till Koko, at last, with a supreme effort, crushed his antagonist prone upon his back, then, jumping quickly to his feet, left the igloo and, harnessing his dogs, drove off with the widow on a bridal tour to the lodge. He had won the prize in a bloodless Eskimo duel. An interesting sequel to this was that, after spending a brief and blissful honeymoon of two or

three days at the lodge, Koko returned to Karnah, when my previously staid henchman Ikwah, though already possessed of a wife and child, became enamoured of the widow, strayed from the paths of propriety, vanquished Koko in another bloodless duel, left him to proceed alone and disconsolate to Cape York, and installed the rotund siren, with all her wealth and witchery of charms, in his own igloo.



AHWEAHGOOD-
LOO.

Eskimo Superstitions.—Jan. 15, 1895. One of the women dreamed last night of seeing a recently deceased woman, and, as a result, all my Eskimos are in mortal terror to-day and will not move a step alone.

The Stillness of Death.—Jan. 19, 1895. While adjusting my transit to-day for some star sights, I was deeply impressed with the stillness, broken only by the cracking and groaning of the ice-foot. It is a great contrast to a year ago, when half a hundred dogs made every hour in the twenty-four hideous. Now there is only poor old Lion, whom I brought home from Karnah, because I wanted his skin, lying stark and stiff in the starlight.

First Glimpse of Sunlight.—Feb. 11, 1895. Kyogwito returned early this morning from Ittibloo with a seal for me. He reports seeing the sun shining upon the highest ice-cap of Northumberland Island yesterday. He tells me many natives will start for Peterahwik in a few days to hunt walrus. The Tigerahomi notch at noon to-day was a blaze of yellow glory, though the sun is still below the horizon.

Matt Returns from Sledge Trip.—Feb. 14, 1895.

Matt returned to-night from Karnah, Netiulumi, Keate, and Igloodiowny, as I directed. He has been gone eight days and is back a day sooner than I anticipated. He reports that Tellikotinah (alias "George Washington") is anxious to bring me a load of narwhal meat, to atone for past misdeeds; that there is still open water at Cape Parry, and much young ice between there and Netiulumi, which will require a few more days to render safe; that the open water



RETURN OF THE SUN.

at Keate has retreated a little to the west of the Keate Glacier; and that Ikwah and his new wife are alone at Keate, the other family having moved to Netiulumi. He found a pool of open water in the channel between Northumberland and Herbert Islands, with three bergs in it; a pool similar to the one I saw in 1892, but much larger. That had one berg in it. This accounts for the somewhat erroneous information obtained from Erasmus York and appearing in

the following legend on his map in *Arctic Papers* ; "No ice ever forms in this channel; icebergs pass through this channel in winter." If a berg is caught here, the powerful tidal currents sway it back and forth, keeping open water about it till the next summer.

An Anniversary.—Feb. 15, 1895. A dull day,



AHTUNGAHNAKSOAH.

lead en grey clouds overhead, finally settling down upon the bluffs, and towards night dropping snow and rain. A year ago to-day, jo and I welcomed the returning sun from a rocky knob well up Mt. Bartlett. Had it been clear, I should have gone there to-day to welcome it again and indulge in reveries and memories of the dear one far away.

Work on Equipment.—

Feb. 16, 1895. Lee at work putting up meat rations for the ice-cap journey. This evening he is plotting the work of his last sledge trip. Matt, with a little native assistance, has assembled the trailer sledge "Chopsie." It is eight feet long, eighteen inches wide, and weighs seven een pounds. "Freckles" has been

fitting a pair of ski for the "Josephine" to be used in soft snow, and Nooktah and Ihrllie have made themselves generally useful.

Old Ahtungahnaksoah, who has quite a reputation as an *angakok*, had one of her spells to-day, and chanted herself into a state of hysteria during which she cried and sang and shrieked, and acted like an insane woman.

At Last the Sun.—Feb. 17, 1895. The sun touched the lodge to-day, and for a few minutes bathed the south side of Mt. Bartlett in golden light. Thoughts of Jo and the blue-eyed mite have been with me all day. At three A.M., the trace of the thermograph had risen above the zero line; at five P.M., it touched the freezing-point.

A Föhn Storm.—Feb. 18, 1895. The wind blew furiously at intervals during the night, the temperature rose to 42° F., and the heavy icy condensation inside the lantern was loosened, and came crashing down on to, and in some places through, the inner glass. The high temperature held throughout the forenoon, with continuation of wind from the south-east. Within the lodge it was insufferable. Between noon and one o'clock, the wind changed to north-east, the temperature fell rapidly, and it began to snow. I had a virulent attack of the blues to-day, due doubtless to the physical relaxation resulting from the high temperature. This storm is the third and most pronounced of these surprising manifestations which have occurred this winter; the first, January 13th, and the second, February 6th, the latter accompanied by a temperature of 39° F. and a barometer of 31.28 inches.

A Brilliant Parhelion.—Feb. 20, 1895. At last a clear day, and at eleven A.M. the sun was entirely above the Tigerahomi Bluffs, and shone on the lodge for almost an hour. As it disappeared behind South

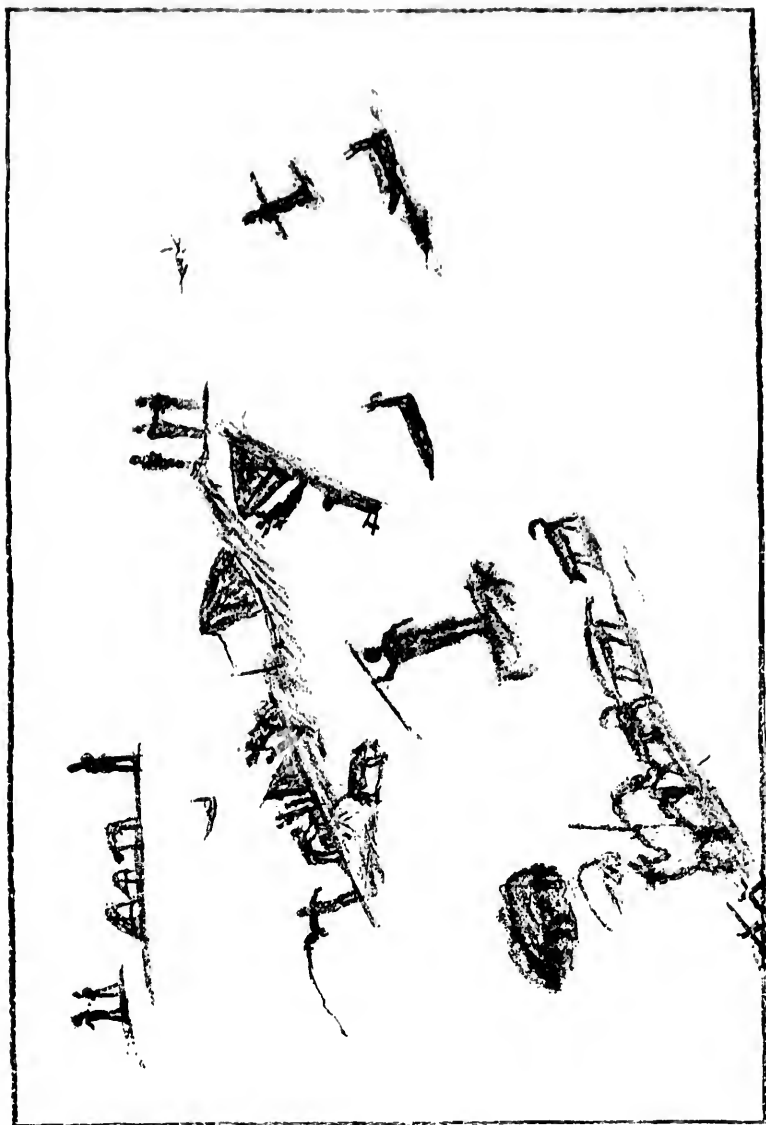


ESKIMO DRAWINGS.

Point, a bright parhelion appeared and afforded a striking display. The wind was from the east, off the ice-cap, so that the upper atmosphere was laden with impalpable snow-dust from the frozen Sahara of the interior, and the entire bay was lit with the splendour, the dazzling colours of the "sun-dog" or parhelion, a phenomenon which is nowhere to be seen in such brilliancy as in the Arctic regions. Around the god of day circled two concentric rings of rainbow-coloured light, with a third inverted, resting upon the top of the others. Set in the inner of these rings, directly over the sun and on either side, were three fainter images of itself, the "sun-dogs." A brilliant corona of yellow light surrounded the sun, rendering the disk indistinct. From this corona a triangular tongue of yellow light flared upward till its point touched the upper "sun-dog," and two paler bands of light stretched horizontally from the sun to and beyond the flanking "sun-dogs."

Native Drawing.—Feb. 21, 1895. I amused myself for an hour or two to-day with the artistic efforts of some of the natives. The aptitude of the Eskimo as a race at map drawing is well known. Many of this tribe show a surprising talent for drawing, and I am collecting examples of their efforts.

A Visit from Kokoyah (Eskimo Devil).—Feb. 23, 1895. Was wakened at three A.M. by a loud crash, and became conscious that the demon of the wind was on hand again and doing more mischief. I immediately dressed, went out, and climbed to the roof—throwing myself flat when the gusts came tumbling off Mt. Bartlett—to see that the sledges were securely lashed. I took a few additional turns for safety, and then made a tour of the house, but could discover nothing wrong. This morning the *Freya* had disappeared and a search discovered what was



DRAWINGS OF A 14-YEAR-OLD ESKIMO GIRL.
Work of about an hour.

left of her high up among the rocks at the head of the harbour. She had been picked up bodily by the wind, borne through the air some hundred yards, dashed against a pinnacle of the ice-foot, then picked up again and hurled far up the rocks, fully fifty feet above high-water mark. There was not an unbroken board, knee, or timber in her. Every time the devilish wind destroys something. Last time it was my transit; now, my boat. Perhaps it will get one of us next. Nooktah says Kokoyah (the Devil) destroyed the boat. He saw a dog barking furiously at the boat yesterday and has no doubt that Kokoyah was in it at that very time.

A Frozen Fog.

— March 11,

1895. A New England coast fog all day except for the temperature, which has been -4° F. to -6° F. Everything is densely coated with finest frost-crystals. At noon the crest of Mt. Bartlett, lit by the yellow light, shone through a rift in the fog overhead, suggesting, though in no way resembling, the Peak of Teneriffe.



ARROTOKSOAH.

416 Northward over the "Great Ice"

Matt Goes South.—March 12, 1895. Matt left this morning for Wolstenholm Sound and Petowik Glacier via Karnah and Netilumi to purchase dogs. He is to meet me at Peterahwik next Tuesday night.

The Story of the Thermograph.—March 13, 1895. A brilliant clear day. The thermograph tells now whether it is a clear day or not, the trace rising as the sun appears from behind the eastern wall of the bay, and falling as it disappears behind the Red Cliff ice-cap. The sheet for the week looks like the profile of an Alpine range.

Horace Greeley.—March 13, 1895. In the afternoon, Arrotoksoah (Horace Greeley), my old friend of Red Cliff House, arrived. The old man is aging and, though still sturdy, his hair is getting decidedly grey. He is just as affable and unassuming as ever.

Pessimism.—March 16, 1895. I do not know if it is impaired digestion or the lingering effect of the unutterable Arctic night, but, in spite of the return of the sun, I have the blues repeatedly. As long as the sun is above the horizon, I almost take a hopeful view of things, though with an effort. But the moment the evening shades begin to gather, I grow pessimistic, and waken in the morning in the depths of the blues. The journey now so near, is, under our heavy handicap, such a forlorn hope. I do not count the work, the risk; but can we win?

CHAPTER XII.

A WEEK AT PETERAHWIK.

HABITS OF THE WALRUS—THE SPRING WALRUS GROUNDS—PURCHASING
MEAT—THE CAPTURE OF WALRUS ON THE ICE—WILD OOGLOOKSOAH—
WEIRD SONGS OF THE *Angloork*—BUSTLE AND EXCITEMENT AT THE SPRING
PENGZVOGS—SUCCESSFUL HUNTERS—BACK TO THE LODGE



CAPE ALEXANDER.

CHAPTER XII.

A WEEK AT PETERAHWIK.



IN summer there are three haunts of the walrus in the region lying between Cape Olsen and Cape York. One is in and off the mouth of Welstenholm Sound; another in Omenak Sound, from the eastern end of Herbert Island out past Cape Robertson; and a third is about Littleton

Island and Life-Boat Cove, and well out toward the centre of Smith Sound.

During July, August, and September, the animals may be found in large numbers in each of these localities, feeding on the bottom in shallow water, where they find large quantities of a species of shell-fish, or basking in the sun upon the drifting ice-pans. In one locality only, Littleton Island and the shore of the mainland abreast of it, are the walrus of this region ever found upon the rocks. At any of these places they may be seen either upon the ice or in the water, singly, or by twos or threes, or in groups, and so on up to herds numbering hundreds. I have seen what I carefully estimated as between one hundred

and one hundred and fifty on one large pan of ice, and as many more in the water about it.

There is a peculiar circumstance in connection with these three summer haunts of the walrus, and that is that only females, calves, and young males are to be found about Littleton Island and Omerak Sound,

and only males, and most of them old ones, in Wolstenholm Sound.



SIPSU.

A few of the animals are obtained at each of these places by the Eskimos during the summer, but not less than two-thirds, and perhaps three-fourths, of the annual walrus catch of the tribe is obtained during the spring hunt at Peterahwik.

Peterahwik is the Eskimo name for Cape Chalon of the charts. It is easily recognisable by a black trap dyke running along the southern side of the bluff forming the cape, from its extreme point to the first glacier east, a distance of some two miles. This dyke, which is from thirty to fifty feet thick, forms a titanic retaining-wall for a mass of stratified sandstone rising above it to a height of from one thousand to twelve hundred feet.

From this point wild Ooglooksoah (Cape Alexander) stands out in savage relief twenty-five miles to the northward, and in clear weather the opposite coast of Ellesmere Land is visible, westward across Smith Sound.



PETERAHWIK.

Here is the spring walrus-hunting ground of the natives ; the edge of the North Water, with its border of thin ice forming after every wind, being never many miles distant to the west or south-west.

The North Water off this cape seems to be the winter resort of all the walrus of the region, and as early as the first of February, when there are a few hours of twilight at noon, but before the sun has returned, scouts from the nearest Eskimo village, with light sledges and picked dogs, dash off to Peterahwik, and thence westward from the cape, till they reach the edge of the North Water, where they note the con-

ditions of the ice, and listen for the deep bellowing of the walrus beyond. If the indications are favourable they return to their homes, and couriers carry the news throughout the tribe. Then family after family takes up its march for the cape, and on arriving erects a snow igloo upon the ice-foot at the base of the cliffs; until, by the latter part of February, half or two-thirds of the tribe will be gathered there.



KODLAH.

Then the hunt is prosecuted well into the spring, when the widening North Water reaches the cape, and begins to eat its way past it, which would cut off the retreat of the natives.

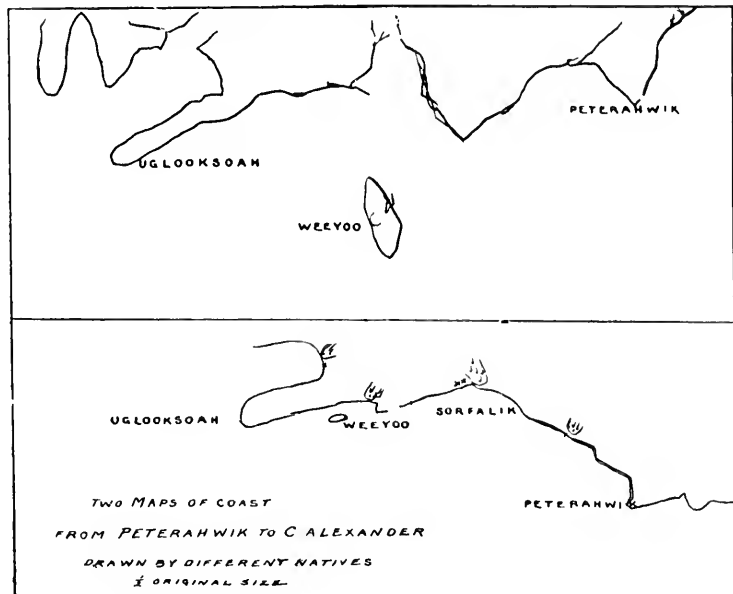
During all this time there is the greatest bustle and activity, and the numerous sledge tracks

from all parts of the coast, uniting as they near the cape, form a broad beaten highway.

Then at last family after family deserts the snow igloos, and flits eastward to Robertson Bay, where they have for some time previously been transporting their meat, and from here they separate to the various localities which they have chosen for their summer residence. The spring sun melts the sledge tracks, and the disrupting floes carry the ephemeral highway to dissolve in warmer waters, and the wild

rocks of Peterahwik are left to the *noyaks* (burgomasters), the *sergwahs* (black guillemots), and the pounding waves.

Monday, March 18, 1895, I left the lodge with my iron-runner sledge drawn by eight dogs, for Peterahwik via Karnah, to obtain walrus meat and dogs to make up my full complement of both for the ice-cap journey.



On the way down the bay I overtook Kyangwah, wife, and child, and Soker, wife, and child, who were walking, and gave them a lift by taking the children on my sledge. It was a brilliant clear day, and I arrived at Karnah in the afternoon, just as the sun was setting behind the ice and bergs of Murchison Sound. I found the settlement almost deserted, nearly everyone having moved to Peterahwik.

The next morning, early, I too started westward,

accompanied by handsome young Sipsu. Sipsu was anxious to get to Peterahwik and take a hand in the walrus hunting, but he had no dogs, so I told him that if he would work his passage by driving mine he might go with me. It was another fine day, crisp, cold, and clear, the road was well broken by the numerous sledges which had preceded us, and we reached Cape Cleveland at noon, then passing across the mouths of McCormick and Robertson Bays ar-



ESKIMO BOY.

rived at Nerke, at the base of its black cliffs, about eight o'clock in the evening.

Some time before reaching Nerke, the tracks of a sledge coming from the south, from the channel between Herbert and Northumberland Islands, had joined the main trail, and from certain peculiarities about the track I knew that it had been made by Matt's sledge, and

that he, returning from the southern journey on which he had started just a week previous, had passed that way the night before or that very morning, to keep the rendezvous which I had appointed at Peterahwik.

At Nerke I learned that he had passed the day before, and had succeeded in purchasing but three dogs. It had been my original intention to make the distance from Karnah to Peterahwik in one march, but Annowkah, one of the two men living here, who was on my list of eligibles for the ice-cap party, was

away for the night, and as I wished to have a talk with him on the subject, I told Sipsu to make the dogs fast and that we would sleep here and go on to Peterahwik in the morning.

The following morning, after an early coffee, I had a short talk with Annowkah and his companion in the house, Kardasuh, which resulted in my engaging both of them for the ice-cap. Then a short ride in the stinging morning twilight brought me to bustling Peterahwik. I found Matt here, and learned from him that he had been the round of the settlements as far south as the Petowik Glacier, but that the natives south of the Sound held their dogs too dear, and three was all that he had been able to obtain.

I very quickly effected the purchase of six from the Peterahwik hunters, but found that Akpalisoaho, Panikpah, Kardah, and Koolootingwah had left the



ESKIMO DRAWING.

village four days before for an extended bear hunt to the north in Kane Basin, beyond Anoritok and Rensselaer Harbour. They would not be likely to return for several days yet, and as each had dogs that I wanted, I must perforce wait for them.

In the evening, after the return of the men from the walrus grounds to the westward, with their sledges loaded with crimson meat, there was an *angakok* gathering in one of the snow igloos which I attended.



A GOOD JOKE.

The hoarse voices of the wraiths of bears and walrus, the shrill cries of sea-birds, the croak of ravens, the gloom of the Arctic night, are mingled in the weird "medicine" songs of these people.

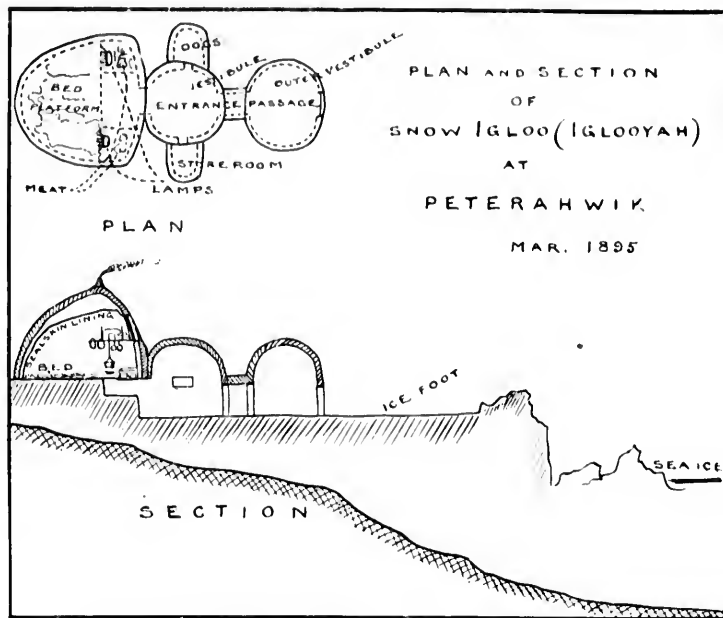
The following morning, with the earliest light, nearly all the hunters

started off to the west and south-west for the haunts of the walrus, on the thin ice along the edge of the distant North Water.

From the men who remained I purchased thirteen pieces of walrus meat averaging some fifty pounds each.

Before noon three sledges came in piled high with the meat from a big walrus just killed, and of this I obtained a portion. Then I drove down to Ahwagahwi, where I obtained ten more pieces. Then at

night the hunters came in bringing two more walrus killed by my handsome driver Sipsu, and from him I obtained a few hundred pounds more. Though I must remain till the bear hunters returned from the north, there was no reason why Matt, who had already been ten days in the field, should remain here, when



he might be at the lodge perfecting a number of last things in connection with the ice-cap equipment.

Now that I had a good supply of meat, he could take charge of a party to convey it and my recently purchased dogs to the lodge. On the way back from Ahwagluahwi, I had arranged with Maksingwah and Ahlettah to accompany him with their sledges and dogs, and each take a load of meat. They got away

428 Northward over the "Great Ice"

at daylight the next morning, intending to take the short cut for the lodge via McCormick Bay, Took-too Valley, and across Kahkoktah Glacier.

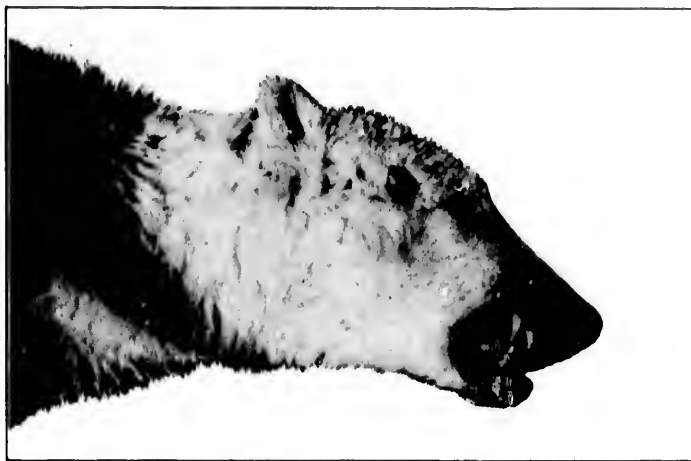
After seeing them well off down the winding track toward Ahwagluahwi, I jumped on the sledge of one of the hunters, and rattled away westward to the hunting grounds to see for myself the noble sport.



WARMING HIS WIFE'S COLD FEET.

The open North Water off Peterahwik may be anywhere from ten to twenty-five miles to the west or south-west, and its edge shifts like the fringe of a waving curtain. Two or three days of heavy wind will eat into the ice and bring the water several miles

nearer the shore. Then during the following calm, the fierce temperatures of February and March, the lowest of the year, bind the motionless water with a zone of young ice, which in twenty-four hours will support a sledge and team of dogs. Then is the hunter's time; leaving the village at earliest daybreak he drives out to the edge of the old ice where the dogs are fastened, and then on foot with his harpoon, line, and lance, he starts out upon the black mirror of the new ice.



HEAD OF POLAR BEAR.

Soon the muffled grunt of a walrus in the water beneath him comes to his ear, or perhaps his quick eye may catch a glimpse of the animal darting through the water, and with intuitive judgment he runs noiselessly over the ice to the point where the animal is likely to lift his head through the ice for breath. With dexterity born of long practice, the harpoon is driven into the animal, and with a quick motion a turn of the line is taken round the iron point of the

lance, driven into the ice, and braced with the foot. These actions have already attracted the attention of a comrade, who hastens to his assistance, and in a few moments his murderous lance has pierced the lungs of the bellowing brute, and then it is only a question of keeping the line fast until he is dead, when the huge carcass is warped out on the ice, and quickly cut up; then the dogs and sledge are brought up, the meat loaded on it, and the hunters return to the village.



WOMEN PREPARING A BEARSKIN.

The precise position of the settlement of Peterah-wik depends upon the particular season and condition of the ice.

In 1894, the snow igloos, over forty in number, were located under the bluffs close by the glacier, some two miles east of the point of the cape, and over two-thirds of the entire tribe were assembled here. At the time of my visit now, the majority of the igloos were located on the ice-foot on the southern side of the

trap dyke, at its very extremity, where a long drift of compact snow furnished suitable material for construction purposes. Other igloos in groups of twos and threes were located at various points along the coast, for a distance of twelve miles.

The igloos at the cape were arranged in a regular line with their backs to the dyke, their entrances to the south, and about fifty feet from the ice-foot, the level upper surface of which formed a wide, smooth street in front of them. These igloos were on an average twenty-five feet apart, and though varying somewhat in size, according to the number of occupants, were all built on one pattern.

With the Whale-Sound Eskimo, the iglooyah, or snow house, is only a temporary habitation, built for a night's shelter when travelling, or for a week or so at hunting grounds far distant from his village. From the fact that the snow igloos of Peterahwik are occupied sometimes for three months, while at other localities they are temporary structures, occupied only for a few days or at most a week or two, more care is taken in their construction, and for this reason, at Peterahwik the snow igloo may be seen in its highest perfection.

The igloo of Ingoahpadu, occupied by me, was one of the largest, and is shown in detail in the sketch (page 427). It was twelve feet long, by twelve feet wide, and seven feet high, in the highest part beneath the seal-skin lining. The bed-platform, raised a foot and a half above the floor, was six and a half feet deep; and the standing room in front of it six feet by five feet. The window of seal intestines was two feet square. The igloo was lined throughout with the tupik or summer tent, so arranged as to leave an air space between it and the snow walls of the igloo, thus preventing the latter from melting, and keeping

the interior dry. A small hole in the highest part of this lining, and another directly over it in the top of the igloo, afforded ventilation.

The succeeding days pending the arrival of the bear hunters, I whiled away as best I could, measuring the igloos as already described, taking photos, questioning the natives and getting them to draw maps and pictures for me, sometimes telling them, in return, stories about the wonderful land *awahnaksoah*



RETURNING FROM PETERAHWIK.

(far away) to the south, where the sun every day in the year rose in one direction, passed directly overhead, and disappeared in the opposite direction! land where there was grass (trees) as tall as the icebergs!! and houses as large as the smaller of the bergs!!!

The last of my supplies had been consumed by Matt and myself on the morning before he started back to the lodge, and after that I lived upon walrus meat pure and simple, without tea, sugar, biscuit, or

salt. I was delighted to be awakened soon after midnight of the sixth day, by someone shouting into the entrance of the igloo, "*Nannooksue shadago*" ("They have killed the bears"). Hurrying outside, I found that the bear hunters had returned, bringing five skins and their sledges piled high with meat. They reported the ice in Kane Basin smooth and hard. They encountered intense cold with much wind. All had their faces more or less frost-bitten. I did not turn in till I had joined the victors in a bear feast, which was a very agreeable change from my steady diet of walrus, and to which I did full justice.

The next day I purchased nine more dogs and some walrus meat, and the following morning started back for Karnah, accompanied by a regular cavalcade, in which were the brave fellows who were to accompany me on the ice-cap.

The fifty-mile journey to Karnah with the meat-laden sledges was long and tedious, and it was midnight when we climbed over the ice-foot at the latter place. Here I obtained a few hours' sleep, and at daylight was on my way to the lodge again, arriving shortly after noon.

Vol. II.—28



CHAPTER XIII.

UPWARD ICE-CAP JOURNEY.

DEFICIENCY OF PROVISIONS—FINAL PREPARATIONS—THE START—PEMMICAN
CACHE BURIED BEYOND RECOVERY—MY ESKIMOS TURN BACK—LEE SICK—
TWO MEN AND FORTY WOLFISH LOGS—OVER A MILE AND A HALF ABOVE
THE SEA—PRISONED BY A FURIOUS STORM—UNBROKEN EXPANSE OF THE
FROZEN SAHARA—DESTRUCTION OF SLEDGE—DOG FOOD USED UP AND DOGS
GIVE OUT—EXHAUSTION—LAND AT LAST.



THE LODGE IN WINTER.

CHAPTER XIII.

UPWARD ICE-CAP JOURNEY.¹

AT last the day arrived to which I had looked forward and for which I had planned so long, the day set for the departure upon the journey across the "Great Ice."

What a striking illustration of the law of the failure of reality to equal expectation! Though at

last in the position for which I had worked so long, I was terribly handicapped.

¹ The usual stock chapter on equipment to be found in Arctic narratives is omitted in this book, primarily for economy of space, secondarily because such chapter is of value only to those specially interested in Arctic work, and not to the general reader.

Were I through with my work in the North, it would be my duty to contribute my experience and results for the benefit of those following. As my task is not completed and further experience may modify many things, I feel that details of equipment can easily bide their time, and for the present yield room for matters of more general interest.

Some general remarks on equipment will be found in the Introduction.

The following details of the devising and construction of our cooker are given simply as a typical illustration of the shifts to which we were forced in connection with every vital item of our equipment.

With the loss of my alcohol, the only resource left us in the way of fuel was kerosene, and this of the poorest quality. The question of how to use this, and how to make an effective cooker and boiler from the material at hand, was a

Equipment and rations were both makeshifts, devised to the best of my ability from the scant means



SOKER.

at my command, and many times when at work upon them was I reminded of Robinson Crosoe, devising his boat and its simple fittings from material ill-suited to the purpose.

Yet I was better off in equipment than in provisions. Experience and ingenuity could make up for deficiencies in the former, but nothing could take the place of the alcohol and pemmican. Without these two indispensable items of an Arctic field ration, no expedition has in recent years attempted a long sledge journey. So heavy was this handicap, that it more than made up for our perfect training and fitness, and our complete experi-

ence. When we started on this journey, we knew that

serious and important one; for upon the effectiveness of our cooker depended not only our comfort, but even our safety, which would be seriously imperilled by the failure of the cooker at any time in the heart of the great ice-cap.

After some experiments with my Rochester lamp, I determined to utilise it for the foundation of my cooker. The lamp, however, could not be used without a chimney, and a glass chimney would be entirely out of place in the rough work of the ice-cap. A metal chimney of some kind must be devised. At first I tried a cylinder of tin wired together, but this did not prove satisfac-

we were relying solely upon our own exertions and the Almighty. Whatever fortune, ill or good, awaited us in or beyond the heart of the "Great Ice"; whatever accident or mishap befell, there would, there could, be no rescuing party.

And even if we returned in safety, if the trust which I reposed in my Eskimo friends was ill-founded, I might find my house and stores appropriated, and ourselves left destitute.

The day set for our departure into the white desert of the "Great Ice" arrived calm and clear. The night before, Lee, Henson, and myself had indulged in a thorough bath, a clean shave, and a prize-fighter's hair-cut before turning in, and now, after a few hours' sleep, had risen to an early breakfast and put on our new clean ice-cap costumes. These had for the past two or three weeks been hanging out-of-doors in the low March temperature, to freeze out any unwelcome inhabitant that might have found a lodgment while our Eskimo seamstresses were making them.

tory, as the draught at the joint interfered with the flame, and I had no means of making the joint tight. Finally a cylindrical copper cup or measure about six inches deep was found, which, fortunately, was of just the same diameter as the chimney.

The bottom was cut out of this, and a hole cut in the side at the level of the wick. Over this latter was fitted one of the small mica windows from a double Florence stove. Through this, the action of the flame could be seen, and by opening it the lamp could be lighted without removing the chimney.

This arrangement proving satisfactory after several tests, the next requirement was something in which to melt snow and make our tea. Going carefully through our scant stock of tinware, nothing was found that seemed satisfactory, the nearest approach to what was wanted being some rectangular bread pans.

The capacity of these was, however, rather too limited, and they had the fatal defect of having the bottoms soldered on.

The boiler for sledge use must have the bottom and sides all in one piece to enable it to withstand the severe usage to which it is subjected. Every time the lamp is lighted, the bottom of the boiler is subjected to the direct action of the flame for some time before the snow is melted sufficiently to yield water to protect it.

It was evident that a boiler must be made, but how this was to be done from the material at our command was a puzzler.

At last while turning over some sheets of tin, and studying how to make a boiler from them, the idea occurred to me of making a seamless boiler by folding one of these sheets of tin at the corners. The idea was immediately put to

All my ammunition and valuable papers had been deposited under the lodge, in such a way as to protect them from fire and the curiosity of natives from distant settlements. The remaining provisions were brought into the house. Letters had been written and given to the natives to deliver to the ship, in the event that the "Great Ice" should close behind us forever, and now the windows were closed, and the doors locked and nailed. While this was being done, my faithful natives were assembling the dogs, and in a short time we were moving up the little valley on our way to the moraine, the shore of the "Great Ice," leaving the house and its contents in charge of my Eskimo friends. Besides Lee, Henson, and myself, there were my six Eskimo men, Nooktah, Kardahsu, Annowkah, Soker, Nupsah, and Akpalisoahho, with sixty dogs, and six sledges; but only the first four of the natives were to go beyond the moraine. This was on Monday morning, April 1, 1895.

the test and, proving feasible, a shallow rectangular boiler was carefully made, and the upper edges tacked to the inside of a wooden Maillard's cocoa-box. This doubled the capacity of the boiler, making it hold sufficient snow to fill the tin part with water when melted down, and also stiffened and strengthened it. The next requisite was a case to protect lamp and boiler, ensure the steady burning of the former, and prevent the escape of any heat. This was found in the woolen case of one of my flour-tins, a strongly made box. The external dimensions of the chocolate-box forming the ring of the boiler were just a trifle smaller than the interior breadth and width of this case, and when the boiler was put inside, a space of $\frac{1}{8}$ inch was left all around it. The case was fitted with a hinged cover on the top end; a hinged door on the side, its top about an inch below the bottom of the boiler, and a small glass window in it to permit inspection of the lamp; and the entire case covered carefully with summer deerskin, the hair inside.

The bottom of the lamp was then cut off, the oil-chamber fastened to a light wooden frame sliding in and out on the bottom of the case, cleats nailed on the inside of the box for the boiler to rest on with its bottom about $\frac{1}{2}$ inch above the top of the chimney, holes bored in the top and bottom of the door for draught, and the affair was complete. Though heavy and uncouth, as was of necessity more than one other item of our equipment, this cooker served its purpose well, and gave us no trouble except that the lamp had to be watched carefully or it would smoke. This was due more to the poor quality of the oil—a St. John's article which at temperatures of -30° F. became so viscid that it could not be poured—than to any feature of the cooker. The boiler, rude as it was, lasted, to my agreeable surprise, during the entire trip.

From the moraine, Tooktoo and Lodge Valleys, with their nunataks and tributary glaciers, and the expanse of McCormick Bay opening out into the Sound beyond, lay below us, like a pictured map. Lee led the caravan, setting the course, he not being in condition to handle his big sledge with the frequent stops and starts inevitable on the steep up grades of the landward slopes of the ice-cap. After him came three of the Eskimos with their sledges, then Matt with the catamaran, or tent-sledge, then Nooktah with the *Josephine* (my sledge). I, with



UP THE LANDWARD SLOPES OF THE ICE-CAP.

Lee's sledge, brought up the rear, where I could note the behaviour of each team. On the catamaran, or tent-sledge, were the supplies for the return trip from Independence Bay, and those for consumption at and north of Independence Bay, together with the tent, sleeping- and cooking-gear, a total of about one thousand pounds. This sledge was drawn by a team of thirteen picked dogs.

On Lee's *Long Serpent* were about seven hundred and fifty pounds of dog food, drawn by ten dogs, and on the other four sledges the remainder of the dog

food, our own supplies for the upward journey, the cooking- and sleeping-gear, and supplies for the men and dogs of the supporting party up and back. The *Josephine* sledge, which I should drive after the Eskimos left us, was drawn by my own team of ten dogs; the other Eskimo sledges had nine dogs each. The steep gradient of the ice from the moraine tried the strength of the dogs to the utmost, and called forth energetic use of the whip from their drivers.



MY ESKIMO COMRADES.

