

CLIPPINGS

OF THE



HARVARD TRAVELLERS CLUB

all elements of a difficult subject. He has original remarks to make on most of these matters, and, though we may not always see eye to eye with him in his treatment of them, we shall most of us agree that intelligent opposition to generally accepted views may serve a useful function.

C. F. C.

GENERAL

HANDBOOK OF TRAVEL. Prepared for the Harvard Travellers Club. Edited by **GEORGE CHEEVER SHATTUCK**. Second Edition, revised and enlarged. *Cambridge, Massachusetts: Harvard University Press (London: Humphrey Milford) 1935.* 7 × 4½ inches; 510 pages; illustrations. 12s 6d

This book is divided into four parts dealing with Methods of Travel; Camping; Recording and Collating; Hygiene, Medicine, and Surgery. Most chapters of this handbook consist of a summary of the principal considerations with which the traveller would be concerned, together with as much in the way of detailed hints as can be squeezed into the very limited space available, followed by a bibliography of works from which full and detailed information can be gleaned. Though in Parts I and II the terrain is with one or two exceptions confined to the New World, the references are by no means confined to American authorities. For instance the list following the chapter on Mountain Climbing consists entirely of British authors. The chapters themselves are all by American writers of experience. Turning, for instance, to Caravan Travel in Mongolia we find that this has very appropriately been done by Owen Lattimore.

It is natural to compare the 'Handbook of Travel' with our 'Hints to Travellers.' In the preface the editors state that "The purpose of this handbook is twofold: first to offer the prospective traveller a great variety of information which may be useful to him while planning his expedition and, second, to provide a compact volume which will be useful in the field." On turning to 'Hints' (Tenth Edition) I was surprised to find that the exact purposes are not stated. Presumably they are the same but with the order of priority reversed. The most outstanding difference between the two books is that the 'Handbook of Travel' devotes a mere eleven pages to survey and position finding, leaving the whole subject to be learnt up beforehand from standard text-books, whereas in 'Hints' a whole volume is devoted to it.

In many ways the two books are complementary, the 'Handbook' being of decidedly more value than the last edition of 'Hints' to the prospective traveller while preparing for a type of travel he has not previously experienced, whereas 'Hints' is by far the more useful book to take with one on an actual journey. As might be expected in an American version the question of food and diet is worked up in great detail (but with what degree of authority I am not competent to say). Judging by the dietary mistakes made by many British expeditions in the past this matter will presumably be attended to in the new edition of 'Hints,' vol. ii.

R. A. B.

RECOLLECTIONS OF A GEOGRAPHER. By **E. A. REEVES**. *London: Seeley, Service & Co. [1935].* 9 × 5½ inches; 224 pages; illustrations and maps. 8s 6d

Sir Francis Younghusband in a foreword commends this book as delightful reading and good to have on record. It will surely serve to perpetuate the memory of an old friend, happily still with us, whose life was devoted to the service of the Royal Geographical Society and to the cause of Geography. When he retired from the post of Map-Curator and Instructor in Surveying in 1933 Mr. Reeves had been a familiar figure in the Map Room for more than half the century-long

EXPLORER GETS NEW FAREWELL

Ipswich Woman Repeats
Good-By as She Trails
Boat South

PHILADELPHIA, Nov. 29 (AP)—Three days overdue, the ship Chiva, docked at Philadelphia today and Mrs. Edward A. Goodale of Ipswich, Mass., was able to bid her explorer-husband the second of three farewells.

Goodale is a member of a party sailing to Dutch New Guinea to study the Papuan tribe for the Philadelphia Academy of Natural Sciences. But Mrs. Goodale "loathes boats."

They said good-by at New York several days ago when the Chiva was taking on its cargo. Mrs. Goodale, with her 4-year-old daughter, Evelyn, drove here for a second farewell. The boat was delayed in sailing, so Mrs. Goodale and Evelyn slept three nights in sleeping bags in their automobile parked on a Delaware river pier.

When the ship sails, Mrs. Goodale said, she will drive down the coast to Key West, Fla., where the Chiva again will stop and there will be a third farewell.

Then she will await the conclusion of the expedition's work to greet him on his return to Key West.

HARRY WHITNEY DIES IN MONTREAL

Noted Explorer Succumbs
Following Operation

MONTREAL, May 20 (AP)—Harry Whitney, 62, of New York, noted explorer and big game hunter, died today in a hospital here. He came here a week ago to undergo an operation.

Whitney was involved in a dispute about the north pole with other explorers in 1909 and 1910.

Admiral Peary and Dr. Frederick A. Cook both returned from the Arctic in 1909, each claiming discovery of the north pole. Whitney had gone to the area on Peary's ship and was left at Etah, Greenland with two others and supplies. Nearby was Cook's base.

Whitney one day found Cook struggling on the ice with two Eskimos, and Cook spent two days with Whitney, leaving some articles with him before departing for America. When Whitney, boarding Admiral Peary's ship, informed the explorer he had two boxes containing material belonging to Cook, Peary would not let him bring them and Whitney cached the boxes.

A controversy soon broke out in the United States as to whether Peary or Cook discovered the North Pole. There were hints that Whitney had destroyed Cook's records or had purposely left them behind.

Whitney is survived by his widow, formerly Eunice C. Kenison whom he married in New York in 1916, and a sister, Mrs. Charles B. Dickey of New York.

5-FOOT WORLD GLOBE PRESENTED HARVARD

A five-foot world globe, said to be the best of its size ever made, was presented to Harvard University as a special tercentenary gift by the Harvard Travellers' Club at the group's annual dinner at the Harvard Club of Boston last night.

Jerome D. Greene, director of the tercentenary celebration, accepted the globe in behalf of Harvard from George A. Lyon, president of the club. The globe was prepared by Prof. Hermann Haack of the Geographical Institute of Justus Perthes, Gotha, Germany, internationally famous cartographer.

The globe is mounted on a brass half meridian and stands on a mahogany base which has an inlaid compass. It will be placed in the Farnsworth room of the Widener library at Harvard. 5/29/36

EXPLORER TO SPEAK ON SO. SEAS TONIGHT

Wheelock School Alumnae Sponsoring
Illustrated Lecture

An illustrated lecture on the discovery of unknown islands in uncharted waters through the South Seas, will be given by Capt. Irving Johnson of the schooner "Yankee" at Whitney hall, Coolidge Corner, at 8:15 o'clock tonight.

The lecture is sponsored by the Wheelock School Alumnae Association for the benefit of the Wheelock Child Guidance Centre of the Roxbury Neighborhood House.

Miss Marguerite Moore, president of the association, is in charge of all arrangements with Mrs. Dane Westcott chairman of the ticket committee. Miss Elizabeth L. Kennedy is head usher, assisted by the Misses Dorothea Callowhill, Sally Marsh, Margaret Cahill, Ruth Hintze and Ruth Barbour. Miss Elva Stearns is in charge of candy vendors.

Travel Club

The Women's Travel Club, one of the many interesting feminine organizations about Boston, will have its annual luncheon tomorrow at 12.45 o'clock at the Club of Odd Volumes on Mt. Vernon street. Mrs. Kojiro Tomita will speak about Japan. This club, which was formed two years ago, has as its object the promotion of intelligent travel and exploration by women. There are active and associate members and the former must have taken at least one unusual or original journey.

Meetings of the Women's Travel Club are held one evening a month from November through April. Mrs. George C. Shattuck is president, while other officers of the club are Mrs. Arthur W. Hartt, vice president; Mrs. Horace U. Gade, secretary; Mrs. George A. Lyon, treasurer; Mrs. Richard B. Hobart, Mrs. Robert L. M. Underhill and Mrs. Carleton S. Coon, members of the executive committee.

Members of the organizing committee in 1934 included Mrs. Larz Anderson, Mrs. Hartt, Mrs. Hobart, Mrs. Lyon, Mrs. W. H. Schofield and Mrs. Jasper Whiting.

The experienced travelers who have become members of the Women's Travel Club include Miss Mary Q. Abbott, Mrs. Oakes Ames, Mrs. Larz Anderson, Mrs. Edwin F. Atkins, Mrs. Charles L. Ayling, Mrs. Myles P. Baker, Mrs. Oric Bates, Mrs. Henry B. Bigelow, Mrs. Harold Bowditch, Mrs. Gorham Brooks, Miss Ellen Bullard, Mrs. Thomas D. Cabot, Mrs. William H. Clafim, Jr., Mrs. Harold J. Coolidge, Jr., Mrs. John G. Coolidge, Mrs. Carleton S. Coon, Mrs. C. Burton Cosgrove, Mrs. Ralph Adams Cram, Mrs. Albert M. Creighton and Mrs. Courtenay Crocker.

Also: Mrs. Richard C. Curtis, Mrs. Brenton H. Dickson, III, Miss Lucy B. Drew, Mrs. William A. Elliston, Mrs. Raymond Emerson, Mrs. Robert W. Ferguson, Mrs. Alexander Forbes, Miss Ethel A. Forbes, Mrs. Gerrit Forbes, Mrs. Horace U. Gade, Mrs. E. T. Gregory, Mrs. Henry S. Hall, Jr., Mrs. George W. Handy, Mrs. G. Browne Harrington, Mrs. Arthur W. Hartt, Mrs. Richard B. Hobart, Mrs. W. Ernest Hocking, Mrs. F. Trevor Hogg, Miss Adeline D. Hooper, Mrs. Earnest A. Hooton, Mrs. Bruce Hopper, Mrs. Alfred V. Kidder, Mrs. Warren Lothrop, Mrs. George A. Lyon, Mrs. Charles MacVeagh and Mrs. Francis P. Magoun, Jr.

Still others are Mrs. Frank C. Paine, Mrs. Franklin Palmer, Mrs. J. Duncan Phillips, Mrs. Herbert A. Poole, Mrs. Charles Allen Porter, Miss Christine L. Reid, Mrs. Oliver Ricketson, Jr., Miss Phyllis Robbins, Mrs. Robb Sagendorph, Mrs. William H. Schofield, Mrs. Eric Schmidt, Mrs. Eric Schroeder, Mrs. George C. Shattuck, Mrs. J. Lindon Smith, Mrs. Frederic J. Stimson, Mrs. Frederic M. Stone, Mrs. A. Leas Strong, Mrs. R. Lindon Taylor, Mrs. Kojiro Tomita, Mrs. Robert L. M. Underhill, Mrs. G. Kennard Wakefield, Mrs. Edward C. Wheeler, Jr., Miss Mary C. Wheelwright, Mrs. Jasper Whiting, Mrs. Emile F. Williams and Mrs. Herbert E. Winlock.

Jan 11/37

Furlong and Head Hunter Settle in Scituate Home

Explorer Reins In Adventurous Spirit—Purchases Farmhouse, 'Six Gables,' Stocks It with Souvenirs

After years spent in some of the most primitive and perilous regions of the Globe, Colonel Charles Wellington Furlong, world-famed explorer, lecturer, and author, has at last reined in his adventurous spirit to live in comparative quiet in his recently purchased New England farmhouse, Six Gables, in Scituate.

This, however, does not mean resignation from activity. On the contrary, as Colonel Furlong himself expressed it: "I still am extremely busy. . . . writing. . . . lecturing. . . . ethnological research. . . . and most of the time, remodelling my new house with the aid of Luciano Chonny whom I brought with me from the head hunter tribe of the Philippines.

Then, eyes alight with memories of days not so long ago, he went through the low, rambling rooms of the farmhouse, pointing out the many souvenirs which for the first time he has collected together.

First to receive attention was an enormous table supported by a single elephant's foot more than sixty inches in circumference. The top of this table is covered by an elephant ear forty-four inches in diameter.

The beast from which these were stripped, Colonel Furlong explained, was shot by him when the mammoth charged the party during Colonel Furlong's recent 8000-mile expedition into Central Africa.

Colonel Furlong pointed out that it was on this same expedition that he managed, by dint of diplomacy and persuasion, to secure rare relics of Sir Henry M. Stanley which have been sought for years by England, Sweden, and Belgium. These relics, now in the African Hall of the New York Museum of Natural History, include a spearhead which chief Matubi Kavali carried when he first met Stanley, a bracelet Stanley gave him, and a headdress and letter given to Kavali by Lady Stanley.

When reminded of his innumerable accomplishments, the

sixty-three-year-old Cambridge born explorer, pointing to a battered pair of chaps, said, "I wore those when I won the world's rough riding championship in Pendleton, Ore., just before the World War."

This led to his being questioned about his military career which, it was learned, was first preceded by four years in the Massachusetts Naval Brigade. Then, beginning as a trooper in the cavalry, he received increasingly higher commissions until his present colonelship in the military army intelligence division of the First Corps Area.

During the Peace Conference in Paris, Colonel Furlong was a member of the American delegation and in 1925-26 served with general Pershing as a senior officer on the Tacna-Arica Commission.

Although the entire house is stocked with rare oddities from all corners of the world, Colonel Furlong's especially-constructed studio holds the bulk of his treasures. The high-vaulted room exhibits heads of a lion, gun, antelope, boar, leopard, and a magnificent assortment of spears and knives. In addition, the walls are lined with a bewildering array of African tokens and ceremonial implements. Many of his paintings, which have long been recognized in world art circles, add to the interest.

About his many literary works which include "Let 'er Buck," "Tripoli in Barbary," and "The Gateway to the Sahara," Colonel Furlong commented, "There has always been so much to write and little time. . . ."

And indeed time has flown for Colonel Furlong. Explorer, soldier, painter, professor, lecturer, publicist, he has fought, desert thieves in Sahara, trekked through unexplored Tierra del Fuego, slept in guanaco skin tents of the primitive Patagonians, crossed the Atlantic in a forty-six foot schooner, probed the interior of the Azores, Madeira, Desertas, and Canary Islands, addressed leading geographical and ethnological societies here and abroad, and has cowpunched with the hard-riding vaqueros of the Venezuelan llanos.

Jan 3/37

SOUTH AMERICAN PARLEY PRAISED

Charles W. Furlong Sees
Advances for Peace

The recent inter-American conference of 21 countries at South America has solidified the multilateral application of the Monroe Doctrine and established it as a bulwark of defense for the western hemisphere, said Charles W. Furlong, F.R.G.S., in an address here yesterday.

Speaking at the Twentieth Century Club's meeting on "The Inter-American Conference for the Maintenance of Peace," he said the factors contributing to the scope of the conference were the failure of Europe's peace structures and its present war drift, internal South American dissensions and the still unsettled Chaco dispute.

The well known authority on South American affairs said the 69 projects approved by the nations represented at the conference resolved into the three objectives of collective security, non-intervention and neutrality. He termed the conference "a step in the right direction" and praised Secretary Hull for his guidance of its work.

Furlong proposed the idea of five such conference groups throughout the world — pan-American, pan-European, pan-African, pan-Asiatic and pan-Oceanic—that world questions might be better considered by delegates from the respective leagues meeting in a world congress.

Harvard Sends Group to Hunt Primitive Man

25,000-Mile Trip May Un-
earth a Contemporary
of Sinecanthropus

Harvard University is co-sponsor of one of the most extended anthropological expeditions in many years—a 25,000 mile trip to Burma, the Straits Settlements, Java and the Philippines in search of the bones of primitive man, his weapons and his tools.

Dr. and Mrs. Hallam Movius Jr., of the Peabody Museum, will sail Friday from New York, with the leader of the expedition, Dr. Helmut deTerra and his wife, of the Academy of Natural Sciences of Philadelphia, the other sponsor. The quartet will be joined in Burma by the fifth member, Rev. Teilhard de Chardin, S.J., co-discoverer of the Peking Man, oldest known inhabitant of China, and many scientists believe, of the world. Father de Chardin, who combines paleontology with missionary work, visited this country last spring for the International Symposium on Early Man held in Philadelphia, later spending a short time at Harvard.

The American scientists will visit their confreres in London and Paris before continuing on to India and Burma. The group will survey and dig all the known sites over a stretch of country in the dry belt of Burma, about 500 miles long and 200 miles wide. They expect to arrive in November and will remain until April, when the monsoons start.

One of the first things Dr. and Mrs. Movius will do on their arrival in Burma will be to start excavating limestone crevasses opposite Mandalay. Cut by water which also washed bones into them, these have been solidified by time and are well preserved. The fissures are similar to the caves outside Peking where Father de Chardin disinterred the Peking man, and Dr. and Mrs. Movius have high hopes of finding human fossils.

Human remains will also be sought by the scientists in gravel deposits of the Glacial period. One of the most promising sites of excavation is a site between Yenang Yaung and Singu, near the celebrated ruby mines of Burma. The action of glaciers has made terrace formations, in which many artifacts are expected to be found.

Dr. Movius is the archeologist of the expedition, Dr. deTerra the geologist and Father de Chardin the paleontologist. The oil geologists of Burma and the directors of the geological surveys of India and Burma are co-operating with the expedition.

As the territory to be excavated is in the dry belt of Burma, Dr. Movius expects that working conditions will be livable enough. The terrain is rather like our own Bad Lands, he explains, and though trees are sparse there are few dangerous insects. There are good motor roads and railroads and excellent transportation on the Irrawaddi. The expedition will not live in tents but in wooden bungalows.

Dr. Movius worked for some years with Dr. Hugh O'Neill Hencken, also of Peabody Museum, on the Harvard archeological expedition in Ireland, where he met Mrs. Movius, the former Miss Nancy C. de Crespigny of Australia. After her graduation from the University of Melbourne, Mrs. Movius studied at Cambridge University, where she became interested in archeology. Before she came to Ireland she worked on the famous Maidenhead, the iron age fort in Dorset, Eng., recently excavated.

Harvard Party Finds Ice Age Tools And Animal Relics in Upper Burma

By DR. HELLMUT de TERRA
(Director, American Southeast Asiatic Expedition for Early Man)
[Boston Herald-N. Y. Times Wireless]

MOGUK, Burma, Dec. 22 (By air-mail to London)—On the banks of the Irrawaddy river, in Upper Burma, Dr. Hallam L. Movius of Harvard and I have found what may prove to be a prehistoric link between two of Asia's most ancient stone age cultures—very primitive stone tools similar to others that have been found both in India and Java.

During the first weeks of our search under a really blistering tropical sun we located in the ancient river drift a number of artifacts (implements) manufactured by what must have been the oldest human race to inhabit the vast river tracts of southeastern Asia. The great geological age of these stone tools was proved when I collected fossilized remains of extinct mammals from terrace formations similar in origin to the culture-bearing strata.

Opposite Mandalay, picturesque residence of past Burmese kings, we found the remains of a hippopotamus, a buffalo and elephants be-

longing to species that roamed the lowlands at the time of the Himalayan ice age. A still older formation but one that also belonged to the Quaternary period yielded, amongst other fossils remains of a horse. This is the southernmost occurrence of the ancient companion of man so far located in Asia.

Our explorations will now be extended over the Shan plateau, famous for its caves, and over the so-called dry belt of Burma. Here tropical jungle, which has been the greatest obstacle to our search, is replaced by a more arid type of landscape, providing us with better working conditions.

The expedition, which is operating under the joint auspices of the Academy of Natural Sciences of Philadelphia, Harvard University and the Carnegie Institution of Washington, will work another three months in Burma before continuing its work in Java.

Petrels' Songs Captured and Sent by Radio

Aug 2, 1937
Bowdoin Expedition to
Kent's Island Accomplishes
Feat for First Time

(By Radio to The Transcript)

KENT'S ISLAND, Bay of Fundy, Aug. 2—The first recording of bird sounds by radio is reported by W. A. O. Gross, director of the Bowdoin College scientific station at Kent's Island. The songs were transmitted from field microphones on Kent's Island by short wave radio to a Cornell University sound truck on Grand Manan Island.

Occurrence of several species of birds whose songs never have been recorded was the reason for the unusual undertaking. These included such bird language as that of the petrels, or mother Carey's chickens, and the northern raven. Albert R. Brand, research associate of Cornell University, was in direct charge of operations.

The heavily laden sound recording truck was shipped by steamer to Grand Manan, nearest point to Kent's Island. Radio operation from VE1IN, the Bowdoin College expedition's powerful radio station, established two-way communication between the sound truck and Kent's Island where delicate microphones were used to pick up the sound.

Difficulty was encountered with the petrels—mysterious birds that carry on their nesting activity in underground burrows. They sing only on foggy nights. Successive failure to pick up their calls finally were ended by using a parabolic reflector which recorded the faintest sounds at distances of nearly a mile.

Officials of the station asserted that this new recording technique will find wide application on future expeditions into regions hitherto inaccessible to recording equipment.