On the second day's march, when we arrived in the vicinity of the cache igloos, I made another most determined effort to recover the cache. Armed with saw-knives, shovels, and light rods, the entire party scattered, quartering the surface in every direction. Every suspicious-looking *sastrugi* and inequality of the snow was probed, and several pits four or five feet deep dug, but all without result, and, unwilling to waste more time on an evidently fruitless search, I gave the word to go on to Camp Equinoctial and search for the cache there. Thus ended the final effort to recover this valuable cache, containing fourteen cases of biscuit, three cases of milk, one hundred

pounds of pea soup, and ten gallons of oil, all buried forever in the inscrutable bosom of the "Great Ice."

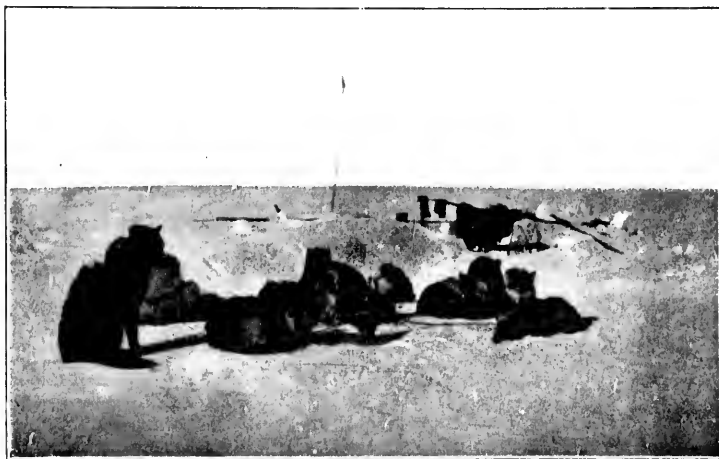
I had more hopes of finding the equinoctial cache, as it had been dug up by Lee, and replaced on the surface of the snow the previous July. Halting when compass and odometer indicated that I had reached its position, I sent out my Eskimo scouts on the little trailer sledges, to quarter the surface of the snow. Seated upon my own sledge, I watched them dashing back and forth, and in a few minutes saw a sharp-eyed, keen-scented dog in one of the teams swerve to one side, and, followed by the entire team, dash at something invisible to me in the snow.

A moment later, Nooktah stood up and waved something about his head, then came galloping back, and handed me a piece of an old bag which had been tied to the tip of the pole marking the position of the cache. Only three inches of the pole were now projecting above the snow, and even this could be seen in but one direction, owing to a tiny drift which had formed against the windward side. At the end of a forty-mile compass and odometer course, I had stopped my sledge within a hundred yards of the buried cache. This cache, though not as large as the other one, containing only ten cases of biscuit, and a case and a half of milk, was still very acceptable, as it enabled me to complete my milk ration, and replace my heterogeneous assortment of open boxes of biscuit, with tight-soldered tins of superior biscuit originally ordered for the Expedition. During the search for the cache, Annowkah, one of the Eskimos, weakened, and took the opportunity to decamp and go back to the lodge with his sledge and dogs. This desertion necessitated a new arrangement of the loads. The marches of the three following days, of twenty-two, twenty-eight, and thirty miles, respect-

444 Northward over the "Great Ice"

ively, carried us across the Whale-Sound-Kane-Basin wind-divide and well into the snow-shed of the Humboldt Glacier, bringing us, at midnight of Saturday, the 6th, to the vicinity of the pemmican cache, one hundred and twenty-four miles from the moraine, and six thousand five hundred feet above the level of the sea.

The weather during the week had been favourable, with no severe winds and no extremely low tempera-



A SHELTER.

tures, these ranging from -12° F. to -23° F. The surface of the ice-cap had been firm enough to support men, sledges, and dogs. We had strained every nerve to reach the site of this cache before there should be a change in the weather, and in spite of the heavy up grades and frequent interruptions of the first three marches, we had made the very satisfactory average of a trifle over twenty-one miles per day. Lee and myself each had a frost-bitten toe, and the cheeks and noses of Henson and myself were

frozen. These mishaps, however, were regarded lightly. Personally I was a trifle fatigued, as I, alone of the party, had walked the entire distance, the duty of setting the course, which I had done after the first two days, giving me no opportunity for riding.

I wasted but a few hours' sleep before commencing the search for the cache, and this was prosecuted for twenty-four hours, the Eskimos, on the trailer sledges, scouring the vicinity in every direction to a distance of five miles, while Lee, Matt, and myself,



LEE AND THE "LONG SERPENT."

on foot, examined the immediate neighbourhood of the camp. All proved unavailing. The prominent signal of the previous year had been broken off by the furious winds, and it and the cache were buried beneath the deep snow. The loss of this cache of some fourteen hundred pounds of pemmican was a staggering blow to me. While I had all along recognised the possibility of this very contingency, and had made up my rationing for the journey without reference to this pemmican, yet at heart I had felt as if we *must* find the cache, for I well knew that neither

walrus meat for the dogs, nor venison for ourselves, could fill the place of pemmican. Already, I could see the effects of the continuous hard work and the ration of frozen meat upon my dogs. The recovery of this cache would have enabled me to lie over here two days, rest my dogs thoroughly, fill them to repletion with pemmican and walrus meat, and then start with full sledges and my dogs fresh and full of enthusiasm, as when we started from the moraine. In other words, it would have brought my starting-point one hundred and twenty-four miles nearer to Inde-



A CAMP.

pendence Bay. As it was, I could not waste an hour here, but must push on, and take every advantage of the continuance of pleasant weather.

From here I sent my faithful Eskimo allies back to the lodge. Only I and they can know how brave and loyal and faithful they were. For six sleeps and six long rapid marches they had followed me unquestioningly into the awful heart of the *sermiksoak*, where none of their tribe had ever been or dared to go before. Never before, even in their longest pursuit of the polar bear across the frozen surface of Smith Sound,

had they been out of sight of the cliffs and mountains of their savage coast. Yet now, since four days back, the highest peaks of those mountains had disappeared below the surface of the "Great Ice," and for four days the unbroken steely horizon of the frozen desert had circled round them in a glittering ring. And now they must hasten back *alone* with feverish speed, before a storm could obliterate our sledge tracks, and leave them lost, bewildered, and bewitched, at the mercy of the dread demons of the "Great Ice." One of them carried a letter to the brave woman waiting in the South, in which was the following paragraph :

"I shall push on to Independence Bay and do all that is possible for man to do. After that I do not know. Everything will depend upon circumstances, and in any case a knowledge of my plans would avail nothing. We have only ourselves and the All-Powerful One to rely upon, and in the event of mishap no human help can find or reach us."

As the Eskimos dwindled into invisibility toward the frozen line of the southern horizon, we began our march into the glittering northern expanse, three of us, with forty-two dogs. The order of march of the little advance party, which had now cut completely loose, and from now on must paddle its own canoe, was as follows : Myself in advance with the "Josephine" sledge and a team of twelve dogs, setting the course by means of the boat-compass lashed on top of the load, which, as may be inferred, had been selected with reference to a total exclusion of anything composed of iron ; next Matt, with the tent-sledge and the "Chopsie" trailer drawn by a team of sixteen dogs ; and finally Lee, with the long sledge and the other trailer drawn by fourteen dogs.

It requires considerable experience to steer a direct course across this white desert, with not a thing to

guide or fix the eye. It takes long practice for a white man to drive a team of ten or twelve Eskimo dogs. And it is something more than either, to force a heavily burdened dog team on a direct line into the blank nothingness of that Arctic Sahara. Yet necessity knows no master, and, driven by necessity, I did this from now on for a



FEEDING THE DOGS.

distance of three hundred miles. The efficiency of the teams was very seriously impaired by the continuous fighting resulting from the rearrangement of the dogs; fighting which no earthly power can stop till it has been conclusively decided which dog is the king of each team.

On the third march, Lee was very much under the weather, and on reaching camp I gave him some medicine and sent him to the tent. The care of the forty odd dogs then fell upon Matt and myself,

and to keep a pack of forty ravenous Eskimo dogs in order during feeding-time is something beyond the power of any two men. We succeeded in tying them as usual in groups of five to eight, to stakes driven in the snow about the camp, and Henson had nearly completed chopping up the daily ration of frozen walrus meat, while I, with whip in hand, tried to keep the yelping brutes from breaking loose. But it was impossible to be everywhere at once, and, while busy quieting one group, another, with a sudden combined rush, and the superhuman strength which the



NOOKTAH AND THE "JOSEPHINE."

sight of food inspires in a hungry Eskimo dog, tore up the stake to which they were fastened, and dashed for the pile of meat. There was a simultaneous savage cry from every other dog, and in an instant every stake was broken or pulled up, and a howling avalanche of dogs swept through the camp and fell upon the meat. Each group being still fastened together by their traces, anything about the camp less firm than primeval rocks, such as projecting points of sledges, odometer, trailers, thermometer support, and so on, came to sudden grief.

Whip and voice were equally unheeded, and Matt and myself were obliged to jump out from among the furious animals, to save our foot-gear from being torn to pieces by their savage snaps at the meat and each other. There was nothing to be done but let them finish the meat, regardless of whether each got his proper share or not. I smiled as I thought of the trouble that other parties of two or three men had experienced in taking care of a team of eight or ten dogs, and wondered if they knew anything about real trouble. Here, before us, were forty savage, power-

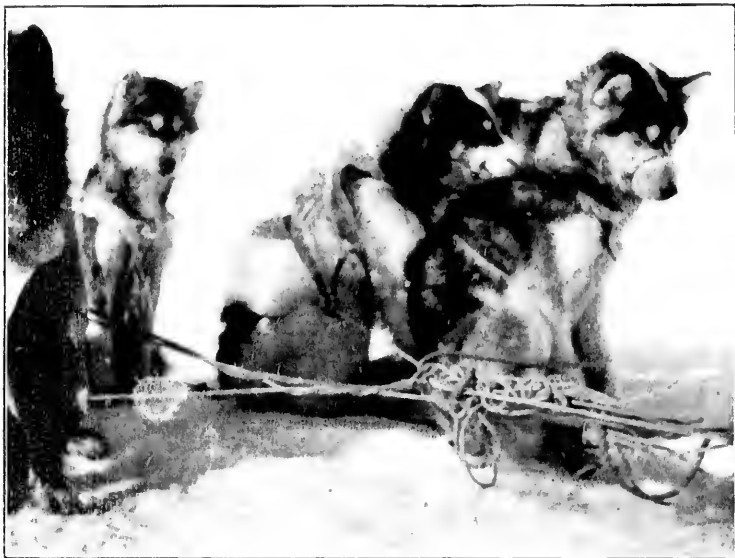


GOOD-BYE.

ful dogs, the flower of the king-dogs and trained bear-hunters of the tribe, mad with the struggle for food and the attacks of each other, and inextricably tangled and bound together by their traces,—Kilkenny cats multiplied twenty-fold.

Then came the straightening out of the snarl. The temperature was 25° below zero, and a strong wind was sweeping through the camp, loaded with a stinging drift of snow. Silently we went to work, and at the end of five hours had the Gordian knots untied and every dog secured, except one. He, tangled up

and rendered helpless by the twisting traces, had been bitten by the others till he had gone mad with rage and pain, and, with bloodshot eyes, frothing mouth, and clashing teeth bit at everything he could reach, until I was obliged to quiet him with a bullet.



THE GORDIAN KNOT WAS NOWHERE.

After this episode with the dogs, we kept on day after day across the white, wind-swept waste, constantly ascending, and the snow surface gradually becoming less firm. While crossing the head of the Petermann-Fjord Basin, we were caught in an *ahnoah-taksoah*, which went hurtling down the ice-slopes toward the land with express-train speed. This storm delayed us for forty-eight hours, and the force of the wind flattened the tent down upon us so that it was with the utmost difficulty that I could extricate myself from it and grope my way to the sledges for necessary sup-

plies. This contraction of our at best limited space, the temperatures of -25° F. to -30° F. in the tent, and the howling of the poor dogs outside as the murderous wind penetrated even their thick coats, rendered our detention here extremely uncomfortable. A single storm plays more havoc with dogs, harnesses, and traces, than the wear and tear of a fortnight of continuous travel. Two dogs used up by this storm were fed to the others.

The gradual ascent continued, and the close of the next week found us over seven thousand feet above sea-level. Temperatures ranged, when there was considerable wind, from -25° F. at noon, to -25° F. and -35° F. at midnight; and when calm, from -10° F. to -20° F. at noon, to -35° F. and -45° F. at midnight. On these latter days the weather seemed almost mild, and the exercise of snow-shoeing and driving dogs at the same time, compelled us to strip to our deerskin shirts in order to avoid perspiration. The moment we halted, the kooletah became essential to our comfort. During the week, the "Long Serpent" was abandoned, and the loads rearranged. As the dogs grew more tired, it became, daily, more and more difficult for me to force my team into the white emptiness ahead.

Covering distances of from ten to twenty-five miles per day, we reached an elevation of 7865 feet above sea-level, our maximum. To enable the dogs, which were daily growing weaker and weaker, to cover these distances, every expedient known to the Eskimo was made use of to lighten their work. The tent-sledge was iced nearly every day, and my own sledge, which could be iced by turning it on its side without unloading, twice a day; the most careful attention was paid to the trim of the loads, the fit of the harness, the untangling of the traces, etc.; and with my own sledge the upstanders permitted me

to aid my dogs very materially. The average elevation for this week was 7670 feet, and the effect of this was very perceptible upon both men and dogs. The latter showed it by their lack of strength, and their rapid breathing at the least increase over our usual speed of about two miles per hour. As for ourselves, while we could walk without discomfort at a two-to-two-and-a-half-mile-an-hour pace, and continue it for



THE DISASTER AT THE FOUR-HUNDREDTH MILE.

from twenty to twenty-five miles, a run of a few yards to overtake the sledge after stopping to tie a kamik string or pick up a mitten, or two or three vigorous pulls to start the sledge, would take our breath completely, and, in the case of Matt and Lee, be frequently accompanied by bleeding at the nose. The strength of all of us was reduced fully fifty per cent., though this was undoubtedly largely

the result of our rarely, if ever, eating our full meat rations. Our meat was raw and frozen; the nearest approach we could make to cooking it was to warm it up in our tea, and we did not seem to care for it. Tea and biscuit appeased our hunger temporarily, but did not give us strength.

Up to the four-hundredth mile, we had not wasted a moment's time in repairs to our sledges, but almost simultaneous with our passing the four-hundredth



LEE AND HIS FIREPLACE.

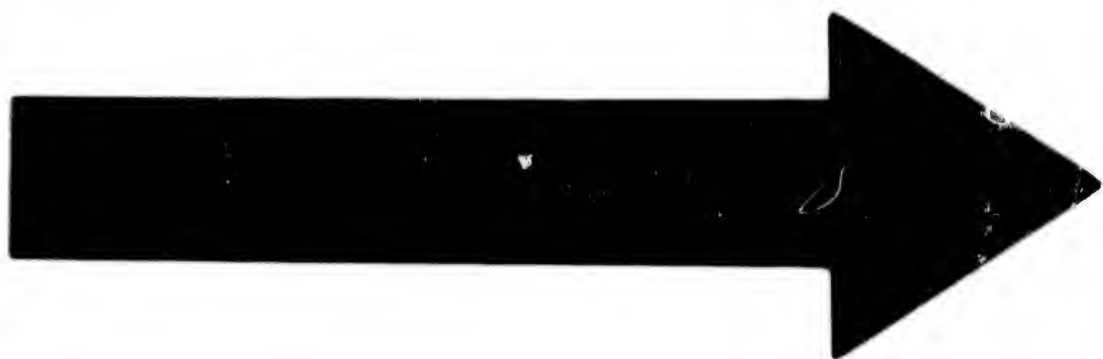
mile, one of the runners of the tent-sledge broke short off at the forward upright. During this march, the wind, which had all this time been blowing steadily from the south-east, fell calm, and the *sastrugi*, the wind carvings on the snow, changed their direction. I knew the meaning of the change. We had passed the continental divide, and were sloping to the east coast, the land clouds over which we could make out far to the north-east. The greater portion of a day was consumed in repairing the sledge with a runner

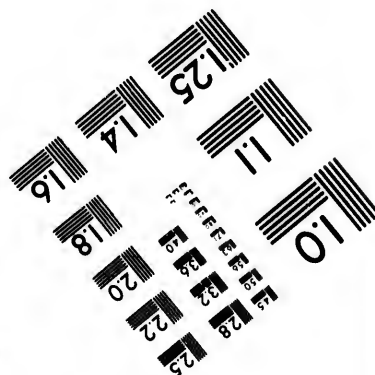
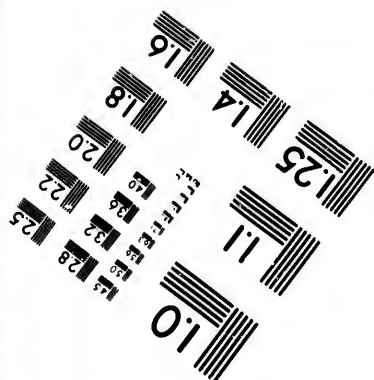
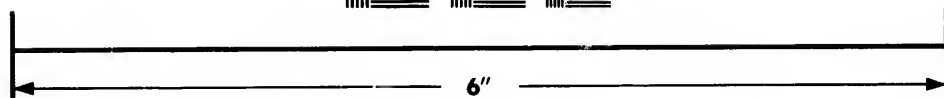
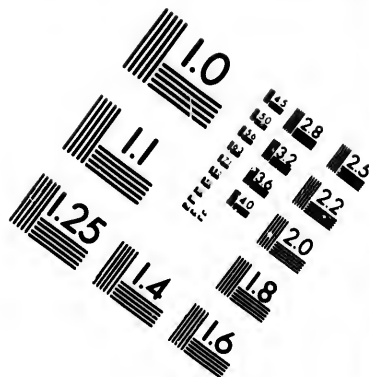
from one of the trailers. With this breakage, the beginning of the fifth week, and our entrance into the fifth hundred miles, began a series of mishaps. The new runner did duty for only twelve miles, when it broke beyond possibility of repairs, even had I possessed any spare material. The load was removed, the wreck cut away, the sledge stiffened laterally by a pair of ski, and the catamaran transformed into a three-runner sledge. Then, by making another twenty-four-hour day of it, we covered twenty-three and a half miles, and at the end of the march, fed the last walrus meat to the dogs, of which I now had seventeen.



MATT AND THE TENT-SLEDGE.

With these it must now be a case of dog eat dog, until we found game. Under this arrangement, my dogs went to the dogs, figuratively and literally, very rapidly, and in a few days there were but eleven left, and we were obliged to get into the drag-ropes ourselves, and, in addition, begin the hateful work of double-banking. It was evident that some of us must get to the land with all speed and at any sacrifice, and let our after movements depend upon the success there. I made an observation to determine our position, dis-





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mantled the three-runner sledge, took the unbroken sledge and the "Chopsie" trailer, our sleeping- and camp-gear and about a week's supplies, and caching everything else, hurried on. The down grade and a stern wind enabled us to cover twenty-one miles, though all of us were completely used up at its finish.

The next day was a trying one, relieved only by the welcome sight of land, rising blue and serrated above the blinding ice-cap ahead and on our left. To our

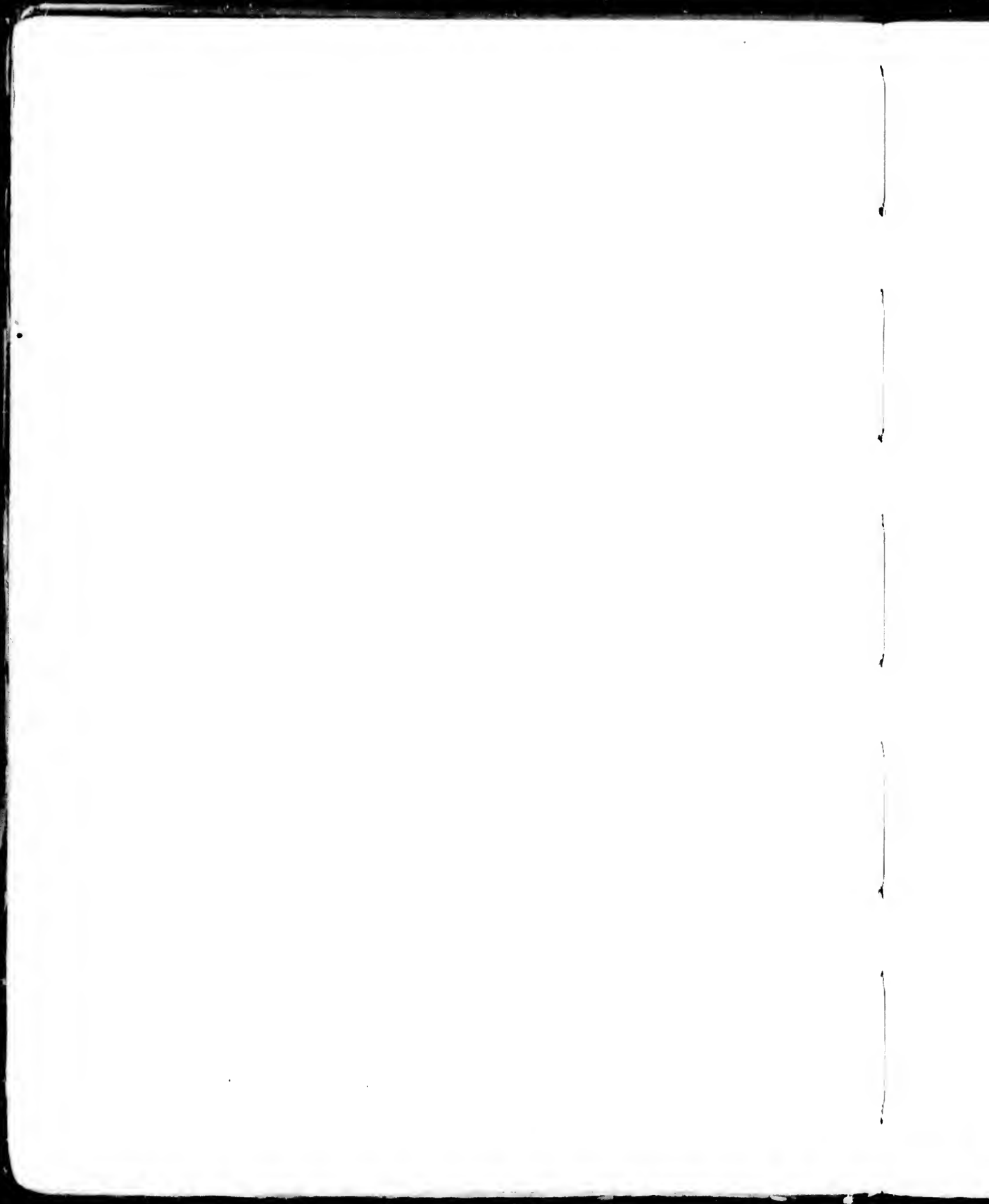


LOOKING DOWN ON THE NORTHERN LAND.

half-blinded and untrustworthy eyes, it was uncertain at first whether it was land or mirage. It was high time that we sighted it. The rapid pace of the previous day's march had destroyed what little life there was in the dogs, and of the eleven poor brutes three were scarcely able to walk, to say nothing of pulling; the others were not much better, and we ourselves were unequal to any violent or prolonged exertion. We camped on the crest of the ice-cap looking down on the land west of Independence Bay.

We were now over five hundred miles in a direct line from the lodge, and I had eleven dogs, all of them completely exhausted, and three so nearly dead that they were fit only for dog food. If we found musk-oxen down below, well and good. If we did not, not a dog in the pack, even under the most favourable circumstances and with continuous fine weather, would get more than a third of the distance back to the lodge, and the remainder of the way we must drag the sledges ourselves. Supposing that we were fortunate enough to cover this third of the distance in ten or twelve days, I should then have twenty days' rations with which to cover the remaining two-thirds (three hundred and thirty-three miles). Nansen, in his crossing of Greenland, with fresh men, had taken forty days to cover two hundred and eighty miles.

As soon as we had camped, my programme was unfolded. After a complete rest and good sleep, I, with Matt and the "Chopsie" sledge, three days' provisions, duplicate lamp (for making tea), and our rifles, would go down to the land and make a thorough search for musk-oxen. Lee was to remain in camp to rest and recuperate, look after the dogs, and make some alterations in the tent, which was no longer to be erected on the sledge. During our absence, he was to feed the two completely exhausted dogs to the others. I did not dare to take the dogs down to the land, for I knew that, if we did not find musk-oxen, they would never climb to the camp again, while, if we did find the musk-oxen, we could come back after the dogs, take them down to the carcasses, and fill them to repletion.



CHAPTER XIV.

THE LAND BEYOND THE ICE-CAP.

AN UNSUCCESSFUL SEARCH—CAMP RESOLUTION—A NEVER-TO-BE-FORGOTTEN
SCENE—REACH LAND IN A FURIOUS STORM—THE FORLORN HOPE—THE
NORTHERN LAND—THANK GOD! THE MUSK-OXEN—AWAKENED HUNGER—
THE MUSK-OX HUNT—A ROYAL REPAST—MY FAITHFUL DOGS.



Matthew A. Henson

CHAPTER XIV.

THE LAND BEYOND THE ICE-CAP.



LEAVING the tent, which was forty-eight hundred feet above sea-level, at midnight, we went straight down for the land, taking turns at dragging the sledge. There is one peculiarity about my discovery of this land beyond the ice-cap which has always struck me very

forcibly, a peculiarity which in a way distinguishes it from all other discoveries of new lands.

More than one explorer has seen the summits of a new land rise from below the sea horizon, until at last, as he stepped upon the virgin shore, they towered far above him. Many others have crept along a tortuous coast, constantly opening up new bays and headlands; but never before has an explorer, after travelling for weeks in an unending day, thousands of feet above the sea-level, seen the peaks and valleys of a new land lying in the yellow midnight sunlight far below him, and has literally descended from the sky upon his maiden prize.

Cortez, it is true, looked down from the mountains which circle the great plain of Mexico, upon the glistening lakes, and the wonderful city ; and Balboa, upon that "peak in Darien," looked down upon the smiling Pacific, but what an unimaginable contrast here !

For them trees rustled in the warm, perfumed breeze, and the panorama spread before them glowed with fullest tropical opulence.

For us hissed the driving snow, borne on the freezing breath of the heart of the "Great Ice," and the new land far below was but a barren heap of fragments of earth's skeleton.

Yet, by contrast with the frozen desolation immediately around us, even those bare primeval bones seemed warm and inviting.

Some four miles from the tent, we passed a series of huge concentric crevasses, ranged like the benches in an amphitheatre, from the crest nearly to the foot of one of the ice-slopes. I recognised the group as one which I had seen in 1892.

Several miles beyond these and lower down, we entered upon a tract, some two or three miles in width, intersected in every direction by narrow crevasses, and dotted with peculiar ice-mounds, from two to three feet high, formed by the freezing of the moisture in the air exhaled from the crevasses. These crevasses, covered with a snow crust, were difficult to detect, and almost as soon as we entered the tract, Matt went into one up to his waist. It was his first introduction to a crevasse, and it naturally gave him a pronounced shake-up, and bleached his dark face, though he said little. My turn came next ; then it was one or the other or both of us, with one leg or both and part of our bodies, down in the villainous cracks, till we got hardened and made no effort to detect or avoid them, but walked straight ahead, though constantly on the *qui*

vive to throw ourselves forward, the moment we felt the snow giving way beneath us.

Although the land here was very similar in appearance to that below the Independence-Bay moraine (as seen in 1892), the junction of the ice-cap and the land was very dissimilar. In the former it afforded free and easy access to the rocks, in the latter it was marked by a nearly continuous, vertical wall of blue ice, utterly impracticable of ascent or descent. Finally



ICE-CAP CREVASSE.

we were able to scramble down over an incipient glacier, picking our way across crevasses, and winding among turquoise seracs, till at last we found ourselves at the bottom of a large pit, walled partly by the ice-cliffs and partly by the rocks, and its floor intersected by embankments and mounds of moraine detritus. As we stepped from the ice upon this, Matt, who had wearied of the frightful monotony of the ice-cap, exclaimed, "Rocks once more, thank God!" Later, with foot-gear cut to pieces and feet bruised to agony, we

were even more delighted to leave the rocks for the surface of the ice.

On the lee side of one of these mounds, we drew up the sledge. We had taken with us only the lamp full of oil, and when Matt started to make tea, he found that most of the oil had been spilled while coming down through the seracs. A spare pair of stockings, which had been packed about the lamp to keep it upright, had absorbed considerable of the oil, and by cut-



"THREE EXHAUSTED MEN AND NINE STARVED DOGS."

ting one of these in strips and using it as fuel in a very small and very carefully constructed stone fireplace, Matt succeeded in making a tinful of tea. We then ate our biscuit and a few mouthfuls of meat, tightened the draw-strings of our kooletahs, and stretched ourselves on the frozen and partly snow-covered gravel, to pass the hours of meridian sun-glare in sleep. When I again became conscious, heavy grey clouds were marshalling above the ice-cap, the sun was obscured, and by the time we had eaten breakfast and

were ready to start, the clouds had descended upon the ice-cap and the summits of the land, hiding them from view.

All day in a drizzling snow-storm we wandered over and among a mass of barren nunataks, sentinels in the picket-line of the land in its eternal conflict with the "Great Ice"; climbing over the jagged rocks, scrambling down cliffs, crossing glacier arms, following ice-walls, in search of a practicable ascent or descent, and unable in the grey obscurity to reach the mainland.

Evidently the guardian demon of this land was opposed to our examining it, or making any havoc in his musk-ox herds.

Tired, footsore, and disappointed, we retraced our steps, and after a twenty-five-mile tramp, reached our sledge. We had seen during the day some ten or twelve snow-buntings, a wolf track, fresh hare tracks, and musk-ox droppings; the latter, however, very old.

There was to my surprise practically no snow on this land, except in the ravines and places favourable for the formation of drifts, and the bare, sharp rocks had cut and ripped our kamiks, and pounded our feet till they were bruised and swollen. The constant climbing up and down, and stepping from rock to rock, had overtaken muscles which the level travelling on the ice-cap had long left indolent, and our legs and backs were aching savagely.

Tea finished, we lost no time in stretching ourselves for sleep, regardless of the snow beneath us or that falling upon us. When we awoke, it was still storming, and we could only climb empty-handed back up the weary ice-cap to the tent, considering ourselves fortunate if we did not have to sleep a night or two without shelter on the ice-cap, for we could easily miss the tent in the thick weather. But the tract of nar-

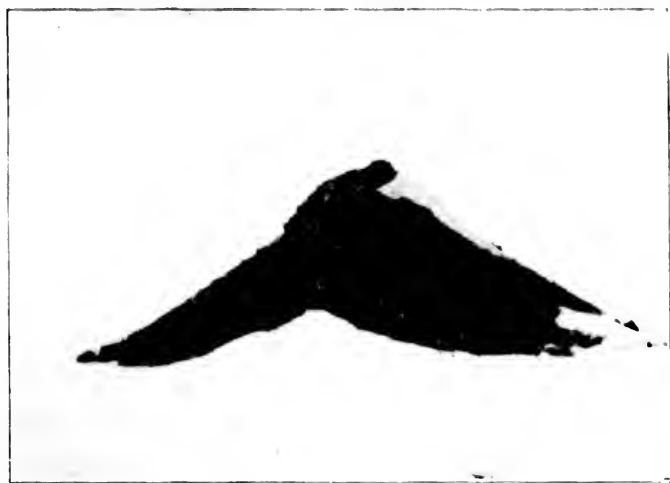
row crevasses, and the group of big ones, enabled us to retrace our route, and after ten hours' march we were back at the tent, breaking the disagreeable news to Lee. It was a very sober, silent little party gathered round the cooker, and it was long before I went to sleep.

The next morning after breakfast I brought the matter up, and with very little discussion it was decided we should stake everything on finding the musk-oxen. I fully explained to the boys that we were taking our lives in our hands, and they expressed themselves as perfectly willing to take the chances. I never think of that camp without a thrill of admiration for the two brave, loyal, unquestioning men with me, who did not hesitate a moment. In the midst of the still thick weather we started back for our cache, the ice-cap hidden in the clouds and fog, everything invisible in the grey shroud.

There are few things more tiresome physically than the monotonous drudgery of dragging hour after hour at a sledge, and when this has to be done in one of those dense fogs of the ice-cap, under the intense mental strain of trying to keep a straight course with absolutely nothing on which the eye can rest, or toward which the steps can be directed, a powerful element of mental fatigue is added, which exhausts one completely. Twenty-two miles of this killing work, for my dogs were utterly useless now, brought us back to my cache, and gave us a foretaste of what the homeward journey would be like if we found no musk-oxen. Matt and myself were thoroughly used up, feet, legs, and eyes, when we halted. Lee, having had a two or three days' rest, was fresher. Yet no one's courage wavered, and after a few hours' sleep we were ready to start for the land again, with everything except one sledge and scant

rations for ourselves for the return journey. These were left in the camp.

Never shall I forget that time and scene ; three exhausted men and nine starved dogs, standing there in the gaunt, frozen desert. These and the glistening snow, the steel-blue sky, and the cold white sun. Five hundred miles in an air-line across a waste of snow to the nearest human being, with insufficient rations for even that distance, yet we were still facing



MORAINE CONE.

the other way. I think that, as we started, each one of us felt an unspoken prayer that the constant petitions of the dear ones in the far-off homeland, where birds were singing and flowers blooming, might be listened to, and that the All-Seeing Eye would watch over us.

I felt then, as I feel now, that in that cool, deliberate moment we took the golden bowl of life in our hands, and that the bowl had suddenly grown very

fragile. And I feel now, as I felt then, that we were neither rash nor foolhardy in so doing, but simply followed the dictates of temperaments which could not act otherwise, and which would do the same thing again under the same circumstances.

When we reached what might be called the actual crest of the ice-cap, about fifteen miles from its edge, where it begins to slope rapidly to the land, and I could make out the familiar landmarks far below, I



THE NORTHERN LAND FROM THE MORaine.

found that we were approaching the land on a course about five miles east of the one on which I had descended to it in 1892. This difference of position resulted in a higher elevation, and enabled me to look over the eastern edge of the Academy-Glacier basin, and make out the summits of the east-coast land ribbon, considerably farther to the south than I had seen them in 1892. At this time it was entirely clear on the ice-cap and along the inner edge of the Inde-

pendence-Bay land. Farther out, heavy cumulus clouds hung at a considerable elevation over the land.

Underneath these, I saw, due north, and distant apparently some seventy-five miles, what had escaped observation on my previous trip, owing to the heavy land clouds, a magnificent mountain, massive in form and heavily buttressed, towering in savage grandeur far above the intervening cliffs and ice-caps. Apparently it was twice their height. As, however, its shape was constantly changing under the mirage effects of these high latitudes, it is very likely that its elevation was exaggerated by the same cause. The clouds descending soon hid it from our view, and a few hours later a dull veil formed across the sky. The clouds sank in great leaden masses upon the land, the ice-cap took on a ghastly hue, short, sharp gusts of wind came up rapidly from behind us, and, hurrying past, rushed down the slopes of the "Great Ice" to the land.

We, too, hurried on with all possible speed, in order to pass the landward slopes of bare blue ice before the wind increased too much, and reach the moraine before it was obliterated. We reached and passed the site of my 1892 moraine camp just before the storm broke, and gained the shelter of the big cone of detritus which, in 1892, had marked my point of departure from the ice-cap, and had been my far distantly visible beacon on my return to it. Hurriedly pitching the tent behind it, we were partially protected from the hissing and howling Niagara of wind and snow which poured over us. The demon angel of the land was evidently still on the alert.

May 15th, the storm which, for two days, had held us prisoners upon the moraine of the "Great Ice," more than four thousand feet above the level of the sea, ceased, and in a very short time I had completed all my preparations for a trip down to the land in search

of the musk-oxen which must be our salvation. Matt and all the dogs were to accompany me ; and I took the little "Chopsie," our rifles, four days' half-rations of tea, biscuits, and oil, and the last of the walrus meat, a frozen lump a little larger than a man's head, which I had been husbanding to get the dogs up the ice-cap again. Lee was to remain at the tent during our absence, to give his toe a chance to recover entirely.



OUR BOULDER SHELTER.

The almost entire absence of snow on this northern country was a surprise as well as an annoyance to me, as it threatened to interfere seriously with the portage of the big sledge and supplies from the ice-cap to the sea ice. By continuous reconnaissance in advance of the dogs, I found a fairly good though circuitous route along the snow-drifts lying in the lee of the

labyrinth of glacial tumuli and dykes through which our path led for some miles. After passing these, and ascending a gentle incline, we entered the main thalweg of this region, which gave us a nearly direct course (situated west of the route followed by Astrüp and myself in 1892, when we intentionally kept along the ridge of the land divide) toward the head of the bay.

This thalweg, commencing at first in an extensive elevated, shallow basin, became gradually more accentuated, narrower, and deeper, until, abreast of Musk-Ox Valley, where Astrüp and myself had seen and killed our first cattle, it was a shallow canyon.

Twelve hours of steady, rapid marching brought us to this point, and here I left Matt with the sledge and dogs, and with my rifle went across to the valley to look for game or traces of it. So far we had not seen the slightest indication of musk-oxen, though we had crossed the same places where, on my previous visit, I had seen their droppings, tracks, and wool, on almost every square rod of ground.

My reconnaissance of the valley also failed to show the least trace of their presence, and I returned to the sledge in a mood the reverse of cheerful.

Could it be that the musk-oxen of this region were migratory, retreating southward along the east coast in the fall, and returning in late spring or early summer, and that we were too early for them? Or had the sight and smell of ourselves and dogs and the carcasses of their slain comrades, in that awful visitation of three years before, terrified them so that they had deserted this region completely? These reflections were perhaps accentuated by the fact that it was now late in the day, and we were exhausted with the arduous travelling, and weak and hungry from our previous continuously scant diet of tea and biscuit.

The last unpleasant sensation was partially ameliorated by a recourse to the dog-food meat. True, this was a frozen mixture of walrus meat, blubber, hair, sand, and various other foreign substances, but it "went" just the same, and the fact that the meat was pronouncedly "high" and the blubber more or less rancid caused no complaint from the parties most interested. Even



"HE SANK ON HIS HAUNCHES."

this unattractive food we could only nibble, for the dogs needed it more than we.

We then went on down the canyon, which narrowed and became more tortuous, until farther progress was barred at the entrance to what we called the "Devil's Den,"—vertical cliffs within arm-stretch of each other, the bottom of the cleft filled with huge angular masses,

almost impracticable for a man alone, and utterly so for a sledge. We were compelled to retreat nearly to where I had left the sledge to reconnoitre Musk-Ox Valley; then climb the banks and go across country. The scarcity of snow made it useless to try to keep the sledge on it, and we proceeded in as nearly a direct line as the topography would allow across rocks, gravel, cobble, and boulders.

A few miles beyond the valley, I saw a fresh hare track, and a few hundred yards beyond came upon the hare itself, squatting among the rocks a few paces distant. With the sight of the beautiful spotless little animal, the feeling of emptiness in the region of my stomach increased. I called to Matt, who was some little distance back, to stop the dogs and come up with his rifle. He was so affected by the prospect of a good supper, that, though usually a good shot, his first and second bullets missed the mark, but at the third the white object collapsed into a shapeless mass, and on the instant gaunt hunger leapt upon us like a starving wolf upon its prey. A little pond, surrounded by high banks a short distance away, offered the advantage of ice for cooking purposes, and here we camped, lit our lamp, and cooked and ate the entire hare. It was the first full meal we had had since the Eskimos left us thirty-five days ago, —the first meal possessing proper substance and staying quality, to fit a man for a heavy day's work.

While we were enjoying our feast, it began snowing, and at its conclusion we lay down as we were, upon the snow-covered shore of the little pond, without tent or sleeping-bag or anything except the clothes we wore, and, with the snowflakes falling thickly upon us, slept.

This meal brought home to me very forcibly the great advantage that a party of two or three men has,

in this region, over a larger number. The one hare had supplied two of us with all that we could possibly eat at one meal, and, like the Eskimo dog, we could now, after a good sleep, travel for a couple of days without meat. Had there been seven or eight of us, to share the animal, the portion of each would have been so small as to only aggravate hunger, and would not have materially increased the strength or traveling effectiveness of anyone.

The next morning we started for a valley between Musk-Ox Valley and Navy Cliff. I had seen numerous musk-ox tracks here in 1892, but none of the animals themselves, though as a matter of fact I had not looked for them. At the entrance of this valley, I came upon a track, but so indistinct that it was quite possible that it might have been made the previous fall. Following it a short distance, the accompanying tracks of a calf were discernible, showing at once that the tracks were of this season; and a little farther, there were traces but a few days old. Thank God, the musk-oxen were not far distant!

Fastening our dogs securely to a rock, and muzzling them so they could neither chew themselves loose, nor make a racket to disturb the musk-oxen, we passed rapidly and eagerly down the valley, Winchester in hand, with eyes fixed upon the tracks. Other tracks joined these, and soon the feeding-ground of the animals the preceding day was reached, their tracks and the places where they had dug away the snow in search of grass and moss being covered lightly with the frost precipitation of the previous night. Evidently there was quite a herd of them, and I was as sure of the animals now as if I already had them lying at my feet.

A survey of the valley with my binoculars failing to locate the animals, we directed our steps to an

entirely snow-free tract of rocks at the lower end of the valley near the glacier, where it seemed quite likely they might be. Nothing was seen of them here, and we turned back towards the feeding-place, when a brace of snowy ptarmigan fluttered up from before us, and then settled a few yards away. Knowing that the report of our rifles would not alarm the musk-oxen, accustomed as they were to the



"WITH A BULLET BACK OF THE FORE SHOULDER."

cracking of the glaciers, I told Matt to take one and I would take the other, and a moment later ptarmigan stew became one of the assured items on our menu. Surely we were in a land of plenty, with hare, ptarmigan, and, in the near future, musk-ox, at our command.

Reaching the feeding-grounds again, we did what we should have done at first (though we would

then have missed the ptarmigan), circled the valley till we found tracks leading out of the labyrinth and up the slopes of the surrounding mountains. These tracks showed that the herd numbered some fifteen or twenty, including several small calves. Rapidly following these, my eyes were at last gladdened by the sight of a group of black spots, on a little terrace just below the crest of the mountains. Seen through the glass, some of the animals were lying down. The herd was evidently beginning its midday siesta. Climbing the slope to the leeward of the oxen, we reached the edge of the terrace completely out of breath, and lay down behind a big boulder to regain it and watch their movements. The herd was almost two hundred yards distant, and numbered twenty-two. The cows and calves were all lying down not far from us, while an old bull promenaded slowly near them. A short distance away, two other bulls were lying down on a snow-bank, but soon got up and began what seemed to me like a friendly butting-match, though it may have been a thoroughly dead-in-earnest contest for the affections of some fair cow in the herd. Certain it is, it lacked that run-at-full-tilt, and strike-fire-when-stopped element, that one is apt to associate with the combats of the bull, the goat, and the sheep, when stung by Cupid's shafts. It reminded me more of the calm and harmless contests of Eskimo swains for the favours of a dusky charmer.

We were trembling too much with excitement, and our eyes were too weak from the incessant blinding glare of the ice-cap, for us to think of shooting at that distance. We must rush on them. Would they run or stand their ground? We should soon know.

I wonder if a single one of my readers really knows what hunger is. I do not mean the hunger which has

reached within a few gasps of death. I fancy that the pain has passed at that stage; and I imagine, too, that one who has had that experience does not talk of it voluntarily. The hunger that I do mean is that which has gone to the utmost limit consistent with the full retention of all the faculties, mental and physical.



DEAD MUSK-OX.

That meal of fresh, hot, luscious meat from the hare, the first adequate meal in nearly six hundred miles of daily snow-shoeing, in nearly six weeks of arduous work in the rarefied air and low temperatures of the "Great Ice," had been to us like the taste of freshly spilled blood to the long-tamed tiger; and had wakened in us every one of the merciless hunger pangs which, during those previous six weeks, had gradually been dulled into insensibility. Now as we

lay there, looking at the big black animals before us, we had none of the sportsman's sensations in the presence of big game. They were not game for us, but meat! and every nerve and fibre in our gaunt bodies was vibrating with a savage lust for that meat,—meat that should be soft and warm, meat into which our teeth could sink and tear and rend, meat that would not blister lips and tongue with its frost, nor ring like rock against our teeth.

Panting and quivering with excitement, we lay for a few moments longer, then: "Do you think they will come for us, sir?" said Matt.—"God knows, I hope so, boy, for then we are sure of some of them. Are you ready?"—"Yes, sir."—"Come on, then." One of us on one side of the big boulder, the other the other, and we dashed across the rocks and snow straight towards them.

There was a snort and a stamp of the hoof from the big bull guarding the herd, and the next instant every animal was facing us; the next, they were in close line with lowered heads and horns. I could have yelled for joy if I had had the breath to spare, for I knew now we were sure of some of them.

Many of us have read one of these thrilling stories of travellers in the Russian forests, chased by hungry wolves, and have had our feelings wrought up to the highest pitch of sympathy for the poor devils in their efforts to escape. But did any of us ever stop to think of the sensations of those other poor devils, the starving wolves? I know now what *their* feelings are, and my sympathies are with the wolves.

We were within less than fifty yards of the herd, when the big bull with a quick motion lowered his horns still more. Instinct, Providence, call it what you will, told me it was the signal for the herd to charge. Without slackening my pace, I pulled my

Winchester to my shoulder, and sent a bullet at the back of his neck, over the white, impervious shield of the great horns. Heart, and soul, and brain, and eyes, went with that singing bullet, for I knew that it meant our lives. I felt we were hungry enough, and wolfish enough, that, had the bull been alone, we could have sprung upon him bare-handed, and torn the life-blood from his throat. But against the entire



"THE FAITHFUL SHADOWS WE CALLED DOGS."

herd we would have been powerless; once the black avalanche had gained momentum, we would have been crushed by it like the crunching snow crystals under our feet.

As the bull sank upon his haunches, the herd wavered. A cow half turned, and as Matt's rifle cracked, fell with a bullet back of her fore shoulder. Without raising my rifle above my hips, another one dropped.

Then another, for Matt; then the herd broke, and we hurried in pursuit.

A wounded cow wheeled, and, with lowered head, was about to charge me; again Matt's rifle cracked and she fell. As I rushed past her he shouted, "My last cartridge!"

A short distance beyond, the remainder of the herd faced about again, and I put a bullet into the breast of another bull, but though the blood crimsoned his



SOMBRE NORTHERN LANDSCAPE.

chest and legs, it did not stop him, and the herd broke again and disappeared over a sharp ridge. I had neither wind nor strength to follow. Suddenly the back of one of the animals running behind the ridge appeared for an instant. I whirled and fired. I did not see my sights, I scarcely think I saw my rifle, but *felt* my aim as I would with harpoon or stone, yet I heard the thud of the bullet, and saw the fatal crimson stain spring out behind the fore shoulder as the

animal disappeared, then sank down on the snow used up. But I knew that he too was mine. I can scarcely realise as I write these lines, what absolute animals hunger makes of men, and yet I can say truthfully, never have I tasted more delicious food than was that tender, raw, warm meat—a mouthful here and a mouthful there, cut from the animal as I skinned it. I ate till I dared eat no more, although still unsatisfied.

Then Matt went back to bring up the dogs and sledge, while I continued the work of removing the skins from the dead animals. With Matt's return, came the supremest luxury of all! That was to toss big lumps of the rich, steaming meat to the faithful shadows which we called dogs, till they, too, could eat no more, and lay gorged and quiet upon the rocks.

The removal of the shaggy black pelts of the musk-oxen was neither an easy nor a speedy job; and by the time the work was done it was midnight, the sun low over the mountains in the north, and a biting wind whistling about our airy location.

We were glad to drag the skins to a central place, construct a wind-guard with the assistance of the sledge, a few stones, and a couple of the skins, and make a bed of the others on the lee side of it. A little stone shelter was constructed for our cooking-lamp, and then, stretched upon our royally luxurious couch, thick, soft, and warm, we were, for the first time, able to spare the time to make ourselves some tea, and cook some of the delicious musk-ox meat. Then, with the savage, sombre northern land lying like a map below us, the barren rocks, mottled here and there with eternal snow-drifts, the summits of the distant mountains disappearing in a mist of driving snow, and the biting breath of the "Great Ice" following even here, and drifting the fine snow over and about us, we slept as tired children sleep.

CHAPTER XV.

THE LAND BEYOND THE ICE-CAP (*Continued*).

AN EXHAUSTING AND UNSUCCESSFUL CHASE—THE 1892 CAIRN REVISITED—
PUSHING ON—DISAPPEARANCE OF THE SNOW—FRIGHTFUL TRAVELLING—DE-
STRUCTION OF LAST SLEDGE—THE END OF OUR ROPE—COMPELLED TO TURN
BACK—DISAPPEARANCE OF THE MUSK-OXEN—THE STRUGGLE BACK TO THE
ICE-CAP—MUSK-OX SKINS FOR SLEDGE—PREPARATIONS FOR THE RETURN.



Hugh Johnson Lee

CHAPTER XV.

THE LAND BEYOND THE ICE-CAP (*Continued*).



OUR slumbers were undisturbed except by "Sambo," a little coal-black musk-calf. His mother was the last cow killed by Matt, and he the smallest of calves. After we had skinned the cow, the little fellow persisted in placing himself between my legs, and, in this position, accompanied us to the sledge, and after the camp was made, seemed to want to come to bed with us. I curled him up and covered him with a corner of the skin, once or twice, but this did not seem to suit. Though I pitied the little fellow, and was considerably annoyed by his performances, I could not help laughing at them. He persisted in nibbling at my hair, licking my nose, and pawing my face with his hoofs, which, though small, were by no means soft. Though he was undoubtedly hungry, I could not detect either the hunger-note or that of fear in any of his four or five distinct baby-cries.

By the middle of the following forenoon, we had our

dogs fed again and muzzled, and, with rifles slung across our backs, were climbing up from the camp on the trail of the animals. From the direction they had taken in their flight, I felt sure their objective point was the valley in which I had killed my musk-oxen three years before, and expected to come upon them there during their noon rest, and bag the remainder of the herd. Their tracks led to the very summit of the mountains, and then along the crest of a long hog-



SAMBO, THE MUSK-CALF.

back formed by a narrow projecting dyke, which on one side formed a vertical wall from ten to one hundred feet in height. Along this narrow ridge, the animals had made a trail no wider than a man would make, and, arrived at the end of it, had gone down the wall where it was lowest and down the steep talus of loose fragments, apparently at full speed, in places evidently sliding upon their haunches. They had entered the valley, but had not stopped, and, emerging

from it, turned in the direction of our first night's camp on the little pond. Before reaching this, they had become quieted down, and were feeding when one of the bulls came upon the camp, and the scent of it started them off again.

Twice after this, our tracks turned them like an invisible fence, but at last they had bolted across the trail, and again, in single file, and evidently at full speed, had taken to the interminable and most villainous slope of angular fragments and blocks of all sizes, leading to the top of a high mountain spur.



"MUSK-OX IS VERY GOOD."

From the top of this, they had descended into the valley west of it, and making a long circuit, had again become reassured and, after feeding for a while, some of them had slept. Then, as if actuated by Satan himself, they had made for the steepest mountain-side in the vicinity, climbed it to the crumbling ledge at the top, frequently only a foot or two wide (we were often obliged to use hands as well as feet in following them), and, travelling sometimes on this, and sometimes along sharply inclined drifts of indurated snow, where we were obliged to cut

steps to keep from sliding into the valley below, had at last taken a bee-line for the valley where we first found their tracks.

We had now been following the trail of these animals for some twenty hours, and for a distance of not less than thirty miles, over a country the roughness of which no one who has not seen it can imagine. During this time, we had each eaten one biscuit, and we were now completely fagged out. The return of the animals to their former haunt, indicated that they were not too badly frightened, and having the two small calves with them, they could not, after the outrageous run they had already engaged in, go much farther without a long rest, so we could undoubtedly overtake them the next day. Anyway there was no more tramp left in us, and in climbing to our mountain ranch we were obliged, more than once, to stop and rest. While we were waiting for our stew to cook, Matt spied some black spots away at the lower end of the valley below us, and the glasses showed our game just emerged from a narrow pass leading round an angle of the glacier-bounding cliffs. They were walking leisurely, and with the glasses I could make out that there were two bulls, five cows, three yearlings, or perhaps two-year-olds, and two calves.

Glad as I was to see them again, my chagrin at our useless tramp may be imagined. We had completely exhausted ourselves, destroyed our foot-gear, and wasted a day, and the animals were still wearing their skins; when, if we had remained at the camp and kept a good lookout, we would now have had them skinned and cut up.

After promenading for a time along the edge of the little lake, and once making a move as if to come in our direction, the cows and calves lay down on a big

drift under a bluff on the opposite side of the valley. I felt sure they were ours now, and that after two or three hours' rest and sleep we would gather them in without difficulty. When we woke they had gone, but we went down to where they had slept, and following their tracks from there, were led directly back up the mountain slopes just east of our camp. They had travelled along leisurely, feeding here and there to within half a mile of our camp, when our scent, or



STILL PUSHING ON.

the music of the dogs, had startled them, and they had made off in Indian file over the mountains. When we had followed their trail some miles farther, it began snowing heavily, and, losing the trail, we returned to the ranch. The sledge and skins were now converted into a tupik, or tent, and we crawled in, to forget the storm and our weariness in sleep. The next day I sent Matt with the sledge, dogs, and ten quarters of the beef back to the moraine after the

rest of our material and Lee, who by this time I knew would be somewhat nervous about us. The beef was for dog food on our return journey, and was to be cached at the moraine.

I gave Matt instructions to examine Musk-Ox Valley, *en route* to the moraine, and gather in the oxen if he found them there. During his absence, which would cover three or four days, I would keep a lookout for such of the animals as might escape him, and would also reconnoitre for a practicable route for the big sledge from here on. After he had gone, I slung my rifle over my shoulder, and started in the opposite direction. Descending to the valley, I crossed it, and examined the pass from which the musk-oxen had emerged, to see if it offered a practicable route, then climbed the acclivity, and along the summit of the mountains to the 1892 cairn on Navy Cliff. From this I took the copies of the New York *Sun* and *Harper's Weekly* which I had deposited there, the papers being still in good state of preservation in spite of a three years' Arctic experience. The musk-oxen had used the cairn as a shelter from the wind, as shown by the abundance of excreta on the lee side.

Turning away from it, I saw a hare browsing on the bleak wind-swept summit. He fell an easy prey to my rifle, and I then descended to examine another section of country for a practicable "route to the sea." Several hours of reconnaissance, though not resulting as favourably as I could have wished, left me so fatigued that I turned back to the camp. The last of our biscuit and milk had been consumed that morning before Matt left, and my supplies consisted of about three ounces of tea, with musk-ox meat *ad libitum*.

The tea straight, without biscuit, was not particu-

larly palatable, the broth from the meat being preferable, even though unsalted. Boiled musk-ox meat, therefore, and the broth from it, formed my diet till Lee and Matt joined me, which they did about noon of the fourth day. The little sledge had broken down beyond repair, less than three miles from the camp, and Matt had been obliged to leave it where it was and cache all the meat.

He had found where the musk-oxen had slept in Musk-Ox Valley the previous night, but saw nothing



CATARACT OF THE ACADEMY GLACIER.

of them. Some two or three miles beyond the valley, while following our sledge tracks back to the moraine, they had crossed ahead of him, going at full speed, and the dogs, in spite of his efforts, had followed in their chase for a mile or more before he could check them. This was disappointing news, for I felt the animals would not soon recover from this fright. The boys had had a difficult time coming down from the moraine, the rocks having cut two pair of skis to pieces under the *Josephine* sledge, and

torn off two or three pieces of the ivory shoes. We had now only one pair of ski left. I was reluctant to send these to destruction after the others, and determined to see if we could not get along by protecting the ivory shoes of the *Josephine* with long strips of musk-ox hide, and dragging the twelve quarters of beef which we were to take with us lashed up in the bull's hide.

By the time we had descended to the valley the strips of musk-ox hide and several pieces of ivory had been torn off by the rocks, and there was no alternative but to make a sledge from the pair of ski, and put the *Josephine* on it. The tent was pitched, and Matt began at once on the sledge, while Lee and myself, with the dogs, went back after the skin of meat. This we dragged about five miles beyond the tent, and then the skin being worn out and torn to pieces by the rocks, we threw the meat down the precipitous walls of a cañon debouching upon a little lake lying in the path which the sledge must take. Here it could be easily reached by sledge from the lake. We then returned to the tent.

On snow or patches of cemented gravel, this novel sledge dragged with comparative ease, but over rocks of any size it was constantly catching, when the dogs would stop and the load must be lifted off the rocks before they would pull again. This had to be repeated every ten or twenty feet. If my dogs had recovered from their terrible ice-cap hunger, it would have been much easier for all concerned to have transported the meat as I did in 1892, panier fashion across the dogs' backs, but under the circumstances this was impracticable. Matt finished the sledge before turning in, and the next morning, after the tent was struck, I started on ahead, leaving the boys to lash up and follow.

Just as they were about to start, one of the dogs

slipped his harness and went back up to the ranch, where he had to be followed and brought back. Consequently it was some hours before they joined me. This march brought us to the little lake, into a tributary cañon of which we had thrown the meat the day before. Our route was a circuitous one, a constant succession of up-hill and down-hill, with very little snow, and what there was, interspersed with angular



LOOKING ACROSS ACADEMY GLACIER.

stones and boulders, to avoid which compelled utmost watchfulness and constant lifting and pushing.

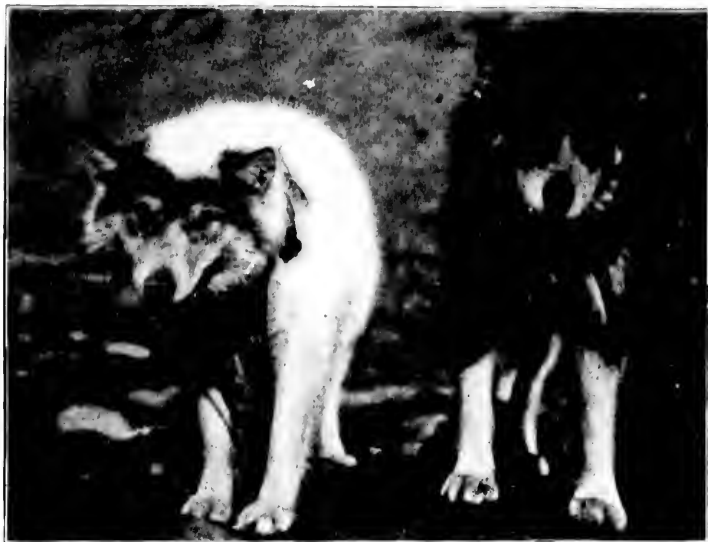
Arrived at the lake, the ski sledge was taken from under the *Josephine*, and with this Lee and Matt went up the cañon after the meat, while I crossed the lake and climbed the mountain-slope to the rolling plateau above, in search of a practicable route for the next day's advance. After getting the meat, the boys were to bring it and the *Josephine* with its load across the lake, get their supper, and turn in without waiting for

my return. The snow on the plateau, though more continuous and evenly distributed, was very shallow, the smallest rocks projecting through it. After locating, partly *per pedem*, partly with the glasses, a practicable, though at its beginning a very steep, road for the morrow's advance, I descended to the lake, ate my supper of musk-ox stew and tea, stretched myself beside the boys at the edge of the lake, and was soon asleep. We did not pitch the tent here, the sheltered location and southern exposure making the camp very comfortable without it. The next morning we started half of our load and took it some three miles up the slope to the plateau. Then the boys went back after the remainder. After getting everything up to the plateau, we could then take it all at one load, and with the rosiest anticipations we pushed on for the head of the snow-filled ravine, trending down towards the head of the bay, confident that the end of the march would see us camped on the ice-foot. After descending it a few miles, it began to narrow in an ominous manner that I distrusted, and after going down a particularly steep descent, I halted the sledge and went ahead to reconnoitre. I found that the ravine in a short distance became impracticable for a sledge, and finally ended several hundred feet up the face of a vertical cliff. I could also see that the Academy Glacier had advanced much farther into the bay than when I was here before.

I followed the cliff for some distance, then returned to the sledge, and sent Matt out to take up the search where I had stopped, and see if he could find any practicable place for a descent.

During his absence, Lee and I double-banked our load back up the ravine to a point suitable for a start in a new direction, and camped. Several hours later, Matt returned, wearily dragging himself into

camp, footsore and almost exhausted, as I had been, with the incessant climbing, scrambling, and jumping over the rocks, and reported no success. It remained for us now to examine the region to the west of us, and the next morning we retraced our steps to the plateau, and, leaving the dogs and sledge securely fastened, all three of us started out upon a reconnaissance.



GETTING WEARY AGAIN.

The result of the combined tramp was to show the existence of a glacier west of the land we had been traversing, projecting till it joined the Academy Glacier; to show us that in order to reach the bay ice we must back everything for some distance over the rocks, then down the precipitous shore (we were some three thousand feet above sea-level), across the glacier's lateral cañon, and over two or three miles of

the roughest and most shattered portion of the glacier surface. Lee, whose rest at the moraine, while Matt and I had been chasing the musk-oxen, had rendered him rather the freshest of the three, was reduced by this scout to the same state of exhaustion as ourselves. During the descent of the ravine our oil tin had been punctured by the rocks and much of the contents had escaped, leaving us only a few pints of fuel.



A SHORT REST.

The close of this day compelled me, bitterly as I disliked it, to look the question of our turning back squarely in the face. To whatever causes it might be due,—whether to our work the last week on the ice-cap, combined with the elevation and inadequate rations, or to the sudden change from the rarefied air of that region, with the change of diet and the excessive and unremitted exercise of travelling over this frightful hash of mountains, cliffs, and ravines,—the fact was

unevadable that we were at a very low ebb of strength. We had that feeling of lassitude, lack of energy, and heaviness of limbs which one experiences at home at the beginning of spring, or during sudden sultry waves in summer, and we had scarcely a third of our usual strength. The transportation of our load down the bluffs and across the glacier to the bay ice was a work which, if not impossible, would certainly have taken the last remnant of our force. While we owed



MY LITTLE THEODOLITE.

it to ourselves as men and Americans to take every possible chance, I did not think we were justified in taking a course which presented *no* chance, but simply a certainty, and that one not agreeable to contemplate.

Though from the time that I had found my provisions and my essentials of Arctic sledge-work buried beyond recovery in the snow of the ice-cap, I had recognised this very thing as a possibility, if not probability, and had tried to prepare myself for it; yet

deep down I had felt all along that our patience and persistence must in the end win, and I could not thus abruptly resign completely the object upon which I had for years centred my efforts. It might be that we could obtain more musk-oxen, and, thus secured on the vital question of food for ourselves and dogs, could afford a complete rest of a week or ten days and then make another attempt.

In 1892 my route from the moraine to Navy Cliff had been selected with a view to giving me as good an outlook as possible, and I had travelled intentionally along the crest of the mountains which bound the Academy Glacier on the west. Now my chief object was to get the sledges to the sea by the easiest practicable route, and this meant following the valleys of the streams, where the greatest amount of snow was to be found, and the grade certain to be more regular and gradual. For this reason, during our work upon the Independence-Bay land, hunting the musk-ox, and transporting the sledges and equipment to a point about ten miles north of Navy Cliff, we saw only the slopes and the valleys which formed our road. Now when the unpleasant fact was forced upon me that our efforts had probably been futile, and that it would be folly to proceed farther, I ascended with some difficulty to the nearest eminence, to see if I could make out anything more in regard to the features of the region.

Where I stood, and from there east and north-east out through the bay, the sun was shining brightly on the unbroken expanse, and from my more advanced position I could see several miles of the south shore of the bay, a land of precipitous black cliffs trending eastward from the cape which confined Academy Glacier on the east. Westward, north-westward, and northward, heavy clouds were rolling across the sum-

mits of the land from the westward, hiding its features. The shore bluffs reached away first north, and then north-east, interrupted by the two probable inlets which I saw in 1892, until they vanished in the distance.

The face of the Academy Glacier was advanced considerably beyond its position in 1892; the surface of the bay was smooth, except for the *sastrugi*, caused



THE MORaine FROM THE LAND.

by the violent winds which undoubtedly rush down from the ice-cap and out of this bay, as they do out of Whale Sound; and there were but two or three bergs in the bay away from the immediate face of the glacier. A large tidal crack ran northward from the cape east of the Academy Glacier.

The next morning, leaving the *Josephine* sledge, we continued to retrace our tracks and travelled some ten or twelve miles, when the sledge, which had gradually been going to pieces, broke down completely. The first part of this march as far as the lake was comparatively easy, in fact the descent of the bluffs

surrounding the lake *too* easy, for, in spite of the drag-chain on one runner and a stone lashed to the other, the dogs and ourselves pulling back on the sledge, it had a narrow escape from getting away from us and being dashed to pieces on the rocks. The next morning, Lee started for the ranch camp with the dogs to feed them from the remains of the musk-oxen there; Matt went after the pieces of the *Chopsisie* sledge to use in patching the one we had; and I took my rifle and glasses and started to make a wide circuit in search of musk-ox tracks. After several hours I joined Lee at the ranch camp without having seen a track more recent than the ones made before Matt went to the moraine.

It was evident we could not afford to remain here.

If the musk-oxen had not left the valley entirely, they were undoubtedly up nearer the moraine, and we would come across them on our way there. On leaving the ranch, we took two of the musk-ox skins with us, and went to the cache of meat which Matt had been compelled to abandon by the breaking of the *Chopsisie* sledge.

The sun for the last day or two had been warm enough to partially thaw this meat, and we cut the bones out, laced the clear meat up in the skins, and then dragged this across country to the ravine above the Devil's Den, in the line of march between our camp and the moraine. Then we returned to the tent, where the sledge was nearly completed. It was a sorry-looking affair, pieced and patched in every part, but it was the best that could be done with the material at hand, and we cared not for looks if it would only see us to the moraine.

The next morning early, we resumed the march. The change in the few days since we first came over the ground was almost incredible. It seemed as if the

arch-fiend himself had made it his special business to remove what little snow there had been at first. Then we had been able, with care, to keep the sledge upon snow for distances of one or two hundred yards at a time. Now it would drag for half a mile or more upon the bare rocks without touching snow. No wood that ever grew could stand this usage long, and the sledge began to break up before we reached the bundle of meat.



VIEW NEAR ICE-CAP.

It was impossible to add this to the load in the condition of the sledge, and the dogs could not pull the sledge with the skin in tow, so there was nothing left but to double-bank. After going ahead a few miles with the sledge, and then going back and bringing up the meat, I decided to push on with the sledge until it went to pieces, or we found fresh tracks of musk-oxen, when one could return with the dogs to bring up the meat, while the others were backing the

things from the wreck to the moraine, or hunting the musk-oxen, as the case might be. A sharp lookout was kept as we went along for fresh traces of these animals, but no signs of them were discovered. Not one had recrossed the sledge-trail since they had crossed it to the westward with the dogs yelping at their heels. As a partial recompense for this disappointment, our sledge endured beyond our brightest expectations, and though the runners were rapidly



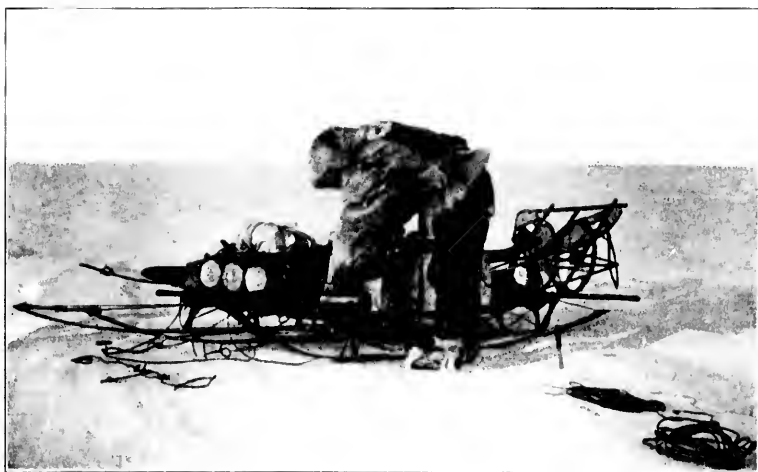
THE RELENTLESS WHITE SLOPE OF THE "GREAT ICE."

diminishing in size as they left splinter after splinter on the rocks, and the cross-bars were all broken, the sledge in some wonderful way still held together and did not collapse entirely until we were within a few miles of the moraine.

We camped beside the wreck, and in the morning Matt with the dogs went back to bring up the meat, while Lee and I, with the tent, cooking-gear, and a few other things to make up two light back-loads,

went on to the foot of the moraine. During the day we got everything else up, part of the work being done in the face of a gale which swept down from the ice-cap and filled all the adjacent valleys with a blinding, cutting drift.

Matt returned late, himself and dogs very tired with the day's work. This struggle back across the land to the foot of the "Great Ice" had been a severe one. The work was the hardest we had done yet, and the hope which had constantly buoyed us up during the advance had been replaced by a general relaxation, but our scanty supplies did not allow us to waste a moment. The next day the pair of ski left at the moraine for that purpose was converted into a small light sledge; the tent, cooker, and our clothes put in as thorough repair as possible, hand- and foot-gear dried; all sleeping-gear, and nearly all extra hand- and foot-gear, with everything that could possibly be spared, thrown away in preparation for the return ice-cap trip.





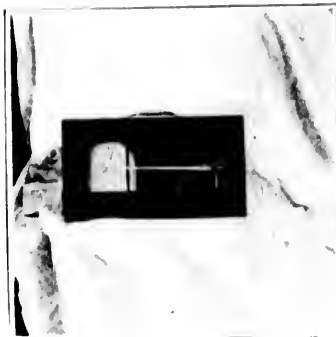
CHAPTER XVI.

RETURN ICE-CAP JOURNEY.

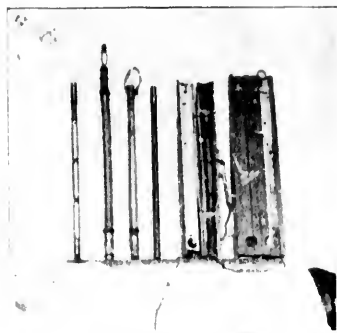
GOOD PROGRESS AT FIRST—EIGHT THOUSAND FEET ABOVE THE SEA—A KILLING PACE—LEE UNDER THE WEATHER—DOGS GOING TO PIECES—THE OUTLOOK NOT PLEASANT—GAINING EVERY POSSIBLE YARD—NUMBER OF DOGS CONSTANTLY DECREASING—FOG AND THE *PATHFINDER*—LAST OF OUR MEAT—LAND AT LAST—ONE DOG AND NO FOOD REMAINING—DOWNS THE ROCKS TO THE LODGE—POOR PANIKPAH—THE NEVER-TO-BE-FORGOTTEN LUXURIES, FOOD AND REST—MY NOBLE DOGS.



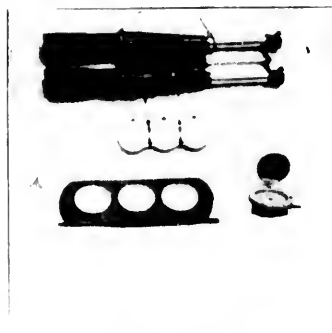
Traveller's
Theodolite.



Barograph.



Thermometers.



Chronometers,
Aneroids, etc.

SOME OF MY INSTRUMENTS.

CHAPTER XVI.

RETURN ICE-CAP JOURNEY.



AT six A.M., June 1st, we left our camp at the foot of the moraine with the skin of meat in tow of the new sledge, and taking a diagonal course up the steep moraine slope, began our homeward march.

Up the steep landward base of the ice-cap we zigzagged, scaling the relentless blue slope in the teeth of the wind and drift till the even snow-covered surface beyond was reached, when the meat was transferred to the sledge, and we shaped our course for Camp Resolution. Here we slept for some five hours, making our tea over the fire kindled with the wooden case of the cooker, which had been thrown away at this camp, and then went on to Camp Josephine. The march between these two camps was made in just such thick weather as it had been the first time, and I had no expectation of being able to find the cache that day; but thought the best we could do would be to travel the required distance as indicated by the odometer, then camp and

wait for it to clear. Fortune favoured us, however, as it had done occasionally before in minor ways, though cruel to us in the one grand thing that would have covered all the rest, and at the end of twenty miles the clouds and fog dispersed enough for me to discern the cache with my binoculars, and we were soon beside it. We felt here that we were at the beginning of our homeward voyage, well out on the deep sea



DINNER-TIME.

(our elevation six thousand feet), with a clear course before us.

I had nine dogs and fourteen days' rations for them ; thirty days' half-rations of tea, biscuit, and oil, and seventeen days' rations of frozen venison, for ourselves. More or less of the latter, however, I expected to give to the dogs after their rations of musk-ox meat were expended. Two methods were open to us : one was to eat our own meat rations and have to drag our load ourselves for the last half of the return journey ; the

other, to live on our biscuit ration, scant as it was, reserving the meat for the dogs, to prolong their effectiveness as far as possible, and thus be compelled to drag our sledges only the last quarter of the return journey. I considered the latter method the better, and was confident it would result in a distinct gain of speed.

If we were so fortunate as to escape storms, a single one of which would annihilate my team in its present



DRIFTED IN.

condition, and did not encounter any deep soft snow, our prospects for getting back I considered good. During our stay at this camp, the weather cleared, and our start was made under auspicious circumstances. The principal incidents of our fortunate and rapid return may be gathered from my daily notes.