The sound records will be preserved permanently and made available to scientists by means of phonographic records. The calls will be analyzed for description directly from the sound track on the films.

Soviet Ambassador Speaks at Harvard Travelers' Club

Nov 9, 1937
Envoy Makes Unofficial Trip to Boston to Talk on
Arctic Exploration Trips

Alexander A. Troyanovsky, Soviet ambassador to the United States, returned to Washington today after visiting unofficially in Boston.

At his request no announcement of his arrival or presence was made by the Harvard Travelers' Club, which invited him to speak before it.

He addressed the club informally on recent expeditionary activities in the Soviet Union, particularly with regard to the exploration of the so-called North-east Passage around Siberia.

In conjunction with his talk, the ambassador presented a sound motion picture taken on the Chelyuskin expedition of 1934, some of it by the ambassador's nephew.

This expedition was made up of 105 men who made their way from Leningrad to the Bering Straits until their ship was blown off its course into the Arctic and was crushed by ice. One man was drowned. Everyone else in the party was rescued by airplane.

Offered Haven



ALEX. A. TROYANOVSKY
Soviet Ambassador to United States

THOMPSON, Conn., Dec. 21—Should Alexander A. Troyanovsky, Soviet Ambassador to the United States, wish to relinquish his post and remain in this country, he can make his home here with leaders of the Russian National Revolutionary Fascist Party, outspoken opponents of the Soviet regime.

Anastase A. Vonsiatsky, 39-year-old leader of the party, telegraphed Troyanovsky last night, mentioning names of Russian diplomats reported recalled and executed recently.

"If Stalin is going to recall you to Moscow," Vonsiatsky told the envoy, "I suggest you and your wife come to Thompson and stay with me. My compliments and hope to see you soon."

Harvard Man Will Explore Arctic For Data on Inaccessible Eskimos

By LAWRENCE DAME

A one-man expedition, sponsored by the New England Museum of Natural History, leaves here tomorrow on a long trek into the Arctic, seeking information for New Englanders about the most inaccessible Eskimos in existence, who now defy civilization in haunts last explored in 1829.

Announcement that Prentice G. Downes, 27, small-framed and studious appearing son of a Hazzardville, Ct., minister, will undertake the expedition was made yesterday by John K. Howard, Boston attorney, the museum's new president.

The announcement revealed an extension of the museum's field of research in districts outside New England. Downes is expected to bring back photographs and specimens of Far North flora and fauna, information about natives who hold to pre-Columbus customs and much geological data.

Railroads will take Downes to Winnipeg, airplanes will whisk him on his fourth annual journey into northwest territory and Indian canoes and Eskimo sledges will, from time to time, augment a Hudson's Bay Company relief steamer as means of transportation.

"Just please don't call me an explorer," begged Downes, who was graduated from Harvard in 1933 and teaches science at the Belmont Hill School.

"There isn't much of any danger up there, except to run into such heavy wind that our ship gets stalled, as it did six days last year. A lot of reading about the Arctic got me

interested in this sort of thing and I have studied anthropology and ethnology. About all I'm taking with me is a camera and some slight knowledge of dialects."

"I want to go to the old men of the tribes to get at the old tribal mythologies and accounts of hunting and trapping habits which are dying out as the airplane comes in. The old culture is disappearing and the young men of some districts, almost ignorant of the past, have outboard motors on their boats, listen to radios and gramophones and even wear store caps."

COURSE OUTLINED

President Howard outlined Downes' course on a map of the Arctic, which he knows fairly well himself through sailings up and down the coast of Danish Greenland. The president speeded Bradford Washburn, Cambridge explorer, off to Alaska May 21, on an expedition sponsored by the New England Museum of Natural History.

Downes expects to fly over Manitoba into Saskatchewan, where he wants to live six weeks with Cree and Chippewyan Indians in the Reindeer Lake district, far from railroads and motors.

"I only hope I can find Solomon," Downes said, explaining that his Biblically named friend is a Cree, who acted as a guide during one of the three annual visits the young man has made to the North since he finished at Harvard.

From the canoes of the Cree territory, Downes will turn for transportation to the Hudson Bay railway and intends to board the Hudson's Bay Company steamer *Nascopie* at Churchill Aug. 11. The

July 11, 1937 READY FOR EXPEDITION TO FAR NORTH



The Royal Mail steamer *Nascopie*, a Hudson's Bay Company steamer which will take a one-man expedition of the New England Museum of Natural History into Far North. The ship is pictured at Sugiuk, Hudson Strait.

Nascopie is a relief boat which gives isolated trading posts their one touch with civilization each year. Its boxes and bales will be stamped "No. 268," indicating that the company has already made 267 such trips toward the North Pole since Charles II granted its charter in 1670.

TO VISIT REMOTE REGIONS

- At each post touched by the ship, Downes will debark with his camera and push into as remote regions as can be reached before the ship sails again farther north. His northernmost visit will be to Craig Harbour on Hudson Strait, within 800 miles of the pole. Flowers will be blooming there in August and the ship's only hazards will be broken-up ice packs and sudden storms.

From Craig Harbour, the *Nascopie* intends to follow the trail of great explorers and visionaries of the past, who sought the Northwest Passage.

"There won't be any outboard motors on kayaks down there," said Downes. "I expect to find pre-Columbian tribes, who have been described as dressed in skins. I'll go to Boothia peninsula, where the Magnetic Pole was found by an expedition headed by Sir John Ross and his nephew, James Ross."

COULD DODGE ICE

"Old Sir John had a steamer with special retractable paddle wheels, which could dodge the ice. Something went wrong with his machinery, though, and he threw the ship's boiler onto the beach."

"I know the natives are still making weapons out of that boiler, be-

cause I own this pocketpiece which was once part of the same boiler."

He took out a bronze object and looked at it through his silver-rimmed spectacles. It was a small harpoon head, an authentic Far North antique.

Before leaving Boothia peninsula, Downes will see his companions on the ship, Canadian agents and Royal Canadian Mounties, establish a new post on the dividing line between the eastern Arctic ocean, which is reached from the Atlantic, and the western Arctic, which is reached from the Pacific. He will see proof that the Northwest Passage is not so fabulous as it once sounded, but is impractical commercially. Baffin Land and points accessible but six weeks in the year will be visited by Downes before his return in September with museum spoils.

agree to a settlement.

N. E. Museum to Hunt Strange Mexican Cat

J. K. Howard Flying to
Nogales—to Trace Report-
ed 'Cougar-Jaguar'

The third summer expedition of the New England Museum will get under way tonight when John K. Howard, new president of the museum, starts by plane for Mexico on a big-game hunting expedition.

He will be joined at Nogales, on the Mexican border, by Ernest and Clell Lee, celebrated hunters, and their pack of hounds. The party plans to visit uncharted country in Northern Mexico after cougar, ocelot, wildcat, boar and jaguar.

They may encounter a strange cat whose existence Mr. Howard doubts, but which natives have reported.

Mexicans believe it to be a cross between a cougar and a jaguar. It is said to have the large, thick neck and shoulders of the jaguar, and even a heavier head, but to be the tawny color of the slimmer mountain lion.

The native name for this new cat is "onca." Mr. Howard points out that this is the Brazilian-Portuguese name for the jaguar, which in all Spanish American countries is known as the "tigre." He thinks that, if anything, it may be an unusual color variation of the jaguar.

Mr. Howard is a partner in the law firm of Gaston, Snow, Saltonstall, Hunt & Rice.

John K. Howard Named Head of Museum of Natural History

Boston Lawyer and Big-Game Hunter Takes Post
Formerly Held by Dr. Wigglesworth

John K. Howard, of the law firm of Gaston, Snow, Saltonstall, Hunt & Rice, was elected president of the Boston Society of Natural History this afternoon, and thus becomes also the head of the New England Museum of National History on Berkeley street.

He succeeds Dr. Edward Wigglesworth, who remains as director of the museum, which is owned and operated by the society.

The society held its annual meeting at the museum. It elected Nathaniel T. Kidder and Glover M. Allen vice presidents; Clinton V. MacCoy, secretary, and Augustus P. Loring, Jr., treasurer.

Eleven trustees were elected. They are Ludlow Griscom, Ralph Hornblower, A. Lawrence Lowell,

Carl T. Keller, Alfred C. Redfield, Thomas Barbour, Charles H. Blake, Arthur Burger, Thornton W. Burgess, Alexander Forbes and William H. Weston, Jr.

A proposal was submitted by Dr. Wigglesworth, in his report, that the front hall of the museum, through which all visitors enter, be brightened with mural paintings. He outlined a new policy by which the museum will enter more actively into the educational system of today, offering a special service to the public schools, to Scouts and other organizations through which boys and girls may be reached with popular information in natural history.

Dr. Wigglesworth also reported on extensive alterations and reclassifications made in the museum in preparation for the re-

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J. K. HOWARD GOES AFTER BIG GAME

July 16, 1933
Heads an Expedition
for New England
Museum

Since the beginning of June, two expeditions have gone into the field, under the auspices of the New England Museum. One led by Bradford Washburn to Alaska and the Yukon, and the Downes' expedition to Northern Saskatchewan and the Canadian Arctic Islands. Now a third expedition has just started for the South Central Sierra Madres Mountains in the State of Sinaloa, Mexico.

FLYING TO ARIZONA

The recently elected president of the institution, John K. Howard, is the leader.

Mr. Howard left the Boston Airport last evening and is flying to Tucson, Arizona, and then a short motor to Nogales on the Mexican border. At Nogales, Ernest and Clell Lee, the famous predatory animal hunters of Paradise, Arizona, join the party, with a pack of their big game hounds. The Lees have hunted with their hounds all over the Southwest, in Florida, Northern Mexico, Central America and were on one expedition in the Matto Grosso of Brazil for the Academy of Natural Science of Philadelphia.

No one in this country has had greater experience than they in chasing the great predatory cats of the Western Hemisphere. The country to be visited by this expedition is new to the Lees and, except for some local shooting, is an uncharted country. Mr. Ferreira, a Mexican rancher and friend of the Lees, who lives nearby, reports cougar (mountain lion), ocelot, wild cats, deer, wild boar and a few jaguar to have been killed in the country.

There is a local tale of a different large cat, to which Mr. Howard gives little credence. The local Mexicans believe it to be a cross between a cougar and a jaguar. It is said to have the large, thick neck and shoulders of the jaguar and even a heavier head, but to be the tawny color of the slimmer mountain lion. Some natives claim to have seen occasional striped ones. (The jaguar is spotted and the lion uncolored). They also claim that the track is different from both the lion and the jaguar.

Based on Delusion

Mr. Howard says that in almost all parts of the world there have been local beliefs of the existence of animals as yet unknown to the scientist, but that generally these beliefs, though genuine, are found on investigation to be based on some optical illusion.

A notable case was the "ibex" of the Rocky Mountains, undoubtedly a young big-horn ram, whose horns had not completed a half curl, magnified into the appearance of the scimitar ibex horn by some trick of light. The local native name for this new cat is "onca." Mr. Howard points out that this is the Brazilian-Portuguese name for the jaguar, which in all Spanish-American countries is known as the "tigre." He thinks that if anything it may be an unusual color variation of the jaguar.

Mr. Howard, who is a partner of the well-known law firm of Gaston, Snow, Saltonstall, Hunt & Rice, expects to fly back and be at his desk again just a month from today.

Puffin, Clown of Birdland, Nests on Bay of Fundy Isle

Boston Bird Lovers to Hear Story of Expedition to Machias Seal Island

Findings of the 1936 scientific expedition to the Bay of Fundy will be reported on Saturday at a meeting of the Northeastern Birdbanding Association and the Massachusetts Audubon Society at the University Club.

Another expedition is preparing to visit the bay country and Kent's Island next summer.

Two persons are the sole inhabitants of the island this winter. They operate the meteorological equipment and observe bird life there. Arrangements have been made for a Canadian Government patrol boat to land a small relief party on the island in February. Sufficient supplies, however, have been provided in advance for the entire winter.

Observations revealing many facts hitherto unknown were made by the 1936 expedition, which remained on the island longer than was planned owing to dense fog which delayed the completion of the program for the year. Objectives of the scientists lie in the fields of ornithology, biology, geology, surveying, map making and the study of certain magnetic disturbances that still border on the mysterious.

Enter the Atlantic Puffin

A strange bird comes into prominence through the efforts of this expedition, the Atlantic puffin. To ornithologists this bird is known as "the feathered clown of the bird world." One of the finest colonies in existence has been located on Machias Seal Island, to which two members of the expedition were sent from Kent's Island. They established a sub-base from which to carry on the study. With multi-colored and rounded bill, his bespectacled eyes and amusing habits the puffin is one of the most interesting forms of life in the Bay of Fundy. It is the most exotic looking bird of the North. Its keen eyes, according to a description given in Natural History, by W. A. O. Gross, field director at Kent's Island, are surpassed in uniqueness only by the dazzling colors and shape of the parrot-like bill. This second feature of its physiognomy has caused the bird to be nicknamed the "sea parrot."

Like the auk, the puffin appears in a full dress suit, the white feathers of the breast and the black ones on its back and tail present a mock semblance to a white vest, starched shirt and tail-coat. Its red feet, another distinguishing mark, are matched only by those of another of the alcidæ (family name of the auk, puffin, etc.), the guillemot.

Look Like Blimps

At the approach of the expedition hundreds of puffins took to the air like a great ascension of miniature blimps. Their round bills and solid cigar-shaped bodies practically



THE ATLANTIC PUFFIN

make small scale silhouettes of lighter-than-air craft.

Thousands of herring gulls, eider ducks, Mother Carey's chickens and other sea birds find Kent's Island an ideal place for nesting. The eider ducks are making progress on the island under the protection it now affords, and their numbers are increasing. Field parties have branded more than 8000 of the birds.

A colony of razor-billed auks, closely related to the extinct and famed great auk, was found on Yellow Murr ledge, near the island. A shy race, the auks nest only on the most isolated sites. Their main breeding grounds are along the Labrador coast. Discovery of this colony was a delight to the Bowdoin-Kent's Island expedition, but on a later visit to the ledge members of the expedition found that the entire colony had been destroyed by storm waves that must have swept completely over the ledges.

Kin of the Great Auk

Only the rocky mass upon which the auks nest remains above high tide. These auks on Yellow Murr ledges, who gave the expedition a good demonstration of their fighting ability, are so much like their departed cousin, the extinct great auk, that they may give clues to its life history. Though the colony disappeared from the ledge the probabilities are that only the eggs or the young ones were destroyed and the adult birds may return to nest there another season.

James Eads Levings of the Institute of Geographical Exploration at Harvard is completing the first topographical maps to be made of Kent's and neighboring islands in the Bay of Fundy. This survey has been coordinated with the triangulation of the Canadian Geodetic Survey. Investigation of the magnetic disturbance has been postponed on account of bad weather.

Many accomplishments of this scientific expedition, which is under the control of Bowdoin College, will be reported by William A. O. Gross Saturday. The policies and direction of the research station are in the hands of a board of ten. Commander Donald B. MacMillan, Alfred O. Gross, Manton Copeland, John S. Rockefeller, Sumner T. Pike, Albert T. Gould, Edward N. Godding, Alger W. Pike, Henry S. Shaw and W. A. O. Gross.

EXPEDITION SEEKS BIRD SONG RECORDS

Bowdoin Kent's Island Party
Expects to Preserve Notes
on Film 60 Miles Away

TO USE SHORT-WAVE RADIO

College and Cooperating Groups
Include Map-Making by Air
in Summer's Program

Special to THE NEW YORK TIMES.

BRUNSWICK, Me., June 5.—Sound recording of bird songs by short-wave radio and mapping by aerial photography are leading features of the plans of a scientific expedition being sent to the Bay of Fundy under the auspices of Bowdoin College and with the cooperation of Harvard and Cornell Universities and several other institutions.

The expedition will sail from Lubec on June 15 and will base at the Bowdoin Scientific Station on Kent's Island, N. B. William A. O. Gross of Bowdoin is leader of the expedition.

Calls of various rare marine birds will be picked up first on a sensitive microphone equipped with a reflecting mirror for concentrating the sounds, which can thus be detected at a distance of half a mile. They will be carried over a long portable cable to a powerful short-wave transmitter. The calls will then be received and recorded on films by a sound truck on the mainland sixty miles away.

Albert R. Brand of Cornell University will be in charge of this first attempt to record bird songs by radio. A special effort will be made to secure the eerie notes of the petrels, or "Mother Carey's chickens," which have so far foiled all attempts of analysis by ornithologists. If the experiment is successful, it is held that one result will be a useful method for gathering sound recordings of wild life in inaccessible regions.

The expedition will use a seaplane furnished by Adriel U. Bird, Bowdoin alumnus, to make aerial photographs of Kent's Island and the adjacent region. Many of the islands at the mouth of the Bay of Fundy have never received topographic treatment. Harvard's Institute of Geographical Exploration will construct the map from the aerial photographs.

It is also planned to carry a meteorograph on the plane for weather observations in conjunction with those on the island. An observer and an assistant have been living on the island during the winter, operating the weather recording instruments.

Cooperation by the Harvard Meteorological Observatory at Blue Hill will supplement these observations with special investigations, chiefly in the field of fog phenomena. Previous expeditions have recorded 90 per cent average humidity at the station and the densest of fogs blanketing the island for long periods during the summer.

Sea temperatures and other oceanographic observations will be made and an automatic recording tide gauge will be installed. The Bay of Fundy is widely known for its great tides. The range at the head of the bay is 43 feet, and the currents near Kent's Island have velocities of more than six miles an hour. Extensive areas of acute magnetic disturbance were located by the 1936 party, but no definite plans have yet been made for their investigation during the present summer season.

New Wonders of Stratosphere Flight Disclosed

—April 7, 1936

Electric Conductivity Much Greater at 60,000 Feet Altitude

(By Science Service)

The untold story behind the record-breaking stratosphere flight of the balloon Explorer II last year was revealed at the recent meeting in Washington of Philosophical Society when the scientists who built instruments for the experiments and tested the strength of the craft before it left the ground told of their work.

Among the apparatus carried aloft 72,395 feet in the ascent of Captain Orvil Anderson and Captain Albert W. Stevens in the National Geographic Society-U. S. Army Air Corps balloon was the equipment of O. H. Gish on air conductivity from the Department of Terrestrial Magnetism of the Carnegie Institution.

The ease with which the stratosphere atmosphere conducted electrical current, said Mr. Gish, rose steadily from ground level to 60,000 feet, when it was sixty times as great as at the surface of the earth. From 60,000 feet upward, however, the conductivity was surprisingly low, and even decreased slightly. This finding may have importance for cosmic ray studies, since above 20,000 feet cosmic radiation is the main contributing cause of air ionization hence of air conductivity.

Between 20,000 and 60,000 feet, Mr. Gish indicated, cosmic rays can be said to explain satisfactorily the conductivity recorded.

Three possible causes may account for the unexpected air conductivity found above 60,000 feet:

1.—The cosmic ray intensity may decrease between 60,000 feet and 72,395 feet peak elevation.

2.—Above 55,000 feet the path of the balloon appears to have entered an entirely different air mass from that in which it started. Under 55,000 feet the Explorer II was in a mass of air which was of polar origin. Above that point it entered air which had come from the tropics. Polar and tropical air, said Mr. Gish, have known differences of conductivity.

3.—Above 60,000 feet the balloon entered a region where the ozone content was greater. Ozone is known to affect the mobility of the air ions on which conductivity measurements are based and thus might account for the lack of conductivity increase above 60,000 feet.

The composition of the stratosphere air was described by G. M. Shepherd of the National Bureau of Standards. The helium content of the stratosphere air was very much too high, he indicated, to be accounted for by the separation of gases which gravity would bring about. Helium was found in a concentration of 200 parts per 1,000,000 of gas. Contamination of the helium samples from the helium used to inflate the balloon was anticipated and is suspected in the measurements.

Log on Record-Breaking Flight

RAPID CITY, S. D., Nov. 11 (AP)—Log of the record-breaking stratosphere flight of the Explorer II: (Time is Central Standard):
Nov. 11—

8:00 A. M.—At sun-up, the gondola is lashed to the balloon and it takes off.

8:15 A. M.—Capt. Albert W. Stevens radios "everything O. K." from height of 11,700 feet.

10:07 A. M.—Capt. H. K. Baisley following the balloon in an airplane, reports Explorer II over Niobara river, in Nebraska, at 21,000 foot level.

10:25 A. M.—Capt. Stevens radios the balloon is at 28,000 feet and rising 500 feet per minute. Outside temperature 40 degrees below zero, Fahrenheit.