"*June 3d.*—A clear day with little wind; recent snow makes going a trifle heavy, but dogs pull well and we cover twenty-five and a quarter miles. The

march from the land to Camp Resolution was made in the daytime, with the sun in front instead of behind us, but we are now travelling in the proper way—that is, during the hours when the sun is traversing the semicircle behind us. As we are going south-west true, these hours are from nine P.M. to nine A.M.

"*June 3d to 4th.*—Still clear and the wind not heavy. The going heavier than yesterday, but by extra exertions we make a fair march. We must gain every mile we possibly can while the dogs last.

"*June 4th and 5th.*—Cloudy, with strong and biting head-winds and heavy drift. The wind is nevertheless doing us a service in sweeping up the newly fallen snow, and giving us an easier travelling surface. We are all having trouble with our feet and legs: the former almost as tender as a boil, the result of the bruising given them by the rocks; the latter stiff and aching in joints and muscles. We travel with the grace and debonair of cripples. This march brings us onto the wind-divide and debatable land of *sastrugi* pointing both to the east and north-west coasts; the winds which rush down from the interior, turning either into the Independence-Bay or the Sherard-Osborne-Fjord basins, or even blowing across from one to the other as the atmospheric balance may determine.

"*June 5th and 6th.*—Yesterday's wind seems to have been only a local squall, and to-day we are beyond its effects, and the new snow is looser and deeper than ever. At the end of three and a half miles Lee is completely used up, aching all over, and scarcely able to drag one foot after the other, and he thinks he can advance no longer. By giving him quinine, anti-kamnia, and brandy, a line from the sledge to support himself by, and stopping twice to brace him up with hot tea, peptonoids, and brandy, he manages to worry through the march. It has been a hard day

for men and dogs. The pace is telling on us all, but it cannot be helped. We cannot loiter while the weather permits us to march, and we have the dogs with us.

"*June 6th and 7th.*—The heavy going and the extra labour of assisting Lee was more of a strain upon the dogs yesterday than I had thought, and to-day they are much exhausted. Two of them give out entirely. This, and a dense frost-fog whose minute

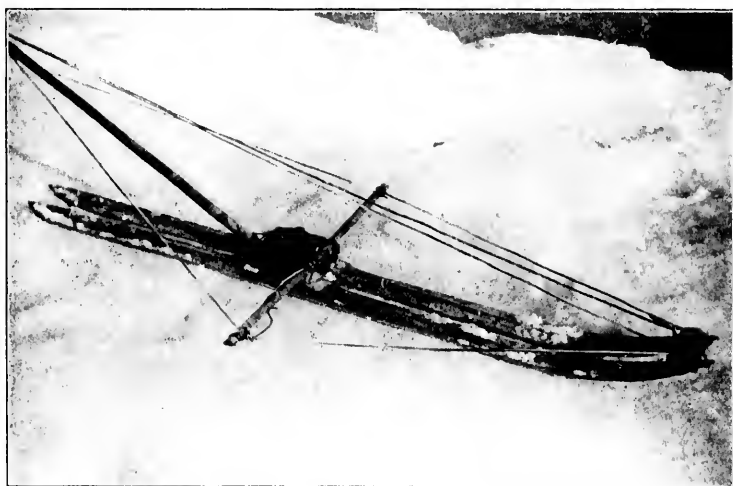


OUR TRAIL ACROSS THE FROZEN SAHARA.

crystals make the surface as gritty as so much sand, cut our day's advance down to seventeen and a half miles. The remaining seven dogs were given the usual meat ration, in addition to the bodies of their used-up comrades. Lee is still feeling very unwell.

"*June 7th and 8th.*—At this camp everything was transferred to the smaller sledge, which is the easier running as well as the lighter of the two, and the larger one abandoned. We must take the chances

of the one sledge making the remaining four hundred miles without breaking. A continuance of the fine weather, but Lee is worse, and the frost precipitation covering the surface is dragging the life out of the dogs. Icing the runners seems to have no effect in making the sledge run easier on this. But twelve and a half hours' plodding enables us to cover twenty miles.



THE "PATHFINDER."

"*June 8th and 9th.*—At the end of four miles Lee gives out entirely and we are obliged to camp. The pace and our altitude are telling upon him and the dogs, and matters are beginning to look very serious for him and for us. With exhausted dogs, a sick comrade, and the lodge nearly four hundred miles away, the prospect is not entirely pleasant. If a short rest and a course of stimulants do not put him in travelling condition, we shall be in a disagreeable position.

"*June 9th and 10th.*—Took advantage of our enforced delay to take an observation. Have been giving Lee treble allowance of milk, with peptonoids, and brandy every few hours, and this with the fifteen hours' rest has been so beneficial that he has been able to cover twenty miles with us to-day. The weather was very thick during the entire march, and we were able to advance only by lashing my ski together as a narrow sledge with the boat compass



SIX.

on them, and pushing this ahead of the one setting the course.

"*June 10th and 11th.*—Another dog falls exhausted to-day. This leaves us six.

"*June 11th and 12th.*—Another dog gives out to-day, and the remaining five are so discouraged that we drag the sledge the last five miles of the march ourselves, the dogs barely able to follow in our tracks. Evidently the day when we will have to

do all the pulling is not far away. Our distance from the lodge now is six miles less than the distance travelled by Nansen in forty days. We have nineteen days' half-rations of biscuit, tea, and milk.

"*June 12th and 13th.*—The warmth of the sun now at midday is such that we are compelled to bury the sledge runners in the snow when we come into



FIVE.

camp to prevent the icing from being loosened. My eyes, which have been useless since taking the observation two days ago, are now enough better so that I can take my regular turn at setting the course. This has been the last march for another one of our dogs, leaving us four. Encouraging circumstances are, that we now have a slight but perceptible down grade in our favour, and that to-night we are a little more than half-way on our return.

"*June 14th and 15th.*—A violent snow-squall with heavy drift dead against us delayed us for several hours at the commencement of this march.

"*June 15th and 16th.*—A warm day, the effect of the sun upon the sledge-runners being, after a time, sufficient to raise their temperature to the vicinity of the freezing point, and loosen the icing. The increased friction and consequent tax upon the dogs used up another one of them. Yet we made the



THREE.

same distance as during the preceding four marches, *i. e.*, between twenty and twenty-one miles. This is our limit; a single mile over this causes a strain to which it is not advisable to subject either ourselves or the dogs. The last of our dog food consumed to-night.

"*June 17th and 18th.*—The violent squalls, accompanied by heavy drift, which, arising from four A.M. to six A.M., have cut our last two marches short by an

hour or two, have had the effect of hardening the snow, and in this march we ran the score up to twenty-one and one-half miles.

"*June 18th and 19th.*—To offset our march of yesterday, we made to-day but ten and one-half miles. It was snowing when we started, and about an inch of new snow made the sledge, as is always the case, drag very heavily. At the end of ten and one-half miles it had ceased snowing, but the wind was blow-



TWO.

ing so hard against us that we were compelled to halt. The delay annoyed me less than it would otherwise have done, had I not known that a few hours of this wind would, by compacting the snow, improve the travelling a hundred per cent.

"*June 20th and 21st.*—The last of the venison went to the dogs to-night. We have two left.

"*June 21st and 22d.*—The last but one of our dogs gave out to-day; but the last three good

marches have put us so near home that we can consider ourselves certain to see the lodge again in spite of weather or condition of snow.

"*June 22d and 23d.*—The labour of dragging our sledge through another fall of new snow, in the face of a heavy drift and wind, showed us that we have overrated our strength, and that to make any progress with even our now light load we must have entirely favourable conditions. Camped at the end of two miles to wait for calm weather. We are now on the Whale-Sound-Kane-Basin "divide," and a few miles west of our upward route. I shall keep on our course, however, till we make the land."

Leaving this camp on the cessation of the wind, after about three hours' marching, we saw the summits of the land, and soon after could recognise various features. The course was changed to the southward to bring us down onto the Bowdoin-Bay-Inglefield-Guif peninsula, and at the end of seventeen and one-half miles, having reached a position from which I could find my way down in any weather, we made our last camp on the ice-cap some twenty miles from the moraine. We had four biscuits remaining for supper and breakfast. Our one dog was obliged to get what comfort he could out of a pair of seal-skin boots and several yards of rawhide line. Our stay at this camp was limited to a few hours, when we were again on the move, and kept on without interruption till we reached the moraine, upon which Matt and myself stepped at 1:30 p.m.

Lee was some distance behind, travelling very slowly, but insisting on our not waiting for him. I had no doubts as to his being able eventually to reach the lodge, and we might as well go down and get the stove in commission and something on it. Weak and tired as we were on reaching the moraine,

we experienced a still further drop in our physical barometer on passing down onto the land. As we entered the valley above Baby Lake I began to feel some nervousness as to how I should find the lodge and its contents, if, indeed, I should find them at all, and I was considerably relieved, as we descended the slope back of the house, to see the observatory supports still in place, then the roof of Nooktah's house, and finally the lodge itself, all apparently intact. No sign of life was perceptible, but this I accounted for by supposing Nooktah and his family to be sleeping through the heat of the day. Coming close to the lodge, it was evident the place had been deserted for some time; but the doors and their fastenings were undisturbed, and we found, on breaking in, that everything was just as we left it. Our first work was to get the stove in commission, and make some mush and coffee. Before this was effected Lee reached the lodge.

So much for the bald facts from the pages of my diary. Let me review the journey briefly:

Somewhat recuperated by the liberal rations of musk-ox meat, men and dogs fortunately started on the return journey in fairly good condition, and were thus enabled to make the ascent of nearly eight thousand feet to the crest of the "Great Ice." For the first one hundred and fifty miles everything went well, the dogs being in fair condition; then the pace, the ascent, and the altitude began to tell upon them, and we were obliged to assist them at the drag-ropes. The musk-ox meat seemed to give them no stamina.

After this the dogs gradually went to pieces, sometimes dropping in their tracks during the march, when a short halt would be made to despatch the poor brute and feed him to the others; sometimes struggling into camp to lie down and never rise again.

When their food was gone we gave them our venison, and so kept them along as best we could, but at last there was no more to give them. Then it was "dog eat dog," and finally,—well, dog meat does not taste badly, in fact it has little or no taste, but it is frightfully tough.

Throughout the entire journey we pressed on to the utmost of our ability, making every yard we could in every march, and when our limit was reached, hastily



"AT LAST THE WHALE-SOUND SUMMITS."

pitched our tent, made our tea, and as soon as it and a biscuit or two had been swallowed, threw ourselves down for a few hours' sleep, to be roused by the first one that woke, and hurry on again. We could feel the last mile or two of each march dragging the life and vital force out of us, and we anxiously scanned each bank of clouds, for we all knew what a snow-storm would mean to us.

We were not troubled with hopes or fears as to any

fortunate chance which might throw help in our way. There would be no searching for us. There was no one to search, even could any human prescience say where to look for us.

Neither was there any possibility, on this dead desert, of coming upon a bear or seal with which to put new life into us and our dogs. We knew the immutable facts of our problem. They had the cold precision of mathematics.

So many weary miles to the lodge, so many meagre rations on our sledge. If we could cover those miles in the time-equivalent of those rations, well; if not—there was no uncertainty.

Personally I did not suffer much from hunger. The rations had been so continuously insufficient that my system seemed to have gradually accepted the inevitable. Lee and Henson, brave boys, never complained; but the hourly and ever interesting subject of what sumptuous feasts they would have if they ever reached the lodge, gave me the key to their feelings.

In ordinary weather I had no difficulty in keeping a direct course across the ice-cap. But when clouds swept across the frozen plateau, they enveloped us in a fog so dense that it was impossible to take ten consecutive steps in a straight line. I had had experience with these fogs in the 1892 journey and had been delayed several days by them then. Now we had no several days to waste. One day might hold the balance of life for us, and spurred by this necessity we devised a little compass-sledge which was called the *Pathfinder*, and which, pushed before us, saved three days of priceless time.

At last the time came when as we halted at the end of the day's march, I could just make out the summits of the Whale-Sound mountains above the snow horizon ahead of us. We had, besides a little tea and

milk, four biscuits remaining for our supper and breakfast, and one dog, Panikpah, was still alive. To him I fed a pair of sealskin boots and a few yards of rawhide line. Here we threw away our cooking-gear, for there was no further work for it, and began our last and it seemed endless march.

When we reached the land the warm odour of the earth, the soft moss, the bright flowers, carried me



"THE SOFT MOTTLED SURFACE OF THE BAY."

back to the opulence of warmth and life and perfume of the waving fields in the distant home-land, and gave me a flash of added energy. A few hours later I reached the head of the little valley stretching back from the lodge.

Even should I in the hereafter be permitted to gaze upon the glory of the Golden City, the sight of its splendour will not outburn the peerless view that met

my blurred eyes as I rounded the last angle of the rocks and saw before me, bathed in the mellow June sunlight, the placid pool of Baby Lake, walled by the warm, flower-sprinkled rocks, and beyond, framed between Lookout Rock and the cliff of Mt. Bartlett, the

soft mottled surface of the bay, reaching to the glowing brown cliffs about Gnome Glacier. Food. Rest. Heaven.

The rough road down over the rocks was too much for my poor dog, who gave out and lay down some distance from the lodge, where I left him, knowing that after a rest he would struggle on after us. When he did come in, I fed him with my own hands, and before I had eaten anything myself,



THE SOLE SURVIVOR.

with tender, unfrozen deer meat, till he was absolutely satisfied and could eat no more. Poor brute! The memory of those famine days upon the "Great Ice" remained so vividly with him, that for weeks after our

return, though weak and afflicted like ourselves, he might be seen at any time, when not asleep, hiding away every bit of meat or blubber, and every bone that he could find about the place.



"FAITHFUL, NOBLE SERVITORS."

After a light and simple meal, we threw ourselves down and slept for a few hours, then bathed, ate lightly again, and then turned in for a long, long sleep. The strain of the grim race was ended. We had distanced our grisly competitor. We had reached

those unspeakable luxuries, food and rest. But my noble dogs had been less fortunate.

Every true man and every true woman loves a noble dog, and there are no more splendid dogs in all the world than those magnificent brutes of Whale Sound. Perhaps my reader may think me prejudiced. I have a right to be. They saved my life and the lives of my two comrades.

Powerful, savage brutes, as one would expect from dogs whose ancestors were wolves, yet they are susceptible to kindly treatment.

My favourite, the leader of my team, was a tall, steel-muscled animal, quick and strong as a panther and brusque as a bull, easily the match of the entire team, yet when I approached, he would come and rub his big head against my leg, with that deep bass growl of satisfaction which tells you beyond the shadow of a doubt that your dog is glad to see you.

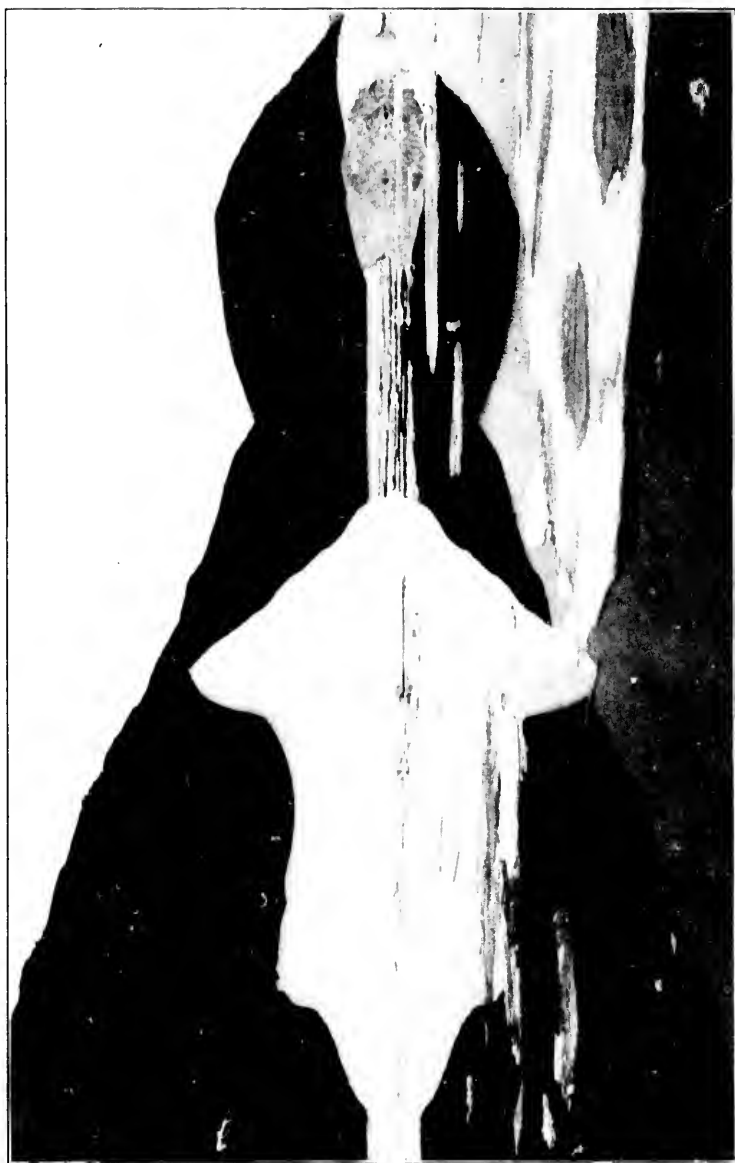
And never were dogs or men more faithful than those poor brutes. Day after day they struggled back across that awful frozen desert, fighting for their lives and ours; day after day they worked till the last ounce of work was gone from them, and then fell dead in their tracks without a sound, forty-one of them out of the forty-two with which I left the "lost cache."

Faithful, noble servitors, Nupsah, Kardahsu, Komonahpik, Ahgotah, Elingwah, and the rest, never shall I forget you; and my only consolation is the knowledge, that like ourselves, you did not suffer pain. The starvation was so gradual that, when at last the end came, and your exhausted limbs refused to move, your bright eyes closed, and your faithful lives went out upon the savage heart of the "Great Ice," your end was painless, as our own would have been, had it not been for you.

CHAPTER XVII.

AFTER THE RETURN.

RELAXATION AND UTTER EXHAUSTION—RETURN OF MY NATIVES—MERIDIAN OF THE ARCTIC SUMMER—EXTREMES OF FEELING—*OOMIAKSOAH* (THE SHIP)—ARRIVAL OF DIEBITSCH AND SALISBURY—A LONG TRAMP TO THE SHIP—RETURN OF "MISS BILL"—CAPE SABINE—WALRUS AND DEER HUNTING—FAREWELL TO THE LODGE—THE METEORITES—JONES SOUND—DEXTERITY HARBOUR—CAUGHT IN THE "MIDDLE PACK"—COPENHAGEN—ST. JOHN'S.



MIDNIGHT CALM.

CHAPTER XVII.

AFTER THE RETURN.



WE had crossed from moraine to moraine in twenty-four and a quarter days, making in that time twenty-five marches of an average of 20.1 miles. This does not seem like the performance of exhausted men. Yet nowhere else in all the Arctic regions but on the

Greenland ice-cap could we have travelled the distance we did in our condition; and each of us knows full well that with a less perfect equipment than ours, with different sledges, with less experience in sledgecraft, or with any severe weather or storms, our return would have been extremely doubtful.

Without snow-shoes or with a different type of sledge, we would never have gotten more than half-way home. The character of the snow after the first one hundred and thirty miles was such that no man living could maintain a pace of more than ten miles per day in it. Our broad-runner sledge and our snow-shoes enabled us to skim along on its surface without undue exertion. The use of the boat compass placed

upon the ski enabled us to travel in the thickest weather, and thus prevented the loss of any precious time; and finally, the absence of storms or any severe weather permitted us to march practically without interruption.

For this last we all have occasion to be very thankful. A severe and protracted storm, like the one that stopped Maigaard and myself on the Inland Ice in



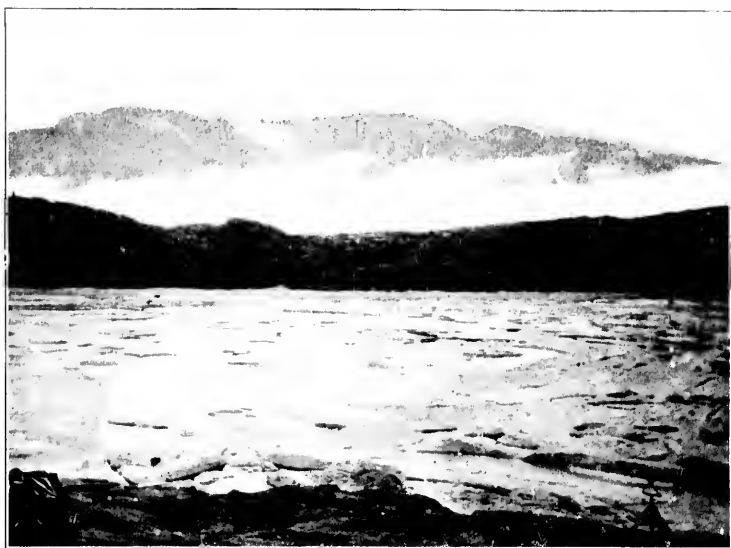
THE SHORE LEAD.

Early July.

1886; that prisoned Dr. Cook, Astrüp, and myself on the Red Cliff-Peninsula ice-cap in 1892; that halted Astrüp and myself for sixty hours, less than a hundred miles from Independence Bay; like either of two or three that my parties experienced in September, October, and November of 1893, and again in March and April of 1894; or that held Matt and myself prisoners for six days in October, 1894, after the cessa-

tion of which we were able to make but twenty-two miles in two days with ten dogs and empty sledges;—a storm like these occurring at any time after we had passed the four-hundredth mile on our upward journey, would have emphatically negatived our return.

Though able at a slow pace to walk straight ahead on a level for twenty to twenty-one miles a day, I do not believe one of us could have dragged a load of



JULY MIST-WREATHS.

seventy-five pounds two days in succession. Any sudden or increased exertion was invariably followed by bleeding at the nose, and a weakness which would compel us to stop and rest.

The use of every expedient known to the Eskimos, or that our own ingenuity could devise; Matt's skill in icing the sledge, and driving the dogs, in both of which accomplishments he was almost as expert as an

Eskimo, reduced the tractive resistance of the former to the very minimum, and rendered the last ounce of pull in the latter effective.

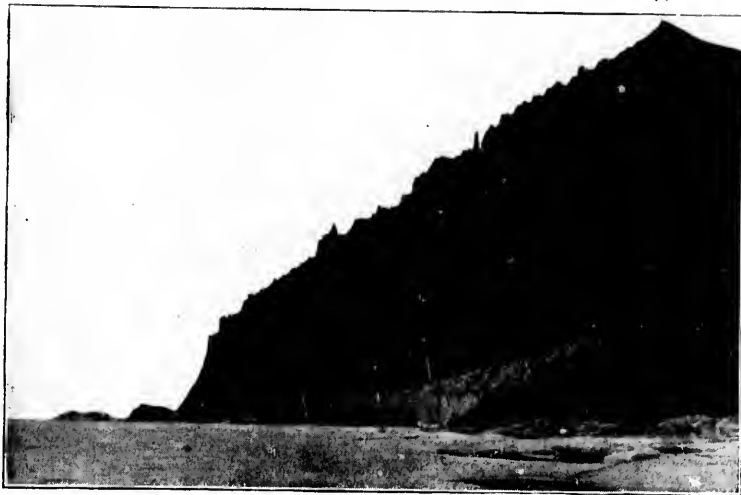
No man could have been more fortunate than I in having two such brave, loyal comrades as stood by me in this journey—Lee, a typical Yankee boy, as full of "sand" as one of his own Connecticut sea-beaches; Henson, unhesitating and tenacious as a bulldog. And no man could have been more unfortunate than I in that I was unable to reward their courage and loyalty by full measure of success.

I endeavoured to impress upon the boys the imperative necessity of exercising the utmost caution in eating, and the almost certain disastrous results that would follow, in our exhausted condition, if we overloaded stomachs accustomed for so long to meagre rations of the simplest kind.

I think I practised what I preached, and I do not think any of us ate ravenously, yet we did not escape severest indigestion.

For a week after our return from the ice-cap, we felt no inclination to do anything but lie down. The relaxation consequent upon the cessation of our long struggle; the great change from the pure rarefied air and low temperatures of the upper ice-cap to the denser, moister air and comparatively high temperatures at sea-level; and the obstinate diarrhœa with which we were all afflicted from the moment of our return, united to drag us down to the lowest notch of physical exhaustion. I would not have believed that I could be so weak and short of breath. The journey to the brook, a hundred yards away, for a pail of water was a serious task, and impossible of accomplishment without several stops for rest. Matt had at first the most acute attacks of stomach disturbances, but Lee recovered more slowly than any of us. Matt and I

had an annoyance which he escaped, in the way of swollen feet and legs. Within an hour or so after rising in the morning, our feet and legs from just above the knees down would swell almost to bursting, the articulation of knee and ankle disappearing entirely. After lying down for a few hours the swelling would be almost imperceptible, only to come on again as soon as we moved about. All this time the weather was of the finest, it was the midnoon of the long Arc-



ALONG THE SCULPTURED CLIFFS.

tic summer day, and we lived with all doors and windows wide open. After being so long in the pure and limitless atmosphere of the ice-cap we should have suffocated with them closed.

The only drawback to this was the numbers and voracity of the mosquitoes. On the sixth day after our return, Nooktah and Kardahsu and their families came back from Karnah. They were delighted to see us back again, and their presence enlivened us very materially. At the end of two weeks, we were

evidently gaining, and Matt rode to Kangerdlooksoah with some of the natives, carrying presents and instructions to the hunters there to go out for deer for me. He returned with three saddles of venison.



CASCADE IN THE SCULPTURED CLIFFS.

Two weeks later, on the 21st of July, I was feeling so well that I thought I would go to Karnah to see what the ice was like out in the Sound. The condition of the bay ice was the same as the year before, the numerous pools and leads making riding an impossibility,

and necessitating almost continuous jumping. I never expect to feel any older, if I live to be a hundred, than I did after the first few miles. Such stiffness, and lack of spring and energy, I would not have believed possible. Though I did not think that we had been strained beyond the elastic limit, yet it was evident we had come very close to it, and it would take a long time to restore us completely.

The outlook from the Karnah bluffs over the ice in the Sound gave no encouragement for an earlier breaking up of the ice than usual, and, after a twenty-four hours' rest, I started back for the lodge in order to get home before the rapidly widening leads became impassable. The very day of my return there was a pronounced change in the weather, and from then on to the end of the month it was as foggy and rainy as it had been clear and bright previously. Yet there was consolation for us in the knowledge that the fog and rain were rapidly eating up the ice, and opening a way for the ship. The boys were constantly thinking and talking of this, and now that it was impossible to see more than half a mile down the bay, were constantly listening for her. Never did either wake at night without getting up and going out to listen, and several times, when everything was quiet, one or the other would say: "Listen, is n't that her propeller thumping through the ice?"

As for myself, I felt the sharpest extremes of feeling. At times it seemed as if I could not wait another moment for the ship to bring my brown eyes and my blue eyes to me; then I felt that even were the ship here I could not go on board and say I had failed. It would be preferable to remain where I was. At times I even hoped that the ship would not come, so that I might make another attempt the next spring.



"MISS BILL" AND HER FAMILY.

I planned how we would pass the winter, living, with the natives, entirely upon walrus and seal, our sole luxury a cup of coffee once a week, which was all that my scant remaining supplies would permit.

August 2d, I read till nearly midnight, and then threw myself down, dressed as I was, upon the bed in the west room, with doors and windows all wide open. The boys had been talking of the ship all day, and were getting a little anxious. Last year we had heard from the *Falcon* on the last day of July, and the ice was worse then than now. I had no fears myself. I knew the brave woman at home would send a ship for us, and I should feel no uncertainty in regard to her until the twentieth came without her arrival.

Next I was conscious of someone shaking me by the shoulder to awaken me, and opening my eyes, was sleepily conscious of Mrs. Peary's brother, Mr. Diebitsch, and a stranger, standing in my room. Then I heard Lee's voice in the other room, "*Oomiaksoah!*" (the ship), and in an instant was fully awake. Curiously enough, Lee, wakened by the sound of voices in my room, had understood their significance at once, yet in his excitement had expressed himself in Eskimo.

My first question may be imagined, and learning that they were not on board, my interest flagged and I let my visitors tell their story, while Lee and Matt hurried to start a fire and set out some beans and coffee. From Diebitsch I learned that the *Falcon* had been lost with all on board the previous October after landing my party in Philadelphia, and that he had come north in the *Kite*, Capt. Bartlett, Master, accompanied by a scientific party, composed of Prof. Rollin D. Salisbury of the Chicago University, Prof. L. L. Dyche of Kansas, Collector for the American Museum of Natural History, Dr. Walsh of Washington, and



THE GHASTLY ROCKS OF CAPE SABINE.
Cocked-Hat Island in the Distance.

Mr. Le Boutillier, representative of the Geographical Club of Philadelphia.

Nooktah and his family, wakened by the excitement, crowded about the door, and seeing his eager face reminded me that there was one whom he too was anxious to hear of,—his girl, who had gone south with Mrs. Peary a year before. I interrupted the conversation to ask about her, and when I told him she was well and on the ship, his face brightened, he turned to old Ahtungahnah with a brief "Get my kamiks ready," and with his family disappeared to their house to prepare for the tramp to the ship. The *Kite* was over in McCormick Bay, fast in the ice off the mouth of Four-Mile River. She had been unable to get near the mouth of Bowdoin Bay by reason of the heavy ice, and so had entered McCormick Bay and forced her way as far as possible, and Diebitsch and Salisbury, leaving her, had walked up the shore of the bay, traversed Tooktoo Valley, crossed the Kahkoktah and Bowdoin Glaciers, and wading the glacier river had reached the lodge an hour after midnight, and finding the door open had entered and wakened us. They were thoroughly tired and soaked after their long tramp, and I was very glad to have a mouthful of whiskey to offer them. Then after a hearty meal of beans, brown bread, and coffee, I tucked them in under some deerskins to sleep like Babes in the Wood. At noon the same day we started back with them, accompanied by Nooktah, and reached the *Kite* about four in the morning.

I had felt considerable interest to see what the meeting between faithful old Nooktah and his daughter, from whom he had been separated a year, would be like. When we reached the ship she was asleep, but was awakened, and told that her father was on deck. After waiting some minutes, and she not putting in an appearance, someone was sent to

see what the trouble was, and found that she had calmly gone to sleep again. She was re-awakened and told to dress and come on deck, as her father was there. A few moments later she appeared, but, as far as any external indication was concerned, she and her father might have been separated only ten minutes. The next day, however, I learned from some of the ship people that, after she and her father had gone below, where they were by themselves, she had talked



SAVIKSOAH BAY.

to him an unceasing stream through nearly two entire watches (eight hours).

As it would evidently be impracticable for the *Kite* to reach the lodge for ten days or two weeks yet, I decided to put in the intervening time in securing some deer and walrus, and examining, more closely than I had yet had the opportunity to do, the islands in Whale Sound, so that as soon as the ship could reach the lodge and get my things on board, we might steam

south to Cape York and begin work upon the meteorites, a second attempt to remove which I intended to make. Consequently we spent a day or two in securing walrus in the Whale-Sound walrus grounds; then parts of two days in a circumnavigation of the three islands, with a visit to the loomerics; and then, after some delay on account of the ice, we succeeded in effecting an entrance to Olriks Bay, where two days were spent and a number of reindeer secured. Steam



AN AUGUST SNOWSTORM.

ing out from here, we bore away for the entrance of the Sound, and then steamed southward into Wolstenholm Sound, where we devoted another day or two to getting walrus to add to the collection of the American Museum of Natural History. From here we continued our southward journey to Cape York, where we took on board all the able-bodied men of the village, and steamed eastward to the site of the meteorites.

I was very agreeably surprised to find the ice in such condition that the *Kite* could be forced to within about a mile and a half of the head of the little bay, near which the two smaller meteorites were located, and the next four or five days were consumed in moving the six-thousand-pound mass, which I had excavated from the snow and ice previously, together with the still smaller one (the "Dog"), which, now that the snow was melted away, was found about one hundred feet from the other, down to the shore and out through the bay to the ship's side, where they were hoisted on board and deposited in the hold. The excavation of the third and largest mass on the island at the mouth of the bay was also commenced, but it was soon found that we had no appliances whatever with which to handle its enormous weight.

On the last day of August, the *Kite* forced her way out through the now rapidly forming new ice and steamed westward for Cape York.

Here my Eskimos went ashore, loaded with presents, with the most unrestrained exclamations of delight, in their great acquisition—the whale-boat which I had given them. With the glasses I watched them on the shore gathered about their newly acquired treasures, until the point of the cape shut the village from view. Rounding the cape, our course was shaped for Jones Sound, over a summer sea, and through a myriad fleet of fantastic-shaped, exquisite-coloured bergs. The great green-brown cliffs, rich in the yellow sunlight, glowed good-bye to me, as they had glowed a welcome two years ago. Great cliffs! long will you live in remembrance with the merry, care-free human children sheltered at your feet, careless of the coming night, thoughtless of the great hereafter.

Soon after leaving the cape, we ran into the fog which for the past week or more had been lying off



CONE ISLAND, JONES SOUND.

to the south and west, and during much of the night were obliged to run at half-speed through its dense folds. No ice and but few bergs were seen. At nine p.m. of Saturday we were close to the glacier-burdened shore of North Devon, just north of Philpot Island, and turned north to enter the Sound. The strong southerly current, and an unreliable compass had taken us from our course. Running at half-speed during the night, at eight a.m. Sunday morning we were well inside Coburg Island, steaming towards Cone Island, under the north shore; the morning clear, except for a light haze which made distant land indistinct or invisible, with a fresh northerly breeze, and no ice discernible.

West of Cone Island, we passed through loose ice for a few miles, and twenty-five miles west of the island encountered more of it which became more closely packed as we advanced, till at the end of two miles it was evident we could proceed at best but a mile or two farther. At three p.m., twenty-seven miles west of Cone Island, the *Kite* was turned about, and headed back for the island which was reached between seven and eight p.m. A landing was effected here, and numerous traces of Eskimos—viz., meat caches, graves, remains of igloos, rings of tent-stones, stone wind-shelters, bones of whale, narwhal, bear, walrus, seal, and birds were found, and one or two implements of bone. The remains of a soft-coal fire were also observed. Arctic poppies were seen still in bloom. Before leaving the island, a cairn was built on a conspicuous rounded rock just south of the main island, and connected with it by a dyke bare at low water. In the cairn was deposited a brief record, then we returned to the *Kite*, and she steamed away for Cape Fitz Roy.

The ice seen in Jones Sound was very rough, but not especially thick, as far as observed. There were

comparatively few bergs visible, and none of large size. There was a strong current setting into the Sound. Several seals, a few burgomaster gulls, two or three young black guillemots, and numerous fulmars comprised the life seen. There is a colony of the latter on the south side of Smith Island.

Though no survey, properly speaking, was made during our stay in the Sound, which would warrant



WHALER EMERGING FROM THE FOG.

a change in existing charts, such angles as were taken, together with the evidence of our eyes, indicate that the shores of Jones Sound, as now shown, are somewhat in error.

The south shore of Jones Sound is not as direct as shown on the charts, but is pronouncedly convex to the northward, the maximum convexity being about abreast of a point somewhat west of Cone Island.

Cape Tennyson is a high ragged brown island some distance off the shore, with a smaller one just west of it; the line of the coast back of it is flatter than shown on the charts, and the change in trend of the north shore is more nearly at the point of the mainland just east of Smith Island, than at Cape Tennyson. The bay behind Smith and Cone Islands is more extensive than shown on the chart.

There is no such bend in the northern shore of the Sound as is shown on the charts at the point marked Sir R. Inglis Peak. The coast-line, broken only by perhaps two or three small fjords, is continuous for a distance of seventy-five miles beyond Cone Island, and is concave to the south.

Cone Island is a ragged-profiled cone, of what Professor Salisbury determined to be granitic gneiss. Though larger, it bears a strong resemblance to the well-known Conical and Dalrymple Rocks of the east side of Smith Sound, and the Little Matterhorn at the head of Inglefield Gulf.

From the appearance of the cliffs forming the shores of the Sound, it is probable that the formation of the entire region, with the exception of two or three very limited areas, is the same as that of Cone Island.

Glaciers are numerous on the south side of the Sound; the ice-cap is nearly continuous with the shore line, and some twenty glaciers, several of which are of large size, may be counted from Cape Fitz Roy westward. The ice-cap from which these glaciers flow suggests in its accented undulations that between Saviksoah and Cape York Bays. On the western side of Coburg Island are nine glaciers, the extremities of which, protruding beyond the line of the cliffs and expanding laterally, are nearly all united to form an almost continuous sea-plain. This side of the island



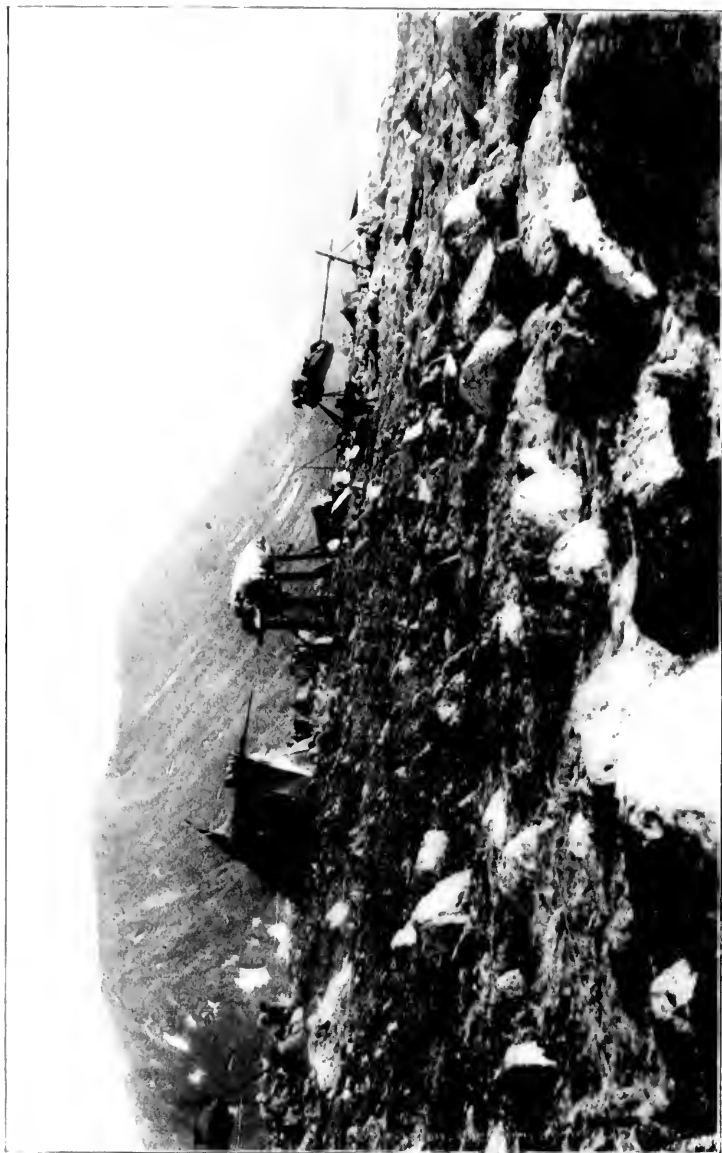
WEST COAST AT DEXTERITY HARBOUR.

suggests very forcibly the north side of Northumberland Island and the western side of Cape York Bay.

The north shore of the Sound, except where interrupted by glaciers, is a series of nearly continuous precipitous cliffs from Cape Tennyson to Smith Island, and from a few miles west of Cone Island west as far as observable. The number of glaciers is considerably less than on the south side of the Sound. One large one debouches behind Cape Tennyson and three others near and west of it. Near the last of these is a peculiar truncated, pyramidal mountain or rock. Just east of Smith Island, a glacier descends through a gorge from three-quarters of a mile to a mile in width, and, reaching the sea, spreads into a huge fan the width of which is ten times the width in the gorge.

A large glacier at the head of the bay behind Smith and Cone Islands has a fan-shaped extremity apparently from twelve to fifteen times the width of the ice-stream in the gorge. This excessive lateral development of the extremity seems to be a peculiarity of all the large glaciers of this Sound. The large glaciers on the north side have terminal moraines along the western portion of their faces. On the eastern side of the bay, behind Smith and Cone Islands, are four small hanging or drift glaciers.

Coming out of Jones Sound we steamed south along the west coast, past the mouth of Lancaster Sound, and, when down near Dexterity Harbour, descried a couple of whalers approaching from the north. By the time we had entered the harbour in which I had lain in the *Eagle* in 1886, the two whalers (the *Aurora*, Captain Jackman, and the *Esquimaux*, Captain Adams) were up with us, and dropped anchor just outside of us. In 1886, Dexterity Harbour was uninhabited; now a settlement of quite a number of tents was located on the south side, attracted here by the



VILLAGE OF WEST-COAST ESKIMOS AT DEXTERITY HARBOUR.
Wreck of the *Eagle* in the Distance.

548 Northward over the "Great Ice"

visits of the whalers. A short stop only was made, to make some studies of these people, and then we got under way and steamed out. Before this, however,



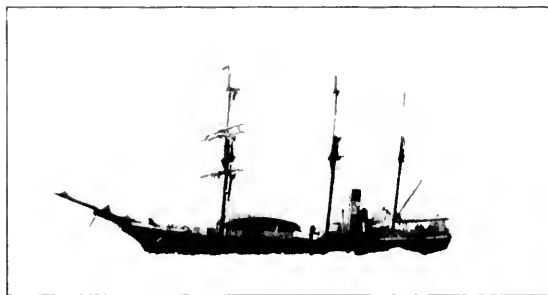
ESKIMO WOMAN AT DEXTERITY HARBOUR.

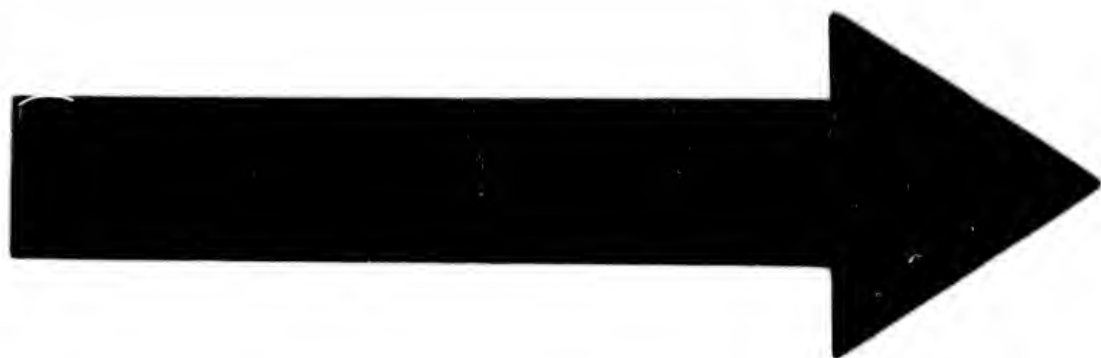
a third whaler (the *Balena*, Captain Fairweather) came in.

Heading south-east from Dexterity, we soon encountered the "middle pack," and in a short time it was so dense and heavy that we found it impossible to advance, and equally impossible to retreat by the

way we had come. In this predicament we remained for three days, drifting slowly southward with the pack, and some on board were beginning to get anxious at the prospect of wintering in the pack, when a temporary slight slackening of the ice about us allowed us, by crowding on all steam, to worry our way out into somewhat looser ice, and then gradually force our way back to the north-westward, and then northward, until we found a practicable opening through the middle of the pack, and were enabled to get into the Greenland waters off Upernavik, and bear away southward for Godhavn.

Here, after the usual stop for water and ballast, we steamed out and down Davis Strait, and though we had rather heavy weather for nearly two days, the winds, as a rule, were favourable, and our voyage to St. John's was accomplished without incident. Arriving here late in September, the *Kite* was discharged, and the party, with the meteorites, and a large quantity of valuable specimens for the American Museum, transhipped to the *Red Cross* steamer for New York.





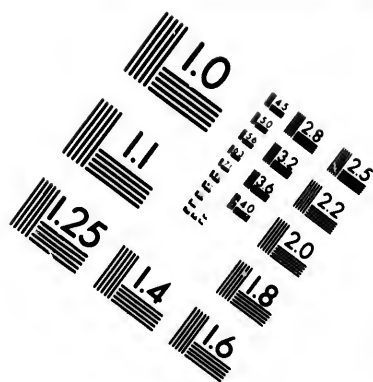
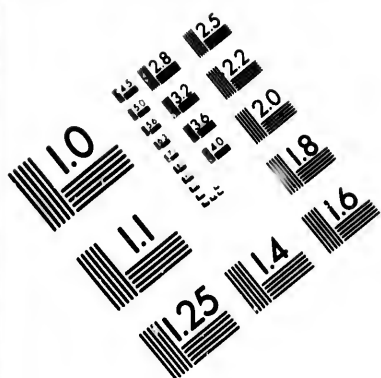
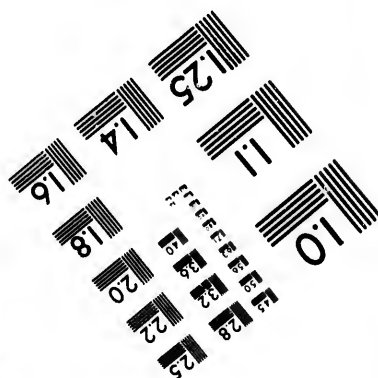
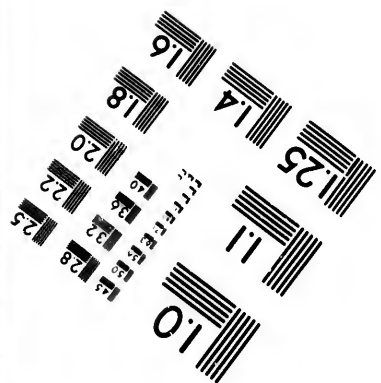
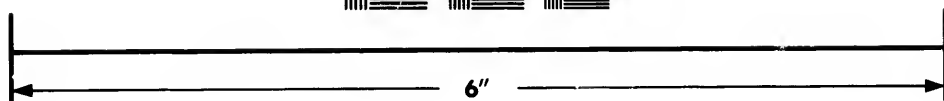
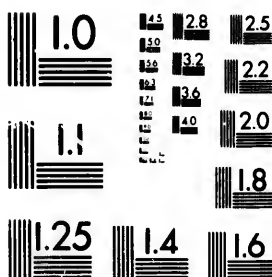


IMAGE EVALUATION TEST TARGET (MT-3)



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OBJECTS AND RESULTS OF NORTH-GREEN-
LAND EXPEDITIONS OF 1893 TO 1895.

OBJECTS.

The delimitation of the detached lands lying north of main Greenland.

The filling in of the remaining gaps in the northern and north-eastern coast-line of Greenland.

In the event of favourable conditions, an attempt upon the Pole.

The completion of the detail survey of the Whale-Sound region.

Continuation of the studies of the Smith-Sound Eskimos.

The discovery of the "Iron Mountain."

RESULTS.

The crossing of the Inland Ice-cap of North Greenland under a most serious handicap of insufficient provisions.

The completion of the detail survey of Whale Sound.

Large accessions of material and information in connection with the Smith-Sound Eskimos.

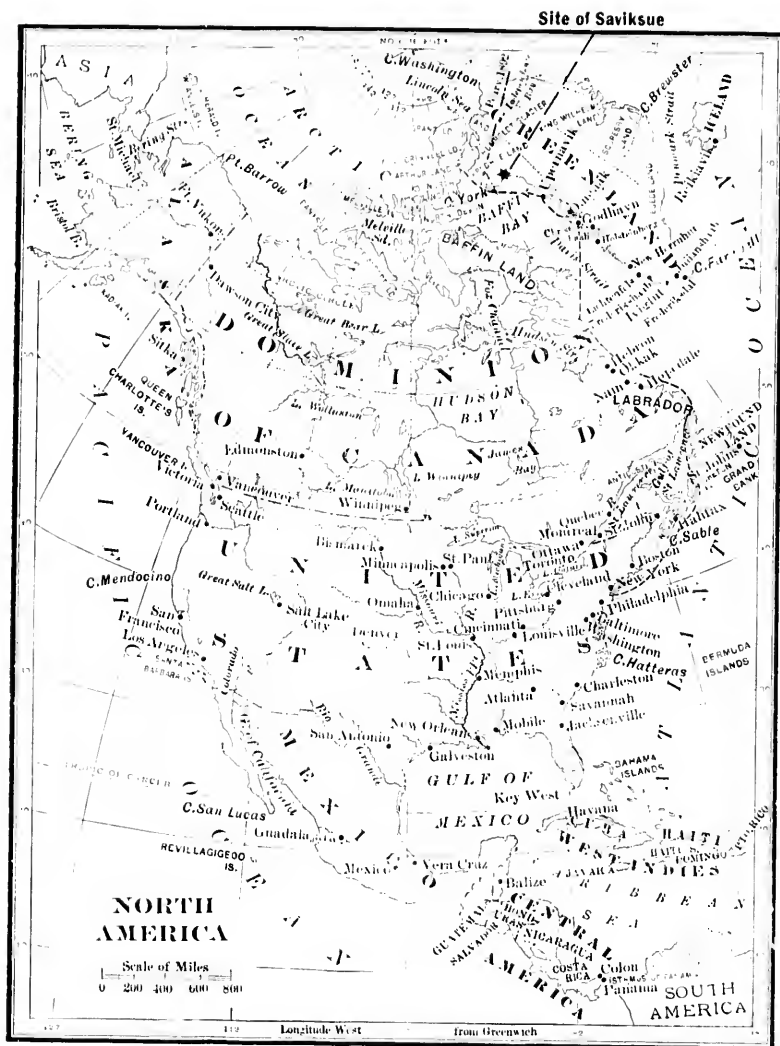
The discovery of the "Iron Mountain," or Cape-York "Saviksue," and the bringing home of two of those interesting meteorites.

PART V.

SUMMER VOYAGES OF 1896-1897.

THE "SAVIKSUE" OR CAPE-YORK METEORITES.

CAPE YORK "SAVIKSUE"—HISTORY, AND EFFORTS TO SECURE THEM—DISCOVERY IN 1894—LOCATION—SECURING "WOMAN" AND "DOG" IN 1895—WORK ON "AHNIGHITO" IN 1896—SECURING "AHNIGHITO" IN 1897—DESCRIPTION—AUTHENTICITY—NOTES AND SPECULATIONS—DISCOVERY OF ANCIENT ESKIMO KNIVES MADE FROM "SAVIKSUE"—PROPOSED GROUP—*Résumé* OF POINTS OF SPECIAL INTEREST.



MAP SHOWING LOCATION OF "SAVIKSUE" AND VOYAGE OF
"HOPE" IN 1897.

PART V.

THE "SAVIKSUE" OR CAPE-YORK METEORITES.



THE two summer voyages made by me in 1896 and 1897 had for their object, among others, the bringing home of the third, last, and largest of the Cape-York meteorites. The securing of this enormous celestial visitor was the main object of the 1896 voyage; the secondary object of the voyage of 1897.

In both these voyages my ship was the S.S. *Hope*. In both, her Master was Capt. John Bartlett, and each time I took parties of scientific men and students for a summer of Arctic field work.

These voyages were full of incidents which, under other circumstances, would furnish abundant material for a volume. But these incidents must yield space to a condensed narrative of one of the most unique episodes in the annals of Arctic exploration, the discovery and removal from their frozen beds of the most interesting of known meteorites, with a brief description of them.

HISTORY, AND EFFORTS TO SECURE.

Of all the great meteorites of the world's collections, as well as the more or less legendary and mysterious celestial visitors, the "heaven stones," "thunderbolts," "abaddirs," Palladium, etc., which have elicited the awe and veneration of man since remote antiquity, the "Saviksue" or Cape-York meteorites, must,

from their exceptional size, their purity and homogeneousness of composition, the extreme northern latitude in which they were found, their incontrovertibly celestial origin, and their human associations, be conceded to rank first.

The history of these meteorites up to the time of their discovery by me is comprised in the statement that, when Capt. Ross in 1818 discovered the existence, in the vicinity of Cape York, of a previously unknown tribe of Eskimos, he found in their possession rude knives and harpoon points with cutting edges of iron. The metal in these implements, as well as could be determined from the imperfect communication with these people, had been obtained by them from an "Iron Mountain" on the northern shore of Melville Bay.

An analysis of the metal showed the presence of nickel, and led to the inference that the source of iron supply of these northern people was meteoric. For a full account of this, and for various papers bearing upon the subject, the reader is referred to Capt. Ross's narrative and to the *Arctic Manual*.

Nordenskjöld's discovery of the famous Ovivak irons on Disco Island, and the ultimate determination of their telluric rather than extra-terrestrial origin, gave rise to doubts as to the meteoric character of the more northern and semi-mythical Cape-York iron, and it was assumed that this iron was also telluric.

One of the objects of almost every expedition which has gone north in that region since 1818 has been the solution of the mystery of the "Iron Mountain."

In the '40's the King of Denmark authorised an expedition for the purpose of discovering and determining the character of the "Mountain," but nothing came of the effort.

The officers of the *North Star*, one of the Franklin search ships which passed the winter of 1849-50 in Wolstenholm Sound, north of Cape York, were unsuccessful in locating the iron, and the same may be said of the various expeditions, English, American, and others, and the whalers, which visited these waters during a long series of years after Ross's voyage. None of these came any nearer than Ross himself to clearing up the mystery.

From the fact that the existence of this iron was discovered by an English officer, the British Museum has been specially interested in the subject, and one of the objects of the splendid English Arctic Expedition of 1875-76 was to clear up the question of its location and character if possible. This desired result, however, was not accomplished.

Baron Nordenskjöld's ship in 1883 went to Cape York for the express purpose of discovering and, if practicable, bringing



"TENT" OR "AHNICHITO" METEORITE.

away the iron, but the ice did not permit her to penetrate Melville Bay, and this expedition, like previous ones, returned unsuccessful.

Up to the spring of 1894, the information already noted above comprised the sum-total of our knowledge on this interesting subject.

It was fortunately reserved for me to settle the question finally and definitely. After I had gained the confidence of the entire little tribe of Smith-Sound Eskimos, Tellikotinah, one of the hunters, in May of 1894, guided me to the "Iron Mountain,"¹ where I found, not a mountain or vein of iron, but three large masses of homogeneous metal, the peculiar and unmistakable characteristics of which, and especially the nature of their surroundings, proved them to be, beyond the possibility of doubt, true meteoric irons.

In the latter part of August of the same year I attempted, in the *Falcon*, to penetrate Melville Bay to the site of the meteorites, and embark them for the purpose of sending them home. The summer of 1894, however, was an unusually severe one in this portion of the Arctic regions, and the ice of Melville Bay did not move out at all, but remained cemented to the shore throughout the entire season, rendering it impossible for me to get my ship within thirty or forty miles of my prizes.

In a December of the same year (the midnight of the Arctic winter night) I made a second attempt to revisit the meteorites, sledging from the lodge in Bowdoin Bay, but bad weather combined with the darkness to close the ever inhospitable door of Melville Bay to me, and I was unable to get beyond Cape York, where I was storm-bound for several days, and then returned to the lodge, narrowly escaping the loss of my dogs and sledge by the breaking up of the ice about me while rounding Cape Parry.²

LOCATION.

The location of these meteorites is on the northern shore of that great icy fastness, Melville Bay, some thirty-five miles east of Cape York. Just inside of Bushnan Island is a second island, larger than Bushnan, and hitherto taken for part of the mainland. This island lies directly across the mouth of a double-armed bay which reaches northward into the land, and has an opening westward toward Cape York, and eastward into Melville Bay, past the ends of the island.

The eastern arm of this bay terminates in a little rectangular cove, walled by a series of hills three hundred to six hundred

¹ See Chap. vi., Part III.

² See Chaps. vii. and viii., Part IV.



EASTERN END OF METEORITE ISLAND AND SITE OF THE AHNIGHITO.
From Summit of Signal Mountain.

feet high. This wall is continuous except at the eastern angle of the cove, where a narrow, gently sloping valley opens. Proceeding up this valley for a few hundred yards, one finds oneself on the divide of a narrow isthmus separating the bay already mentioned from a glacier bay to the eastward, and uniting the mountains which overhang the head of the bay with the bold and striking masses that form its eastern shore and headland. The centre of the isthmus is about eighty feet above the sea-level at its highest point, and a few yards north of this divide, on the southern slope of the mountain, the two smaller of the famous "Saviksue," the "woman" and the "dog," lay loosely upon the gneissose rocks which cover the ground.

Standing here the eye roams southward, over the broken ice-masses of Glacier Bay, the favourite haunt of the polar bear; eastward, across the glacier itself, to the ebony faces of the Black Twins, two beetling ice-capped cliffs, which frown down upon the glacier; northward, to the boulder-strewn slopes of a gneissose mountain; and westward, over the placid surface of Saviksoah Bay, which presents a striking contrast to the berg chaos on the opposite side of the isthmus.

About midway of the eastern shore of the inner island, and some six miles south of the site of the "woman" and the "dog," lay the third and largest, the "tent," meteorite, nearly buried in the rocks and soil, upon a terrace some eighty feet above high-water mark, and distant about a hundred yards from the shore. Near by rises one of the most peculiar peaks that I have seen anywhere upon the Greenland coast,—a gneissose mass with sharp, overhanging crest,—which I have called Signal Mountain, since it has for centuries been marking the position of the celestial visitor. Both from this mountain, and from the site of the meteorite itself, the northern shores of Melville Bay present an eastward-stretching panorama until hidden behind a labyrinth of icebergs.

In winter this region is the desolation of Arctic desolations, constantly harassed by biting winds, and every rock deep buried beneath the snow, swept in by these winds throughout the long dark night, from the broad expanse of Melville Bay, and piled in drifts, which in many places are hundreds of feet deep. Even in summer, only the directly southward-facing slopes of the mountains are free from snow for a few weeks, while in the valleys and on the northward slopes the drifts remain eternally. A large portion of the ice and bergs of Melville Bay pass close along this coast in their slow drift westward toward the southerly current of Smith Sound. Consequently the shore is beset with ice during about eleven months of even the most favourable

The "Saviksue" or Cape-York Meteorites 559

years, and the slightest increase in the severity of a season beyond the normal, results in the coast being completely blockaded and



MELVILLE BAY

SITE OF "AHNIGHITO"



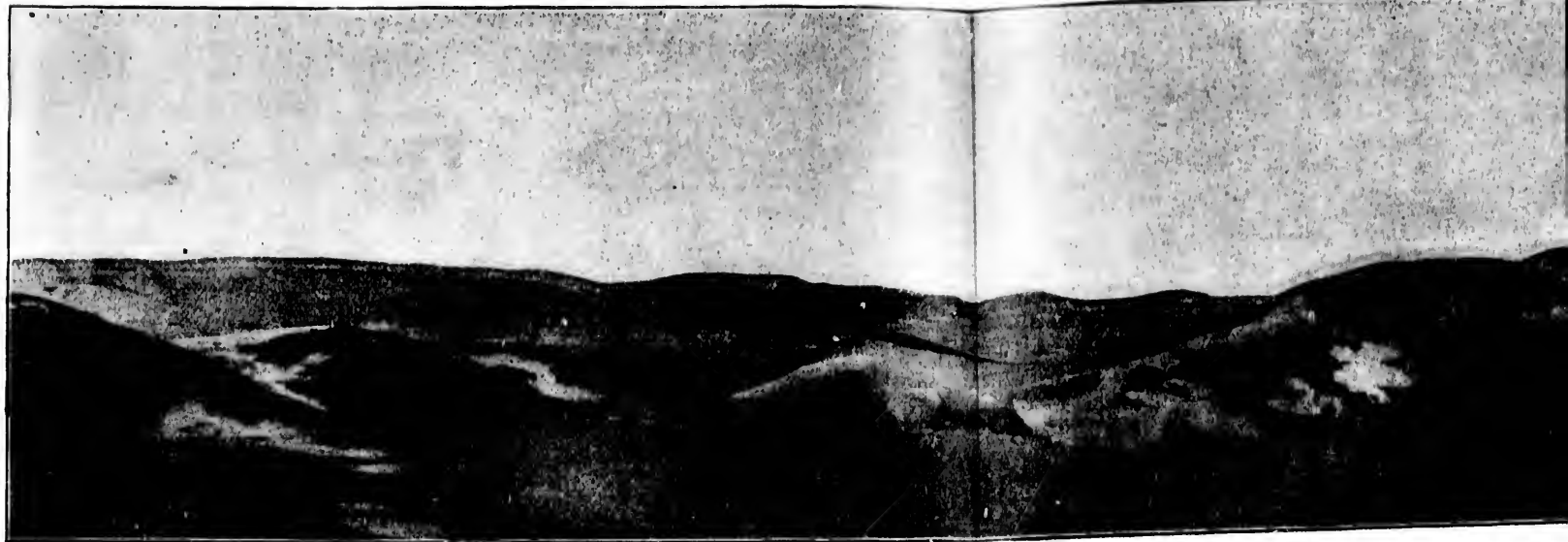
METEORITE ISLAND

the long and arduous journey to Cape York and into Melville Bay, when they needed to replenish their stock of iron. The head



SITE OF "WOMAN" AND "DOG"

SAVIKSOAH MT.

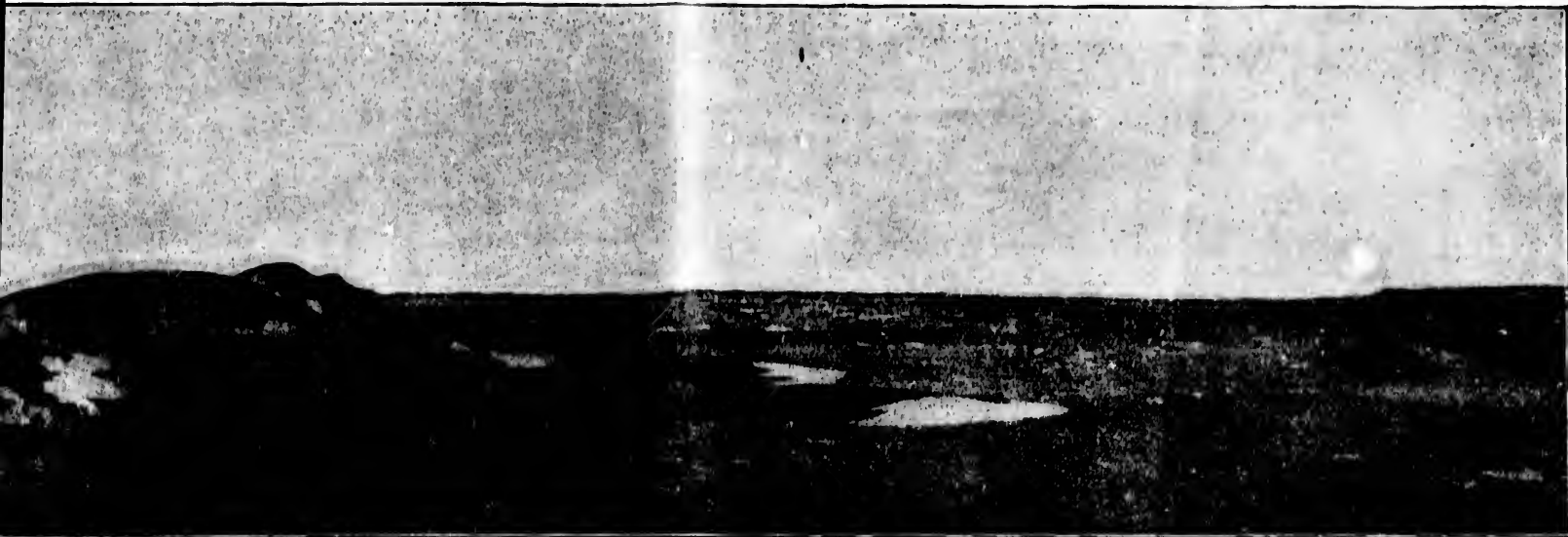


PANORAMA OF SITE OF THE
Looking Eastward

SAVIKSOAH MT.

MELVILLE BAY

SITE OF "AHNIGHITO"



SAVIKSOAH BAY

METEORITE ISLAND

SITE OF THE "SAVIKSUE"

Looking Eastward

558 Northward over the "Great Ice"

feet high. This wall is continuous except at the eastern angle of the cove, where a narrow, gently sloping valley opens. Proceeding up this valley for a few hundred yards, one finds oneself on the divide of a narrow isthmus separating the bay already men-

valleys and on the northward slopes the drifts remain eternally. A large portion of the ice and bergs of Melville Bay pass close along this coast in their slow drift westward toward the southerly current of Smith Sound. Consequently the shore is beset with ice during about eleven months of even the most favourable

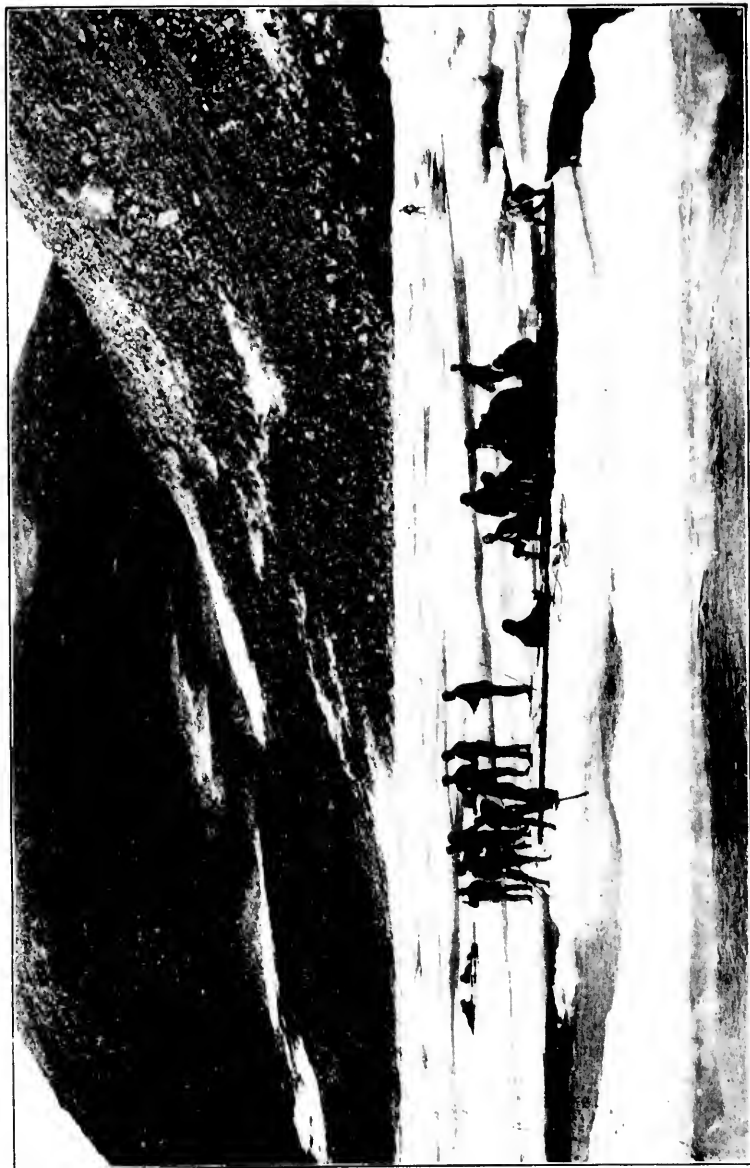
The "Saviksue" or Cape-York Meteorites 559

years, and the slightest increase in the severity of a season beyond the normal, results in the coast being completely blockaded and rendered inaccessible throughout the entire year.

The historical data to be obtained from the natives in regard to the meteorites is rather scanty. According to them the "Saviksue" (great irons) have been where I discovered them from time immemorial; but they were originally an Innuït woman and her dog and tent hurled from the sky by Tornarsuk (the Evil Spirit). They say that at first the "woman" was in shape like a woman seated and sewing, but that the constant chipping off of fragments through successive ages has gradually removed the upper portion of her body and reduced her size one-half or one-third. Years ago her head became detached and a party of Eskimos from Peterahwik or Etah (settlements north of Whale Sound) attempted to carry it away, actuated probably by the desire to have a supply of the precious metal more convenient, and save themselves the long and arduous journey to Cape York and into Melville Bay, when they needed to replenish their stock of iron. The head



METEORITE ISLAND, FROM TOP OF SAVIKSOAH MOUNTAIN.



THE ICE FERRY-BOAT.

The "Saviksue" or Cape-York Meteorites 561

was lashed upon a sledge and the party started for their home, but when well out from the shore the sea ice suddenly broke up with a loud noise, and the head disappeared beneath the water, dragging down with it the sledge and dogs. The Eskimos themselves narrowly escaped with their lives, and since that time no attempt has been made to carry away any but the smallest fragments of the heavenly woman.

This mass is the one from which all the ancient iron supply of this people was obtained, and the supposed statement of the natives to Captain Ross that one mass was composed principally



THE "DOG."

of a black rock containing iron in the shape of small nodules imbedded in it, was a misinterpretation. The hard, dark rock mentioned by the natives, a piece of which they gave Ross, was a piece of one of the trap-cobbles used in hammering off flakes of the iron, and not a portion of the rocky matrix enclosing the metal. For several generations, probably from the time of the wintering of the *North Star* or possibly earlier, no use has been made of the iron of these meteorites by the natives; they obtaining their scant supply of knives from the whalers and expedition ships visiting their coast or beset in the ice off Cape York.



HAULING THE "DOG" OVER THE ROCKS.

SECURING "WOMAN" AND
"DOG" IN 1895.

In spite of my previous unsuccessful attempts to revisit the meteorites the effort was not given up, and finally late in August, 1895, I rounded Cape York in the steamer *Kite*, which had been sent by Mrs. Peary to bring me and my two companions home, and finding Melville Bay comparatively free from ice, every possible pound of steam was crowded on and the *Kite* pushed eastward at her utmost speed in order to reach the vicinity of the meteorites before a change of wind should shut the door in my face.

As we penetrated mile after mile into the icy fastnesses of Melville Bay without finding our progress barred by ice, my hopes began to rise, only to be dashed again when we entered Saviksoah Bay and saw the previous winter's ice stretching entirely across it. It looked as if even after getting thus far I was yet to be stopped several miles away from the objects of my visit. From the masthead a narrow lead of open water was detected penetrating the bay, and following this lead to its end, then ramming the *Kite* her length into the edge of

The "Saviksue" or Cape-York Meteorites 563

the floe, the ice-hooks were put out and the ship made fast a mile from the shore.

No sooner was this done than, with Diebitsch and Bartlett each armed with a boat-hook to assist in crossing the leads and pools of water which interrupted the surface of the ice in every direction, I climbed over the side of the *Kite*, crossed the ice, reached the ice-foot at the head of the bay, and, passing up the little valley, stood once more beside the great heaven-born mass, from which a little more than a year before I had removed the deep covering of the winter's snows.

With the snow now melted away from the "woman" and her surroundings, it was possible to obtain a clear idea of the difficulties incident to transporting the mass to the ship. I was encouraged to find the meteorite was not larger than I had first estimated it to be (about 5500 lbs.), my excavation of the previous year having determined its maximum dimensions. The continued existence of a large drift of compacted snow and ice in the little valley between it and the head of the bay was also a valuable point in our favour. Yet the several hundred feet of distance intervening between the



ACROSS THE BAY ICE.

meteorite and the upper end of this drift, thickly covered with large gneissose boulders, and the wide lane of open water separating the ice in the bay from the shore at the mouth of the valley, presented difficulties which I could see would require all our resources to overcome.

The next day, Diebitsch began work with the ship's crew and the Eskimos; the "woman" was lifted out of her bed with jacks, and a rough sledge of spruce poles made for the "dog." On the second day, the "woman" was blocked up ready for transportation, and the "dog" rolled upon its sledge and dragged by the combined force of the ship's crew and my native allies over the boulders and down the snow-drifts to the shore; then ferried



MOVING THE "WOMAN" ON ROLLERS.

across the open water upon a cake of ice, and finally hauled for a distance of about a mile over the surface of the ice in the bay to the ship's side, where it was hoisted on board and deposited in the hold.

On the third day a heavy timber drag was constructed for the "woman," upon which she was placed and secured, then slowly transported upon iron rollers over a plank tramway laid along a rude road-bed, roughly graded by my Eskimos with the abundance of stones in the vicinity. In this way the meteorite was brought to the upper end of the snow-drift. Then after midnight, when the surface of this drift was frozen firmly, it

The "Saviksue" or Cape-York Meteorites 565

was moved down to the shore, where a huge cake of ice, 40 ft. long by 20 ft. wide by 7 ft. thick, had been securely moored to receive it. Upon this novel ferry-boat it was floated across the open water to the bay ice, and into a dock cut to receive it. Once on the bay ice, progress was continued upon rollers running on a plank tramway until within half a mile from the ship, when the work was expedited by splicing all spare ropes together and carrying them out from the ship, using the winch for tractive power. As soon as the prize was alongside, all possible speed was made in hooking on to it with the ship's tackles and purchases ; but before this could be completed the



"KITE" DOCKED IN THE ICE.

ice gave way under the great weight, leaving the meteorite only partially secured. Fortunately, the lines and chains already fastened to it were strong enough to hold, though insufficient to lift it, and finally, although nearly submerged by the listing of the *Kite* under the unbalanced load, additional lines were attached and the meteorite slowly warped up to the rail and swung inboard. Everyone breathed a sigh of relief when the sulky giant was safely deposited in the hold.

The work of transporting and embarking these two masses was engineered entirely by Diebitsch, and was accomplished by him in a most able and effective manner.

While this work on the two smaller meteorites was progressing,

566 Northward over the "Great Ice"

the big one out on the island was visited and partially excavated with a view to getting an idea of its size and weight.