11:17 A. M.—Stevens reports altitude 55,000 feet, 15,000 feet above the stratosphere level.

11:28 A. M.—Altitude of 60,000 feet reported by Capt. Stevens. He says he will try for "ceiling."

11:55 A. M.—Capt. Stevens reported altitude "about 71,000 feet," unofficial American record.

12:10 P. M.—Barometric pressure reading of 29 millimeters radioed by Capt. Stevens, computed to indicate altitude of 73,000 feet.

12:30 P. M.—Altitude of 74,000 feet indicated by barometric pressure reading.

1:05 P. M.—Stevens radios "we're coming down."

2:47 P. M.—Explorer II has descended to 40,000 feet, Capt. Stevens reports, and position estimated 75 miles east of Valentine, Neb.

3:13 P. M.—Balloon located 50 miles west of Yankton, S. D., at altitude of 31,000 feet, and descending 500 feet a minute.

3:28 P. M.—At 23,000 foot level, Stevens and Anderson throw ballast over side to halt too rapid descent.

4:13 P. M.—Balloon brought down safely 12 miles from White Lake, S. D. ending epic journey.

Ratio of Oxygen and Nitrogen

The ratio of the amount of oxygen to nitrogen obtained in the stratosphere air samples is slightly different from that expected, Mr. Shepherd said. The possible origin of these differences is under study. If the difference turns out to be real, it would indicate that a separation of the two gases due to gravity is occurring at the altitudes reached by the balloon.

W. G. Brombacher, also from the National Bureau of Standards, revealed that the automatic instruments carried aloft brought back a complete "life history" of the epochal flight in terms of barometric pressure and time.

There is a difference of about 175 feet, he said, in these barometric altitude records and the official height reached by the Explorer II. This difference arises because the official figures are measured from the center of the inflated balloon, while the barometric pressure readings were obtained from the gondola 175 feet below.

The use of the vertical camera to measure altitude, Mr. Brombacher declared, yielded results in good accord with the pressure records. The photographs are excellent. A problem on which scientists still are working is to determine the effect of camera tilt on the vertical camera photographs.

The strength and performance of the stratosphere balloon was described by Dr. L. B. Tuckerman of the National Bureau of Standards. He explained the new method used in folding the bag of the Explorer II to overcome the forces which caused the disastrous mid-air rip of the Explorer I and its abrupt descent.

Significance in the performance of the balloon, Dr. Tuckerman indicated, was the use of the prepared ballast chart from which Captain Anderson could determine for any conditions of air temperature, outside and inside the balloon, what amount of ballast would be required for a safe landing. Captain Anderson then made his decisions on whether ballast should be released.

One disappointment, Dr. Tuckerman pointed out, was that the clockwork mechanism driving the meteorograph inside the balloon stopped about halfway up on the ascent. Its final reading was minus twenty degrees Centigrade.

If Captain Anderson had known, in advance, where and under what ground conditions the balloon was going to land, he probably could have taken chances when the balloon was at its highest point and thereby dumped enough additional ballast to gain an extra 500 feet.

Actually the need for caution in possible emergencies on landing demanded a ballast reserve. When it came down to earth the balloon still had 1000 pounds of ballast aboard.

H. W. Hemple of the United States Coast and Geodetic Survey described altitude measurements on the balloon from ground stations by trigonometric calculations.

Opening the meeting and introducing the other speakers was Dr. Gilbert Grosvenor, president of the National Geographic Society, who discussed "Stratosphere Flights as Exploration."

Harvard Group Notes Advance on Peruvian Ill

Study of Parasitic Anemia
Largely Successful, Dr.
Strong Declares

NEW YORK June 15 (AP)—Dr. Richard Pearson Strong, professor of tropical medicine at Harvard Medical School, returned to New York today with word of progress in his study of parasitic pernicious anemia, a disease which affects animals in various parts of the world, but touches human being only in Peru.

Dr. Strong, former president of the Association of American physicians, headed a Harvard mission of five scientists who spent four months studying the disease. He said they had succeeded in isolating the organism responsible for the balady, were cultivating it and preparing a vaccine.

The disease is not widespread, Dr. Strong said, but its mortality rate is from 70 to 80 per cent. He and his colleagues found it to be transmitted by a species of fly and is usually found in narrow valleys at an altitude of from 3000 to 8000 feet. Liver extract commonly used in the "vitamin deficiency" form of pernicious anemia is not effective in treating the Peruvian brand, he said.

Accompanying Dr. Strong, who returned on the Grace liner Santa Lucia, were his wife; Dr. Emory Pinkerton, pathologist; Dr. David Weinman, research fellow; Dr. Marshall Hertig, entomologist, and M. L. Bennett, technician.

This was Harvard's second mission to Peru in quest of knowledge of the disease. The other was in 1913.

Miss Grace Nichols to Be Wed to Dr. Richard Strong in London

Couple to Spend Honeymoon in France After Ceremony,
Set for Thursday

According to an Associated Press dispatch from London, Miss Grace Nichols of 107 Chestnut street, Boston, will be married on Thursday in London to the well-known Boston biologist, Dr. Richard Pearson Strong of 380 Commonwealth avenue, the Harvard Club. A civil wedding in the London Register's office will be followed by a church ceremony, after which Dr. Strong and his bride will leave for a wedding trip in France, returning to Boston in September.

Miss Nichols, whose age is listed in the dispatch as sixty-one, is a member of the Alliance Francaise here and has entertained for its members and speakers at her very beautiful and famous Chestnut street house. She is a member also of the Cosmopolitan Club and is very active in many charitable affairs in this city. Mrs. C. Nichols Greene of 6 Chestnut street and West Dover, Vt., is her sister.

Dr. Strong has a notable record in medicine. He was graduated from Yale in 1893, and from Johns Hopkins in 1897.

He studied in Germany thereafter and received honorary degrees from both Yale and Harvard. He has worked particularly with the prevention and cure of tropical diseases and during the war was the medical director of the International and American Red Cross Sanitary Commission in Serbia and was a member also of various commissions which studied war diseases. He was decorated with a D. S. M. for his services, and is a Companion of the bath (British), Officer Legion d'Honneur (French), Striped Tiger (Chinese) and Grand Officer Cross of St. Sava (Serbian).

He is a member of the Somerset, Tavern, Union, Norfolk Hunt, The Country Club and the Authors' Club of London, which is now listed as his summer address. In 1921 he became a member of the Council of the Massachusetts Department of Health. His first wife was Agnes Leas Freer, their marriage, which took place in 1916 in Ann Arbor, Mich., having been terminated in divorce in August of last year, at Reno.

UESDAY, MAY 31, 1938

New 'Slant-Eyed' Camera Technic Measures Mountains from Air

NEW YORK, May 30 (AP)—Invention of a "slant-eye" camera which measures mountains from the air was reported today by the American Geographical Society.

Used by flying cameramen, it takes all its pictures at a tilted angle instead of straight down.

It has shown, among other things, that reports of a chain of mountains in northern Labrador higher than the mile-tall summits of New Hampshire's Mt. Washington and North Carolina's Mt. Mitchell are untrue.

Proof that the Labrador chain is

lower in altitude than the two eastern peaks—the highest east of the Rockies—is contained in a map of the northern region just published by the geographical society.

To make the map, expeditions led by Dr. Alexander Forbes, of Harvard, used the "slant-eye" camera in the first test of a new technique. The pictures which resulted are described by the society as "more accurate" with "more detail than do existing maps for a large part of the United States itself."

More than 5000 square miles of

traffic.

Dr. Richard Strong Wins Medical Award

MEMPHIS, Tenn., Nov. 23 (AP)—The Theobald Smith medal of the American Academy of Tropical Medicine was awarded tonight to Dr. Richard P. Strong of the Harvard University Medical School.

The medal, given in honor of a U. S. department of agriculture scientist who discovered the tick transmission of disease germs and viruses, was given Dr. Strong "for outstanding work in the study of tropical diseases."

By a coincidence it was presented by Dr. William B. Castle, also of Harvard University, who Tuesday was given the Walter Reed medal of the American Society of Tropical Medicine for his studies in tropical diseases.

Gets Linnean Medal



DR. E. D. MERRILL

BRITISH HONOR ARBORETUM HEAD

Linnean Medal Is Awarded to Dr. E. D. Merrill

Dr. E. D. Merrill, eminent Harvard University botanist and director of the Arnold Arboretum, was awarded the Linnean medal for 1939, the first American botanist to be thus honored by the Linnean Society, which was founded in 1788, according to word received here yesterday from London.

The medal was given to a member of the American legation to be forwarded to Dr. Merrill, who is administrator of botanical collections at Harvard. The award is usually conferred on a zoologist and a botanist in alternate years, and of the 51 awards previously made, only two American scientists have been selected, a zoologist and a paleontologist.

At the same time it was announced that Prof. Alfred Rehder, member of the arboretum staff for 41 years, had been elected one of the 50 foreign members of the society.

Before accepting appointment at Harvard in 1935, Dr. Merrill served seven years in the Philippine service, as director of the bureau of science in Manila; from 1924 to 1929 he was dean of agriculture at the University of California; and from 1929 to 1935 was director of the New York Botanical Garden.

His special field has been the problems of classification and plant distribution of the Philippines, Borneo, Sumatra, China, Burma, Indo-China and Polynesia. He is acknowledged one of the outstanding specialists on plant classification for the entire Indo-Malaysian region and China.

Tremendous Power for Russia Envisaged by Harvard Professor

Because civilization today flows to the sites of raw materials, Soviet Russia, which is building a vast industrial empire in Siberia, will be a tremendous power in the new industrialism which will develop in Asia, Prof. Bruce C. Hopper of Harvard University said yesterday at the luncheon meeting of the Boston branch of the Foreign Policy Association in the Copley-Plaza Hotel.

Prof. Hopper and Samuel H. Cross, associate professor of Slavic languages and literature at Harvard, led the discussion on the subject, "Soviet Russia's Future Power in the East."

Asia possessing about one-half the population of the world, is the greatest unsaturated section of the globe, rich in natural resources which have never been developed. Asia today is to the world what America was to Europe after the renaissance, and the Russian revolution is to the world what the French revolution was to Europe, Prof. Hopper declared.

He defined bolshevism as "channeled enthusiasm for building," and pointed out that the Russians had converted a surplus population of 7,000,000 into an acute labor shortage.

Prof. Cross, speaking on the influence of the Russians on education, declared that regardless of its opinion of communism, the world must be grateful to Russia for its contribution to education. Illiteracy has been practically banished from the cities, he said, and is rapidly disappearing in the rural districts. Education is being developed in the vernacular, with linguistic autonomy for minorities.

At the annual meeting which preceded the luncheon, Harvey H.

Bundy was re-elected chairman of the Boston branch of the association. Others elected were Malcolm Donald, treasurer; Mrs. Roland G. Hopkins, Christian A. Herter, Prof. Hopper, Eldon R. James, William K. Jackson, vice-chairmen; Mrs. Chatfield Whitman, a member of the council, class of 1939; Laurence Curtis, J. Roscoe Drummond, Dr. Claude M. Fuess, Mrs. William R. Sears, Theodore Smith and Bentley W. Warren, members of the council, class of 1940.

CAPTAIN BOB BARTLETT

One of the dramatic moments in man's conquest of the globe is that in which Bob Bartlett, who had accompanied Admiral Peary farther north than any one had been at that time, turned back with the last relief party, leaving Peary to go on. As Bartlett himself describes the moment:

Our parting was simple. He wished me good luck, told me to be careful of the new ice, and I told him I was sure he would make it. Then we pushed off with our Eskimos and sled and dogs, going in opposite directions.

Eskimos and sled and dogs, going in opposite directions. It was an essential

part of the program of conquest on foot that there should be this turning back. Nevertheless, to have done what Bartlett did was to give him a right to share in the immortality of Peary's achievement. He has now become our perennial ambassador to the Arctic Empire of snow and ice.

One of the refreshing incidents of our Summers in the so-called temperate zone is the occasional message from Captain Bob—beloved by a people who have proudly adopted him as one of their own, though his home must still be kept in a higher latitude. In yesterday's TIMES appeared his wireless message from within 675 miles of the Pole—a distance that might easily be covered by plane in a few hours. He tells of visiting the monument to Peary, of finding there the last of the four Eskimos who went with Peary to the Pole, of seeing thousands of icebergs launched for their southbound voyages in the Spring, of gathering "red snow" at Crimson Cliffs, of the collecting of flowers by the young exploring botanists, of sailing in straits of "sheer beauty" and of finding beautiful weather in the north, though the weather to the south "reflected the disturbed condition there." We recall his quotation of Shelley in an earlier message as he tried to picture the scenes which borrowed something of color from the Aurora Borealis. What with the Russians hardly farther away than Buffalo from New York and Sir Hubert Wilkins flying about in noble adventure within the bounds of the Circle, he has good company. But there is no one from other zones to whom the Arctic regions give more hearty welcome than to Captain Bartlett, as Commodore Peary said of him, "just Bartlett—tireless, sleepless, enthusiastic."

railroad lost Aug. 29/38 Boston Man Aids In Peak Discovery

VANCOUVER, Aug. 29 (Canadian Press)—Mr. and Mrs. Don Munday, north Vancouver mountaineers, believe they have found a great new peak in the coast mountain range.

Accompanied by their daughter Edith, Henry S. Hall, Jr., of Boston and Hermann Ulrichs of San Francisco, they discovered the mountain peak near Bella Coola in the southern British Columbia coast district, among the most spectacular and formidable peaks yet explored in the range.

"Only the north face of mount Waddington (in the same area) exceeds in splendor and inaccessibility one face of the newly found mountain," Munday said.

JUNGLE GIANTS

ONCE, PERHAPS, IN A DECADE A VOLUME APPEARS WHICH is at the same time an unusual human document, a valuable contribution to science, and a fascinating narrative of adventure against a dramatic background.

"Jungle Giants" is the first book written by Newell Bent, Jr., who graduated from Harvard College in 1933, and spent the following year in the Department of Anthropology at Trinity College, Cambridge, England, making a special study of native races that live at high altitudes. After receiving his diploma in the summer of 1934, he sailed for Cape Town.

Thence he traveled north through Africa, once making a foot-safari accompanied only by native boys, covering in two months over 1500 miles through the little traveled sections of Northern Rhodesia, Tanganyika, and Uganda. An unusually skilful photographer, young Bent made a magnificent series of photographs covering all phases of his journey. The name, "Jungle Giants," refers not only to the crafty elephant and the clumsy rhinoceros which the author hunted with his camera, but also to the inanimate giants of nature to be found in Africa — Victoria Falls, Kalambo Falls, which plunge 880 feet, the great Nkana Copper Mine, richest in the world. The author traveled by native dugout canoe across the waters of Lake Tanganyika; descended into the huge crater of Ngorongoro, 12 miles wide and 1000 feet deep, with 140,000 head of game living within it; conquered Mount Kilimanjaro, monarch of Africa, whose 19,700 feet of jungle, lava, and ice sweep up from a plain scarcely 2000 feet above sea level.

This volume was written immediately upon young Bent's return to Boston, and reflects the spontaneous enthusiasm which he manifested in the expedition; yet it is written with a sober sense of the importance of the information imparted, with strict regard for actual facts, and with a compelling force which carries the reader along with deep interest and constant entertainment. The volume is profusely illustrated with beautiful and unique reproductions of photographs made under unusual conditions by the author himself.

After completing this manuscript, young Bent, in November, 1935, went to South America with the idea of carrying through a similar expedition. He was to collect specimens for the Agassiz Museum in Cambridge, and to climb and record Aconcagua, the highest mountain in the New World, which rises 22,835 feet in the Chilean Andes, on the border of northern Argentina. Near the summit of that peak, in spite of his experience and splendid physique, he unexpectedly succumbed.

Under these circumstances his friends have decided to issue this volume not through the usual trade channels, but as a memorial to an intrepid spirit. This makes it possible to disregard the relation between cost and price, and this announcement is sent to you as an invitation to subscribe for one or more copies at \$4.00 per copy. No particular effort will be made to distribute the volume through the ordinary trade channels, as it is believed that there is a sufficient number of those interested in a book of this nature to oversubscribe the limited edition which is being published.

PRIVATELY PRINTED FOR THE AUTHOR'S FRIENDS
by The Plimpton Press, Norwood, Massachusetts

JUNGLE GIANTS



[*Specimen Illustration*]

KILIMANJARO

By NEWELL BENT, Jr.

MEMBERS OF MOOSE AT NORUMBEGA PARK OUTING



Officers and members of the Loyal Order of Moose who attended the outing held yesterday at Norunbega park. Left to right—Frank J. La Bell, supreme outer guard; Harold H. Parsons, supreme auditor; Edwin O. Childs, mayor of Newton; Dr. Albert B. Hart, governor of the Mooseheart lodge; Joseph F. O'Connell, dictator of the Boston lodge; James F. Griffin, past supreme dictator; William E. Egan, supreme prelate and assistant attorney-general of New Jersey, and William Lee Provol, regional director for New England.

June 22 / 36

THE BOSTON HERALD, FRI

RUSSIAN EXPLORER EXHIBITS IN BOSTON



(Boston Herald-Associated Press Photo)

Alexandre Iacovleff before one of his canvases in his Riverway studio. This famous artist-explorer, twice staff member of the Citroen expeditions across Africa and Asia in armored cars is having the first Boston exhibition of his paintings at the Vose gallery through Dec. 5.

IACOVLEFF WORKS SEEN IN ART SHOW

200 Paintings and Drawings
on Exhibition in the Grand
Central Galleries

4/20/37 -
DISPLAY IS A MEMORIAL

Later Canvases Found Free,
Fanciful and in Tradition
of Paris Modernists

By EDWARD ALDEN JEWELL

A memorial exhibition made up of more than 200 paintings and drawings by Alexandre Iacovleff, who died last year at the age of 51, opened with a reception and preview yesterday afternoon at the Grand Central (Terminal) Galleries. It opens to the public today, and will continue until April 29. The memorial is being held under the patronage of René de Saint Quentin, French Ambassador to the United States; Dr. Hu Shih, the Chinese Ambassador; Charles de Ferry de Fontnouvelle, French Consul General, and Dr. Tsune Chi Yu, Chinese Consul General. There is also a long and distinguished list of sponsors.

Mr. Iacovleff was a Russian by birth. He was graduated from the Academy of Fine Arts in St. Petersburg, and in 1913 won a traveling scholarship, which took him to Italy. The Russian Government sent him into Mongolia to make drawings of racial types—a task that was terminated by the revolution. The artist, however, continued on his own, visiting China and Japan, where he again studied types and found himself particularly interested in native theatres. Plates in color, from books reproducing some of the work of this period, are included in the present exhibition, and many of the sanguine and pastel drawings on the walls at the Grand Central reflect the artistic activity of these and subsequent trips.

Made Many Expeditions

In 1924 Iacovleff was invited to join the Citroen-Haardt expedition into Africa, and in the same company he later, in 1931, went to Syria, Persia, Afghanistan, India, the Gobi Desert, Inner Mongolia and French Indo-China. The drawings made on this expedition were exhibited in Paris and then, in 1934, in the Explorers Hall of the National Geographic Society in Washington, D. C.

It was at this time that Iacovleff became director of the Department of Drawing and Painting at the school of the Boston Museum. He remained in Boston for two years, showed in the Carnegie International, and had a one-man show (in 1936) at the Knoedler Galleries here.

"During these last years of his life," writes Malvina Hoffman in her appreciative and sympathetic catalogue introduction, "he was restless and dissatisfied with his own work. He felt that as a painter he must search for new means of expression and a new scale of tonal values. He worked like a creature possessed—he felt his art growing and his horizon widening. He resigned from the Boston school to devote all his time and strength to the development of his new vision and technique."

The nature of this late development, cut short by death, is strikingly revealed, since one entire room at the exhibition is devoted almost exclusively to the work of the last two or three years. It is highly romantic, fanciful, free, following the general tradition of the Paris modernists, though marked by a certain definite individuality. All this contrasts not a little with characteristic work of earlier periods in Iacovleff's career, with its highly polished if often rather slick and academic draftsmanship.

Negro Subjects Praised

If we set to one side, as constituting a phase quite by itself, the final romantically and decoratively modern work in tempera, the portrait drawings may be thought to represent Iacovleff's best and most distinctive achievement. Among these there are no better examples than several eloquent portrait heads of Negroes.