A portion of it about four feet long by two feet high by one and one-half feet wide, projected above the scant turf and moss on the crest of a terrace on the eastern side of Meteorite Island, eighty feet above, and some three hundred yards distant from high-water mark. The excavation developed that this projection was in the nature of a dorsal fin, rising from nearly a flat table about twelve feet long and eight feet wide, tapering at one end



THE "TENT" OR "AHNIGHITO" IN SITU.

to a point or tail. The excavation, although carried down over three feet at this time, did not discover the depth of the mass, which was evidently considerable.

Two ten-ton screw-jacks which I applied together under one end and forced to the point of crippling without disturbing the monster, showed that not only our appliances but the ship itself were entirely inadequate for handling and transporting such a huge mass and concentrated weight, which I estimated at one hundred tons. Four days were then devoted to an attempt to



THE "SAVIKSOAH" AS LEFT IN 1896.
Signal Mountain in the background.

568 Northward over the "Great Ice"

break off the point already noted, by drilling holes close together and driving in taper bolts. The toughness of the metal rendered the effort abortive, and the rapid formation of heavy young ice then compelled the retreat of the *Kite* to escape being frozen in for the winter.

With the two meteorites safely on board, the *Kite* proceeded to Cape York and thence to St. John's, Newfoundland, in safety, though the presence of these unusual masses of iron affected our compasses to such an extent that, whenever thick or stormy weather compelled us for any length of time to depend upon our dead reckoning, it was found impossible to keep on our course.

From St. John's, Newfoundland, the meteorites were transported by steamer to New York.

WORK ON "AHNIGHITO" IN 1896.

Determined to secure the giant, I chartered a larger ship, the *Hope*, of 307 tons net register, and went north in July of 1896 with more powerful appliances on board, reaching Cape York August 9th.¹ The ice in Melville Bay being not yet broken up, I put in two weeks north of Cape York, returning there the 22d of August.

The stop at Cape York was only long enough for me to take on board all the able-bodied men of the village, when the *Hope* continued on her course eastward across Cape-York Bay, and so on to Saviksoah Bay and the eastern side of Meteorite Island, where we arrived shortly before noon. Before we reached the natural pier just below the meteorite, its dark-bronze crest could be seen on the top of the terrace, peering out from the debris of last year's excavation. A barrier of ice-pans packed close against the shore delayed us somewhat in getting in; but outside of this was a narrow lane of open water, and beyond this again a chain of grounded icebergs, holding the still unbroken ice of Melville Bay in check.

My full force of Eskimos was set to work at once with pick and shovel, clearing away about the meteorite, and by supper-time the brown monster stood out in all its immensity as to length and breadth, though its depth was still indeterminate. From this time on during ten days, the work on the meteorite was continued

¹ On this voyage the following gentlemen accompanied me: Prof. A. E. Burton in charge of a party composed of Professor Barton, Assistant Putnam, of the U. S. Coast Survey, and Messrs. Dodge, Phillips, and Porter; Prof. R. S. Tarr in charge of a party composed of Professor Gill and Messrs. Martin, Bonesteel, and Watson; Mr. Benj. Hoppin with his companion Mr. Sutherland and their steward. My personal party consisted of Albert Opetti, artist, Hugh Lee, Mr. Figgins, naturalist, and Matthew Henson.

Professor Burton and his party were landed at Umanak, Professor Tarr and party at Wilcox Head.

The "Saviksue" or Cape-York Meteorites 569

night and day. The Captain and the ship's complement took the day watch, and I, with Lee, Henson, and my Eskimos, took the night.

The first thing to be done was to tear the heavenly visitor from its frozen bed of centuries, and as it rose slowly inch by inch under the resistless lift of the hydraulic jacks, gradually displaying its ponderous sides, it grew upon us as Niagara grows upon the observer, and there was not one of us unimpressed by the enormousness of this lump of metal. The expressions of the Eskimos about the "Saviksoah" (the great iron) were low but earnest, and it, and the other wonderful great irons (the jacks) which could tear it from its bed, awed them to the utmost.¹



CARRYING THE HUNDRED-TON JACK.

Sliding the meteorite upon steel rails laid upon heavy timbers across the few yards intervening between it and the crest of the hill, it was then rolled down the slope to the natural rock-pier.

It was interesting, though irritating, to watch the stubbornness of the monster as it sulked and hung back to the last inch. Under the strain of the two powerful chain blocks which transformed the wire cable and the big chain straps into rigid bars of steel, and urged by the resistless lift of the jacks, the huge brown mass

¹ In this work my sixty-ton jack, a second-hand affair, gave out after the first lift, and, as I had no appliances for repairing it, it remained useless from this time on, depriving me of nearly one-third of my total power.

would slowly and stubbornly rise on its side, and be forced to a position of unstable equilibrium; then everyone, except the men at the chain blocks down at the foot of the hill, would stand aside. A few more pulls on these, then cable and the chain straps would slacken, the top of the meteorite would move almost imperceptibly forward, the stones under the edge of revolution would begin to splinter and crumble, then, amidst the shouts of the natives and our own suppressed breathing, the "Iron Mountain" would roll over. When it struck the ground the harder rocks would



ROAD FOR THE METEORITE.

of the terms "momentum" and "inertia" so powerfully brought home to me, as in handling this mountain of iron. No pur-

elicit streams of sparks from its brown surface before they crumbled, the softer ones would dissolve into dust and smoke, and the giant would bury itself half its depth in the earth with the slow, resistless motion of a hydraulic punch cutting cold iron, then lunge suddenly forward a few feet, throwing up a dam of earth and stones before it like the terminal moraine of a glacier.

Arrived at the bottom of the slope, the meteorite was again lifted upon the rails and timbers, and slowly and laboriously pushed forward towards the edge of the pier.

Never have I had the terrific majesty of the force of gravity and the meaning

The "Saviksue" or Cape-York Meteorites 571

chase or appliance which we could bring to bear upon it, outside of the jacks, made the slightest impression upon it. When lowered slowly upon heavy timber blocking by the jacks, it settled resistlessly into the wood until it seemed as if it would never stop. The timber creaked and groaned in every fibre, and in the immediate vicinity of the pressure its structure was entirely destroyed and it became a mass of incoherent fibres. If the meteorite slipped and fell even for half an inch, as it frequently would, in spite of every precaution, it would bite into the steel rails like a punch, and the rail itself would sink into the



AFTER A HALF-REVOLUTION.

timber beneath, if near the middle, or crush through it if near the end. The inherent deviltry of inanimate objects was never more strikingly illustrated than in this monster. Had the matter been a subject of study for weeks by the celestial forge-master, I doubt if any shape could have been devised that would have been any more completely ill suited for handling in any way, either rolling or sliding or lifting.

The difficulties in getting a hold on it were also great. The shallowness of the conchoidal depressions on the surface left but few places where a jack could be applied. Even where it was possible to get a grip with the head of the jack, the hardness of the

metal, combined with the excessive pressure, and the shifting angle of contact between the jack and the surface of the meteorite, as the latter changed its position, necessitated following the mass up closely with block and wedges, so that if the head of the jack, like a melon-seed pressed between thumb and finger, flew out with serious risk to adjacent legs and arms, the meteorite could not fall back. In spite of every precaution, however, this sometimes happened, and I have a half-inch steel link on which the meteorite fell a distance of perhaps an inch, which is flattened as if it were so much lead. These terrific blows were too much for my two thirty-ton jacks, which, owing to the failure of the sixty-ton one, had been constantly working beyond their capacity, and they gradually gave out, until at last I had only the unwieldy hundred-ton one left. Then progress became so slow that before I could get the meteorite close to the edge of the pier a furious south-easter broke up my iceberg barrier, and the pack ice of Melville Bay driving in upon the shore forced us to pull the ship out with haste to avoid having her crushed like an eggshell against the rocks.

During all this time it was an impressive sight to see the *Hope* lying quietly beside the natural rock-pier, with her mooring lines out, waiting for her cargo as if at home, yet everywhere about her a wilderness of ice and bergs and savage snow-capped mountains.

During the first of our stay here the weather was clear, and there was light enough for us to work continuously through the night. Then it came on much colder, and the young ice began to form and increase rapidly in thickness. The effect of the drop in temperature upon the fleet of Melville-Bay icebergs outside of us was startling. Throughout one brilliant biting night, the crash and roar of their convulsions was almost continuous, and the huge swells caused by their foundering kept the *Hope* tossing and surging heavily at her moorings. Sunrise on such a morning was a magnificent spectacle, the yellow disk of the sun rising from behind the savage peaks which mark the line of the heart of Melville Bay, and painting the slopes of the eternal ice-cap above us an exquisite pink. Then this clear cold weather gave way to a few days and nights of fog and snow, followed by the south-easter already mentioned. The fog and storm, combined with the rapidly shortening autumn days, made it too dark to work at night.

There were many incidents of the work to suggest the supernatural even to the most prosaic mind. The dogged sullen obstinacy and enormous inertia of the giant against being

The "Saviksue" or Cape-York Meteorites 573

moved ; its utter contempt and disregard of all attempts to guide or control it when once in motion ; and the remorseless way in which it destroyed everything opposed to it, seemed demoniac.

I remember one particularly striking occasion. It was the last night of our stay at the island,—a night of such savage wildness as is possible only in the Arctic regions. In spite of the driving storm, it kept artist Operti running up out of the warmth and light of the cabin, upon the snow-covered deck, to feast his



TWO OF MY HYDRAULIC JACKS.

eyes upon the scene. The wild gale was howling out of the depth of Melville Bay through the *Hope's* rigging, and the snow was driving in horizontal lines. The white slopes of the hill down which the meteorite had been brought, showed a ghastly grey through the darkness ; the fire, round which the fur-clad forms of the Eskimos were grouped, spread its bright red glare for a short distance ; a little to one side was a faint glow of light through the skin wall of a solitary tupik. Working about the meteorite

was my own little party, and in the foreground the central figure, the *raison d'être* of it all, the "Saviksoah," the "Iron Mountain," towering above the human figures about it, and standing out black and uncompromising. While everything else was buried in the snow, the "Saviksoah" was unaffected. The great flakes vanished as they touched it, and the effect was very impressive. It was as if the giant were saying: "I am apart from all this, I am heaven-born, and still carry in my heart some of the warmth of those long-gone days before I was hurled upon this frozen desert." To strengthen this fancy that the meteorite still held some of its celestial fire and feeling, if a sledge, ill aimed in the darkness at wedge or block, chanced to strike it, a spouting jet of scintillating sparks lit the gloom, and a deep note, sonorous as a bell, a polar tocsin, or the half-pained, half-enraged bellow of a lost soul, answered the blow.

Through all this time of labour and exposure, my Eskimo allies worked faithfully and contentedly, sleeping between decks when they could find time. They assisted in every possible way, and never interposed the slightest objection to my removal of their heavenly guest,—in fact, seemed almost as disappointed as I when the insweeping ice compelled me to give up my prize till another time.

As soon as the *Hope* was free of the ice, she steamed into the little bight where the *Kite* had lain to embark the two smaller meteorites the previous summer, and the anchor was dropped till daylight and the cessation of the storm should enable us to see our way back to Cape York. From Cape York the voyage was continued home and Sydney, C. B., reached late in September.

SECURING "AHNIGHITO" IN 1897.

Disappointed, but not discouraged by my non-success in embarking the meteorite, I again put on board the *Hope* in 1897, when I went north in her to communicate with my Eskimos, powerful appliances with the view of giving the giant another fight if the Melville-Bay ice would permit me to get near him.¹

¹ On this 1897 voyage the following gentlemen accompanied me: Prof. Schuchert of the National Museum, with his party, consisting of Prof. White and Mr. Stickney, Mr. Robert Stein, of the U. S. Geological Survey; Mr. Porter with his party, consisting of Dr. Fitzgerald, his son, Messrs White, Goodrich, Shaw, Boal, and Carpenter. Mr. Jensen, the Dane whom I brought to this country in 1896, returned to his station at Cape Haven. My own party consisted of Mrs. Peary, our little girl Ahnighito with her nurse, artist Operti, Mr. Perry, my young friends Arthur Moore and Lansing Baldwin, Dr. Fred. Sohon, Mr. Figgins, naturalist, and Matthew Henson. Hugh Lee with his bride spent their honeymoon at Godhavn. Mr. Porter and party were landed at Cape Haven, Prof. Schuchert and party at Umanak, and Mr. Stein at Nugsuak.

The "Saviksue" or Cape-York Meteorites 575

Arriving at Cape York the 12th of August, the ice conditions of Melville Bay were found to be favourable to an immediate approach to the meteorite, and instant advantage was taken of these conditions to force the *Hope* again to her berth alongside the natural rock-pier on Meteorite Island.

My ten days' work on the "Saviksoah" in 1896 had given me a very thorough acquaintance with its peculiarities and perversities, and had emphasised to me the full meaning of its concentrated weight, its intractable shape, and its almost resistless inertia.



THE METEORITE ON MY RETURN IN 1897.

I felt, however, the utmost confidence that the equipment that I had brought with me, the powerful hydraulic jacks, the magnificent oak timbers (the best that could be bought), the heavy steel rails, the bolts, chains, and tools of various kinds, all of the best quality, would enable me to bring it safely on board, provided the hostile Arctic ice would allow me to get near it.

This year as I neared the locality again the outlook was at first disheartening. There was much less open water and double the number of bergs that I had found last year, but, much to my relief, by butting a passage through two or three icy barriers, and after grounding twice from being forced to the shore by the ice, the *Hope* was brought alongside the natural rock-pier where I had left the meteorite a year before.

In spite of this good fortune, the ship's position and surroundings were such as to cause disquietude even in the mind of a man who had seen some Arctic experience, and to a novice were discouraging to the verge of fear. The rocky shore to which the ship was made fast lay fully exposed and absolutely unprotected against the resistless pressure of the Melville-Bay ice-pack under the stress of south-east winds: the open water through which we had crept close along the shore was scarcely more than a ship's length in width, was already coated with young ice, and outside of it lay an indescribable labyrinth of icebergs, through which even the practised eye could not discover an opening. To add to the dismal outlook and the mental unrest of many on board, we forged alongside the meteorite in a driving snow-storm that twelve hours later had covered our little world a foot deep in snow, and formed upon the water a thick covering of slush, which forty-eight hours of severe cold would transform into unbreakable fetters for the *Hope*. No one who was not present can form any idea of the savageness and hostile aspect of the scene. There were good reasons for the belief that the Arctic winter had already set in.

Fortunately the natural features of the shore, at the site of the meteorite, were uniquely favourable for getting it on board the ship, and my previous summer's work had left the huge mass close to the edge of the natural rock-pier, with sufficient depth of water alongside to allow the ship to be brought within about eighteen feet of the shore.

I proposed to construct a very strong bridge, reaching from the shore across the ship; lay the heaviest steel rails upon this, and then, after depositing the meteorite upon a massive timber car resting upon these rails, slide the huge mass across the bridge until it rested directly over the main hatch; remove the bridge; then lower the meteorite with my hydraulic jacks through the hatchway to the ship's hold.

This was simple enough in theory, yet when such an enormous and concentrated mass is concerned, every detail of construction must be of the most massive character, and every detail of manipulation studied with the utmost care.

The transferring of such an enormous weight from the unyielding support of the shore to the yielding and continuously changing support of the ship, with the shifting and complicated strains resulting from the rise and fall of the tide, the varying displacement of the ship with the increasing load, and her listing with the unbalanced weight as it came upon her rail, all demanded the most careful thought and study.



THE "HOPE" AT METEORITE ISLAND, AUGUST 17, 1897.

The first thing was to prepare the ship for receiving her ponderous and unusual freight, so as to insure against the possibility of any mishap, and cause as little strain and reduction of her stability as might be.

To accomplish this, all the coal remaining amidships was hoisted out and put in the bunkers ; heavy oak timbers laid fore and aft on either side of the keelson ; then the entire amidships space filled with coarse, heavy ballast up to the deck beams, and in the centre, directly under the main hatch, some two feet higher. The 'tween-deck beams were carefully wedged and blocked up upon this ballast, and the main deck throughout the ship's waist supported from them by a small forest of twelve-inch posts kept in position by systems of horizontal struts and braces.

The object of the ballast was to increase the inertia and stability of the ship ; absorb and distribute the shock in case, through any mishap, the meteorite should be allowed to drop ; and finally to serve as a firm bed and matrix for the enormous mass during the homeward journey. The posts were to enable the deck to sustain the great load while in transit without collapsing, and also form a rectangular shaft downward from the main hatch, so that the meteorite would be compelled to descend into the hold without the possibility of shifting laterally.

This work accomplished below decks, an almost continuous floor of heavy timber was laid on deck, so as to distribute the weight of the meteorite and bridge over some twenty-five feet of the ship's length.

With the exception of a few minor details to be noted later, and the secure mooring of the ship to the rocks with all her cables and hawsers, this completed the preparation of the ship.

The backbone of my bridge consisted of two royal sticks of fourteen-inch by sixteen-inch white oak, sixty feet long, straight-grained, tough, and well seasoned, which were to span the gap between the ship and the shore, reach well under the meteorite at one end, and across the ship at the other.

A third stick of timber twelve by twelve inches and thirty inches long, re-enforced these in the span from the ship to the shore, and the whole was bound rigidly together by heavy timber cross-heads and spreaders, bolted through and through by powerful screw bolts of the best Swedish iron.

The inshore end of this bridge rested continuously upon the rocks and gravel. The shipboard end was almost continuously supported by the heavy timbers on deck. The span from the ship to the shore was re-enforced and strongly trussed with the ship's steel-wire cable and posts of twelve-inch timbers.

The "Saviksue" or Cape-York Meteorites 579

The work of preparing the ship had been entrusted to Captain Bartlett, and had been effected in the most thorough and seaman-like manner. The assembling of the bridge had been done by the engineer force under Chief Hunter, and the setting up of the steel cable of the truss I had assigned to Mr. Taylor, the first mate, a thoroughly practical seaman, who had accomplished it in a most effective manner. My faithful Eskimos were useful wherever any lifting had to be done, and the gentlemen members of the party, in their interest and enthusiasm, lent a hand whenever they could see a chance.



CAPTAIN JOHN BARTLETT.

The assembling of the bridge had of necessity to be done in place, as the big oak timbers weighed some three tons each, and the completed structure would be too heavy for the ship's tackle to handle. These were launched separately under the meteorite, which had previously been raised for the purpose, and supported upon blocks at each extreme end.

Scarcely had they been so placed and the work of assembling commenced, when a huge iceberg in the labyrinth outside of us went to pieces, sending a succession of heavy swells in upon the shore. On these the *Hope* rolled and danced like a cork, jerking

580 Northward over the "Great Ice"

viciously at her moorings and keeping me in a fever of anxiety during minutes which seemed like hours, knowing as I did if one of the lines parted, the great timbers, with one end still resting upon the *Hope's* heaving deck, would act as irresistible levers to pry the blocks from under the meteorite and let it topple over the edge of the pier into the water. It was with the utmost relief that I saw the swells gradually subside, and yet the occurrence kept me in a state of apprehension for the next forty-eight hours, until I had the meteorite firmly mounted upon its car and resting its full weight upon the inshore end of the bridge.

The same thing might again occur at any moment, and I remem-



THE MASONIC GROUP.

Figgins, Peary, Bartlett, Hunter, Operti.

bered with unpleasant vividness an entire night last year during which the *Hope* tossed and tugged at her lines like a wild animal, upon the continuous swells caused by the disrupted icebergs about her.

Previous to launching the timbers to the shore, the edge of the pier had been carefully levelled and a heavy timber bridge seat laid upon it. The earth and rock back of this had been graded and tamped to afford a firm bearing.

The assembling of the bridge, and the stringing of the cable truss completed, the thirty-foot standard steel rails of the New York, New Haven, and Hartford R. R., weighing one hundred



LAUNCHING THE "AHNIGHITO" ON BOARD.

582 Northward over the "Great Ice"

pounds to the yard, were hoisted out and laid in pairs, side by side, on each of the oak timbers, with their inshore ends coming just through under the meteorite, and the other ends coming just in-board of the *Hope's* starboard rail. Two fifteen-foot lengths of rail continued the track across the main hatch, and then all were fastened down with numerous spikes.

The massive timber car, clamped together like the bridge, by heavy screw bolts, and sheathed underneath with steel plates, was then hoisted upon the rails, and pushed out against the meteorite; some of the timbers were removed; the front of



CROSSING THE BRIDGE.

the meteorite jacked up till the half of the car could be forced under it; then this part lowered, the rear raised, the other timbers of the car placed in position, and the car bolted firmly together again, then the meteorite was finally lowered to its position on the car.

As the plungers of the powerful jacks retreated into their casings upon the opening of the valves, transferring the mighty weight entirely to the car, every projection on the underneath side of the meteorite buried itself in the solid timber, the joints closed up till almost invisible, every inequality in the steel sheathing beneath the car flattened out, the bases of the rails

The "Saviksue" or Cape-York Meteorites 583

sank perceptibly into the oak stringers, and the earth and gravel beneath these, settled and compressed into rock-like solidity.

Then the monster was lashed to the car by fathom after fathom and turn after turn of steel chains, tightened by oak wedges, until it and the car were inseparable.

The next thing was to adjust the ship in precisely the right position, with the bridge centred, to an inch, over the main hatch, for the opening of the hatch was scarcely large enough to admit the meteorite, and the least error in the position of it, and the car, when it came in over the hatch, would necessitate much trouble in shifting it. By careful manipulation of the cables to the anchors, and the stern and bow lines and springs, which were



THE ESKIMOS' FAREWELL TO THE "SAVIKSOAH."

made fast to the rocks ashore, the *Hepe* was finally adjusted to a nicety, the shipboard end of the bridge lashed down to eye-bolts in the deck and down on the starboard side, then cables and mooring lines were all set taut and carefully stopped.

While this was being done, a ten- or fifteen-ton counterpoise was being loaded on the inshore end of the bridge behind the meteorite, with the old timbers and rails of last year for a platform, and big gneissose boulders for weights.

The ship's heaviest tackles were then attached to the car, and the ends carried to the drums of the steam winch. The hydraulic jacks were also placed in position behind the car, with their bases working against the heavy cross-head.

Nothing remained now but to clear the *Hope's* waist of everything, except tools and materials needed while bringing the meteorite on board, slush the rails with a thick mixture of tallow and soap, then await the proper stage of the tide, start the huge mass with the jacks, and warp it inboard with the tackles, if they could handle it, or, if not, jack it the entire distance.

This matter of the tide was an extremely important one, and I am indebted to my young assistants, Arthur Moore and Lansing Baldwin, for their assiduous, hourly readings of the tide through storm and darkness, and plotting the tidal curves from the time the *Hope* came alongside the meteorite, so that now I knew to a nicety at just what time the tide would serve me.

At last the tide was right, and while Mrs. Peary and Captain Bartlett, at the levers of the jacks, started the monster, draped in "Old Glory," toward the ship, the baby dashed a little bottle of wine against it and named it "Ahnighito." Then the jacks, manned by the engine-room force, pushed it steadily forward to the edge of the pier.

Every man on board had his station and knew his work. The Captain had charge of the winch and tackles, the chief engineer of the jacks, and men were stationed at the lashings to slush the rails, etc., while I kept an eye on everything.

As the jacks moved the meteorite to the edge of the pier, the winch started, setting the heavy tackles taut, and the huge monster, in a series of short jumps, crept out upon the bridge.

At this moment, every Eskimo on board went over the stern gangplank to the shore. With all their confidence in me, and their awe for the size and power of the ship, which they had repeatedly seen smashing her way through the pack ice, and even battering pieces off the bergs themselves when they opposed her, they could not overcome a superstitious fear that the mountainous weight of the "heaven stone" would crush the *oomiaksoah* (ship), and they preferred to say farewell to it from the shore.

When the meteorite reached the centre of the bridge, a master might have played a grand march with the tense strands of the steel cable for violin strings. When it reached the rail, the *Hope* began to careen, but not seriously, and the men stationed at the lashings took in every inch of slack the moment it appeared.

In an hour from the time it started, a motion of my hand stopped the winch with the meteorite precisely over the main hatch. Three cheers went up from everyone on ship and ashore, and the glorious Stars and Stripes and the ship's flags went flying to the mastheads.

As matters now stood, the *Hope* was heeling toward the shore,

The "Saviksue" or Cape-York Meteorites 585

and the bridge had a pronounced gradient. The next step was to get the bridge out of the way. This had already been provided for. Two of the jacks were brought on board, pumped up to their full height, placed on the deck timbers under each of the oak stringers just inboard of the rail joints, then the cross-cut saws were brought into requisition, inserted in the rail joints intentionally left open, and the bridge sawed clear through some three feet inside the *Hope's* rail.

As the saw passed nearly through the last timber, a long crack

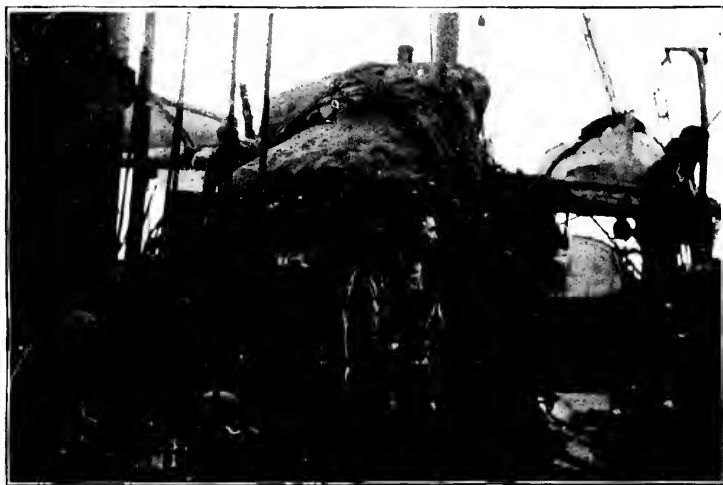


A MOMENTARY HITCH.

split out into each part, and Mr. Figgins, the naturalist, seizing a broad axe, jumped upon the rail, and with a blow or two severed the last connection of the "great iron" with the land. After years of rest it was to resume its wanderings.

I had anticipated that the *Hope* would right herself suddenly when the bridge was severed, with something in the nature of a kick, but had endeavoured to provide against it as much as possible. Fortunately these precautions were successful. As the saws went through, the *Hope* righted herself slowly and quietly to an even keel, and the heavy stone counterpoise ashore

held the severed bridge projecting like a cantilever. The valves of the jacks were opened, and the portion of the bridge under the meteorite sank till it rested true and level across the ship's waist. It was now six p.m., of Friday, August 20th. We had been engaged upon the meteorite five days, working throughout the entire day and much of the night, and during this entire time, from the moment the *Hope* came alongside the meteorite in a blinding storm, it had been one constant succession of fog and driving snow. This not only retarded the work very seriously, but had a pronounced dampening effect upon the spirits of the men, particularly the superstitious sailors, some of whom had been



"STOP THE WINCH!"

with me last year and called this regular meteorite weather. They insisted that the brown monster was hoodooed, that I would never get it on board, or if I did we should never get it home, as it would surely take the ship to the bottom. These same ones were in the habit daily of looking over the rail at the labyrinth of bergs about us, and the steadily forming young ice, and prophesying that even if the meteorite did not smash the ship in coming aboard, we should certainly be frozen in and have to spend the winter here.

Under the circumstances I could certainly almost forgive their associating supernatural agencies with the meteorite, and it was a strange but actual and unexaggerated fact that, as the great

The "Saviksue" or Cape-York Meteorites 587

mass crept slowly over the bridge and across the ship's rail, patches of blue sky appeared overhead ; and when at last it rested safely over the main hatch, the last tie which bound it to the land completely severed, the horizontal rays of the low mid-night sun burst past the cliffs of Signal Mountain, fell upon the meteorite, changing it into molten bronze, flooded the countless icebergs east of us in light, and bathed the ragged black crests and flowing ice-domes of Innahlooksoah and Nahgloktoo, the savage mountains of Prince Regent's Bay, in unspeakable tints of rose and



METEORITE IN THE HATCH COMBINGS.

yellow. It was as if the demon of the "Saviksoah" had fought a losing fight, accepted the result, and yielded gracefully.

The congratulations that evening in the cabin of the *Hope* were numerous and earnest.

By the middle of the next afternoon the car was lowered into the hatch combings, and in a safe position for the ship to steam in smooth water, which we were certain to have in this region with all the icebergs about us. At five o'clock, the last lines were cast off, and the *Hope* steamed away for the last time from the shore of Meteorite Island.

Throughout the forenoon and early part of the afternoon, it



RAMMING THE ICEBERG BARRIER.

The "Saviksue" or Cape-York Meteorites 589

had been snowing again, and my superstitious sailors said that we should never have clear weather until the hatches covered the brown demon crouching amidships completely from the light of day. As we started, it cleared, however, and offered a striking contrast to last year, when in a driving south-easter I swung away from the same place in feverish haste, in order to escape having the ship crushed by the resistless Melville-Bay ice-pack, leaving the big brown demon perched derisively upon the shore. Now the persistence of three years had won, and at last I had the prize on board.

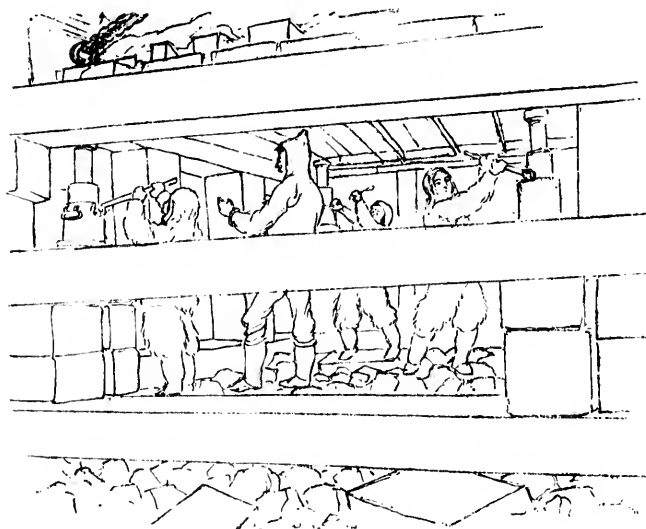
Yet my risks and uncertainties were not yet ended. During our



MY ESKIMO LABOURERS.

stay at Meteorite Island, the young ice had formed in every interval of calm, the last day's snow-storm had cemented everything with a thick leathery stratum of slush, and the almost continuous south-easterly wind had been steadily compacting the icebergs and forcing them nearer and nearer to the shore. Just before starting, Captain Bartlett and myself reconnoitred the bay from the top of the island, and saw that there was but one practicable route of escape, and even by that we should be obliged to force a barrier of bergs. A short distance from the shore of the island, we entered a lead formed by the tide, and soon reached the barrier which separated us from comparatively open water. This barrier, though narrow, was formidable, made up entirely of bergs

and heavy berg-fragments. At first we tried to squeeze through, but without success. It was evident we must ram a passage in spite of our ugly load. Additional timber-braces were hurriedly put about the meteorite, and it was with considerable anxiety that I watched the effect of the first blow, as the Captain from the foretop conned the rushing ship straight at the keystone of the barrier. As the bow struck the ice, it rose upon it with a harsh grating lift, and then with a crash and quiver the *Hope* came to a dead stop. The meteorite trembled, and the ballast underneath



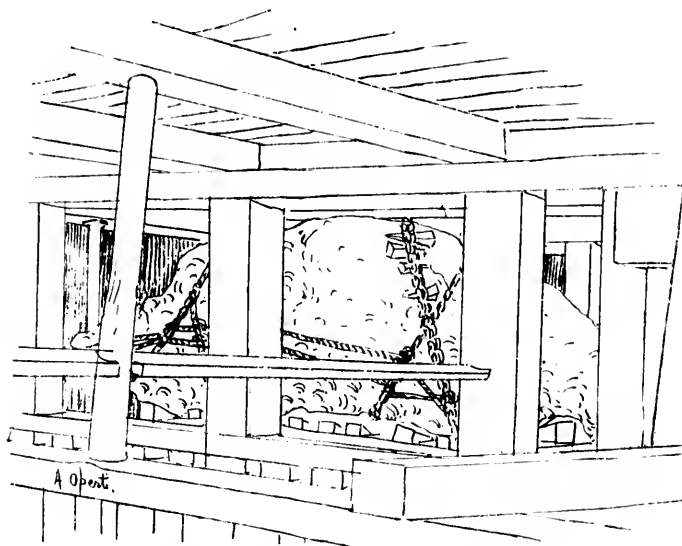
WORKING UNDER THE METEORITE.

groaned and settled slightly, but no serious results followed, and as there was no alternative, the engines were reversed, and we backed out for another blow. Blow after blow was delivered, big pieces of ice were broken off and sucked out by the draught of the ship's backing, till at last the massive wedge of the *Hope's* iron-clad bow could be entered between the last two bergs of the barrier, and, with engines going at full speed, gradually forced them apart. The entire engine-room force was stoking like demons, black smoke poured in clouds from the *Hope's* funnel, the propeller was whirling at ninety revolutions per minute, and the

The "Saviksue" or Cape-York Meteorites 591

Hope herself was pulsating like a human heart. Inch by inch we squeezed between the frozen blue rocks on each side, rasping the iron bark sheathing from stem to stern, and as the sternpost cleared the bergs, the flying propeller-blades struck once or twice, sending throughout the ship a resonant clangour, fierce as the bellow of fire bells on a winter's night. It was our pæan of escape.

Looking back over the *Hope's* wake I saw the bergs between which we had squeezed swing slowly together again. The icy

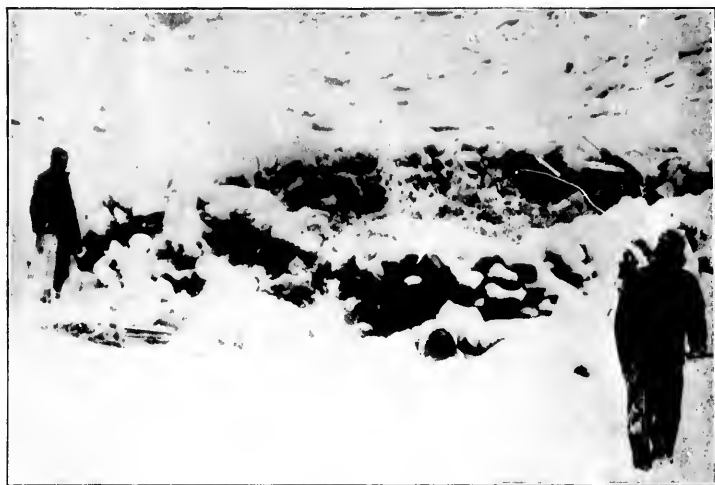


METEORITE AT 'TWEEN-DECKS LEVEL.

cordon of Meteorite Island had closed for the winter, but the treasure of the island, the celestial prisoner, had escaped, and now was throbbing there amidships, as it had never throbbed since that cataclysmic day when it hummed through the burning air, and shook land and sea with the frightful fury of its impact.

Six hours later we were at Cape York, where I sent my faithful Eskimos ashore, accompanied by several barrels of biscuit, and loaded with guns, knives, ammunition, and numerous other articles which I had brought to reward them for their faithful service.

In going into the village at Cape York, the bergs, driven in by the south-easter, forced us to hug the shore, and all at once I heard that horrible grating sound which tells the sailor that his ship is on the rocks. A glance at the shore showed me that the tide was high. It was a critical moment. If caught here with the huge mass of the meteorite still at the deck level when the falling tide left the ship to fall upon her bilge, no earthly power could keep her from capsizing. For perhaps a minute (it seemed to me a week) the vibrations continued, then, with a lift and lurch of the stern, they ceased. The danger was past. The *Hope's* momentum had carried her over the reef.



REMAINS OF GREELY HOUSE AT CAPE SABINE.

From Cape York we steamed away for Cape Sabine; but the next morning, off Wolstenholm Island, a furious Arctic gale descended upon the ship, against which she was barely able to fight her way inch by inch to safety under the lee of the island, where for thirty-six hours she dodged back and forth, a phantom ship, her decks deep with snow, her spars, sails, and rigging crusted with the frozen crystals, barely able with full head of steam to hold her own, while I, with four of my bravest Eskimos, worked like miners in our timber-cage under the meteorite, lowering it with the iicks, inch by inch and foot by foot, in order to get it

The "Saviksue" or Cape-York Meteorites 593

low enough not to endanger the ship's safety. All this time the furious wind howled through the *Hope's* tense rigging, as if the demon of the "Saviksoah" were shrieking at us.

The superstitious ones on board were now more firmly convinced than ever that we should never reach home, and that this storm was but a warning from the devil of the meteorite.

After this Cape Sabine was visited, where I was the first one to step inside the Greely house since the rescue of the survivors of that ill-fated party in 1883; the tour of the Eskimo settlements completed; and the homeward voyage effected as far as Godhavn without special incident. Here the meteorite was lowered to within a few feet of the keelson, where it rested firmly upon the ballast, which was also packed solidly about it. Then twelve-inch by twelve-inch timbers were placed between it and the ship's side and wedged, blocked, and spiked in place until there was no possibility of the huge weight moving except as the ship moved. Every loose object on deck was also sent below, and the ship made snug for the mauling which the experience of the previous years had led us to expect in crossing Davis Strait.

And fortunate it was that every precaution was taken. Before we were across the strait a fierce north-wester descended upon the ship, and during the night of September 8th, she rolled and pitched dizzily upon the furious seas till the grey light of dawn began to filter through the tumult. Time after time the lee dead-eyes were under water, and as the *Hope* leaned and wavered and hesitated with her rail out of sight, and the boiling tumult to leeward seething up to the side of the companion-way it seemed as if she would never right.

Turning from the ship, an inferno of Arctic hellishness, a furious horde of scourged, bitter-cold waves, rose out of the windward gloom and tossed up their heads, only to be lashed down by the merciless wind, until in savage revenge they rushed upon the *Hope* like Arctic wolves, and poured over her rail as if to devour her.

Crouched behind the weather rail, with eyes just pupil width above it, fascinated, I watched the turmoil.

The wind, resistless and sonorous as Niagara, roared across the seething waters, almost as tangible as they. And as in the plunging flood of Niagara there are countless tiny sagittate spurts or jets of greater velocity than the rest, so in this ærial torrent there were jets which cut the water as a graver's tool cuts metal and drove the liquid shavings in sagittate lines.

Nowhere will such a mad sea be raised in such an incredibly short time as when the autumn boreal winds, marshalling in

Baffin's Bay, charge southward, and, crowding through the narrows of Davis Strait, hurl every intruder out of the realm of night, foundering many a majestic berg, and driving others, foaming like battle-ships, through the water. It is the mighty besom of Kokoyah, the demon of the North, sweeping his domain clear and closing his realms for the winter. And nowhere does the sea subside more quickly after the wind goes down.

More than one anxious heart on board was certain at every wave shock that the demoniac iron had broken loose and was smashing a way for itself through the ship's side, and more than one gave up hope of ever seeing the morning light again.

Though the bulwarks of the starboard bow were smashed by a sea, and occasionally the waist filled with green water to the rail level, yet with everything, including the hawse holes to the cable lockers, battened down, no serious damage was done, little water was taken in, and the meteorite never moved.

The next morning we were steaming under the lee of the Cape of God's Mercy, named by Davis centuries ago.

After this nothing of moment occurred, though the presence of such an enormous mass of iron on board rendered the compasses useless, and compelled us to make a coasting voyage all the way back to Sydney, where the ship arrived in safety on the 20th of September, burning her last ton of coal. The homeward voyage was hampered and delayed by almost constant fog and head-winds. The dangerous passage of the Straits of Belle Isle, with its rapid and erratic currents, was made in the night and in densest fog, and was one of the neatest pieces of navigation by Bartlett, who knows every inch of this coast, that I have ever seen. It was simply intuition on his part that brought us through.

Saturday, October 2, 1897, the hundred-ton floating crane at the New York Navy Yard, through the courtesy of the Navy Department, lifted the giant from the *Hope* and deposited it upon the quay wall, the largest known meteorite in the world, and a meteorite with human associations such as attach to no other.

Three years of persevering efforts had won. The great Star Stone of the North, traced to its icy matrix and torn therefrom, had been brought safely out through the ice, the storms, and darkness of the Arctic seas.

This brief narrative would be incomplete without my acknowledgment of the invaluable assistance, of Capt. John Bartlett, one of the most reliable, conservative, and gentlemanly of that hardy company of Newfoundland ice navigators; of Emil Diebitsch, the able, cool-headed young engineer; of the officers and crews of the *Kite* and the *Hope*, who, though they availed themselves

The "Saviksue" or Cape-York Meteorites 595

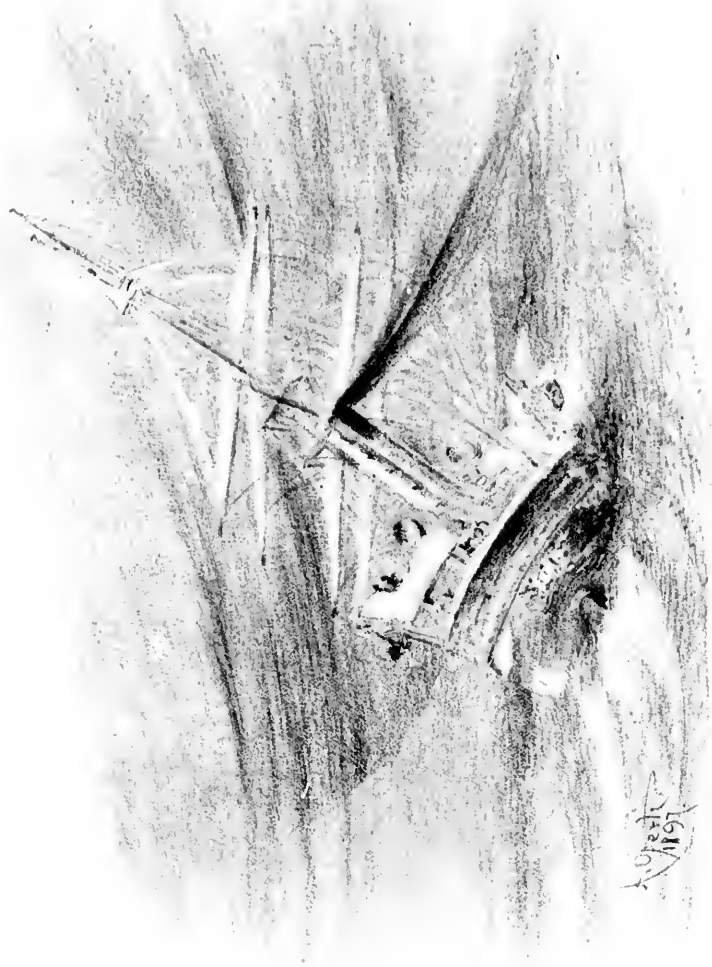
of the sailor's universal prerogative to grumble, still did yeomen's work ; and of my faithful little band of Eskimos, who, handling heavy rails and timbers, working with pick and shovel and bar, and pumping on the jacks, did all they could to put into my possession the "Iron Mountain" of their forefathers.



HOISTING METEORITE OUT OF THE "HOPE."

DESCRIPTION AND ANALYSES OF THE "SAVIKSUE."

The smallest of the three meteorites (the "dog") is an ellipsoidally rounded mass with dimensions $27\frac{1}{2}$ inches by $19\frac{1}{2}$ inches ; an estimated bulk of 2 cubic feet ; and an estimated weight of 1000 pounds.



THE STORM UNDER THE LEE OF WOLSTENHOLM ISLAND

The "Saviksue" or Cape-York Meteorites 597

When found, it was lying loosely upon the surface among the gneissose rocks of the vicinity, and though the natives tell me that it has been used but little because it is harder than the others, it certainly seems to have been pounded sufficiently to destroy nearly or quite all of its original surface. It was situated 80 feet above, and 1625 feet distant from, high-water mark.

The next larger meteorite (the "woman") has an irregular rounded trapezoidal shape, with a maximum length of 4 feet 3 inches, a maximum width of 3 feet 3 inches, and a maximum thickness of 2 feet. Its estimated bulk is 12 cubic feet, and its

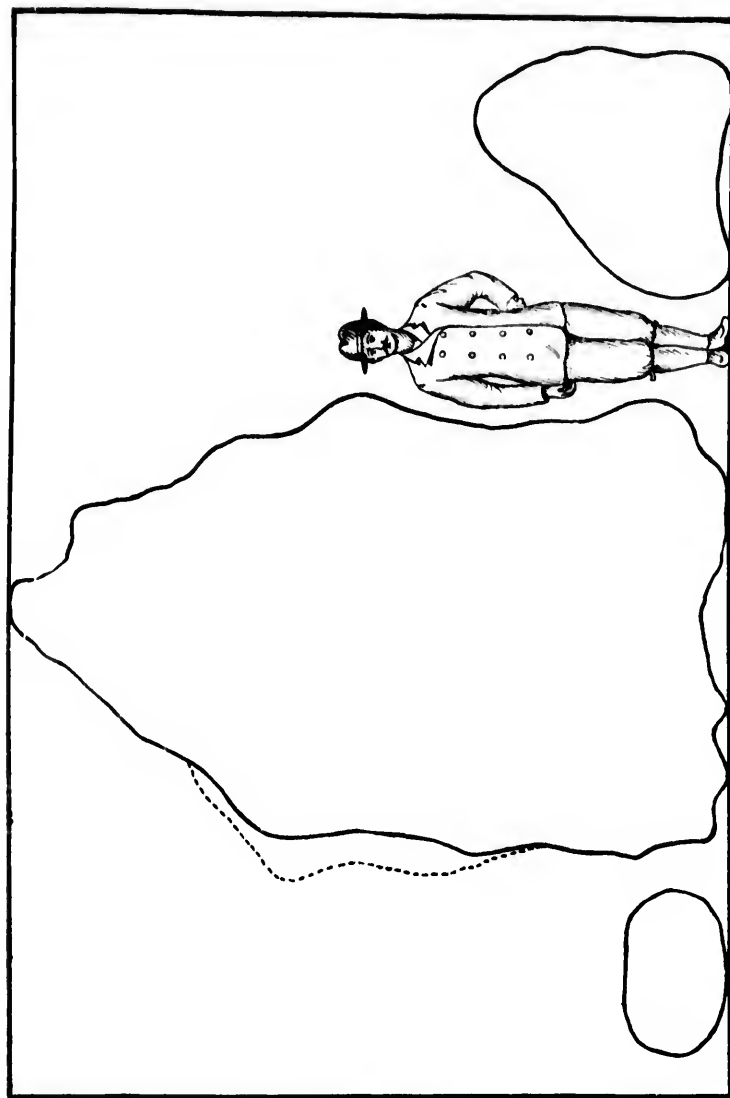


THE "DOG" IN SITU.

estimated weight 6000 pounds. It was situated 96 feet distant from, and 21½ feet higher than, the "dog."

Its entire upper portion has been worked and pounded by the Eskimos through many generations, until all the original surface has been removed. A well-defined and continuous rough burr of metal like that round the head of a stone drill extends along the original ground-line of the mass and shows clearly how much of it projected from the ground. The under part preserves the original meteoric surface characteristics.

This mass, when discovered, lay slightly imbedded or perhaps indented in the coarse material at the bottom of a shallow saucer-



"Dog."

"Alnighito."

"Woman."

SKETCH SHOWING RELATIVE SIZES OF "SAVKSUE" AND SIX-FOOT MAN.

The "Saviksue" or Cape-York Meteorites 599

shaped depression, formed partly by the work of the natives and partly by the piling up of the trap-stones brought by them during many generations for use as hammers.

The circumference of this pile of stones at the base is some 60 yards, and its height from the toe of the down-hill slope to the top is 18 or 20 feet. The contrast between the smooth rounded greenish trap-cobbles and the rough angular lichen-covered grey gneissose rocks of the vicinity is very striking. When viewed from



THE "AHNIGHITO" IN SITU.

across the valley, one is reminded of the pile of debris usually to be seen at the mouth of a mine shaft.

The third and largest, the "Ahnighito," is an irregular mass, of a shape difficult to describe, with a maximum length of 11.2 feet, a maximum width of 7.6 feet, and a maximum thickness of 6 feet. Its estimated weight is 90 to 100 tons. One end is rather square and bluff, the other tapers to a point or tail. One side has a massive wedge shape, while the opposite side is tabu-

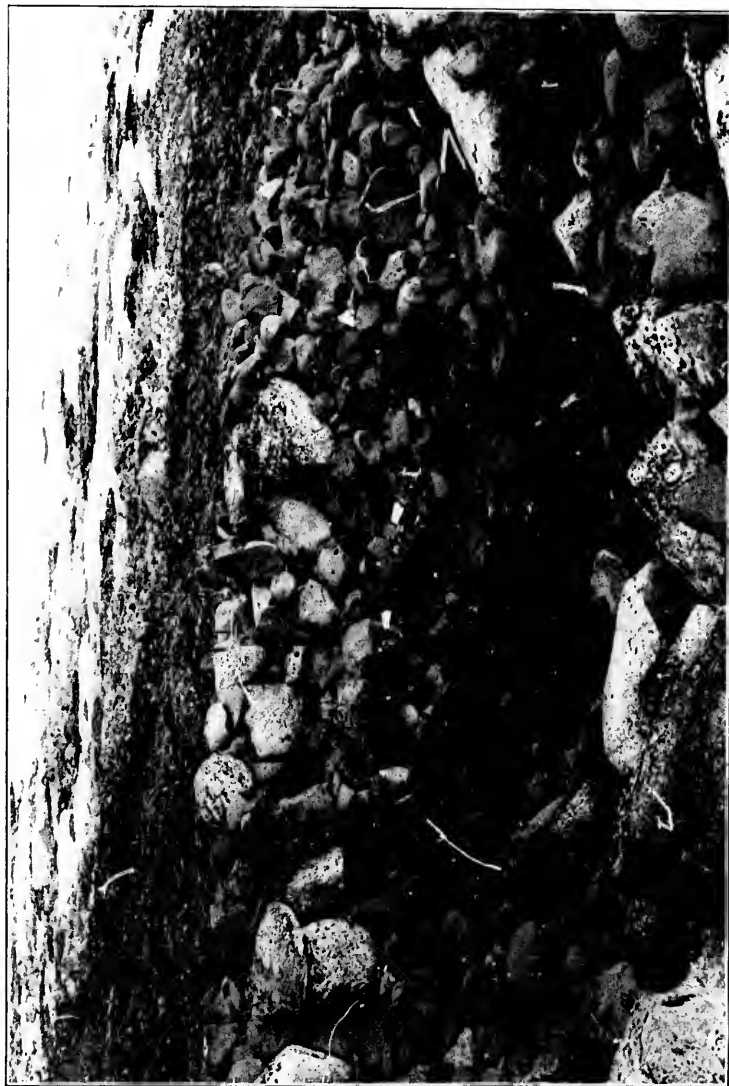
lar, with a pronounced dorsal fin rising from it. When found, it was nearly buried in the earth and gravel with the wedge side down, the tabular side nearly parallel with, and about a foot below, the surface, and the dorsal fin alone showing through the mossy turf. The bluff end was toward the shore and the long axis nearly perpendicular to it and lying nearly east and west (magnetic north and south).

The exposed part had the colour and appearance of weathered bronze, and in places showed in slight relief the lines of the Widmannstätten figures. Much of the tabular surface showed scales of rust caused by the corrosion from the water which, percolating down from the eternal snow-drift a few hundred yards in the rear, settled and remained upon it. All the rest of the mass showed the characteristic meteoric surface markings.

The surface of all the meteorites is dark brown in colour, interspersed with greenish bits, and resembles bronze. To the eye the appearance of the metal seems the same in all, a dense, tough, fibrous soft iron or mild steel, with silvery lustre and resonant as a bell. The homogeneousness of the metal is surprising. There is apparently not so much as a single grain of any foreign substance in the entire mass of either meteorite. The metal can be cut with a knife, and when scraped with a file shows a bright silvery lustre. Etching with acid brings out the characteristic Widmannstätten figures, and analyses show the typical meteoric nickel-steel alloy, the composition being about 92 per cent. of iron and 8 per cent. of nickel. Similar, however, as the three are in appearance, I am convinced that there is a pronounced difference in the amiability of the metal: the "woman" being the softest. The statements of the natives are unvarying on this point, and their statements are borne out by the huge pile of broken trap cobble surrounding the "woman," while scarcely a score of these stones were scattered about the "do_o," and none were found about the "Ahnighito."

Preliminary analyses of samples of the "Ahnighito," made after my return in 1895 by Ricketts and Banks of New York City and J. K. Phelps, of Yale College, gave the following results:

	R. & B. Analysis.	Phelps Analysis.	Mean.
Iron.....	93.800	90.410	92.105
Nickel.....	5.990	8.180	7.085
Cobalt.....	—	0.540	0.540
Copper.....	—	—	—
Sulphur.....	—	0.190	0.190
Phosphorus.....	0.150	0.180	0.175
Carbon.....	trace	0.150	0.150



THE "WOMAN" IN SITU.

602 Northward over the "Great Ice"

These analyses demonstrated the true meteoric composition of the mass.

Final analyses of all three masses by Prof. Whitfield of the American Museum of Natural History, after my return in 1897, gave the following results :

	"Dog."	"Woman."	"Ahnighito."
Iron.....	90.993%	91.468%	91.476%
Nickel.....	8.265	7.775	7.785
Cobalt.....	0.533	0.533	0.533
Copper.....	0.016	0.018	0.014
Sulphur.....	0.019	none	none
Phosphorus.....	0.172	0.188	0.202
Carbon.....	0.014	0.020	0.023

These last analyses settled what I had personally been convinced of from the first, that the three masses are fragments of one original mass. The difference in hardness on which the Eskimos insist is probably due to a process of tempering, variations in which were caused by the difference in size of the masses and the resultant differing temperatures, when at the end of their descent they plunged into the snow and ice.

That there are additional specimens unknown to the natives I doubt, as nothing escapes the Eskimo eye, and in the ages that this tribe has lived in its contracted Arctic prison, there is not a stone on shore, or mountain-side, or summit, that has not been pressed by the foot of some fur-clad hunter, or noted by his quick eye.

Immediately upon my return with the large meteorite, the chronic objector came to the front in full force, and paragraphs appeared repeatedly in the press, both in this country and abroad, asserting that the discovery of these irons was not new, that scientists had decided their telluric origin, and that I was taking a great deal of trouble to secure comparatively uninteresting specimens.

It seemed to be assumed by these objectors, that the determination of the telluric origin of the Nordenskjöld irons, and the occurrence of nickeliferous iron *in situ* in the basaltic formations in and about Disco Bay, settled conclusively the character of all metallic iron in Greenland, and precluded the possibility of true meteoric irons being found in any portion of that country, even though several hundred miles distant.

This skepticism was not confined entirely to the press. Some eminent gentlemen, in advance of any personal acquaintance with the meteorites or the facts connected with them, did not hesitate to class them with the Nordenskjöld irons.

Inner Edge.

"Woman."

Crest.

Toe.



PILE OF TRAP COBBLES ABOUT THE "WOMAN."

Though absolutely satisfied myself, from the first, as to the extra-terrestrial origin of these masses, I was entirely willing to waive any considerations as to whether my own judgment in the matter had weight, and submit the question to experts whose verdict would be incontestible.

My friend President Morris K. Jesup of the American Museum of Natural History kindly offered to obtain for me the decision of the greatest authorities on meteorites in the world; and the dictum of Fletcher of the British Museum, Weinschenk of Munich, and Brezina of Vienna, together with the verdict of Prof. Rollin D. Salisbury of the Chicago University, who saw all three of the masses *in situ*, before a stroke of work had been done toward their removal, and the report of Prof. R. P. Whitfield of the American Museum of Natural History, are here appended.

Even were it not for the unquestionable proof contained in their surroundings, the characteristics of the masses themselves are so unequivocal as to be absolutely conclusive, and a simple examination has been sufficient to immediately convince anyone conversant with the subject and competent to form an opinion of their meteoric origin.

It may be said that in but one respect, *i. e.*, that their composition is an alloy of nickel and iron, are these Cape-York meteorites similar to the Nordenskjöld telluric irons of Ovifak.

The following points of difference between these meteorites and the Nordenskjöld telluric irons will be of interest.

The Nordenskjöld irons were found in 69° N. Lat., the Cape-York "Saviksue" in 76° N. Lat. The Nordenskjöld irons are rough and rusty in external appearance, with no surface markings differing from those of any rusty lump of iron, and they oxidise rapidly, some of them even to complete disintegration. Some it was found impossible to preserve, others are kept constantly wet in closed cases.

The surface of the Cape-York "Saviksue," except where it has been abraded by the Eskimos, has the pittings, striations, and slightly fused appearance of the edges, distinctive of all siderites,¹ and is of a rich, smooth bronze colour, unaffected by exposure. A small surface on the "Ahnighito" meteorite, planed in 1895, was in '97 still bright and uncorroded.

The beautiful Widmannstätten figures, the celestial trade-mark, are as sharp and clear on these Cape-York meteorites as if made by a graver's tool. Not only do these markings show on a polished surface under the action of acid, but on the exterior of the meteorites as well.

¹ Metallic meteorites.



SHOWING SURFACE OF "AHNICHITO" METEORITE.

As regards surroundings, the Nordenskjöld irons lay in an extensive igneous region at the foot of basaltic cliffs in which are found nodules of the same iron, and from which every year additional masses are weathered. The Cape-York meteorites rested upon gneissose boulders in the midst of a purely gneissose region which extends, uninterrupted by igneous or basaltic formations, for miles about them. Were any further proof needed, the legends of the Eskimos attribute a heavenly origin to the masses.

REPORT OF PROF. ROLLIN D. SALISBURY.

In the summer of 1895, in company with Lieutenant Peary, I visited the region near Cape York, North Greenland, where the meteorites, which he has subsequently brought to the United States, were seen. The two smaller ones were brought back that year. The third, the one which Lieutenant Peary has just brought back, was visited, but having no machinery by which so heavy a body could be handled, it was reluctantly left behind. Sufficient time was spent in its immediate vicinity, however, to allow both the meteorite and its surroundings to be well seen. Because of the special interest attaching to the meteorite, its character and relations were noted with some care.

The character of the meteorite itself was such as to leave no doubt as to its origin. The topography of its surface, studied in detail, possessed all the characteristics which mark the surface of metallic meteorites, characteristics which are not found in any other stones or metallic masses on the earth's surface. It had the peculiar pit-like indentations so characteristic of metallic meteorites, and its surface showed at several points the Widmannstätten figures which are one of the distinctive marks of the etched surfaces of those bodies. A hole several inches deep was drilled into it, and its metallic character established. Like many other meteorites composed chiefly of iron, oxidation had affected only a thin film at the surface. These and other considerations less capable of brief statement led to the confident conclusion that the metallic mass was meteoric.

Its surroundings were in harmony with the conclusion reached by examination of the iron itself. It lay upon an island composed of gneissic rock. No other sort of rock was seen about it, and though there was drift on the island, it likewise was composed of gneissic debris. No other stone bearing the least resemblance to the meteorite was seen in the vicinity, nor was there in the drift or in the bed-rock, so far as seen, any basic igneous rock, the only sort of rock known to contain metallic iron even in tiny particles.

"Ahnighito,"



"Woman,"



WIDMANSTÄTTEN FIGURES OF "AHNIGHITO" AND "WOMAN."

608 Northward over the "Great Ice"

Chemical analysis of the material of the meteorite subsequently confirmed the conclusion to which the examination of the metallic mass and its surroundings had led.

The position of the meteorite, which was no more than half buried, seemed to indicate that it fell on glacier ice when ice covered the region where it lay. On the melting of the ice the meteorite was let down upon the surface in the position where it was found.

Oct., 1897.

ROLLIN D. SALISBURY,
Professor, Chicago University.

[COPY.]

AMERICAN MUSEUM OF NATURAL HISTORY,
NEW YORK, N. Y., December 11, 1897.

PROF. LAZARUS FLETCHER,¹ M.A., F. R. S.,
BRITISH MUSEUM, SOUTH KENSINGTON,
LONDON, ENGLAND.

DEAR SIR :

As conflicting views are likely to be presented regarding the meteoric nature of the iron masses brought from Greenland by Lieut. Peary during 1895 and 1897, I have taken the liberty of soliciting an expression of your valuable opinion.

The section which I have sent to you for examination is cut from the great mass now at the Navy Yard. I also have included a copy of the analysis of borings made from each of the meteorites.

If it is not too great an intrusion upon your valuable time, I shall be pleased to receive an expression of your judgment in this matter at your early convenience. I have sought your opinion in the cause of science, and in the knowledge that it will be appreciated by Lieut. Peary as well as myself.

I am, sincerely yours,
MORRIS K. JESUP,
President.

LETTER FROM PROF. FLETCHER.
BRITISH MUSEUM (NATURAL HISTORY).
LONDON, December 23, 1897.

PRESIDENT MORRIS K. JESUP,
AMERICAN MUSEUM OF NATURAL HISTORY,
NEW YORK.

DEAR SIR :

The specimen of Peary iron and the letter have reached me this morning. I return the specimen herewith.

¹ Similar letters addressed to Dr. Weinschenk and Prof. Brezina.

The "Saviksue" or Cape-York Meteorites 609

The character of the etched surface is decisive as regards the extra-terrestrial origin ; no such figures have been shown by any iron which is not regarded as meteoric, and such figures are shown by irons which have been actually seen to fall.

As regards other Greenland irons, it has been possible to hold opposite views as to the origin ; about this iron there can be no doubt whatsoever ; the figures are as distinct as in any I have seen.

I am, faithfully yours,

L. FLETCHER.

TRANSLATION OF LETTER FROM DR. E. A. WEINSCHENK, INSTITUTE OF MINERALS, MUNICH, BAVARIA.

MUNICH, December 28, 1897.

PRESIDENT MORRIS K. JESUP,
NEW YORK.

MY DEAR SIR :

Fortunately, I am able to determine, with certainty, the piece of iron which you kindly sent me for examination. Like all others, it bears the characteristics of meteoric origin, and it is absolutely and without doubt a meteorite. If one should wish to doubt this, one might as well question all the known meteorites of the day which belong to this class of irons, as their falling has never been observed. The sample you sent me belongs to the group of the Oktaedriethen irons, and it resembles that of Totura of prehistoric times.

DR. WEINSCHENK.

CABLE FROM PROF. BREZINA, DIRECTOR NATURAL HISTORY
MUSEUM, VIENNA.

"Cutting sent is a Montahedral Meteorite."

REPORT OF PROF. WHITFIELD, AMERICAN MUSEUM OF NATURAL
HISTORY.

TO MORRIS K. JESUP,
PRESIDENT AMERICAN MUSEUM OF NATURAL HISTORY.

DEAR SIR :

I have investigated the subject of the Peary meteorites, as you requested, and find they are among the most pronounced meteorites known, as far as their structure and nature can determine. Sections were cut from the two largest, and etched portions submitted to three of the most noted experts on this subject in Europe, Prof. Fletcher of the British Museum, Prof. Brezina of Vienna, and Prof. Weinschenk of Munich, Bavaria.

Drillings were taken from each of the three irons and submitted to an expert in meteorite analysis.¹

None of the specimens show Silicon or Manganese. A trace of Chromium was found in the outside crust of the largest specimen.

The analyses show all three irons of the Peary group to be not only decidedly meteoric in nature and composition, but quite similar in character, proving they are parts of the same fall, and were originally one celestial mass. So the meteoric nature of the masses can be considered as definitely established.

Yours truly,

R. P. WHITFIELD.

NOTES AND SPECULATIONS.

Surprise at finding this little family of Hyperboreans on a par with the Greeks, the Romans, the Carthaginians, and the devotees of Buddha, in their possession of a "heaven stone," is almost startling in its intensity; yet surprise gives way to admiration as we note the shrewdness of these brown hunters of the "Great Night." The savage stress of natural environment in which the Creator placed them to struggle for existence, left them no room for any such Platonic manifestations as worship of their celestial guests. A Diana of Ephesus or Venus of Cyprus² would be utterly useless to them. Nor, on the other hand, would any glittering blade, irresistible in conflict, appeal to them.³ Their sole and ever-besieging enemies were the demons Hunger and Starvation; and so, with intense practicalness, they pressed the "Sariksue" into their service, in solving the, to them, fundamental equation of the problem of existence,—securing food,—and chipped their heavenly visitors to point the harpoons that brought this great essential.

In contemplating these brown masses, a host of strange fancies, speculations, and queries crowd upon one. Did man or the meteorites first arrive in that inhospitable region? If the former, and the meteorites fell in the long, dark winter night, what terror the detonations, the blinding glare, and the earthquake shock of their fall must have caused among the poor savages cowering in their shaking stone and turf huts! Would it be strange if they had thought that the sun itself had broken loose and was falling upon the earth, and that the earth was going to pieces under the shock, like one of their own icebergs?

If the meteorites fell in summer, how the seals must have plunged

¹ See page 604.

² Sacred statues said to have fallen from the sky.

³ Sword of Antar, and other legendary blades said to have been forged from thunderbolts (meteorites).

The "Saviksue" or Cape-York Meteorites 611

for the water, and the polar bears rushed at full speed over the ice-floes, fear-stricken by the awful cataclysm!

If the arrival of the meteorites antedated that of man, did they fall but a short time previous to his advent, or thousands of years ago, during the glacial epoch, when this entire region was covered by an unbroken ice-sheet?

The fact that the "woman" and the "dog" were not buried in the ground, and that there were no indications of crushing of the rocks beneath them or abrasion or indentation of the under surfaces of the meteorites themselves, phenomena which must have accompanied their direct fall upon the ground, would seem to indicate that they had originally descended upon the surface of the then much-expanded ice-sheet, and upon its recession had gradually settled to the positions in which they were found.

On the other hand, one of the enormous snow-drifts which form along this coast even in ordinary winters might have received the meteorites and cushioned their fall completely, allowing the presumably high temperature of the masses to effect their gradual descent and final deposition upon the underlying rocks.

The existence of the Eskimo legend already noted above in regard to those meteorites, lends colour to the belief that their arrival was subsequent to that of man; else how could these rude natives have obtained any idea of their heavenly origin, and why should not the brown masses have been to them simply *weeaksue* (rocks) like all the others in their country, including the soapstones which have furnished them with material for their lamps and pots?

Next, and to me most astonishing, how did these poor aborigines discover the qualities of the material composing the masses, and the uses to which it could be put, and then devise means of availing themselves of it?

From what I have seen of this people, and their exhaustive knowledge of all the materials to be found in their country, and the special qualifications of each, I am inclined to think that these little brown wizards of the North have, at one time or other during the past centuries, put through the laboratory of common sense and practical experience every stone or other material in the whole range of their observation, and settled for all time the characteristics, the qualities, and capabilities of each; and, where these capabilities could be used for their own benefit, have devised means for so utilising them.

The spectacle of these little fur-clad children of the ice-floes using for centuries a heaven-invented alloy (nickel steel), which is almost precisely the same in its composition as the nickel-steel

armour plate with which we are protecting our battle-ships to-day, is to me one of the most striking in the annals of Arctic exploration.

DISCOVERY OF TWO ANCIENT ESKIMO KNIVES MADE FROM
THE METAL OF THE "SAVIKSUE."

During the moon of January, 1895, I made with Lee a tour of the Eskimo settlements in Whale Sound, for the purpose of purchasing material for the equipment for my Inland-Ice journey the following spring.

We stopped one night at Netiulumi.

In the morning, Lee brought in a small *oodoo*, or woman's knife, which his hostess, the wife of Kyangwah, wished to give me in exchange for some needles. Something peculiar in the appearance of the implement caused me to examine it, and I saw that the cutting edge was composed of five small fragments of iron ingeniously set in a groove in the ivory handle.

Sending for the woman, I asked her where she got the knife, and she replied: "*Saviksuami ; sukkennuksue*" ("It is from the great iron; it is very old"). Further questioning elicited the information that in the autumn, while she was rebuilding an old igloo for their winter residence, she found this knife buried in the interior. She herself had never seen one like it before, but the old men of the tribe had told her that it was one of those made from the "Saviksue," and used by their women of generations past.

Pleased with my prize, I gave the woman all the needles I had left,—an entire paper,—which unbounded wealth immediately raised her to the proud position of millionaire among her less fortunate sisters.

The cutting edge of the knife thus obtained is formed of five fragments of the meteoric iron. The handle is composed of three pieces of bone, and the entire implement is of a size to make it seem almost a toy. Yet small and crude as it is, it still must have been a great improvement over the fragments of flints which, previous to the utilisation of the metal of the "Saviksue," formed the only cutting implements of these people.

Diligent inquiry of nearly every member of the tribe since, demonstrated not only that there is no other knife like it in the tribe, but that this is the only one ever seen by any of the tribe, with the exception of one or two of the oldest men.

In March of 1895, while packing various specimens previous to starting upon the Inland-Ice trip, I came across some relics of the ancient people of this region, discovered by one of the men



"OODOO," OR WOMAN'S KNIFE.



"SAVIK," OR MAN'S KNIFE.

ANCIENT ESKIMO KNIVES MADE FROM METAL OF THE "SAVIKSUE.

Actual size.

while digging in an old igloo at Kangerdlooksoah, and brought by him to me.

There was a lance-head of bone, the bone-point of a harpoon, a bone-scraper, and a peculiar piece of bone some three or four inches in length with a groove extending along a portion of one side. It at once occurred to me that this was the handle of another of these ancient knives, and in order, if possible, to determine the matter absolutely, I called in one of the old men then visiting at my headquarters and, spreading the various articles out upon the table, told him I wished to know what they were. Pointing to each one in turn, he explained to me what they were, and the peculiar-shaped piece of bone was identified by him as the handle of a man's knife, the cutting edge of which had been composed of fragments from the "Saviksue."

The length of the groove was only one and one-fourth inches, and it would seem that this knife must have long antedated those which Ross saw in 1818, as the cutting edge of one which he figures is much longer. Probably, as the result of long experience, the natives had, at the time of his visit, become more expert in working the iron. This knife, like the other one already described, is the only one of the kind known to any of the tribe.

PROPOSED GROUP IN CONNECTION WITH THE "SAVIKSUE."

From that dazzling May morning in 1894, when Tellikotinah, kneeling beside the "woman" at the bottom of the snow-pit, showed me how his grandfathers had removed fragments of the iron and fashioned their rude knives, I felt that these unique meteorites deserved more than to be simply ranged in order among so many other inert masses of iron in some great collection.

I believed that the important part they had played in the advancement of this little family of Eskimos should be perpetuated forcibly, and the meteorites themselves given warmth and life by making them the central feature in a life-size group representing the ancient method of utilising them. With this object in view, I invited artist Albert Operti to be my guest on my summer voyages of 1896 and 1897 and assist me in putting my ideas in shape.

A scene of a hundred years or more ago, as described and in part re-enacted for me by some of the older men of the present generation, was outlined by the facile brush of my friend Operti, and suitable individuals of the tribe were selected and posed for the group.

Operti then made a complete series of casts, measurements, and



ANCIENT ESKIMOS OBTAINING METAL FROM THE "WOMAN."
Study by Albert Operti for proposed group.

616 Northward over the "Great Ice"

sketches, as well as studies of the surroundings. I assisted with my camera. The costumes and all accessories of the group were then purchased, and packed away with the casts.

In the foreground, are the "woman," and two families of Eskimos who are availing themselves of the opportunity to renew the cutting edges of their knives and harpoon heads. One family, consisting of the father, mother, grown son, and small child, has taken possession of one of the numerous *kangmah*, or small stone shelters, constructed by their long-dead ancestors, and in front of this the woman is preparing a meal of seal meat which



THE SCULPTOR'S STUDIO ON METEORITE ISLAND.

she is heating in a stone pot over a stone lamp. The child stands near her eating a piece of the raw meat.

Kneeling beside the "woman," is the young man, with one of the rounded trap-stones grasped in both hands. With this he is engaged in the arduous labour of laminating some small prominence of the meteorite by continuous pounding in the same spot, until a small flake becomes partially separated and can be removed.

The father, seated upon his sledge, which for convenience has been drawn near the "woman," is engaged in the skilled labour of joining and fitting the bits of iron detached by his son into the

The "Saviksue" or Cape-York Meteorites 617

groove of a bone handle, to form as continuous a cutting edge as possible. The dogs of this family, four in number, are tied to one of the numerous gneissose boulders in the background.

The second family has just arrived, and comprises a man, his wife, and a baby, carried in the mother's hood. While the man is untangling the traces of his dogs, three in number, preparatory to tying them to a rock, the woman brings up from the sledge an armful of the rounded trap-stones which they gathered a hundred miles or more up the coast, for use as hammers upon the "Saviksue." Upon the sledge may be seen, in addition to these stones, the meat of a seal just killed on the bay below, which will insure an ample supply of food for the entire party during the several days that they must remain in order to obtain their meagre supply of the precious iron.

RÉSUMÉ OF POINTS OF SPECIAL INTEREST.

The Cape-York "Saviksue" stand easily first among all known meteorites, with an unapproachable combination of charms.

Their extra-terrestrial origin is unimpeachable. On this the highest authorities are unanimous and emphatic. "*As regards other Greenland irons, it has been possible to hold opposite views as to the origin; about this iron there can be no doubt whatsoever.*"—Fletcher. "*I am able to determine the iron with certainty. It is absolutely and without doubt a meteorite.*"—Weinschenk. "*Is a meteorite.*"—Brezina. "*The character of the meteorite itself was such as to leave no doubt as to its origin.*"—Salisbury. "*They are among the most pronounced meteorites known.*"—Whitfield.

The extremely high latitude in which they were found, the peculiar physical conditions existing in the locality of their discovery, the bearing of these conditions upon the details of their arrival upon the earth, their wealth of suggestion of questions and speculations of the most attractive nature to the scientist, and the fact that though their existence has been known since 1818 they for seventy-six years baffled all efforts to locate their hiding-place, would lend them under any circumstances unusual attraction.