Lenders to the memorial exhibition include the Luxembourg Museum in Paris (which, by the way, plans to hold an exhibition of the artist's work next December), the New York Chapter of the American Red Cross, Mrs. Boris H. Bakhmeteff, Mrs. Irene A. Bashkiroff, Mrs. N. D. Berestneff, Martin Birnbaum, Guy F. Cary, Miss Mabel Choate, Mrs. W. Murray Crane, John J. Cunningham, Mrs. C. Suydam Cutting, Miss Malvina Hoffman, Mrs. Edwin O. Holter, Alexis E. Jackson, B. A. Davits, Mr. and Mrs. Oliver B. Jennings, Paul Manship, Miss Anne Morgan, Mrs. John T. Pratt, George N. Richard, Mr. and Mrs. John M. Schiff, Mr. and Mrs. James P. Warburg and Dr. Jerome Martin Zeigler.

The exhibition committee is composed of the following: Miss Anne Morgan, Miss Malvina Hoffman, Miss Henrietta Ely, Erwin S. Barrie, John J. Cunningham and William James.

Mr. Barrie, director of the Grand Central Galleries, announced yesterday that twelve of the present paintings and drawings have been bought and will be presented by an anonymous donor to the Tate Gallery in London.

Iacovleff, One of World's Six Best Draftsmen

Taught at Boston Museum
School of Fine Arts,
1934-1937

Alexandre Iacovleff, famous Russian artist rated among the six best draftsmen in the world, who headed the department of painting and drawing at the Boston Museum School of Fine Arts for three years, is dead in Paris at the age of fifty.

Mr. Iacovleff taught at the Fine Arts School from the fall of 1934 through June of last year. Several of his books of illustrations of the Chinese theater and the Japanese stage are now in the library of the school.

Born at St. Petersburg and graduated from the Academy of Fine Arts there in 1913, he studied in Italy, Spain and Greece before the outbreak of the Russian revolution, when he escaped to China. He later went to Paris to gain recognition as a member of the "Mir Iskusstva," a Russian artists' group.

Crayon Portrait Studies

Perhaps some of Iacovleff's best known crayon portraits are those of Dr. Serge Koussevitzky, at one time placed in Symphony Hall, here, and of Anna Pavlova. A group of his portraits will go on exhibition soon at Omaha, Neb.

Mr. Iacovleff went with the Haardt-Citroen expedition through Africa and Asia in 1924, during which he traveled as far south as the Belgian Congo, making portraits of the natives. He had one big exhibition of his work at the National Geographical Society in Washington last year.

Although most of his work was on crayon portrait studies, Mr. Iacovleff did the smoking room mural for the French liner Normandie.

4/20/37

Recent Deaths

Prof. Wheeler, Biologist of World Renown

Scientist Dies, 72

Many Years at Harvard,
After Long Career in
Other Universities

Professor Emeritus William Morton Wheeler of Harvard, one of the world's outstanding scientists and scholars, dropped dead last night in the Harvard Square Subway station on the way to his home at 39 West Cedar street, Boston. It was revealed that the noted Harvard savant died of a heart seizure. He was seventy-two years of age.

Dr. Wheeler's body lay unidentified several hours at the Cambridge City Hospital, where it was taken by police before it was learned who he was.

During his brilliant career as an entomologist and zoologist, Dr. Wheeler was honored many times by leading scientific societies. He was made a member of the Legion of Honor by the French Government in 1933. The Joseph Leidy Memorial Award came from the Academy of Natural Science of Philadelphia and he received the Elliott Medal for important discovery and research, with many other awards from Germany, Belgium and England.

Born in Milwaukee, a son of Julius Morton and Caroline Georgianna (Anderson) Wheeler, he matriculated at the German-American Normal College in Milwaukee and graduated in 1884. He received his Ph.D. degree from Clark University in 1892. In the following year he occupied the Smithsonian table at the Naples zoological station. While abroad, he studied at the universities of Wurzburg and Liege.

From 1887 to 1890 he was curator of the Milwaukee public museum; next for two years, he was fellow and assistant in morphology at Clark. He was an instructor in embryology at the University of Chicago seven



WILLIAM MORTON WHEELER

William M. Wheeler

Many Bostonians, a host of former students in every part of the United States, and eminent scholars here and afar will mark with respect and regret the death of Dr. William Morton Wheeler. Professor emeritus at Harvard, long dean of the Bussey Institution, he was a scientist of the first order. Possessing unusual powers of observation, he employed them not merely in a great quantity of research, but with a keen intuitive sense, which made the results of his work expressive and vital. His special studies of the life of insects—pursued in every region of the world—contributed to an understanding of the life of man, for they showed remarkable analogies between the conduct of insect societies, as President Lowell once said, and the social and individual habits of human beings.

In genius, it is not too much to say that Dr. Wheeler was America's Henri Fabre. Indeed, with the advance of learning, he excelled the great French entomologist in many fields of scholarly knowledge. Meanwhile, amid his work, he lived a gracious, high-minded life. His career made him famous; the man himself made him beloved.

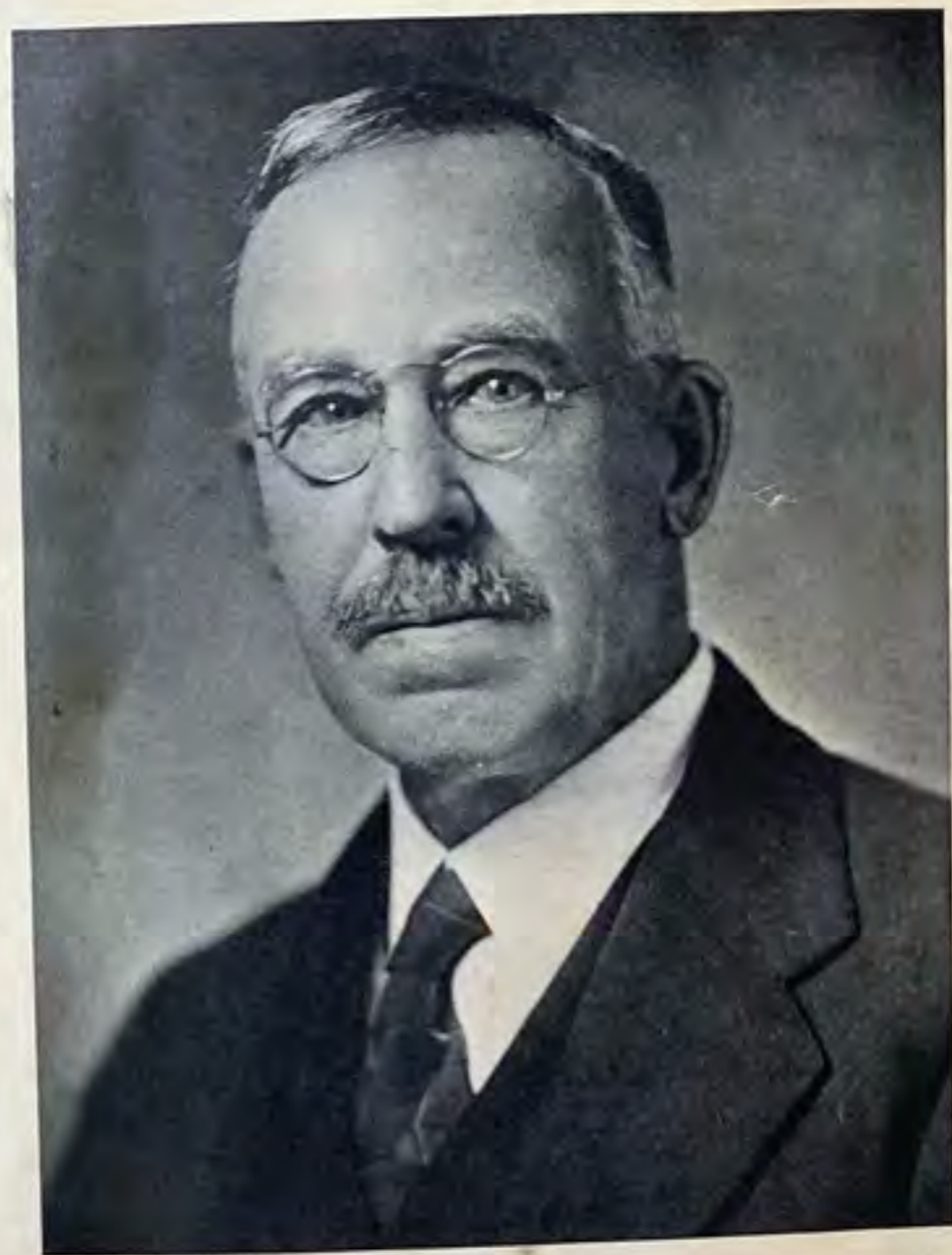
WILLIAM MORTON WHEELER.

WILLIAM MORTON WHEELER, professor of entomology, emeritus, at Harvard University, died suddenly in Cambridge, on April 19, in his seventy-third year.¹

Professor Wheeler was born at Milwaukee, Wisconsin, on March 19, 1865. He first attended public school but later transferred to Engelmann's German Academy and graduated from the German-American Normal School, which was appended to the academy. Even as a boy he was intensely interested in natural history and haunted the old museum at the school. In 1884, an incident occurred which was to influence his whole subsequent life. This was the visit to Milwaukee of Professor H. A. Ward, of Ward's Natural Science Establishment in Rochester. Ward brought with him a collection of stuffed and skeletonized mammals, birds, etc., with the idea of having the academy museum converted into a free municipal museum. Then a boy of 19 years, Wheeler helped Professor Ward prepare the collection for exhibition and was offered, and promptly accepted, a position in the Rochester Establishment. His duties consisted of identifying, listing and arranging collections of birds, mammals, shells, echinoderms and sponges. The catalogue of shells which he then prepared is still used by conchologists. In the following spring (1885) he left Ward's and returned to Milwaukee, starting his career as a teacher. Dr. George W. Peckham, who had been making studies on spiders and on the behavior of wasps, induced him to accept a position as teacher of German and physiology in the Milwaukee High School, of which Peckham was principal. Within a very few years the Allis Lake Laboratory was established near the high school, and Professor C. O. Whitman was appointed its director. One of the assistants at the laboratory, Dr. William Patten, taught Wheeler the latest embryological technique and suggested that he investigate the embryology of insects. This re-

¹Dr. Wheeler was a member of the BOSTON SOCIETY OF NATURAL HISTORY from 1908 until his death, and since 1921 was one of its Vice-Presidents.

This obituary has been reprinted from *Science*, June 4, 1937, by kind permission of its editor.



WILLIAM MORTON WHEELER.

SUYDAM CUTTINGS SAILING FOR TIBET

Explorers' Wife Is First White
Woman to Be Invited to
Lhasa, Forbidden City

MUSEUM ITEMS SOUGHT

Couple Also to Make Study of
Social Customs While Guests
of Governor

Mrs. C. Suydam Cutting, with her husband, explorer and trustee of the American Museum of Natural History, will sail today on the Queen Mary to begin the long journey to Lhasa, in Tibet, by way of India.

Mrs. Cutting is said to be the first white woman to receive an invitation to visit the ecclesiastical and forbidden city of Lhasa. In the sacred city she and Mr. Suydam will be the guests of Tsarong Shape, the first governor and a member of the council of five, Tibet's chief governing body. They will be gone six months.

Mr. Cutting, who has participated in many big game and anthropological expeditions, visited Lhasa and also Shigatse, the other great city of that country, two years ago, with his friend, Arthur S. Vernay. They were said then to have been the first unofficial foreigners to receive permission to enter Lhasa.

Mr. Cutting was a friend for many years of the late Grand Lama, or Dalai Lama. This will not be the first time that Mrs. Cutting has ventured into a wild region with her husband, as she has accompanied him in big game shooting in the jungles of India.

During their stay in Tibet they

will make an anthropological collection for the museum as well as study Tibetan religious and social customs. They plan to bring back plants for the New York Botanical Garden.

Mrs. Cutting expressed herself as thrilled in anticipation of the trip, at their home, 14 East Eighty-ninth Street, yesterday.

Heating appliances were among the gifts Mr. Cutting made to the late Grand Lama during their long friendship.

Mrs. Cutting formerly was Miss Helen McMahon, and she was the widow of James Cox Brady when she was married to Mr. Cutting in July, 1932. Mr. Cutting was graduated from Harvard in 1921 and at one time was national court-tennis champion. He accompanied Colonel Theodore Roosevelt and Kermit Roosevelt on their zoological expedition into Tibet and Indo-China, and in 1930 was a member of the group of scientists and explorers who accompanied Vincent Astor on his yacht Nourmahal on an expedition to the Galapagos Islands.

HENRY FIELD AND BRIDE AT SOUTHBORO



(AP Photo)
Henry Field, assistant curator of famed Field Museum of Chicago, poses with his bride, the former Mrs. Placidia White Knowlton of Boston and Thomasville, Ga., after their marriage June 2 at the Southboro home of Field's aunt. Field's first wife recently divorced him on grounds of desertion. The new Mrs. Field, daughter of a minister, has two children by her first marriage.

PROMINENT MEMBERS OF BOSTON SOCIETY



(Photo by Joe Dixon)

Mr. and Mrs. Harold Jefferson Coolidge of Warren street, Brookline, and Squam lake, Ashland, N. H., two outstanding members of Boston society caught by the camera man while out on a recent stroll. Mr. Coolidge son of Mrs. James Amory Sullivan of Chestnut street and "Elletraps," Prides Crossing, and the late Harold Jefferson Coolidge, is secretary of the American Committee for International Wild Life and is assistant to Dr. Thomas Barbour at the Harvard Museum of Comparative Zoology. He is a direct descendant of Thomas Jefferson and a nephew of Prof. Julian Lowell Coolidge of Lowell House at Harvard.

Harvard Savants Sail for Studies in Ape Evolution

Dec 29 '37

Harold J. Coolidge, Jr., Heads
Expedition to Siam, Borneo
and Sumatra

Sailing today for a nine-months' expedition into Siam, Borneo and Sumatra to make a comprehensive study of anthropoid apes was the first contingent of scientists from Harvard University, Bard College of Columbia University and Johns Hopkins University. Aboard the Kota Tjandi, which left New York for Singapore were three members of the party with heavy equipment to be used on the expedition. The remaining members leave Vancouver on Jan. 3.

The entire expedition, proposing to clarify problems of man's evolution by studies of the anthropoids, especially the gibbon, is headed by Harold J. Coolidge, Jr., assistant curator of mammals at Harvard Museum of Comparative Zoology. It will undertake intensive co-operative research on the psychology, sociology, morphology, physical anthropology and anatomy of the primates.

Among other major questions which the expedition will study is that of what phases of growth are peculiar to man and what others represent general growth processes common to many or all primates.

The scientists also will attempt to learn whether the individual and group interests of man are really larger than those of other primates, and, if so, whether this is because of civilization, domestication and absence of natural selection, as has been claimed.

Commenting on fossil evidence that man and other high primates have evolved from a gibbonoid stock, Mr. Coolidge said:

"If we assume that man arose from a gibbonoid stock, the gibbon not only becomes a key animal to the interpretation of much data on physical anthropology of primates, including man, but also it is an equally important type for study in connection with man's behavior, his social evolution and cultural anthropology."

GIBBONS AND COOLIDGES

Although Calvin Coolidge doubtless read "The Decline and Fall of the Roman Empire," he would probably have been mystified by another and younger Coolidge's ambition to study gibbons in Siam and Borneo. The gibbon is a small, arboreal ape which because of its nimble two-leggedness is regarded by zoologists as a "key animal" in the evolution of man. Harold Jefferson Coolidge, Harvard '27, and assistant curator of mammals at the zoological museum in Cambridge, is the leader of a group of scientists who recently left for the Orient on a year's intensive study of the gibbon as "a political and social beast," in Herkimer Johnson's immortal phrase.

Time magazine, in tersely summarizing the expedition's purpose, appears to be better informed about the ancestry of man than it is about the genealogy of the Coolidge family, for it refers to Gibbon-Hunter Coolidge as "a cousin of the late Calvin Coolidge." Unless one is prepared to trace the relationship back for five or six generations, the two cannot be called cousins.

Although all the New England Coolidges are descendants of the prolific John Coolidge who settled in Watertown in 1636, Calvin's forebears left Massachusetts for Vermont in 1781. Harold Jefferson's ancestors remained on the seaboard, prospering as merchants and lawyers. One of them, as his name indicates, married a granddaughter of Thomas Jefferson.

Coolidge kinship was well explained by the late William H. Coolidge of Boston when he testified a few years ago before an unfriendly investigating committee at Washington. One of the committee asked him if he were related to the President. Mr. Coolidge replied that the relationship was "not close enough to help me or to hurt him."

Jan 24/37

Notable Achievements Described for Members

^{Nov 1936}
Outstanding during the past year has been the publication of the thrilling story of the flight of the National Geographic Society-U. S. Army Air Corps balloon *Explorer II* to a world altitude record of 72,395 feet above sea level; the report on the extensive scientific results of this expedition into the stratosphere; and the extraordinary 14x23-inch photograph, taken from the highest point ever reached by man, showing for the first time, and in an easily understood projection, the division between the troposphere and the stratosphere and also the curvature of the earth.

Described in your Magazine were the adventures and discoveries of your Society's *Yukon Expedition*, which made the first crossing of the mighty St. Elias Range, found new glaciers and peaks, and mapped 5,000 square miles of little-known territory. These discoveries were first shown in The Society's new ten-color Map of Canada. The product of many months of field exploration and exhaustive research, this 40x27-inch map came to members as a supplement to the June GEOGRAPHIC.

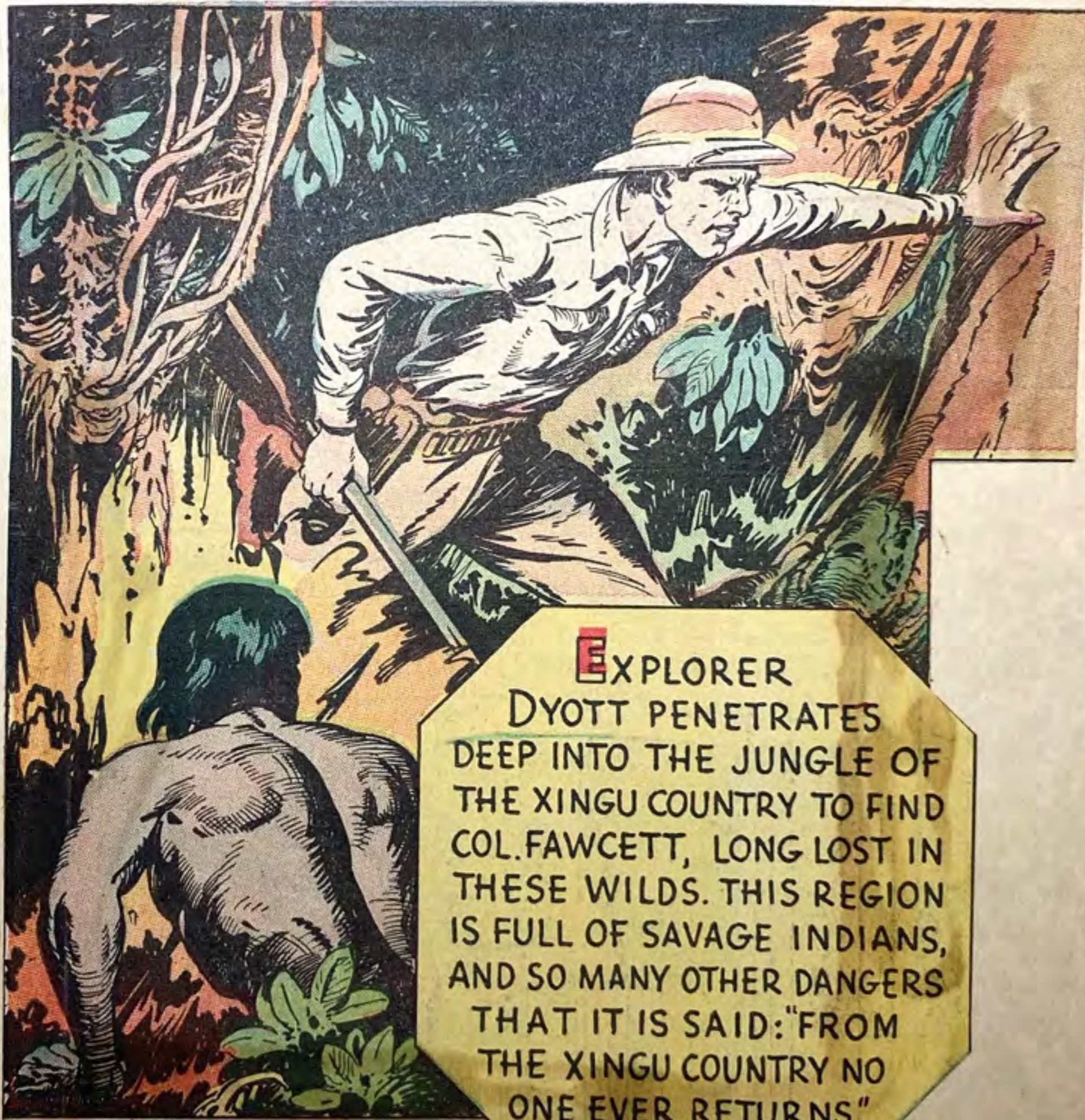
Other notable features in 1936 were Lincoln Ellsworth's first complete account of his flight across Antarctica; the beginning of an informative series of articles on dogs of the world, with paintings by Edward Herbert Miner; and full-color reproductions of 26 of Alexandre Iacovleff's remarkable drawings and paintings of oriental life in Central Asia. Members also received the first detailed narrative of the eventful history and substantial growth of the National Geographic Society and its Magazine during nearly half a century of service to education.

The Society awarded and presented to Dr. Lincoln Ellsworth on April 15, 1936, the Hubbard Gold Medal for "Heroic and Extraordinary Achievements in Arctic and Antarctic Exploration from 1925 to 1936." This medal, highest honor con-

volume record of his 65 years' travels through the forests and waters of North America. The first edition of these remarkably illustrated books has been distributed—without financial profit—and a new edition is being printed to meet the mounting demand. A new "Book of Birds" in two volumes—a compilation of THE GEOGRAPHIC's recent articles and full-color series on bird families—is in preparation and will likewise become available to the membership in 1937.

To the rich "dividends" that The Magazine returns to members for their moderate annual fee must be added the deep satisfaction they derive from their participation in The Society's explorations and researches and from their contribution—through The Society's publications and School and Press services—to the popular diffusion of geographic information. Such altruistic undertakings are possible only because The Society is an educational and scientific organization not operated for financial profit.

Each member supports in equal measure The Society's vast activities. Each receives a tangible return in THE NATIONAL GEOGRAPHIC MAGAZINE—a return that increases in value as The Society's membership grows. No appeals for special funds are made. Your officers urge only a continuance of your fine cooperation in two respects—the prompt payment of dues to avoid the cost of expensive billing, together with your valued aid in nominating friends and acquaintances for membership.



EXPLORER
DYOTT PENETRATES
DEEP INTO THE JUNGLE OF
THE XINGU COUNTRY TO FIND
COL. FAWCETT, LONG LOST IN
THESE WILDS. THIS REGION
IS FULL OF SAVAGE INDIANS,
AND SO MANY OTHER DANGERS
THAT IT IS SAID: "FROM
THE XINGU COUNTRY NO
ONE EVER RETURNS"

SCIENTISTS TO SEEK MOUNTAIN SECRETS

Two Museum Expeditions Next Month—One to Hunt Blue Sheep in British Columbia

ARIZONA PEAKS GOAL ALSO

Second Group to Scale Kaibab Plateau in Search of Traces of Prehistoric Life

Two new expeditions for September were announced yesterday by the American Museum of Natural History. Michael Lerner, field associate, will leave today with Mrs. Lerner for the Cassiar Mountains in Northern British Columbia in search of a rare species of blue sheep. A group known as the American Museum-Grand Canyon Expedition, headed by Dr. Harold E. Anthony will leave early next week on an attempt to scale hitherto unclimbed peaks in the Kaibab Plateau of Arizona.

The two peaks are known as Shiva's Temple and Wotan's Throne and have lime and sandstone sides of sheer bluff varying from 350 to 400 feet in height. The expedition will investigate the probability of rare forms of animal life on the remote "lost world" plateaux.

Noted Mountain Climbers

Dr. Anthony, curator of mammals at the museum, will be accompanied by Walter E. Wood Jr. and Mrs. Wood, noted mountain climbers; James B. Shackleton, naturalist and photographer; George B. Andrews of the museum and Elliot H. Humphrey.

Morehead Patterson, who is backing the expedition, and Miss Amy H. Andrews, a veteran airplane pilot, will cooperate with the climbers by dropping supplies by parachute from their two privately owned aircraft.

The expedition is to explore geological data on the unscaled peaks, which antedate any other known formations and have been isolated. Dr. Anthony expects to find traces of animal life which may have been able to subsist without free water and which may have been marooned on the peaks for centuries. He is eager to determine whether drought and dust storms have exterminated all life at the high butte plateaux, although aerial surveys have shown some vegetation of a peculiar type.

Leader Starts Sept. 2

Dr. Anthony will leave about Sept. 2 by automobile and will go in advance of the rest of the party to arrange for supplies. The others will be flown out later in the month in the two airplanes.

The British Columbian expedition will fly 800 miles northwest from Edmonton, Alberta, into unmapped mountain territory. A landing will be made on Trimble Lake, where the party will join Jack Brewster, a guide, who left Edmonton several weeks ago on the long trek with the camping equipment.

The expedition will spend considerable time photographing and hunting the ovis stoni, or blue sheep, the caribou, elk and grizzly bear in the Jasper district. The Lerner will present the specimens collected to the museum.



MR. AND MRS. WOOD photographed upon returning to their base camp after their attempt to climb Mt. Wood. Mr. Wood is a veteran of mountain exploration and mapping. He explored the Himalayas in 1929, Mexico and Central America in 1930 and 1931, Greenland in 1933, Colombia in 1936, Shiva Temple in the Grand Canyon in 1937 and Sierre Nevada de Santa Maris, Colombia, in 1939.



SURE-FOOTED pack horses employed by the Wood-Yukon expedition making their way up the moraine of Wolf Creek Glacier. This photograph was taken on July 19, 1939.

Atop the YUKON'S Mountains



NEARLY BLOWN OFF A MOUNTAIN were Mr. and Mrs. Walter A. Wood, who survived three 75-mile-an-hour gales, each lasting for hours, on the unsheltered slopes of the Mount St. Elias Range. Mr. Wood led an American Geographical Society expedition into the Southwest Yukon mountains to work out a new method of aerial photography. Once they were marooned for 11 days, protected from the winds only by little tents.

Dec 3, 1939



MR. AND MRS. WOOD are shown at 11,000 feet during their descent of Mt. Wood after an unsuccessful attempt to reach the 15,880-foot summit. Mt. Wood is said to be the highest unscaled peak in North America. It was named after Com. Z. T. Wood of the Royal Canadian Mounted Police in 1898, during the days of the gold rush.

CLIMBERS DESCRIBE 'ALPS' OF JUNGLES

Explorers Return Telling of
19,000-Foot Ascent of
Range in Colombia

AIR PHOTOS FOR MAP DATA

Secluded Area Inspected for
Geographical Society and
Boston Museum

One of the highest peaks in the Western Hemisphere, rising 19,000 feet, snow-capped within sight of a warm sea and coastal jungle country, in a land where roaming wild horses and cows are reminders of the Spanish conquistadors of four centuries ago, was scaled in March for the first time by an American expedition.

Members of the Cabot Colombian Expedition, who accomplished the feat, arrived here Thursday and described the "nearest big mountain range to New York that is higher than the Alps." They brought, in addition to photographs of the mountain region, 175 air photos and other topographical data, as well as animal, flower and rock specimens, stories of a mountaineer's paradise almost untouched by white men.

Two members of the expedition, for which the American Geographical Society and the Boston Museum of Natural History were joint sponsors, described yesterday how they had climbed the highest peak of the Sierra Nevada de Santa Marta range in Colombia.

Trip of a Few Weeks

Walter A. Wood, head of the Geographical Society's department of exploration and field research, who led the expedition, and Anderson Bakewell discussed the results of the trip, which was accomplished within a few weeks.

The Sierra Nevada de Santa Marta range is in the northern part of Colombia, at the "top" of South America. The mountains, only twenty-five miles from the Caribbean Sea, are believed to be the highest coastal range in the world. Despite the relative accessibility of the area, little is known about the mountain mass, which is not a part of the Andes, but forms an isolated block about the size of Connecticut. Most of the region has not been mapped accurately. One of the main purposes of the expedition was to map a part of it from the air.

Assembling at the seaport of Santa Marta, the six-man expedition began on March 4 its 250-mile climb by rail and motor to reach the mountain peak, twenty miles distant. Mr. Wood explained that the north slope of the range had been explored by a number of parties. Between the range and the sea, he said, lies a dense malarial jungle which has caused sickness in all other expeditions. Besides that, he added, the range is protected from invasion from the north by an impenetrable series of parallel ridges.

Instead of attempting this route, the explorers encircled the range to the west and entered it from the south. They had to pass through low lands before reaching the dry near-desert country to the south, but they encountered no illness. They went by mules into the Paramo—the grassy open country occupied by the Arhuaco Indians, whom Mr. Wood described as "not aggressive, lackadaisical and pretty dopey, because they chew the cocoa leaf from which cocaine is made."

Base Camp at 16,500 Feet

A base camp was established from which the climbing, mapping and collecting were undertaken. The camp, from which the ascent of the high peak was made, was established 16,500 feet above sea level. The coldest weather encountered was 15 degrees above zero and the temperature averaged 35 degrees. "A peculiar twist about the country is that it is colder below the snow peaks," Mr. Wood said.

On March 16 three members of the expedition climbed the range's highest peak—East Peak they called it. The climbers were Mr. Wood, Mr. Bakewell and Henry Praolini, a Swiss-Italian who had been in the territory with the only other party of white men to explore it. This was a German expedition which had climbed a neighboring peak of virtually the same height one month earlier.

The Cabot expedition conducted an aerial survey of the range after the ascent. The group made a three-hour flight obtaining a series of oblique air photos from which a photogrammetric survey was completed. Positions on the ground were determined with the aid of a theodolite and radio receiving set.

Mr. Wood said that the range had not been mapped previously above the 10,000-foot level and that no studies had been made of animals above 10,000 feet on the south slope. Most of the material, both topographical and biological, has to be collated.

Members of the expedition observed wild horses and sheep in the mountains and even saw four cows grazing at 15,000 feet above sea level. All these animals had unusually heavy coats. Mr. Bakewell reported that there were many condors in the Sierras, a fact unknown before, and that there were hummingbirds at the 15,000-foot level. One condor that was shot had a wingspread of 9 feet, 4 inches.

Others on the expedition included Thomas D. Cabot, president of the Appalachian Mountain Club, and Henry S. Hall, secretary of the American Alpine Club, both of Boston, and Frank B. Notestein of Cucuta, Colombia, chief geologist of the Colombian Petroleum Company.



Times Wide World
PREPARING TO EXPLORE AMERICA'S "LOST WORLD"
Walter E. Wood Jr., left, leader of the climbing party, and Dr. Harold E. Anthony, who will be in charge of the expedition to the Kaibab Plateau of Arizona, shown at the American Museum of Natural History yesterday.

HOPE TO MAKE MOUNTAIN CLIMBING RECORD



Left to right—Arthur B. Emmons, Harvard senior; Adams Carter, Harvard senior; Charles S. Houston, Harvard '35, and William F. Loomis, Harvard senior, who have joined an expedition that will this summer attempt to scale the 25,645-foot peak, Nanda Devi, of the Central Himalayan range.

HARVARD MEDICAL FELLOWS NAMED

First Awards Under New Plan Announced

Selection of three outstanding candidates for admission to the Harvard Medical School next fall as holders of the first prize fellowships offered by the school under the university's long-range scholarship policy was announced last night.

The Medical School is the third graduate department of the university to adopt the plan inaugurated in Harvard College three years ago by Dr. James B. Conant, Harvard president.

Chosen as recipients for the first medical awards were William F. Loomis of Tuxedo Park, N. Y., a senior in Harvard College; Ward S. Fowler of Eldora, Iowa, a senior at Swarthmore College, and Carl C. Gardner, Jr., of Columbia, Tenn., a senior at Vanderbilt College. The award carries a maximum stipend of \$1200.

Loomis is a member of Harvard's varsity ski team and an officer of the Mountaineering Club. He was also a member of the British-American Himalayan expedition which last summer climbed Nanda Devi, highest peak ever conquered by man.

In the college and other departments, students apply for the fellowships but by a new feature of the Medical School plan every applicant for admission is automatically considered for the awards.

Gifts of more than \$1,000,000 to the Harvard Tercentenary Fund last year, given especially for these prize fellowships, made the extension of the plan possible.

Of this money, Edward S. Harkness of New York, founder of Harvard's house plan, gave \$100,000 and Dr. Daniel F. Jones, Harvard, '92, of Boston, \$25,000, particularly for such awards in the Medical School.

Money now available, it is esti-

STUDENTS PLAN RECORD CLIMB

Three Harvard Men Join Expedition to Scale Himalayan Peak

Three Harvard seniors and another student who was graduated last year, will be members of a nine-man expedition that will attempt this summer to be the first party ever to reach the peak of dangerous Nanda Devi, 25,645-foot giant of the central Himalayan mountain range of northern India.

If the expedition succeeds the members will have climbed the highest peak ever ascended by man. Other parties have reached slightly greater heights on famed Mt. Everest but no peak as high as the ice-crusted and wind-swept one of Nanda Devi has ever been conquered. The mountain is among the 10 greatest on the face of the globe.

Three of the four Harvard men making the trip, all of them members of the Harvard mountaineering club, and experienced in dangerous ascensions, will leave Cambridge this week end on the first leg of the journey to the Tibetan border.

They are H. Adams Carter '36 of 170 Otis street, Newtonville; Arthur B. Emmons '36 of Dover; William F. Loomis '36 of Tuxedo, N. Y., and Charles S. Houston '35 of New York city, now a first-year student at the college of physicians and surgeons, Columbia University, New York.

Scale Minyakonka for First Time

Dover, Mass., Man, One of Americans to Plant Chinese Flag on Top

Shanghai, Jan. 6 (A.P.)—Announcing that they had reached the roof of Asia, had planted the Chinese flag at the highest altitude ever achieved, and had scaled Mount Minyakonka for the first time by human beings, two young Americans and a Honolulu-born Chinese have arrived back in Shanghai's civilization brimming with enthusiasm over their six-months exploit in the fastnesses of Western China more than 2000 miles west of here. Granite-peaked Minyakonka, 24,000 feet high, is located in the little-known Sikong province.

The Americans are Richard Birdsall of Portchester, New York; Terris Moore of Philadelphia, Pa., and Theodore Young, a Chinese born in Honolulu who is enrolled in New York University and who plans to return to his studies after the exploits are ended.

The fourth member of the party was Arthur Emmons of Dover, Mass., who also walked on the-roof of Asia with his Mount Minyakonka suffered frozen feet and is now in an American Baptist mission hospital at Yachow, Szechuan, where the doctors fear he may lose all of his toes. The other members of the party deplored Emmons's misfortune but laughed at reports that they had suffered injuries. All were looking the picture of health despite the fact that they subsisted on frozen bread and other indigestibles while in the land of the Asiatic Nomads.

Nanda Devi Conquered By Party Of American And British Climbers

Dec 24, 1936

Emmons Tells Of Successful Climbing Of Highest Summit Yet Reached In Himalayas; Peak Is Highest In British Empire

(A great mountain peak was added this year to the list of the conquered when Nanda Devi, in the Central Himalayas, yielded to a party of American and British climbers. In the following article a member of the expedition describes the thrills and difficulties of the ascent. Mr. Emmons, who arrived in Shanghai early this month with Mr. Jack Young and Mr. Farnsworth Loomis after having made the overland trek from Burma by foot and mule-back to Yunnanfu, is leaving the city tomorrow with his American companion to return to the United States. Mr. Emmons is recalled in Shanghai as having spent some time here in 1932 and 1933 before and after his party scaled Minya Konka, the well known peak in Western Szechwan.)

Incidentally the much-publicized Japanese party's climb of Nanda Kot amounted to 22,530 feet or 3,130 feet less than Nanda Devi—Editor.)

By ARTHUR B. EMMONS 3d

Ranikhet, Almora District, India.—The British-American Himalayan expedition has just returned here after spending nine weeks in the Central Himalayan Ranges of Garhwal, during which it achieved the first ascent to the 25,660-foot crest of snow-capped Nanda Devi, the highest mountain wholly within the British Empire and the highest summit yet scaled by man.

Nanda Devi, which towers above a vast area of lesser ranges and foothills in Northern India, is a sacred mountain. Its name, in Hindustani, means "The Goddess Nanda"—Nanda being the traditional wife of Siva and hence a deity in the eyes of the world's 240,000,000 Hindus. Many of the Indian Hindus felt that we were doing a pious thing by making the "pilgrimage" to Nanda Devi.

Peak Central Feature

The sacred mountain is the central feature of one of the most unusual geographical formations in the world. Picture a ring of snow packs enclosing an area of over 200 square miles. The highest of this ring of peaks is 24,391 feet; some twelve others are more than 21,000 feet in elevation. The inner wall of this formidable barrier is tremendously steep, dropping thousands of feet to the valley floor. The lowest point of the rim is 18,500 feet in elevation, save for the rugged gorges where the Rishi River breaks through to form one of the tributaries of the sacred

the extreme remoteness and difficulty of our objective, only men of considerable experience were chosen.

Personnel Of Party

The American personnel of the expedition includes: Arthur B. Emmons 3d of Dover, Mass., Farnsworth Loomis of Dedham, Mass., Charles S. Houston of Great Neck, L. I.

The British climbers were: Professor T. Graham Brown of Cardiff, Wales, Peter Lloyd, past president of the Cambridge University Mountaineering Club and candidate for the Mount Everest expedition, H. W. Tilman, transport officer.

Climbing boots were made of light non-freezing leather, lined with asbestos. Wind-suits were of light windproof cloth, built to withstand gales and extreme cold. Pressure stoves with special burners, previously tested to 30,000 feet in a decompression chamber, were supplied for use at high altitudes. Lightness and strength were, of course, the primary requisites.

The expedition left Ranikhet on July 10, covering the first few miles, over tortuous mountain roads, by motor lorry. From then on, travel was on foot. For 10 days we marched up through the foothills and lower ranges, each night camping near some native mountain village. As the snow ranges grew nearer excitement ran high and wonderful views were had from the passes over which the road climbed. One of these passes, the Kuari, was 12,000 feet high; below it lay Joshimath, the end of the telegraph line and the mail route.

62 Men In Party

The party soon left Joshimath, now 62 men strong—a formidable army to negotiate safely the hazardous country ahead. It was the season of the monsoon rains, which last from June until September. This year they have been extremely heavy and were directly responsible for the failure of the Mount Everest expedition. Every day during our trip, great banks of clouds would come drifting in at noon and for the rest of the day it would rain.

A two-day march brought us to the last village, Lata. From Lata we climbed more than 6,000 feet up a steep mountainside, camping below the summit of a pass which our hypsometer showed to be 14,300 feet high. The next day we crossed it and descended part way into the lower Rishi gorge, some miles above the point where it joins the main Dhault River. The crossing of the Lata pass was necessary to avoid the lower part of the gorge, which no one has ever been able to penetrate.

Ganges.

The enclosed valley has a complicated system of glaciers descending from the north and south. Large areas of the slopes and lower country are covered with rolling grassy downs, over which roam wild mountain goats (thar) and mountain sheep (bharal). Dwarf trees grow in the lower parts of the valley, at 13,000 to 14,000 feet, and the place is carpeted with magnificent alpine flowers.

From the center of this pleasant valley soars the enormous bulk of Nanda Devi, a giant tower of sedimentary rock. Its sides rise with terrifying steepness, and during the monsoon rains avalanches thunder down them almost continuously. Its 25,660-foot peak has challenged explorers and mountaineers for years.

Attempted In 1883

As early as 1883 W. W. Graham with two alpine guides attempted vainly to penetrate the formidable gorge of the lower Rishi River and thus reach the foot of Nanda Devi. In 1905 Dr. T. G. Longstaff tried to reach the Inner Basin of Nanda Devi by scaling the Eastern rampart. He reached a pass at 19,100 feet, from where he could look down into the "forbidden land"—the first man ever to do so.

But the slopes below were so precipitous that he abandoned all hope of descending them. In later years he tried repeatedly to gain the Basin, but without success. Similarly unsuccessful attempts were made by such men as Dr. Somervell, of Everest fame, and Hugh Ruttledge, leader of two recent Everest expeditions.