But their wealth of interest does not end here. The "Ahnighito" far surpasses in size the largest of the known meteorites in the world, and the "woman" is exceeded by but one or two specimens in the world's great museums. The Cranbourne meteorite in the British Museum weighs some 8000 pounds. The gems of the National Museum, the Paris Museum, the Yale University Museum, and the Field Columbian Museum, weigh, respectively, 2500 pounds (estimated), 1709, 1630, and 1013 pounds.

618 Northward over the "Great Ice"

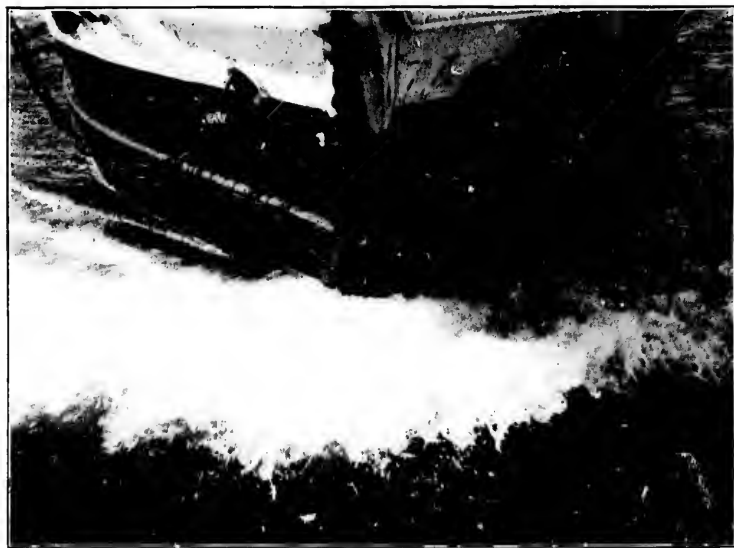
while the largest in the museums of Vienna and the University of Bonn are still smaller.

The group is absolutely complete. The three specimens are intact and undivided and together comprise the entire fall. In this respect they are unsurpassed.

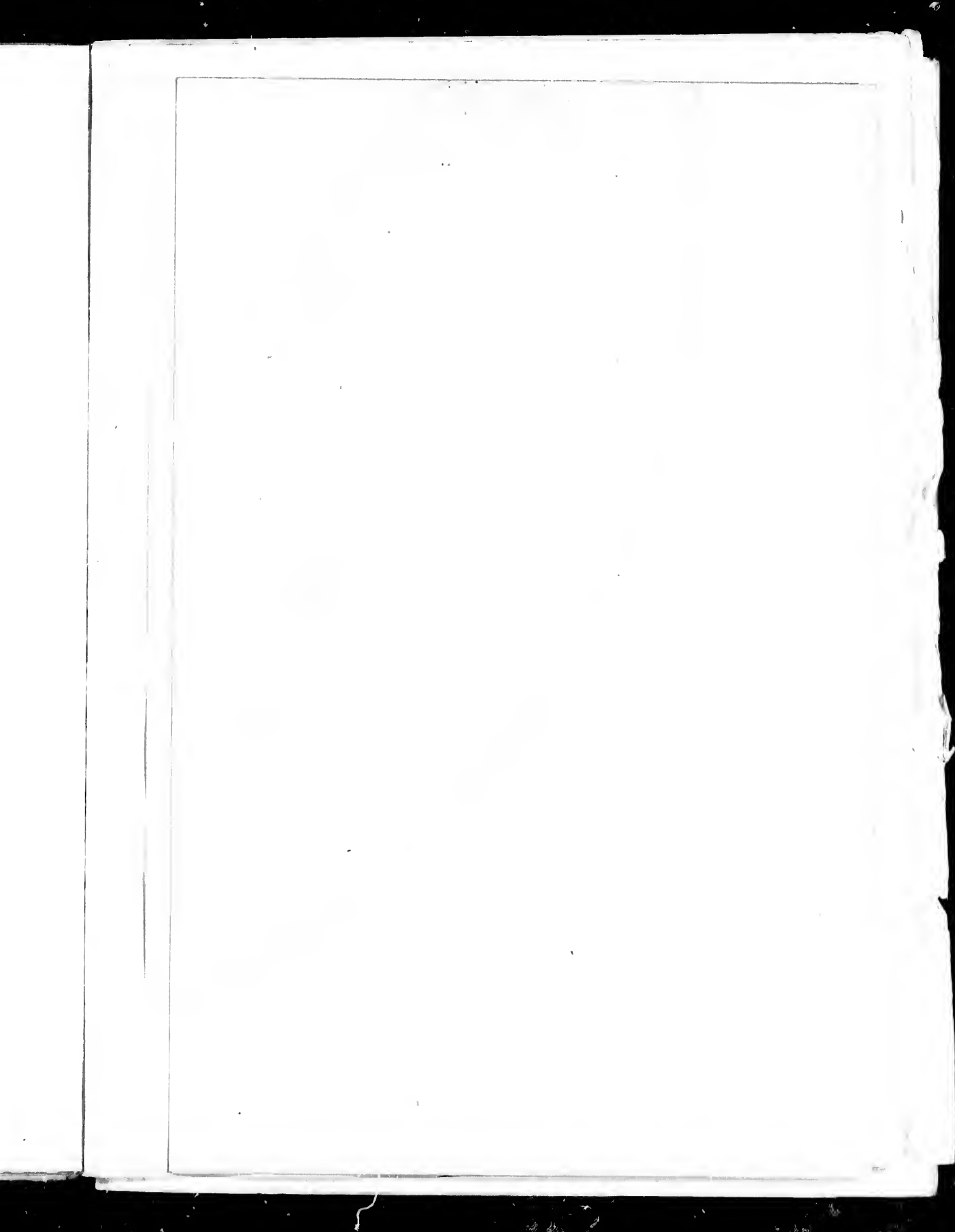
Yet perhaps most prominent of all their attractions stand their ethnological or human associations. Heaven-sent, they have made it possible for an entire aboriginal tribe, the most northerly one upon the earth, probably the smallest, and perhaps the most interesting, whose habitat is metal-barren, to rise from the stone to the iron age.

Last are the by no means uninteresting incidents of their discovery and transportation to civilisation.

This combination of values renders these Cape-York "Saviksue" peerless and unique among all the meteorites of the world.



HOMeward BOUND WITH THE STAR STONE.









THE ARCTIC R

COMPRISING THE MOST RECENT EX

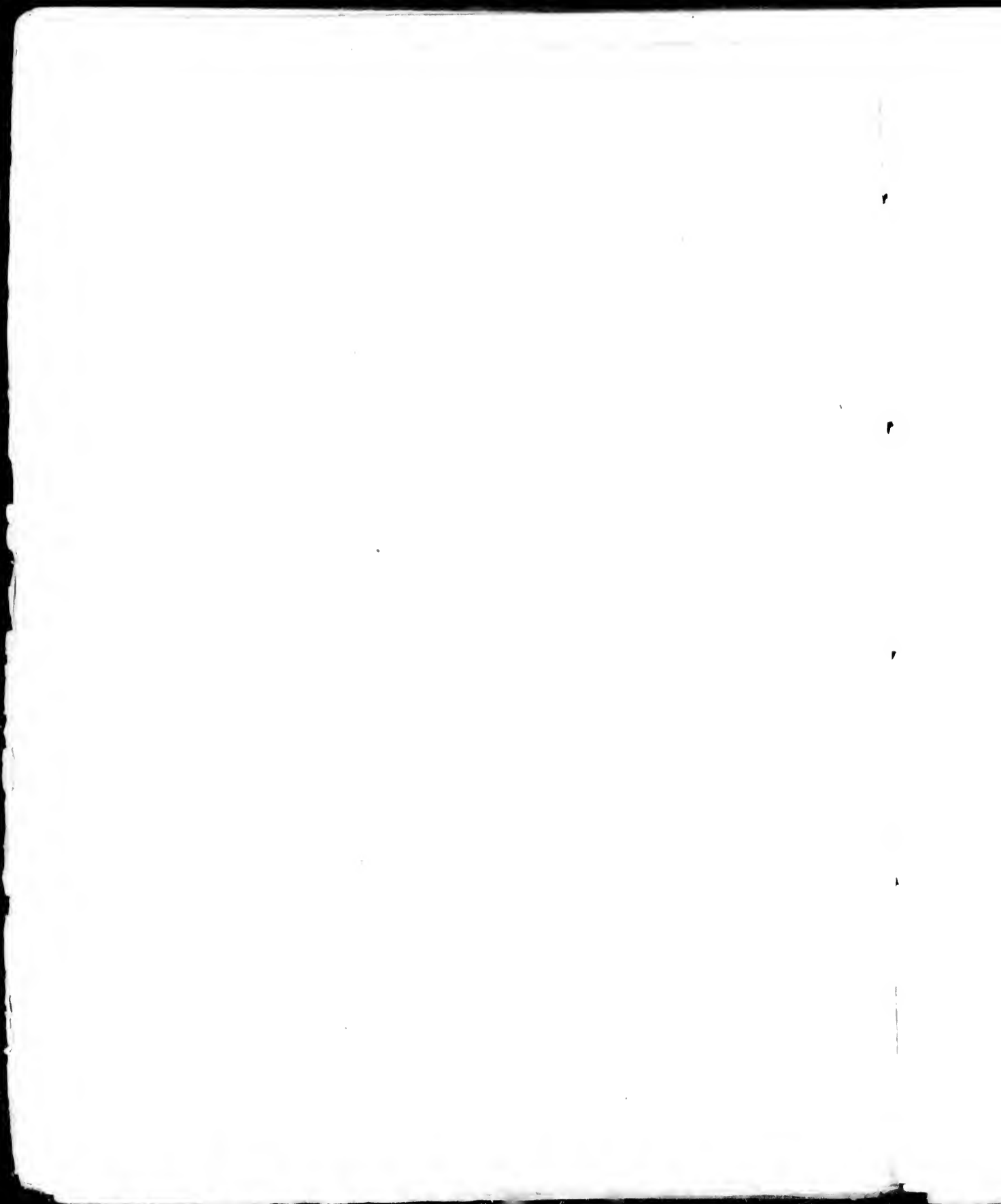
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INDEX OF VOL. II.

A

Academy, Bay, 61, 79, 124, 130, 154, 232; Glacier, 494, 495, 498, 499; Glacier Basin, 468
 Adams, Capt., 546
Advance, the s. s., 213, 218; boat party from the, 136
 Agony, Mount, 138, 211
 Alexander, Cape, 421; steaming past, 52, 58
 American Museum of Natural History, 549, 611
 Andersen, fruit for Mrs., 24
 Anniversary, Camp, 39; Lodge, 65, 68, 72, 85, 120, 153, 327, 518; completing, 66; dog food brought to, 79; reaching, 96; return of sun to, 80; return to, 247
 Anoah Glacier, 220, 331
 Arctic Circle, crossing the, 19; night reindeer hunting in the, 79; settlement within the, 21
 Astrup, Eivind, 46, 65, 66, 72, 86, 114, 159, 471, 528; attended by doctor, 68; condition of, 94; ill, 70, 93; preparing food, 90; return of, 95
 Athol, Cape, 137, 162, 211, 212, 214, 327, 335
 Aurora and meteor, 405
 Auroral notes, 191-203

B

Baby Lake, 88, 90, 288, 518, 522; skating on, 395
 Baffin Bay, 594
 Balboa, 462
 Baldwin, E. B., 65, 86, 97, 98, 108, 115, 187, 190, 203; meteorological instruments of, 100

Baldwin, Lansing, 574, 584
 Barden Bay, 149, 161, 220, 222; the *Falcon* in, 38
 Bartlett, Capt. Harry, 19, 47, 54, 59, 155
 Bartlett, Capt. John, 535, 553, 563, 579, 584, 589, 594
 Barton, Prof., 570
 Battle Harbour, 10, 11
 Bay, Academy, 61, 79, 124, 130, 154, 232; Baffin, 600; Barden, 149, 161, 220, 222; the *Falcon* in, 38; Bowdoin, 39, 65, 154, 208, 241, 242, 247, 275, 353, 517, 537, 556; Disco, 604; Granville, 173; Independence, 66, 93, 102, 108, 113, 210, 300, 441, 446, 447, 456, 463, 528; McCormick, 88, 127, 153, 232, 273, 396, 424, 428, 537; Melville, 124, 128, 142, 155, 163, 167, 382, 554, 556, 558-562, 568, 572, 573, 575, 589, 614; crossed, 33; passage begun, 30; sledge journey to, 159; Olriks, 119, 123, 129-131, 174, 231, 244, 376, 378; glaciers of, 126; hunting in, 72; inaccurately charted, 61; party for, 67; returning from, 60; steaming for, 58, 59; Parker Snow, 140, 335, 338, 345, 346; Robertson, 273, 422, 424; Saviksoah, 558, 562, 568; Sonntag, 58
 Bears, killed, 433
 Belle Isle, Straits of, 600
 Bell Rock, 135, 220, 221
 Berge, fleet of, 46; overturning of, 350; scattered, 39; seen, 11
 Birds, Greenland, 141
 Bismarck, Cape, 93
 Bjorling, 217; and Kallstenius, 153
 Boal, Mr., 574
 Bonesteel, Mr., 568
 Booth Sound, 135, 149, 161, 220, 222

620 Northward over the "Great Ice"

Bowdoin, Bay, 39, 65, 154, 208, 241, 242, 247, 275, 353, 517, 537, 556; bergs in, 39; *Falcon* anchored in, 39; Glacier, 75, 247, 537
 Brezina, Professor, 606, 609
 Bridgman, H. L., 153, 211
 British Museum, 554, 606, 617
 Bryant, H. G., 153
 Burros, attacked, 42; death of two, 10; landing the, 41; on board the *Falcon*, 4
 Burton, Prof. A. E., 570
 Bushnan Island, 145, 164, 556

C

Cache, digging out the, 91; equinocial, 443; igloos, 117; leaving the, 92; one hundred and twenty-four miles from the moraine, 113; searching for the, 442
 Cairn, erected on Cape York, 37
 Cairn Point, 53, 54
 Camping in a snow-storm, 115; on Inland Ice, 86
 Cape, Alexander, 421; passing, 52, 58; Athol, 137, 162, 211, 212, 214, 327, 335; Bismarck, 93; Chalon, 420; Cleveland, 44, 251, 307, 324; *Falcon* passing, 52; Dudley Digges, 140; Frederick VII., 54; Hawkes, 53; Ingersoll, 54; Isabella, 53, 54; Louis Napoleon, 54; Melville, 164, 165; Murdock, 169; Ohlsen, 56, 419; Parry, 134, 149, 161, 219-221, 327, 329, 349, 352, 354, 376, 381, 409, 556; sighted, 38; Robertson, 419; Sabine, 53, 54, 592, 593; Seddon, 168; Shackleton, 28; Walker, 166, 168; York, 128, 129, 141, 142, 155, 159, 162, 164, 169, 171, 211, 219, 273, 305, 313, 327, 330, 333, 336, 339, 343, 353, 373, 396, 408, 419, 553, 554, 556, 559, 561, 562, 568, 574, 575, 591, 592, 606, 607, 618; cairn on, 37; families from, 70; fox-traps on, 37; ice-cap on, 37; landing at, 37; meteorites of, 553, 607, 617, 618; outlook from, 37; region about, 133; rounding, 143; sighted, 32
 Carey Islands, 38, 217
 Carpenter, Mr., 674
 Carr, George H., 66, 71, 155

Carrier pigeons, 4; letter by, 68
 Castle Cliffs, 43, 129, 241, 242, 275, 403
 Chalon, Cape, 420
 Chamberlin, Prof. T. C., 153
 Christmas, 78
 Clark, George H., 65, 97, 99; accompanying the invalids, 95, 96; decides to go ahead, 101; frozen to sleeping-bag, 109
 Cleveland, Cape, 44, 251, 307, 424; *Falcon* passing, 52
 Cliffs, Castle, 43, 129, 241, 242, 275, 403; Crimson, 141, 172; Navy, 498
 Coburg Island, 542, 544
 Cone Island, 542, 544, 546
 Conical Rock, 140, 172, 211, 220, 327, 338, 345, 544
 Cook, Dr. F. A., 46, 528
 Cortez, 462
 Cranbourne meteorite, 617
 Crimson Cliffs, 141, 172
 Cross, Mrs. Susan J., 66, 68
 Crystal Palace Glacier, 52

D

"Daisy," death of the, 45
 Dalrymple Rock, 220, 544
 Davidson, James W., 66, 71, 72, 99, 155; frozen heel of, 101; return of, 102
 Davis Strait, 549, 593, 594
 Devil's Thumb, 166
 Dexterity Harbour, 546
 Diebitsch, Emil, 153, 535, 537, 563, 565, 594
 Disco, Bay, 611; Island, 554
 Dodge, Mr., 568
 Dogs, assistants on ice-cap, 4; attacked by disease, 110; attacking the burros, 42; buried in snow, 111; disease of the, 92; endurance of the Eskimo, 120; exhausted, 117; killed, 94; loss of, 10; mad, 111, 115; nearly a hundred, 26; of Whale Sound, 524; on board, 17; pitiable condition of, 100
 Duck Islands, landing on, 26; leaving the, 30
 Ducks, eider, 30; shooting, 56
 Dudley Digges, Cape, 140
 Dyele, Prof. L. L., 535

E

- Eagle Island, 7
 East Glacier, 242, 275, 279, 373
 Eider-ducks, 30; shooting the, 56
 Ellesmere Land, 153, 421
 English Arctic Expedition, 554
 Enrikin, Samuel J., 65, 67, 86, 97, 99, 115, 116, 152; better, 110; frost-bitten, 107; hunting, 72, 73; sick, 109; team of, 108
 Equinoctial Camp, 107, 117
 Equipment, pushing work on Inland Ice, 79; work commenced on, 78
 Eskimo, dogs, loss of, 10; pack of, 82; hunters, 43; knives, 612; mail carrier, 133; of Whale Sound, 431; visitors, 77, 309
 Eskimos, building igloos, 91; Labrador, 14, 17; return to lodge, 92; Smith-Sound, 556; taken on board, 38
 Expedition, English Arctic, 554; Kane, 6, 161; Peary, 151

F

- Fairweather, Captain, 548
Faith, whale-boat, 4, 47, 67; crushed, 76
 Falcon Harbour, 60, 75; *Falcon* returns to, 61
Falcon, the s. s., 49, 50, 126, 128, 143, 153-155, 207, 210, 213, 339, 556; anchored in Bowdoin Bay, 39; arrival at Duck Islands, 26; at Constitution Wharf, 6; at custom-house pier, 6; breaks the record, 33; burros on board, 4; cabin accommodations of, 9; cruising for meat supply, 43; in Barden Bay, 38; in the ice, 18; leaving Boston, 6; leaving New York, 5; leaving Portland, 7; leaving St. John's, 10; loss of, 535; moored in Brooklyn, 5; passing Cape Cleveland, 52; return to Falcon Harbour, 61; returning home, 65; scene on deck, 8; steaming down the Delaware, 5; steaming past Cape Alexander, 52; steaming toward Cape Sabine, 53; unloading, 40; walrus hoisted on, 47, 48
 Field Columbian Museum, 617

- Figgins, Mr., 568, 574, 585
 Fitzgerald, Dr., 574
 Fjord, Foulke, 52; Petermann, 67
 Fletcher, Prof. Lazarus, 606, 608, 609
 Flowers, at Battle Harbour, 11; at Hopedale, 15
 Foulke Fjord, 52
 Fox-traps at Cape York, 37
 Franzen, Asst. Gov., 21
 Frederick VII., Cape, 54

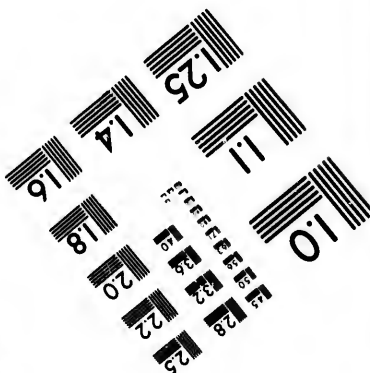
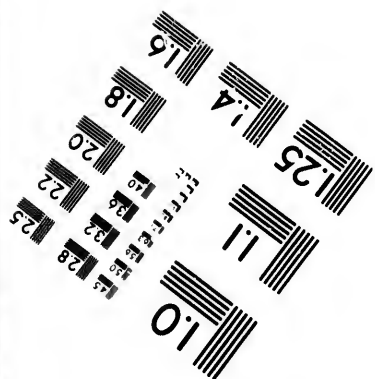
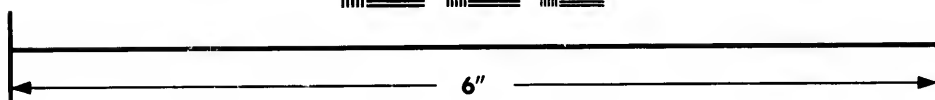
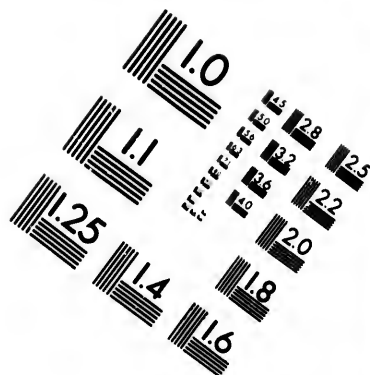
G

- General Wistar*, launch, 67; stove in, 76; whale-boat, 207, 213, 248, 250, 275, 279
 Geographical Club of Philadelphia, 537
 George W. Childs Glacier, 58
 Gibson, Langdon, 46
 Gill, Prof., 568
 Glacier, Academy, 494, 495, 498, 499; Anoah, 220, 331; Bowdoin, 75, 247, 537; Crystal Palace, 52; East, 242, 275, 279, 373; George W. Childs, 58; Heilprin, 43; Hubbard, 43, 72, 73; Humboldt, 124, 382, 444; Hurlbut, 43; Igninnut, 219; Kalkoktah, 82, 428, 537; Keate, 409; Marie, 123; Misumisu, 229; Petowik, 137-139, 141, 155, 163, 207, 211, 330, 335, 416, 425; Savage, 126, 232; Sculptured Cliffs, 241; Tyndall, 150; view of, 88
 Glaciers of Olriks Bay, 126
 Godhavn, 549, 593; entering the harbour of, 22
 Goodrich, Mr., 574
 Granville Bay, 173
 Greely house, 592, 593
 Greenland birds, 141
 Gulf, Inglefield, 43, 58, 81, 117, 119, 252, 375, 544

H

- Hakluyt Island, 38, 47, 376, 383; steaming toward, 58
 Harbour, Dexterity, 546; Pandora, 52; Rensselaer, 213, 420
 Harrington, Hon. M. W., 177
 Hawkes, Cape, 53
 Hayes, Dr. I. L., 161
 Heilprin Glacier, 43





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2



622 Northward over the "Great Ice"

Heilprin, Professor, 7
Henson, Matthew, 60, 88, 155, 207, 217, 231, 232, 236, 237, 239, 244, 248, 277, 278, 281, 287, 301, 307, 311, 313, 361, 370, 373, 376, 396, 398, 402, 408, 410, 416, 424, 425, 427, 432, 440, 441, 444, 445, 447-450, 453, 457, 462-464, 466, 470, 471, 473, 475, 478, 480, 481, 485, 488-496, 500, 503, 517, 520, 528-530, 532, 568, 574
Herbert Island, 38, 46, 58, 59, 67, 78, 130, 160, 224, 232, 251, 258, 329, 376, 380, 409, 419, 424; absence of ice in vicinity of, 47
Holsteinborg, harbour of, 20; picturesqueness of, 22
Hope, the s. s., 553, 568, 572-576, 579, 580, 582-587, 590-595
Hopedale, Moravian Mission of, 14
Hoppin, Benjamin, 568
House, commencing work on, 40; Greely, 592, 593; Red Cliff, 45, 127, 416; site of Polaris, 54
Hubbard Glacier, 43, 72, 73
Humboldt Glacier, 124, 382, 444
Hunter, Chief, 579
Hurlbut Glacier, 43

I

Ice-cap, beginning of journey upon the, 437; end of fall work on, 77; on Cape York, 37; packing supplies to, 66; Red Cliff, 416; supplies on the, 72; travelling upon, 77; wind-storm upon, 98; work on, 288, 300
Igloo, construction of, 268, 269; description of, 430, 431; Lee's, 89; Peary's, 153
Ignimut Glacier, 219
Independence Bay, 66, 93, 102, 108, 113, 210, 300, 441, 446, 447, 456, 463, 528
Ingersoll, Cape, 54
Inglefield Gulf, 43, 58, 81, 117, 119, 252, 375, 544
Inland Ice, 66; camp on, 86; equipment for, 78, 79; journey on, 612; Lee starts for, 80; returning on the, 114; sledges blown from edge of, 72; surface of, 107; visible, 35; work on, 67, 72

"Iron Mountain," 127, 133; discovered, 147; search for, 145
Irons, Ovifak, 554, 606
Isabella, Cape, 53, 54
Island, Bushnan, 145, 164, 556; Carey, 38, 217; Coburg, 542, 544; Cone, 542, 544, 546; Disco, 554; Duck, 26, 30; Eagle, 7; Hakluyt, 38, 47, 376, 383; steaming toward, 58; Herbert, 38, 46, 58, 59, 67, 78, 130, 160, 224, 232, 251, 258, 329, 376, 389, 409, 419, 424; absence of ice in vicinity of, 47; Josephine Peary, 242; Littleton, 56, 57, 61, 419, 420; abreast of, 52; landing on, 57; hunting walrus off, 57; McGary, 56; Meteorite, 566, 568, 575, 587, 589, 591; Northumberland, 38, 47, 58, 78, 173, 224, 376, 381, 383, 389, 409, 424, 546; Ptarmigan, 375; Saunders, 136, 137, 161, 172, 173, 215, 217, 331, 332, 346, 352; Thom, 174; Wolstenholm, 211, 215, 331, 592

J

Jackman, Capt., 546
Jensen, Mr., 574
Jesup, Morris K., 606, 608, 609
Jones Sound, 542, 543, 546
Josephine Peary Island, 242

K

Kahkoktah Glacier, 82, 428, 537
Kallstenius and Bjorling, 153
Kane Basin, 107, 117, 426, 433; ice unbroken in, 53
Kane, Dr. E., 138, 172; expedition of, 6, 161; ship of, 213
Kangerdlooksoah, reindeer pastures of, 79
Karnah, Sculptured Cliffs of, 43
Keate Glacier, 409; settlement of, 78
Kirkland, Com., 4
Kite, the s. s., 128, 535, 537, 542, 549, 562, 563, 565, 568, 574, 595

L

Labrador, Eskimos of, 14, 17; steaming along the coast of, 13
Lake, Baby, 88, 96, 288, 395, 518, 522

Lancaster Sound, 546
 Larry, the steward, 152
 Launch, *General Wistar*, 67; stove in, 76
 Le Boutillier, Mr., 537
 Lee, Hugh J., 66, 71, 72, 127, 130, 137, 139, 142, 143, 146, 148, 155, 208, 243, 248-250, 253, 256, 273, 277, 278, 281, 287, 301, 311, 313, 327-329, 331, 336, 346, 361, 370, 387, 395, 398, 410, 440, 441, 443-445, 447, 448, 453, 457, 466, 470, 490-494, 496, 500, 503, 510-513, 517, 518, 520, 530, 535, 568, 569, 574, 612; condition of, 94; exhausted, 81; frost-bitten, 92; igloo of, 89; leaving camp, 90; loses his way, 81; return of, 95; starts for Inland Ice, 80
 Libbey, Prof. Wm., 153
 Life-Boat Cove, 54, 419
 Little Matterhorn, 220
 Littleton Island, 56, 57, 61, 419, 420; abreast of, 52; landing on, 57; hunting walrus off, 57
 Louis Napoleon Cape, 54

M

Maigaard, Christian, 528
 Marie Glacier, 123
 Martin, Mr., 568
Mary Peary, whale-boat, 4, 47, 57, 60, 72, 250, 275, 279; struck by ice, 50
 McCormick Bay, 88, 127, 153, 232, 273, 396, 424, 428, 537
 McGary Island, landing on, 56
 Melville Bay, 124, 128, 142, 155, 163, 167, 382, 554, 556, 558-563, 568, 572, 573, 575, 589, 614; crossed, 33; passage begun, 30; sledge journey to, 159; Cape, 164, 165; Monument, 168
 Meteor and aurora, 405
 Meteorite, christening the, 589; lifted from its bed, 565; sledge made for, 565; Cranbourne, 617; Island, 566, 568, 575, 587, 589, 591
 Meteorites, analysis of, 609; Cape York, 553, 607, 617, 618; description of the, 595; history of, 554; location of, 556

Meteorological notes, 177-203
 Misumisa Glacier, 229
 Moore, Arthur, 574, 584
 Moraine Camp, 74, 85, 96, 120; picket duty at, 75
 Mørch, Eskimo pastor, 25
 Mount, Agony, 138, 211; Bartlett, 80, 396, 410, 411, 413, 522; Gyrfalcon, 235
 Mountain, the "Iron, 127
 Murchison Sound, 38, 58, 153, 231, 232, 242, 423
 Murdock, Cape, 169
 Museum, American, of Natural History, 549, 611; British, 554, 606, 617; Field Columbian, 617; National, 617; Paris, 617; Yale University, 617
 Musk-calf, 485
 Musk-oxen, following the, 486; killed, 479, 480; meat, 491; seen, 476; skinned, 481
 Musk-Ox Valley, 471, 473, 474, 490, 491

N

Nansen, Dr. F., 457, 514
 Navy Cliff, 474, 498; cairn upon, 490
 Navy Department, 594
 Navy Yard, N. Y., 594, 608
 New Year, 79
 New York Navy Yard, 594, 608
 Nordenskjöld, 554; irons, 604, 606
North Star, the s. s., 554, 561
 Northumberland Island, 38, 47, 58, 78, 173, 224, 370, 381, 383, 389, 409, 424, 546

O

Odometer, 129
 Ohlin, Dr. Axel, 153
 Ohlsen, Cape, 56, 419
 Ohlsen, Governor, 25
 Oil, loss of, 79
 Okkak, mission station of, 17
 Olriks Bay, 119, 123, 129-131, 174, 231, 244, 376, 378; glaciers of, 126; hunting in, 60, 72; inaccurately charted, 61; party for, 67; returning from, 60; steaming for, 58; steaming up, 59
 Omenak Sound, 38, 208, 419, 420

624 Northward over the "Great Ice"

Operti, Albert, 568, 573, 574, 614, 617
Ovifak irons, 554, 606

P

Pandora, the s. s., 50
Pandora Harbour, 52
Panther, the s. s., 29
Paris Museum, 617
Parker Snow Bay, 140, 335, 338, 345, 346
Parker Snow Point, 140
Parry, Cape, 134, 140, 161, 210-221, 327, 329, 349, 352, 354, 376, 381, 409, 556; sighted, 38
Peary Expeditions, 151; igloo, 153
Peary, Little Ahnighito, 70; Marie Ahnighito, 68
Peary, Mrs. Robert E., 40, 47, 54, 59, 66, 80, 88, 123, 152, 212, 309, 315, 535, 537, 562, 574, 584; boarding the *Falcon*, 7; landing at Godhavn, 24
Peninsula, Red Cliff, 119, 232
Perry, Mr., 574
Petermann Fjord, 67; Basin, 451
Petowik Glacier, 137-139, 141, 155, 163, 207, 211, 330, 335, 416, 425
Phelps, J. K., 602
Phillips, Mr., 568
Pigeon Camp, 88, 95, 96, 119
Pigeons, the carrier, 4; letter by, 68
Plateau Camp, 89
Polaris House, site of, 54; souvenir from, 55
Porter, Mr., 568, 574
Portland, farewell banquet by the city of, 7
Prudhoe Land, 107, 117
Ptarmigan Island, 375
Putnam, Assist., 568

R

Red Cliff, 133; ice-cap on, 416; peninsula of, 119, 232
Red Cliff House, 45, 127, 416
Red Mountain, 211
Reindeer, cache, 375; haunts, 59; hunted, 60, 72, 154; pastures of Kangerdlooksoah, 79; shot, 137
Relics of Polaris party, 55
Rensselaer Harbour, 213, 426

Ricketts and Banks, 602
Robertson Bay, 273, 422, 424; Cape, 419
Ross, Capt. John, 554, 561, 614

S

Sabine, Cape, 53, 54, 592, 593
Salisbury, Prof. Rollin D., 535, 537, 544, 606-608
Salmon River, 234
Saunders Island, 136, 137, 161, 172, 173, 215, 217, 331, 332, 346, 352
Savage Glacier, 126, 232
Saviksoak Bay, 558, 562, 568
Schuchert, Prof., 574
Sculptured Cliffs of Karnah, 232, 249, 275, 328, 376; glacier of, 241
Seddon, Cape, 168
Shackleton, Cape, 28
Shaw, Mr., 574
Sledge, 132; cached, 117; construction of, 97; iron runner, 423; journey to Melville Bay, 159; left, 117, 118; observatory, 98; trips, 78
Sledges, blown from Inland Ice, 72; broken, 106; buried, 111; completed, 108; overhauling, 92; repaired, 130
Sledging by moonlight, 79
Smith Sound, 207, 252, 419, 421, 446, 544, 558; Eskimos of, 556
Sohon, Dr. Fred, 574
Sonntag Bay, 58
Sound, Booth, 135, 149, 161, 220, 222; dogs of Whale, 524; Jones, 542, 543, 546; Lancaster, 546; Murchison, 38, 58, 153, 231, 232, 242, 423; Omenak, 35, 208, 419, 420; Smith, 207, 252, 419, 421, 446, 544, 558; Eskimos of, 556; Whale, 38, 58, 93, 117, 127, 134, 150, 172, 173, 229, 232, 242, 366, 375, 376, 499, 612; Wolstenholm, 129, 136, 161, 162, 172, 215, 219, 331, 334, 347, 416, 419, 420, 554, 592
Stein, Robert, 578, 579
Stickney, Mr., 578
Stokes, F. W., 66
St. John's, N. F., 3, 10, 397
Strait, Davis, 593, 594
Straits of Belle Isle, 594
Sugar Loaf, 28
Sunrise Point, 58

Supplies on ice-cap, 72
 Sutherland, Mr., 568
 Swain, Walter T., 66
 Sweigard, Supt., 3

T

Tarr, Prof. R. S., 568
 Tasiusak, settlement of, 26
 Taylor, Mr., 584
 Temperatures, 30, 77, 90, 97, 100, 105-
 110, 115-117, 120, 129, 162, 163,
 178, 179, 181-187, 317, 370, 373,
 411, 415, 444, 450, 452; of air, 33;
 of water, 33
 Thom Island, 174
 Tooktoo Valley, 82
 Traps on Cape York, 37
 Turnavik, leaving mail at, 13
 Tyndall Glacier, 150

U

Umanak, 570, 579
 Upernavik, 25, 213, 549

V

Verhoeff, John M., 37, 46
 Vincent, Dr. Edward E., 65, 68, 99,
 101, 102

W

Walker, Cape, 166, 168
 Walrus, 57; feeding grounds of the,
 208; hoisted on board, 47; hunting
 the, 251, 262, 429; killed, 67; meat
 of, 420; off Littleton Island, 57;
 securing, 48; seen on the ice, 47;
 steaming toward the, 46
 Walsh, Dr. John, 535

Watson, Mr., 568
 Weinschenk, Dr. E. A., 606, 608, 609
 Wetherell, Dr. H. E., 153
 Whale-boats, 67; the *Faith*, 4, 47;
 crushed, 76; the *General Wistar*,
 207, 213, 248, 250, 275, 279; the
Mary Peary, 4, 47, 57, 60, 72, 250,
 275, 279
 Whale Sound, 33, 58, 93, 117, 127,
 134, 150, 172, 173, 229, 232, 242,
 366, 375, 376, 499, 612; dogs of,
 524; Eskimo of, 431
 White, Mr., 574
 White, Prof., 574
 Whitfield, Prof., 604, 609
 Widmannstätten figures, 602, 606
 Wilcox Head, 28, 568
 Wind-storm on ice-cap, 98; subsides,
 100
 Wistar, General I. J., 4
 Wolstenholm, Island, 211, 215, 331;
 Sound, 129, 136, 161, 162, 172, 215,
 219, 331, 334, 347, 416, 419, 420,
 554, 592

Y

Yale College Museum, 627
 York, Cape, 128, 129, 141, 142, 155,
 159, 162, 164, 169, 171, 211, 219,
 273, 305, 313, 327, 330, 333, 336,
 343, 353, 373, 396, 408, 419, 554,
 556, 559, 561, 562, 568, 574, 575,
 591, 592, 606, 607, 618; cairn erected
 on, 37; families from, 70; fox-traps
 on, 37; ice-cap on, 37; landing at,
 37; meteorites, 553, 607, 617, 618;
 outlook from, 37; region about,
 133; rounding, 143; sighted, 32
 Young, Sir Allen, 56