Finally, in May, 1934, two young English climbers—Eric Shipton and H. W. Tilman—entered the forbidding gorges of the Rishi with a few porters, and by an intricate and hazardous route managed after nine days to gain man's first entrance to the Inner Basin.

Second Trip Made

On a second trip into the basin the same party, having explored the north and west sides of Nanda Devi without success, reconnoitered the peak from the south, still looking for a route to the summit. They reached a height of 20,000 feet on the south ridge and came to the conclusion that, while the ascent of Nanda Devi might be possible, it would be a difficult and prolonged affair, requiring a strong party of experienced men.

In the fall of 1935 plans were made by several officers of the Harvard Mountaineering Club for an attempt on the peak the following summer. A party composed of four American and four British climbers was made up—largely of members of the club. In view of

From a camp on a high alpine meadow we crossed a second pass of 14,000 feet and descended steeply alongside a tremendous face of rock known as the "Captain." The next two days we spent climbing precariously along the north wall of the lower Rishi, several thousand feet above the river. It rained heavily and the steep grass slopes proved treacherous footing, but we all came through without a slip.

Hardships Of Marching

The hardships of the march were proving a bit too much for our 37 porters, with their bare feet and scant clothing. They rebelled at going further, saying that they would be unable to ford the river on their way home. Persuasion was of no avail and when their wages had not been paid they left us.

We swung our loads across the torrent by means of ropes and then crossed with the aid of a hand line. Our predicament was now serious, for we were still seven marches from our proposed base camp. We had to reduce our supplies severely and then make double relays for each stage. The Europeans had to carry loads as heavy as those of the porters, and the terrain ahead was far worse than that already covered.

At the junction of the Rnamini with the Rishi we were obliged to lower our loads on ropes for 30 feet down over a cliff. One porter slipped and his load, containing oxygen apparatus and kerosene, went crashing to the rocks in the river. Fortunately he saved himself from a like fate, but the loss of the fuel was a serious matter. This,

(Continued on Page 12, Col. 1.)



Arthur B. Emmons, 3rd

Party Scales Highest Peak Of Nanda Devi

Emmons Tells Story Of Reaching Highest Point Made By Man

TALLEST PEAK IN BRITISH EMPIRE

Himalayan Sacred Slope First Assailed In Year 1883

(Continued from Page 9, Col. 8.)

however, was the only load lost on the entire expedition.

For four days we backpacked full loads along the cliffs and finally established camp on top of a giant rock buttress which had been named Pisgah, for we were about to enter the "promised land." A day's march from here brought us, on August 1, to the green alps and pastures of the "Inner Sanctuary"—the second party ever to stand at the feet of the "Goddess Nanda."

The explorations of Shipton and Tilman in 1934 saved us any indecision over the best route in the attack on Nanda Devi. For two marches we climbed up along the moraines of the main south east glacier, finally establishing a main base camp, of which I took charge, at 17,000 feet on the South shoulder of Nanda Devi on August 8th, after 30 days of marching. The eighth member of the party, Adams Carter, had joined us the previous day, having been delayed in reaching Ranikhet and making the march in alone with two porters.

At 19,000 Feet

We paid off the Mana men and sent them home, for they were not equipped for high-altitude work. They had been splendid, never flinching at the severest hardship, and marching in bare feet for the last two days with full 60-pound loads over snow and glacial moraine. The main attack on the mountain began on August 16, when Camp I was established at 19,000 feet on an exposed rock ridge. From here the party pushed on, finding difficult going, for the ridge narrowed and was complicated by a series of rock towers which proved treacherous because of rotten rock and loose snow.

Camp II was perched on a miniature ledge below the main snow slopes at 20,500 feet. One by one the porters fell ill and were sent back to the base camp. Only the climbers were left.

Camp III was consolidated on a high, windswept spur of snow at an elevation of 21,300 feet, and after nine days the entire party of seven climbers was established here. At this point a severe blizzard swept down from the north-east. For 48 hours it raged, and the small sail-silk tents were nearly buried. The temperature dropped to zero and the men lay huddled in their sleeping bags without being able to venture outside. Avalanches continually thundered down from the huge southern escarpment, though the camp was in no immediate danger from this menace.

By August 24 the storm had blown itself out. A party of five men pushed ahead up over steep, snow-covered rocks. Progress was slow and exhausting, but they managed to erect Camp IV at 22,000 feet before returning to Camp III.

Camp V. Established

From Camp IV an advance party of two men—Houston and Odell—with three other climbers in support, pushed on over difficult terrain to an altitude of 23,500 feet. Here the two climbers were left at nightfall, for there was no accommodation for the three in support; they descended to Camp IV. Only with great difficulty was even a precarious site found for Camp V on the steep snow face.

On August 26 Houston and Odell got away early, and after fighting their way up through deep, soft snow, finally managed to gain a rock ridge. Along this ridge they climbed for some hours until it again merged with the steep snow face above. While yet 1,700 feet below the summit, they were forced by the lateness of the hour to return to Camp V.

Houston became ill that night from food poisoning. He was replaced by Tilman and returned to Camp IV. On August 28 Odell and Tilman established Camp VI at 24,200 feet on the rock ridge and occupied it. Early on the morning of August 29 they set out for the summit, over the route previously explored by Houston and Odell. They followed the ridge to its upper limit and then encountered very steep going on the slabs of the upper face below the summit.

By using a couloir they found progress somewhat easier. As they neared the top of the couloir much of the snow in it came away in an avalanche, which broke off from immediately below them. They were clear of it, however, and shortly afterward reached the easier slopes leading to the summit.

On The Summit

At 3 p.m., after nine hours of steady climbing, they stood on the summit—highest point within the British Empire and highest in the world ever reached by man. The day was fortunately not excessively and the wind had subsided. Though the broken clouds hid a great deal, the men caught glimpses of and photographed the neighbouring ranges of Nepal and the borderlands of Tibet. After an hour on the summit Odell and Tilman descended to Camp VI.

On August 30 the summit party returned to Camp IV, where three climbers remained in support. As the weather looked forbidding, it was decided to evacuate the mountain without delay, and August 31 the upper camps were dismantled.

and the entire personnel reassembled at the base camp.

The party, save for Houston and Tilman, returned to Ranikhet via the gorges of the Rishi. The march took 18 days and the party was assisted by six Lata men who came into the base camp to act as porter for the return journey.

Upon our return to civilization we found that the District of Garhwal had experienced severe storms and floods on August 29, the day the ascent of Nanda Devi had been completed. In Ranikhet 12 inches of rain had fallen on that one day alone. Several of the mountain villages we passed through had been completely annihilated by floods and landslips, which brought death to more than 50 inhabitants. The rumor spread abroad among the natives that our climbing on Nanda Devi had so angered her that on the very day of our success she had punished the people for allowing us to do so.

Nanda Devi proved herself a strong adversary; if we conquered her it was only because there existed among us—Americans and Britons alike—a definite spirit of team-play, of "playing for the side," without which no such enterprise could succeed. *N. Y. Times.*

London on May 7/37

Mountain YALE ALUMNI WEEKLY

Hair-raising motion pictures of the ascent of a 25,660-foot Himalayan mountain, Nanda Devi, were shown in a Yale-in-China lecture on April 23 by Mr. Arthur B. Emmons, 3d, in Strathcona Hall. It is the highest peak yet reached by man, and the lecturer, a Harvard '33 graduate, told an exciting story of how he and seven others—four Americans and four Englishmen—were deserted by their porters when four fifths of the way up, how they pressed on upwards, and how two of the English climbers finally reached the top over snow and ice that had thwarted previous explorers. A few color slides were shown of sunsets on the peaks.

Porters' Strike Hits Mountain Climbers

BOMBAY, India, Sept. 22 (AP)—A strike of thirty-seven native porters aiding an Anglo-American group to climb Mount Nanda Devi almost halted the successful scaling of the 25,661-foot peak, it was disclosed today.

"The porters failed us miserably, necessitating each of us to carry 30 pound loads on the last lap over intensely slippery ice tracks," said a British member of the expedition which reached the summit of the Himalayan Mountain Sept. 13.

The group required 21 days to reach the base camp, 18,000 feet high. Some members of the expedition are continuing their exploration of the mountain foothills while others have returned home, it was said.

AN AMERICAN CLIMB

The Story of Six Months' Adventure in The Heart of Asia and the Conquest Of Minya Konka's Mighty Peak

Minya Konka, in Western China, is among the greatest and the least known of mountains. The first ascent of this giant peak is here described by one of the participants. The exploit of the climbers took them to the highest point ever attained by an American mountaineering expedition. The writer of this article shared in the first ascent of the Alaskan peak, Mount Fairweather, in 1931.

By TERRIS MOORE

THE Himalayas, flanking the high plateau of Tibet on the south, have long been a familiar sight to travelers on the plains of India. East of Tibet, rimming the Tibetan plateau on the side toward China, are mountain ranges almost as huge which few white men have seen. One of them, the Niarong Range, reaches its loftiest point in the snowy up-thrust peak, Minya Konka, which is surpassed in the earth by not many more than ten or a dozen of the peaks thus far measured. Our expedition journeyed and labored for six months for the doubtful pleasure of shivering for an hour on Minya Konka's summit, 24,000 feet above the sea.

The map of China shows Chungking at the head of navigation on the Yangtse River. To the west is the city of Tatsienlu, on the Sikkong-Szechwan border. Here the Tibetan plateau rises abruptly from the low Chengtu plain. The historic Ambassadors' Road from Peking to Lhasa, on which Tatsienlu is a post, winds among narrow defiles through the Niarong Range. Down this barrier range, about forty air miles south of Tatsienlu, or a week's journey by trail, stands Minya Konka.

This is the range described by the Roosevelt brothers in the account of their hunt for the giant panda in 1929. Theodore Roosevelt, writing recently, said: "I well remember the splendor of the first sight of this peak as we breasted a pass. Little did I suspect that it would first be climbed by Americans, and so soon." Excellent photographs of this peak were published by Dr. J. R. Rock in 1930.

Our party journeyed across China to the Niarong Range for three pur-

poses: to determine the altitude of its peaks with theodolite and mercurial barometer (kindly supplied to us by the American Geographical Society); to climb the highest peak if we could, and to make zoological collections that might supplement those made by the Roosevelts. There were four of us: Richard Burdsall, civil engineer; Arthur B. Emmons 3d, Harvard undergraduate; Jack Young, an American-born Chinese, who came well recommended from the Roosevelt expedition, and the writer. We had no leader; we were simply friends, each one a specialist in his field, and each contributing to decisions as problems arose.

IN the Summer of last year we traveled by steamer 1,200 miles up the Yangtse, past the famous gorges, to Chung-king, thence by rickshaw or on foot to Tatsienlu, our baggage carried by coolies. Since we were to penetrate the range into Tibet and approach our mountain from the high grassy plains on its western side, our people and animals from Tatsienlu on were all Tibetan. The plodding, long-haired yak carried our equipment, while we and our servants rode wiry little ponies. A friend of ours has well summarized this stage of our journey in these lines:

*Behold the ever-patient Yak,
With four explorers on his back.
He treks for miles across the snows,
Wearing a bracelet in his nose;
And when they stop to have a snack,
It's slices of the useful Yak!*

Working south on the Tibetan plain but facing east, we halted one evening in awe of a great white truncated pyramid that dwarfed its companion peaks of the range. There stood Minya Konka, clear and near and wonderfully huge against a background of cobalt sky. We had had only glimpses of it as we toiled upward through the misty valleys on the eastern slope of the range. Now that we saw it close, we knew it for a mountain indeed.

Here on the plain Burdsall and Emmons spent the month of August operating the surveying instruments. They laid out a base line of two miles and took seventy barometer and hypsometer readings, establishing the altitude of the line at about 14,000 feet. Then with the theodolite they triangulated the peaks. The final figures have yet to be rechecked, but it appears now that the highest peak will turn out to be about 24,000 feet, a reduction of 1,500 feet or more from estimates of earlier travelers.

On the wide plateau live only care-free Tibetans, tending their herds. Some dwell in stone huts; others in large, black, round yak-hair tents, called "yurts." They are a friendly people. The touselled tent owner will greet you with a bow and give you the seat of honor, a heap of skins before the glowing fire that warms the shade. His daughter will fetch you fresh yak

cheese and meat and a long drink of buttered tea from the tall earthen churns. Your host will be interested in your firearms and field glasses and you in his muzzle-loading matchlock gun. Before you leave he will show you with pride his two or three new-born yak, sleeping in the tent near his bed.

A MONTH of reconnaissance trips on the high glaciers brought Emmons and me at last to a point at 19,000 feet where we could see the entire eastern face of the mountain. We saw that it fell away in hopelessly unclimbable cliffs and crags. We agreed reluctantly that there was only one way to the top. That way was a prominent north-west ridge that faced our survey stations. We had seen it from the first and had not liked it. But there was no choice. We might have saved ourselves a month of laborious back-packing over icefields and high passes and of lying storm-bound in sleeping bags.

At the base of our ridge stands the Konka Gumpa Lamasery at an altitude of 12,000 feet. The holy lamas, droning their prayers in their cloisters, did not resent our presence. Rather, they succumbed to the diplomacy of Jack Young and invited us to make the sanctuary our headquarters. We gladly accepted, camping in the wide courtyard, which we found dominated by a large white rooster, sacred and very savage—a celibate like his lonely, monastic human companions. We should have liked to rest here and study the life of those quaint, isolated, mystical people; but October was at hand, and the climbing season would soon end.

Our plan was like that of most modern ventures on big mountains: a line of camps slowly advancing to a final camp high up, from which to take off for the dash for the summit, and gradual acclimatization to the high altitudes in course of trips with loads to the upper camps. The glacier line on Minya Konka is high, at one point up to 17,000 feet. That meant that we could dispense with porters from there on and thus avoid the heavy responsibility of taking natives on to high glaciers.

With no little brown men to

shelter and feed on the high slopes, it meant also that less equipment had to be carried up. More than one great expedition has added to its difficulties, as at Mount Everest in one of the early years, because white men are true to their obligation to care for the safety of their humble helpers. We on Minya Konka were fortunate in not having that problem.

Six Tibetans, one of them a woman who shouldered her loads with the best, helped us to move our supplies from the lamasery to our base camp in an Alpine meadow at 13,800 feet. That was on Oct. 2, and we were to be on the mountain for four weary weeks thereafter. Before those weeks were over that bit of upland pasture with its grasses and flowers would look like the Garden of Eden to us.

On Oct. 3, Emmons and I, with forty-pound loads, reconnoitred a route up to 15,500 feet over glacial moraine and loose steep rock, and leaving our loads at that point, returned. Next day Burdsall, Emmons and I went on past our first stopping place to 17,000, the highest part of the snow line on the ridge, and set a small camp in the snow. For three days we made relays between this camp and the base, the porters bringing up loads part way. They were not yet accustomed to the high rock route, though later they made daily trips from the base camp up to 17,000. By Oct. 8 we had a large supply of food here.

OUR first serious storm occurred Oct. 10. All four of us had gone up with heavy loads along a route which Emmons and I had found to a new campsite at 19,000. Fresh snow in the night had covered the tracks that Emmons and I had left, and we had to go slowly, breaking a new trail. We had been able to bring sleeping-bags for two only, and the plan was for Burdsall and Young to go back to the 17,000 camp that night. When we reached the 19,000 campsite, the day had only two hours left, and a storm was gathering.

Burdsall and Young gallantly started down as planned. Emmons and I began to set up the camp, worrying about our friends on the difficult descent. Just as darkness came we heard their returning

(Continued on Page 13)

and when their wages had been paid they left us.

We swung our loads across the torrent by means of ropes and then crossed with the aid of a hand line. Our predicament was now serious, for we were still seven marches from our proposed base camp. We had to reduce our supplies severely and then make double relays for each stage. The Europeans had to carry loads as heavy as those of the porters, and the terrain ahead was far worse than that already covered.

At the junction of the Rhamini with the Rishi we were obliged to lower our loads on ropes for thirty feet down over a cliff. One porter slipped and his load, containing oxygen apparatus and kerosene, went crashing to the rocks in the river. Fortunately he saved himself from a like fate, but the loss of the fuel was a serious matter. This, however, was the only load lost on the entire expedition.

FROM the cliff we crossed a spectacular natural bridge over the Rishi and camped on the south side of the gorge just at the foot of the Rishi Nala. Now the going became difficult in the extreme. We climbed from the river bed for 3,000 feet over cliffs and tremendously steep slopes of grass into which we dug our fingers for support. At one place we fixed a rope for 300 feet, fastened to metal spikes driven into the rock. At another the loads had to be hauled up a cliff for fifty feet on ropes.

An intermediate camp was placed on a shoulder half way through the gorge. From this point the route became even more intricate, involving a rather high order of technical climbing ability. The track ran along the south wall, about 3,000 feet above the river. We followed from one remarkable feature to another, unable to see how progress could be made much further; but always one unique ledge or gully led to another, and we greatly admired the skill of the first two men in picking what must be one of the most hair-raising and spectacular pathways in the world.

For four days we backpacked full loads along the cliffs and finally established camp on top of a giant rock buttress which had been named Pisgah, for we were about to enter the "promised land." A day's march from here brought us, on Aug. 1, to the green alps and pastures of the "Inner Sanctuary"—the second party ever to stand at the feet of the "Goddess Nanda."

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We paid off the Mana men and sent them home, for they were not equipped for high-altitude work. They had been splendid, never flinching at the severest hardship, and marching in bare feet for the last two days with

full sixty-pound loads over snow and glacial moraine. The main attack on the mountain began on Aug. 10, when Camp I was established at 19,000 feet on an exposed rock ridge. From here the party pushed on, finding difficult going, for the ridge narrowed and was complicated by a series of rock towers which proved treacherous because of rotten rock and loose snow.

Camp II was perched on a miniature ledge below the main snow slopes at 20,500 feet. One by one the porters fell ill and were sent back to the base camp. Only the climbers were left.

Camp III was consolidated on a high, windswept spur of snow at an elevation of 21,300 feet, and after nine days the entire party of seven climbers was established here. At this point a severe blizzard swept down from the northeast. For forty-eight hours it raged, and the small sail-silk tents were nearly buried. The temperature dropped to zero and the men lay huddled in their sleeping bags without being able to venture outside. Avalanches continually thundered down from the huge southern escarpment, though the camp was in no immediate danger from this menace.

By Aug. 24 the storm had blown itself out. A party of five men pushed ahead up over steep, snow-covered rocks. Progress was slow and exhausting, but they managed to erect Camp IV at 22,000 feet before returning to Camp III.

From Camp IV an advance party of two men—Houston and Odell—with three other climbers in support, pushed on over difficult terrain to an altitude of 23,500 feet. Here the two climbers were left at nightfall, for there was no accommodation for the three in support; they descended to Camp IV. Only with great difficulty was even a precarious site found for Camp V on the steep snow face.

ON Aug. 26 Houston and Odell got away early, and after fighting their way up through deep, soft snow, finally managed to gain a rock ridge. Along this ridge they climbed for some hours until it again merged with the steep snow face above. While yet 1,700 feet below the summit, they were forced by the lateness of the hour to return to Camp V.

Houston became ill that night from food poisoning. He was replaced by Tilman and returned to Camp IV. On Aug. 28 Odell and Tilman established Camp VI at 24,200 feet on the rock ridge and occupied it. Early on the morning of Aug. 29 they set out for the summit, over the route

previously explored by Houston and Odell. They followed the ridge to its upper limit and then encountered very steep going on the slabs of the upper face below the summit.

By using a couloir they found progress somewhat easier. As they neared the top of the couloir much of the snow in it came away in an avalanche, which broke off from immediately below them. They were clear of it, however, and shortly afterward reached the easier slopes leading to the summit.

At 3 P. M., after nine hours of steady climbing, they stood on the summit—highest point within the British Empire and highest summit in the world ever reached by man. The day was fortunately not excessively cold and the wind had subsided. Though broken clouds hid a great deal, the men caught glimpses of and photographed the neighboring ranges of Nepal and the borderlands of Tibet. After an hour on the summit Odell and Tilman descended to Camp VI.

On Aug. 30 the summit party returned to Camp IV, where three climbers remained in support. As the weather looked forbidding, it was decided to evacuate the mountain without delay, and on Aug. 31 the upper camps were dismantled and the entire personnel reassembled at the base camp.

THE party, save for Houston and Tilman, returned to Ranikhet via the gorges of the Rishi. The march took eighteen days—the party was assisted by six Lata men who came into the base camp to act as porters for the return journey.

Though we lost one Sherpa porter, who died of dysentery at the base camp, the expedition was fortunate in that no casualties occurred "in action." Throughout the nine weeks spent in the hinterland, the eight climbers remained in almost perfect health.

Upon our return to civilization we found that the District of Garhwal had experienced severe storms and floods on Aug. 29, the day the ascent of Nanda Devi had been completed. In Ranikhet twelve inches of rain had fallen on that one day alone. Several of the mountain villages we passed through had been completely annihilated by floods and landslips, which brought death to more than fifty inhabitants. The rumor spread abroad among the natives that our climbing on Nanda Devi had so angered her that on the very day of our success she had punished the people for allowing us to do so.

However credulous one may be of such a philosophy, it is certain that the goddess defended herself ably. Mountain sickness among the porters forced us to carry our own loads above 20,000 feet. The monsoon rains plagued our every step. The approach through the Rishi Nala was as involved and "interesting" as one could well imagine. Lastly, the character and severity of the climbing upon the peak, aside from the altitude, was of a high degree of difficulty, even when measured by alpine standards.

Nanda Devi proved herself a strong adversary; if we conquered her it was only because there existed among us—Americans and Britons alike—a definite spirit of team-play, of "playing for the side," without which no such enterprise could succeed.

HIGHEST OF SUMMITS YET REACHED

An Account of the Scaling of Nanda Devi,
Whose Peak Towers Over 25,000 Feet



Climbers and porters on the lower slopes of Nanda Devi.



Photos © Sikong Expedition.

A Stark, Blizzard-Swept, Threatening Land—The Camp at 19,000 Feet.



Near the Summit of Minya Konka—Struggling Up a Steep Ridge.



Making up loads at Camp IV in preparation for the next thrust.



NANDA DEVI.—Four pictures at the top of the page accompany the first of a series of articles describing the successful ascent of Nanda Devi by a British-American expedition. Above, the great mountain (25,660 ft.) is seen from Pisgah Ridge. The right skyline falls to the south and is the line by which the mountain was climbed, the route itself lying just out of sight round the corner. The article is on page 13.



IN THE UPPER RISHI GORGE.—A view of the gorge looking towards the upper end from above "Gorge Camp."

By John Durant

Slashing into the sky along a 1500-mile line, the Himalayan mountain range tumbles in a north-westerly direction between the barren, wind-swept plateau of Tibet and the fecund, steaming humidity of India. A precipitous, snaggle-toothed jumble of rock, snow and ice is this greatest of nature's barriers. Practically impenetrable, the Himalayas with cold, towering grandeur have penned in for thousands of years the teeming hordes of India that swarm along the banks of the holy Ganges river. So too, have the Himalayan mountains turned haughty face to the questing, insatiably curious white men who have tried to clamber over her rugged features.

Few, very few, are those who have topped the peaks of the Himalayas and gazed upon the forbidden Tibetan land with its tinkling temple bells and begging lamas.

Famed is the Himalayan mountain range for its Mt. Everest, highest of all mountains whose peak spikes the sky five miles above sea level, whose summit has never felt the crunching scrape of any climber's boots. Many have tried to scale Mt. Everest, all have failed, some have died.

To the Himalayan mountain range goes not only the honor of the world's highest unclimbed peak, but the double honor of including the highest mountain yet climbed by man. Highest of mountains climbed is Himalaya's snow-capped Nanda Devi.

WIFE OF SHIVA

Of the British-American Himalayan expedition that climbed Nanda Devi (pronounced Day vee), four were Americans, four were British. Three of the four Americans are Greater Boston boys—Farnsworth Loomis of Dedham, Arthur B. Emmons, 3d, of Dover, and H. Adams Carter of Newton. Add up the years of these four American boys when they climbed Nanda Devi, and the sum total of their years would make them only nine years older than Supreme Court Justice Brandeis. To American youth, then, must go the mountain-climbing palm for scaling the highest peak yet won by man.

Sacred of the sacred is the Ganges river. From the lower reaches of

its muddy waters that flow through miasmatic jungles to empty its turbidity into the bay of Bengal, clear back for hundreds of miles to its cool, snow-fed source in the Himalayan mountains is the Ganges considered holy. Each year hundreds of thousands of Hindus make a religious pilgrimage to its waters for the purpose of washing from their souls the sins of the past. Many a temple lines the Ganges river, and in most of these temples faithful worshippers of Hinduism may leave their religious offerings at the feet of one of India's three great gods, Shiva.

Wife of Shiva, or perhaps better would be to say one of the wives of Shiva, is Nanda Devi, holy mountain. Fifty miles away is the holy city of Badrinath, where the British-American Himalayan expedition was given the benediction of success by the city's high priest before starting the climb.

Tributary to the Ganges, and therefore holy, too, is the Rishi river, a turbulent stream that with gathering momentum rushes down from Nanda Devi's glacial cirque through a gorge deeper than the Grand Canyon of Colorado.

Nanda Devi's peak juts from a tiny island of level land almost five miles high and completely encircled by ring of mountains whose sides rise so precipitately as to forbid any possibility of scaling them to reach Nanda Devi itself. The rim of this circle of mountains that protect Nanda Devi is about 75 miles in circumference. Absolutely the only approach to Nanda Devi is up the narrow Rishi Gorge, a mere slit in wilderness of towering barrenness whose V-shaped sides drop down for thousands of feet at practically a ninety degree angle.

START OF CLIMB

At the foot of this Rishi Gorge is where this story of the ascent of Nanda Devi should begin. Instead we're going to start the world's highest climb in the Hotel Kenmore. There a gathering came to hear climber Arthur Emmons deliver his illustrated lecture on the British-Himalayan Expedition's ascent of Nanda Devi.

Rosy cheeks, deep blue eyes, fair hair, Arthur Emmons looks incredibly young to have been a mem-



(Photo by British-American Himalayan Expedition.)

Arthur B. Emmons 3rd, "booted and picked" for the climb.

ber of an expedition to Nanda Devi. Strange to say, climber Emmons was the eldest of the Americans whose ages ranged from 20 to 26. The lights went out, and upon the screen began by lantern slide and motion picture the long, back-breaking trek up the Rishi Gorge; the slow, heart-thumping push up to Nanda Devi's pinnacle.

The from-bottom-to-top-to-bottom-again story of the conquering of Nanda Devi is told by H. W. Tilman, English unofficial "leader" of the expedition, in his recent book, "The Ascent of Nanda Devi." This story of ours is a series of unrelated, episodic fragments that have embedded themselves in the mind, of the fragments of words and pictures that youthful Emmons gave in depicting the ascent of Nanda Devi.

A group shot of the expedition on Nanda Devi. A bearded, sunburned, unkempt crew of eight with shirts unbuttoned at the neck and cumbersome climbing boots bulging out from the cuffs of soiled trousers. The four English of the British-American Himalayan expedition were: Prof. T. Graham Brown, white-haired, white-bearded, who in embarrassment at being the oldest member of the expedition, usually hid his features behind a battered



(Photos by British-American Himalayan Expedition.)

Traveling the high grade ridge between camps 2 and 3. Odell and Carter in the foreground.

felt hat when he saw the camera man coming; Peter Lloyd, dark as an Indian, past president of Cambridge University Mountain Club; N. E. Odell, geologist, last man to see Mallory and Irvine alive as they made their ill-fated attempt to climb through the swirling clouds and snow of Mt. Everest's peak; H. W. Tilman, only man, previous to this expedition, able to work his way inside the great outer rim of jagged rock that guard's Nanda Devi's peak.

EXPERIENCED CLIMBERS

The four Americans were Charles S. Houston of Great Neck, Long Island; Loomis, who cracked the toughest mountains in British Columbia; Carter, who picked up his experience with Bradford Washburn in Alaska, and Emmons, who had his toes frozen off on a previous climbing expedition up Tibetan Minya Konka.

All were experienced climbers. They had to be if they wanted to live. Every man packed 60 pounds on his back while climbing Nanda Devi, and Nanda Devi itself is no anhill to scamper up. Since 1883, white men have been trying to reach Nanda Devi's summit. No Indian would even consider trying it. Sahibs to them are slightly touched gentlemen, who for some unknown reason pay silver rupees to them for the privilege of staggering up to a place where no one wants to live.

FOUR MILES UP

First of the great mountain climbers who tried to conquer Nanda Devi was W. W. Graham. With two alpine guides and high hopes Graham attempted to scale the holy mountain. He wasn't even able to get to the Rishi gorge. Some 20 years later Dr. T. G. Longstaff pushed up to 19,100 feet. There he was stopped over a mile short of his goal.

Hugh Rutledge, leader of two expeditions to Mt. Everest, and Dr.



(Photo by British-American Himalayan Expedition.)

Six of the expedition's porters rest before meal time. The man in the middle wears sunglasses and the man at the right is without shoes.

Somervell, another Everest climber, were both turned back by Nanda Devi. It wasn't until May, 1934, that H. W. Tilman and Eric Shipton were able to traverse the Rishi gorge and make the first entrance into the inner basin that encircles Nanda Devi at about 20,000 feet. If you are interested in figures, that's about four miles straight up in the air.

Rishi Gorge is one of the sights of the world, a barren, desolate gouge through sedimentary rock. Though it attains the depth of the Grand Canyon in spots, it is entirely lacking in beautiful changing colors of our canyon. Only wild mountain flowers relieve the drab monotony of plunging rock.

So fast runs the Rishi river, its waters are churned up into frothing, milky-white foam. Though not deep, the current runs so swiftly that to ford the stream knee-deep means the very likely possibility of finding your legs swept out from under you and a journey downstream on the back of your neck.

White, feathery pillows of monsoon clouds gust up the gorge continuously to dampen the spirits of Nanda Devi climbers. For two weeks steadily, while the British-Himalayan expedition was clambering up this gorge these monsoon clouds pre-

cipitated their moisture day and night. Nice for drinking water, a little discouraging when seeking a fingernail hold to keep yourself from dropping a thousand feet or so into the Rishi river.

You can hardly comprehend the height and sheerness of the walls of this gorge. Campsites for pitching the tents at night often had to leveled off by tiering rocks to a height of 2 and 3 feet. A somnambulist wouldn't have to take more than a couple of steps outside one of those tents before he'd awake to find himself doing a non-stop drop to the Rishi river 1000 feet below.

Unexpectedly, after a weeks clambering up one side of rocky V, the party popped out on to a reasonably level acre of land. From the photographs it looked to me about as level as the slanting roof of a Vermont farmer's barn, but the expedition thought so highly of it they immediately christened it. "A horizontal oasis in a vertical desert," and immediately indulged in the luxury sunning themselves stretched full length without the usual fear or rolling over the edge of a precipice.

One other "horizontal oasis in a vertical desert" that brought joy to the hearts of the party was when they crawled over the Nanda Devi's

protecting outer rim and looked down upon the inner basin—level field, some 200 yards square, and even at 20,000 feet, complete with flowers and grass. Dubbed "the polo field," members of the expedition trotted across the first level piece of ground they had seen in weeks, reveled in the strange sensation of soft, springy ground beneath their asbestos-lined climbing boots. Like broken-down gray horses finally let out to pasture they clumped through fields of green.

Tragedy and comedy are seldom divided by more than a whisker—even on climbing a holy mountain.

Englishmen must have their tea, no matter how high up in the air they may be. It is as necessary to their constitution as coffee is to an American truck driver. Unfortunately, one morning the party's generous sized can of tea was discovered missing. No tea, no climb, was the verdict of the English immediately. Only explanation of the disappearance of the tea was that in some mysterious manner it had rolled down the side of the mountain. Porters were dispatched at once to locate the missing tea can. Clambering down the slippery slope for hundreds of feet, they poked in and out, around and about the snow.

TEA AND SUCCESS

No tea. Just about the time the Englishmen had decided to give up any further thought to continuing the ascent of Nanda Devi, resourceful Emmons returned to the base camp to root out a forgotten supply of tea that saved the expedition from failure.

Speaking of tea recalls a second amusing episode. Odell and Houston were bivouacked in camp V about 24,000 feet up the side of Nanda Devi. On the previous morning from this camp Odell and Houston had made a final assault on Nanda Devi. Scattered through intermediate camps from I to IV were the other members of the party, who, if the wind was blowing in the right direction, could yodel to each other.

Camp IV was busy preparing breakfast on this particular morning when every one was startled out of their usual mountain altitude state of lethargy by Odell's familiar

yodel ringing out the somber message, "Charlie is killed."

First aid supplies were rushed into a knapsack and all of Camp IV tore up the mountain. Tearing up the side of snow-covered mountain at 24,000 feet, means you move at a turtle's pace. Panting from exhaustion, the rescuing party was greeted by the cheerful words issuing from Camp V's tent, "Come in and have a cup of tea."

Charlie Houston was ill from a touch of not-so-good bully beef. The wind must have changed Odell's word "ill" into "killed."

Random recollections and wonderings of a greenhorn hearing about and seeing the pictures of the ascent of Nanda Devi:

The ludicrous sight of Indian porters in bare feet with a pack on their backs that looked as big as a bale of cotton scrambling over rocks, that white men with small packs and hobnailed shoes stumbled over.

What it is like to be cramped in a tent for 48 hours by a blizzard, with the world stretched out below you, and the wind blowing so hard it scoops the snow off the ground as fast as the flakes light.

What it is like to wake up in the night and find yourself choking to death. You do this at very high altitudes. Your lungs aren't getting enough oxygen. They have to work overtime in the rare atmosphere, and when you are asleep your respiration slows down to the point where you are actually choking to death. A few deep breaths and you can go back to sleep until you wake up again choking to death.

The mental picture of members of the party adding up long columns of figures with frozen fingers to determine if their brains possessed the snap and accuracy as at sea-level.

Debating whether some of the evil-looking porters, who made a practice of building little stone shrines every time they stopped to rest, were dumb, industrious, or religious.

What the last thoughts of the porter were who died of dysentery at the base camp.

That the sky is perpetually as dark as a photograph negative when seen from high altitudes.

That the best place for a mountain greenhorn is on the ground.



(Wide World photo).

H. W. Tilman (left) and A. B. Emmons 3rd., at work at a survey station in the basin, out of the center of which Nanda Devi rises. The basin is formed by a series of ridges, whose steep inner walls reach a minimum height of 18,500 feet.



(Photo by British-American Himalayan Expedition.)

While food cooks, clothes dry. Note the towels hung on the guy ropes.



(Photo by British-American Himalayan Expedition.)
A base camp set on a bleak and windy slope



At 22,000 feet on Nanda Devi—Camp IV, an isolated resting place on the side of the storm-swept mountain.

PLANS TO SCALE ALASKAN PEAK

PLANNING ALASKAN MOUNT ASCENT

Washburn Expedition
Backed by Harvard
And N. E. Museum

UNCLIMBED LUCANIA EXPLORERS' GOAL

Three days from now, a youthful, slightly built chap of 27, will leave Boston to begin one of the most hazardous expeditions ever sponsored by a New England organization. He is Bradford Washburn of Cambridge, who started his career of mountain climbing and mapping at the age of 16 and his goal is the summit of Mt. Lucania in Alaska, altitude 17,150 feet, and the highest unclimbed mountain peak on the North American continent.

The expedition is being jointly sponsored by the New England Museum of Natural History of Boston and the Harvard Institute of Geographical Exploration. At a testimonial dinner to Washburn at the Tavern Club last night the first public announcement of this undertaking was made.

For the first time an attempt will be made to reach a base camp by means of an airplane equipped with skis, taking off from a tidal mud flat and landing on glacial ice and snow.

Already supplies have been flown from Valdez, 225 miles away on the coast to the Walsh Glacier at the foot of Mt. Lucania, which itself is at an altitude of 8500 feet.

Washburn will arrive in Valdez on June 11. There he will be met by the three other members of the party, Robert H. Bates of Philadelphia, Russell Dow of Woodsville, N. H., and Norman Bright of Sunnyvale, Calif.

Washburn said the summer months were chosen for the climb as the lesser of two evils. In winter, better emergency landing areas would be available but the party would be confronted with temperatures ranging from 40 to 60 below zero.

From the first base camp on Walsh glacier, the party will establish, by "back-loading" intermediary camps to the start of the actual ascent.

The purpose of the expedition, beyond "the sporting interest," is to map an hitherto unexplored glacier area that, within 200 years, is expected to have receded so as to resemble the White mountains.

The climb was attempted unsuccessfully by the Wood expedition of the American Geographical Society in 1935, at which time this expedi-



Bradford Washburn, left, youthful mountain climber, chats with Dr. Edward Wigglesworth, concerning his plans for the ascent of Mt. Lucania in Alaska, the highest unclimbed mountain peak in North America.

B. HERALD 7/1/35 Washburn Party Scales 13,250-Ft. Mt. St. Agnes

VALDEZ, Alaska, July 10 (AP)
—Brief notes jotted down during a 24-day battle against storms and frigid weather disclosed today that four young explorers had conquered 13,250-foot Mt. St. Agnes, queen of the hitherto unclimbed peaks of the Chugach mountains.

The notes were made by Bradford Washburn, Jr., leader of the party which reached the summit June 19. The expedition was sponsored by the Harvard Institute of geographical exploration.

Mount Lucania Climb Planned by Washburn

Cambridge Explorer, 27,
Will Attempt Yukon's
Highest Unscaled Peak

Bradford Washburn of Cambridge, explorer and mountain climber, will lead an expedition sponsored by the New England Museum of Natural History and the Harvard University Institute of Geographical Exploration this summer, in an attempt to make the first ascent of Mount Lucania, highest unscaled peak in North America.

Mr. Washburn, a veteran at the age of twenty-seven of many similar climbing expeditions in America and Europe, will rely on aerial photographs which he made two years ago to guide him and three companions to the summit of Lucania, which rises to an altitude of 17,150 feet in the southwest corner of the Yukon Territory, about thirty miles from the Alaskan border.

An airplane equipped with skis will be used by the expedition to reach a base camp at the foot of the mountain. Taking off from the mud flats at Valdez on the Alaskan coast, the plane will land on the Walsh glacier at an altitude of 8500 feet. Supplies for eighty days already have been flown 225 miles from Valdez and cached at the site of the base camp by Robert Reeve, noted Alaskan pilot.

Air Photos Show Route

From the base camp, which will be established by June 11, the expedition will attempt to scale the southern cliffs of Mount Lucania, which repulsed the Wood expedition of the American Geographical Society 1935. Mr. Washburn is confident that he and his companions can reach the summit by following a trail disclosed by a study of his aerial photographs of the region.

His companions on the climb will be Russell Dow of Woodsville, N. H.; Robert H. Bates of Philadelphia, and Norman Bright of Sunnyvale, Calif., all experienced in mountain work. They expect to be ready to make their attempt by June 18. They also plan to scale Mount Steele, twelve miles east of Lucania. The Wood expedition made the first ascent of Mount Steele two years ago.

Plans for the expedition, which is for the purpose of obtaining a complete photographic record of the ascent of an unclimbed peak and to map the unsurveyed surrounding area, a vast expanse of 5000 square miles of mountains and glaciers, were announced at a dinner in Mr. Washburn's honor at the Tavern Club last night by his associates of the New England Museum of Natural History. John K. Howard, new president of the museum, presided, and the guests included Norman Vaughan, a member of the Byrd Antarctic expedition.

New Conquest by Washburn: 16,206 ft. Peak

**Mt. Sanford Was Highest
Hitherto Unclimbed Sum-
mit on Continent**

CHISTOCHINA, Alaska, July 26 (AP)—Returning to civilization, Bradford Washburn, Cambridge, Mass., explorer, today reported the successful ascent of Mt. Sanford, which he described as the highest peak hitherto unclimbed on the North American continent.

Mr. Washburn reported that, accompanied by Terrace Moore of Los Angeles, he reached the 16,206-foot summit at 9 o'clock the night of July 21, after many days of hardship.

With Mrs. Moore, he said, they earlier made an unsuccessful attempt to reach the top on July 19, but were driven back from an altitude of 14,500 feet by heavy snow storms.

Used Aerial Photos

"Our route of ascent," he said, "was entirely planned and followed by means of a detailed series of aerial photographs taken a year ago."

Horses and dogs were used in taking supplies to a base at 6000 feet, Washburn said, which was reached only after crossing a wide expanse of bogs. The dogs were used to a height of more than 14,000 feet and the final dash to the top and return was made with skis, just ahead of a threatening storm.

Mr. Washburn said he and Mr. Moore remained on the summit twenty-five minutes, making photographs.

"We had a great deal of trouble with the horses in the bogs," Mr. Washburn said, "but the dogs succeeded in swimming the Copper River as well as navigating even the worst of the swamps, pulling their sledge faithfully even while still many miles from snow."

"The weather was wretched throughout the trip, with rain or snow at some time during every one of the first twenty-three days of July."

On one occasion, Mr. Washburn said, a large bear attacked the horses, but the animal was shot by Adam Sanford, a native Indian member of the party.

Mr. Washburn, whose expedition was sponsored by the Institute of Geographical Exploration of Harvard, reported he planted the flag of the National Geographic Society on the summit of Mt. Sanford.



(Photo by Marshall)
BRADFORD WASHBURN, JR.
Of Cambridge.

PEAK SCALED BY WASHBURN

**Conquers Mt. Lucania in
Alaska—Highest Hith-
erto Unclimbed**

(Continued from First Page)

able to return only after three take-off attempts, and plans to fly in Russell Dow of Woodsville, N. H., and Norman Bright of Sunnyvale, N. H., to join the climbing party, had to be abandoned.

MOVING SUPPLIES

Washburn said the pair at once began the laborious task of transporting supplies over a shoulder of Mt. Steele.

On June 26 they dragged a 300-pound sledge load of supplies to a cache five miles farther up the valley. Fresh snow continually blotted out the trail, making it necessary to keep camps close together and move forward by short relays, marking the trail by willow twigs in the snow.

An advance camp stocked with 30 days' food supply was set up July 1 at a height of 10,000 feet, at the base of the great buttress which rises from the head of Walsh glacier to the lofty pass between Mt. Lucania and Mount Steele.

While snow fell unrelentingly, the mountaineers fought by short stages up to the ridge, painfully moving supplies in small quantities and cutting more than 5000 footholds in ice.

The temperature at this point, Washburn said, fell rapidly, never passing 20 degrees above in the daytime and ranging between zero and 15 below each night.

Climbing conditions became so bad that on July 3, after an extra heavy snowfall, Washburn and Bates were forced to abandon one sleeping bag and air mattress and cut the bottom from their tent to reduce weight.

BEGIN FINAL ASCENT

On July 8 a sudden break in the weather enabled them to come within 4000 feet of the top of Lucania, and when the following day dawned cloudless they began the final ascent in 12 below zero weather. In the clear air the views of the Alaskan and Canadian mountains were marvelous, Washburn said; but the altitude and deep snow made climbing unusually arduous.

Roped together to avoid sliding into crevasses, they forced upward through deep powder snow. In mid-afternoon they put on ice creepers and tackled the ridge of the peak between them and Lucania's top.

Peak after peak rose ahead of them as they climbed through frost feathers and loose snow until at 4:45 P. M. they clambered to a little knife edge of snow covered ice, the summit of America's Mt. Everest.

That night they struggled back to their camp 4000 feet below. On the following day, packing 42 pounds each of food and supplies, they attacked Mt. Steele, making the summit before night.

To their amazement they found there a large bundle of trail markers left by the Wood Yukon expedition of the American Geographical Society in the only previous ascent of the mountain in 1935.

Then began the fight back to civilization. Reduced to emergency rations they struggled down Wolf creek glacier to the Donjoy river where flood waters made a 40-mile detour to a ford necessary.

When 20 miles from Kluane lake and the nearest settlement, they met a 10-horse pack train from a hunter's lodge, and at the hunter's invitation spent two days resting before riding yesterday into Burwash Landing.

Today a Pan-American airways plane flew the explorers to Fairbanks, whence they returned to Valdez. Bates said he would leave for the East Saturday. Washburn planned to remain here for a month of aerial photography with Reeve.

WASHBURN LEAVES FOR STUDY ON PEAK

**Harvard Explorer Will Climb
Mt. St. Agnes in Alaska Range,
13,250-Foot Altitude**

CAMBRIDGE, Mass., May 1 (AP).—

For the sake of two hours' work atop 13,250-foot Mount St. Agnes, Bradford Washburn Jr., Harvard geographer and explorer, left today to spend the next two months risking his life on the icy slopes of an Alaskan mountain range.

The two hours will be spent making maps, taking ranges with surveying instruments, and photographs of the surrounding terrain with a panoramic camera which requires only three exposures to encompass the 360 degrees of horizon.

The remainder of the two months will be used in reaching the peak and, equally as important to the explorers, in returning to civilization at Valdez.

Mount St. Agnes is nearly a mile under the knife-edged ridge of Mount Lucania, 17,150 feet above sea level, which Washburn and a companion, Robert Bates of Philadelphia, scaled last Summer. They were the first to reach its top.

In his office in the Geographic Institute Building at Harvard—austerely furnished, but beautifully decorated with enlarged photographs made on former expeditions—Mr. Washburn enthusiastically outlined his plans.

"Our biggest trouble will be getting enough clear weather to ferry our supplies by plane from Valdez to the base camp, and in getting back to Valdez after we scale the mountain," he said.

"The weather is the worst. In the last month they haven't had an hour of clear weather. Getting out again is another story. Last year the plane couldn't come back for us, because it would have been impossible to take off from the glacier in that rarefied air, and we had to walk 125 miles out. It's rugged country up there. But we'll make it."

"This expedition is being made to continue work already done in mapping the range along the southern coast of Alaska.

"There are vast unmapped tracts in North America," Mr. Washburn said, "and up where we are going are some of the last areas holding interesting secrets. In past trips we found three glaciers—each one of which was higher than any previously mapped glacier on the continent."

Already in Valdez for the work are Norman Dyhrenfurth and Peter Gabriel, Swiss skiers, and Norman Bright, Sunnyvale, Calif., athlete.

Once the work is done, Mr. Washburn will spend the rest of the Summer making aerial photographic flights for the Harvard Geographical Institute and the National Geographic Society.

WASHBURN STARTS 9TH ALASKA TRIP

Will Try to Scale Mt. St.
Agnes, 13,250-Foot Peak

Bradford Washburn, Jr., 28-year-old Cambridge resident, left East Boston airport yesterday on the first leg of a journey that will take him to the mountain ranges of Alaska for the ninth consecutive year.

Mount St Agnes, the 13,250-foot peak that rises nearly a mile under the ridge of Mount Lucania, will be the goal of Washburn and his party this summer. Last season, Washburn and Robert Bates of Philadelphia became the first humans to scale the 17,150-foot summit of Lucania.

To spend only two hours on the crest of Mount St. Agnes, making maps and photographing surrounding terrain, Washburn and his three assistants will spend two months in preparations for the climb. Peter Dyhrenfurth and Peter Gabriel, Swiss skiers, and Norman Bright of Sunnyvale, Calif., are already at Valdez, the take-off point.

"Our biggest trouble," Washburn explained, "will be getting enough clear weather to ferry our supplies by plane from Valdez to the base camp, and in getting back to Valdez after we scale the mountain. In the last month the spot hasn't had an hour of clear weather."

The youthful Harvard geographer and explorer will make aerial photographic flights for the Harvard Geographical Institute and the National Geographic Society, in addition to continuing his work of mapping the mountain range along the southern coast of Alaska.

AIRPLANE LANDS PAIR ON GLACIER

Cambridge Mountain Climber
And Companion Plan to
Scale Alaska Peak

VALEDEZ, Alaska, June 22 (AP)—Pilot Bob Reeve today landed two adventurous young mountain climbers on Walsh glacier at the foot of unconquered Mount Lucania and then returned here in his ski-equipped airplane after what he described as "the most hazardous flight I ever attempted."

The two mountain climbers, Bradford Washburn of Cambridge, Mass., and Robert H. Bates of Philadelphia, will attempt to scale the towering 17,150-foot mountain soon, starting from their base camp on the glacier.

The New England Museum of Natural History in Boston and the Institute of Geographical Exploration, Harvard University, are sponsoring the expedition.

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BRADFORD WASHBURN PREPARES TO SAIL

SEATTLE, June 3 (AP)—Bradford Washburn, youthful explorer of Cambridge, Mass., prepared today to sail for Valdez, Alaska, where his party will attempt to scale 17,150-foot Mount Lucania, highest unclimbed peak in North America.

Success of the venture will depend upon the ability of a ski-equipped plane to take off from mudflats near Valdez. It is necessary to cross 250 miles of mountains by plane to reach the base camp at 8500 feet elevation.

The New England Museum of Natural History, Boston, and the Institute of Geographical Exploration, Harvard, are sponsoring the expedition.

ALASKA WILDS PICTURED IN AIR

VALDEZ, Alaska, Aug. 15 (AP)—High in a cloudless sky, Bradford Washburn, explorer and mountain climber, today recorded with camera nature's changing story in a vast glaciated area in mountainous borderlands of Alaska and Canada.

Conqueror only a month ago of Mount Lucania, highest mountain hitherto unclimbed in North America, the youthful Cambridge, Mass., adventurer in a 600-mile flight reported he took more than 200 pictures of the little-known wilderness, of a great glacier flowing north from Mount Bona and of an active volcano in the Wrangell mountains.

In the light of a setting sun, Pilot Robert Reeve set down his plane here—the end of the expedition for young Washburn, who began immediately his trek with photographs and records he has gathered for the New England Museum of Natural History and the Harvard University In-

SEPTEMBER 7, 1937

Washburn Back from Yukon Climb; Lived for Days on Squirrels, Rabbits

A 34 days' wait to get four hours of clear weather; living for days on squirrels and rabbits, and sharing a sleeping bag between two men was some of the experiences told last night by Bradford Washburn, Jr., Harvard explorer and instructor in natural history at Harvard, home at last after his epic conquest of Mt. Lucania in northern Canada this summer.

Washburn and Robert H. Bates, instructor in English at the University of Pennsylvania, who went with him on the hazardous ascent, parted at the Newark airport yesterday, whence Washburn flew to Boston and then motored on to Holderness, N. H., to join his family.

"One of the most thrilling experiences of my life," he declared. "The weather was frightful and we had to wait 34 days to get four hours of clear skies before making our first photographic flight over Mt. McKinley.

"While taking these photographs, our plane made the highest landing on skis ever recorded: At 8500 feet, it was 2000 feet higher than the previous mark of Lincoln Ellsworth."

They had a narrow escape trying to take off on a downhill glacier. It took the two men five days to free the plane after one of its skis had struck a snow hidden crevice.

They had a tough time getting out of the frozen country after climbing Lucania. Forced to throw away much needed supplies and equipment to reduce poundage, they had to share a single sleeping bag and lived for days on squirrels and rabbits.

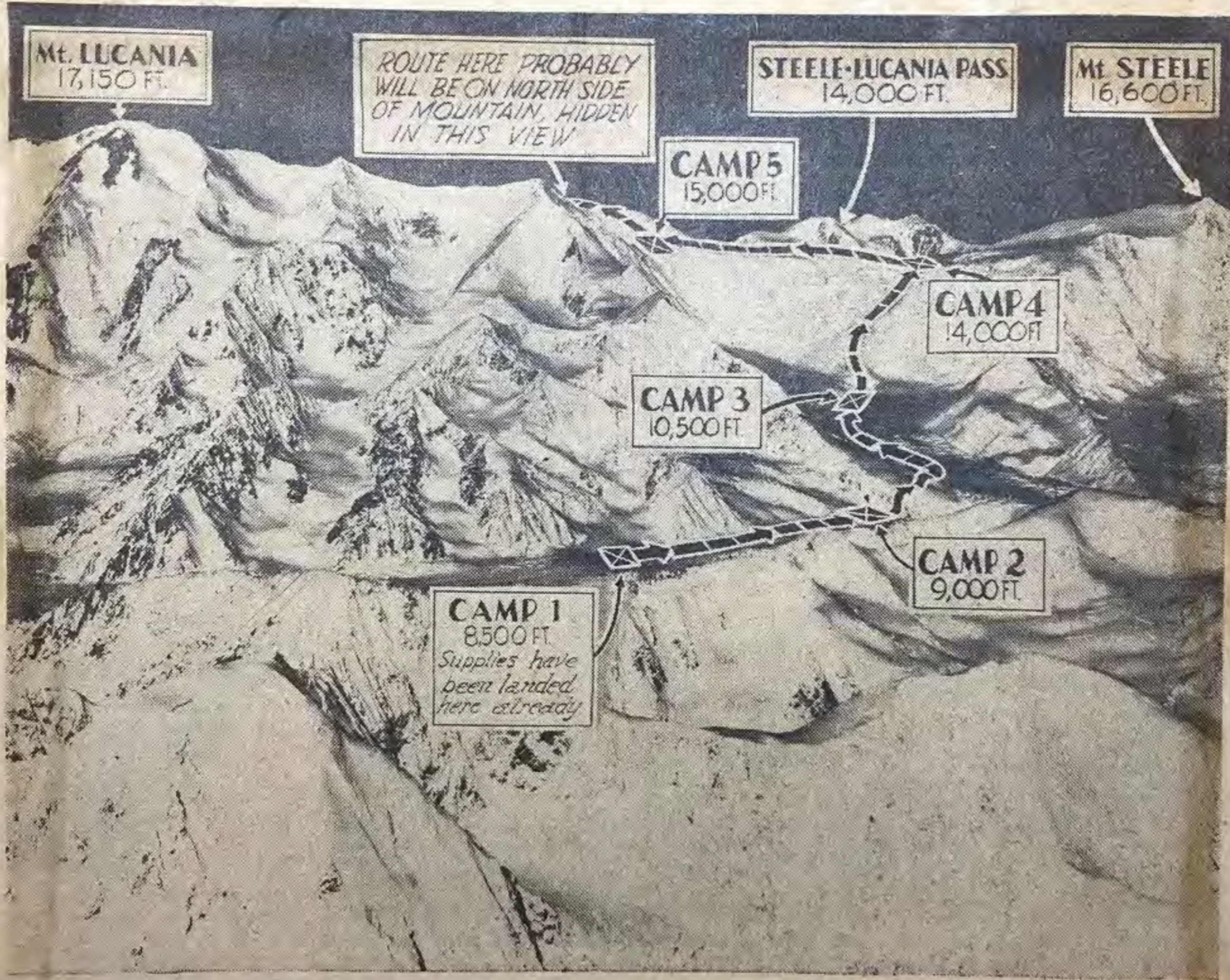
At last on their return to the Yukon river and civilization, they scaled Mt. Steele, 14,600 feet above sea level, which had only been scaled once before.



Robert Reeve, pilot who has already flown in supplies to the base camp at the starting point of the expedition on Walsh Glacier. He will pick up the Washburn party of four, two at a time and with the last of the supplies fly them to the base camp, after which the members of the expedition will be lost in the icy wilderness for 90 days before the result of their quest is known.



Bradford Washburn photographed at Fairbanks, Alaska, after landing from the first aerial photographic flight over the summit of Mount McKinley (20,300 feet) Alaska, highest peak on the North American continent. This flight expedition was under the sponsorship of Pan American Airways and the National Geographic Society, and was led by Mr. Washburn.



Camp I is at 8500 feet on Walsh Glacier which flows from right to left out of picture. Supplies will be hand-sledged to Camp II up comparatively smooth glacier. A very steep pitch is above Camp II where trouble is liable to be had—then easy going to Camp III at the bottom of the great 4000 feet ice wall which guards the 14,000 feet pass between Steel and Lucania, where Camp IV will be located if possible. Camp IV is at least 8 miles from the peak of Lucania and another advanced Camp V will have to be placed somewhere along the final ridge. All altitude of camps (except that of Camp I) are conjectured. The sharp ridge between Camp III and IV is probably the only route up the ice wall which is elsewhere impossible on account of avalanches.

Hurricane-Swept and Ice-Crowned Pinnacle of Mount Lucania Goal of Washburn Expedition

By John Durant

If hell ever freezes over, it probably will look like the St. Elias mountain range in Alaska. For six thousand square miles its jagged, precipitous, solidified flames of rock and ice rip open the sky two and three miles high.

First man to cross, and map this scraggy barrier of upended monolithic bear traps was 26-year-old Bradford Washburn. No novice climber is Brad Washburn. He started clambering over the White Mts. when he was 12, and by the time he was 16 the tip of Mt. Blanc, Europe's highest mountain, had felt the heel of his mountain boots. By 21, Europe's mountains were an old

story, so he started in to explore the practically virgin wilderness and peaks of storm-brewing Alaska.

Last year, on the Yukon expedition, Washburn surveyed, both from the ground and air, 5000 square miles of this hitherto uncharted St. Elias Range. This June, under the auspices of the New England Museum of Natural History in Boston, Brad expects to map the last unknown 1000 miles, and also the scale Mt. Lucania that lies in the southeastern corner of this unknown territory. Mt. Lucania, 17,150 feet, remains the highest unclimbed peak on the North American continent.

Inaccessible, remote, barren, hurricane swept, surrounded by 10,000 square miles of desolate, tumbling mountains and glaciers, Mt. Lucania's face of ice has never once been scratched by man. The Wood expedition tried in 1935, but was driven back.

DIFFICULTIES INVOLVED

From Valdez, Alaska, the expedition airplane jumping off place, to the Walsh glacier, their base camp, at the foot of Mt. Lucania, is about 250 miles. For 200 miles of that stretch there is nothing but tumbling, twisting, ridges of snow, ice and rock, ribboned by slashed glaciers that are as broad across as the glaciers of Europe are long. No animal, no bird, no insect, no tree, not even moss is hardy enough to exist in this refrigerated petrified Hades of ice and granite.

The climbing of Mt. Lucania presents two problems for the expedition to solve, getting in and getting out. And as Brad Washburn himself says, "I'm not sure we can get in, and I'm not sure we can get out if we do get in."

If Washburn could combine the advantages of Alaskan summer and winter for solving his expedition problems, his worries about crossing the petrified desolation, climbing Mt. Lucania, and getting back to civilization again, would be over. Snow is the magic carpet upon which all wilderness-bound Alaska depends for transportation. In winter there is plenty of snow for the ski shod airplane to take off and land on, and the sky is almost always clear so the pilot doesn't have to worry about granite needles ripping his plane to pieces in the fog.

But if Alaskan winters make transportation easy, they make mountain climbing impossible. At 14,000 feet the temperature drops down as low as 50 below zero, and continuous hurricanes swirl clouds of wind-driven snow particles around the peaks of the St. Elias range. In winter it is a physical impossibility to climb these mountains.

In the summer, you have just the opposite problem: you can climb the mountains but you can't get to them. Warm winds blown in from the Pacific, hit the cold air of the mountains, condense to form clouds that shut off airplane visibility. Worst of all, Valdez, the only accessible air base for the expedition, has no snow at all in the summer. With the spring thaw, Valdez, becomes and stays, a mud flat. Of course, flying boats are used, but you can't land or take off from snow with pontoons, which you would have to do at the glacier base.

Faced by this dilemma, Washburn figured that with only 90 days in which to work, summer would be the easiest horn to knock off. Here is how he hopes to solve the problem:

Take off from Valdez' mudflats

on a ski-shod airplane. With all the heavy food supplies and equipment, Bob Reeves, the expedition's Alaskan air pilot, flew up to the Walsh glacier base a couple of weeks ago while there was still snow on the ground at Valdez. The third of June, Washburn expects to rise from the mud flats, with Reeves, and locate that bamboo pole-marked cache 8500 feet above sea level.

Four expeditioners, Washburn, Robert H. Bates, Russell Dow and Norman Bright will make the trip to Mt. Lucania. Reeves will carry them in, two at a time, to make the taking off load as light as possible. As for clouds, and visibility, that is any one's guess.

LAND OF ISOLATION

There is little hope that the airplane will be able to pick up the men again. By July, the summer sun has sliced the glacier into crevasses that make airplane landings impossible.

Isolated by tremendous mountains, and skiling over a glacial valley that has never known a man's foot, four men in zero weather, with an occasional blizzard tossed in their face, will begin the fight to conquer the last great unscaled mountain in North America.

Because of avalanches, the only route up Mt. Lucania is up an ice wall that rises sheer for 4000 feet. Two camps above and below this ice barrier must be established before the last dash for the top can be made. This means back-packing cameras, rope, food, sleeping bags, and fuel up a trail that the ordinary person couldn't climb with an escalator.

To save weight, all food on the expedition is dried. Even the milk comes in powdered form. In high, cold altitudes the craving for sugar and sweets chocolate becomes an obsession. About a third of the food weight carried goes into this concentrated energy food.

"Wind, not the cold, is what we dread the most. For the cold we can dress, but the wind stabs right through you, and wears you down with its steady pressure. It is surprising how rapidly you become inured to zero weather, after a couple of weeks you can get along with one half of the clothes you first needed to stand the Arctic weather," Mr. Washburn added, however, that "nothing ever cures your stomach of the longing for a glass of fresh milk, and piece of well-done steak."

LONG DAY'S TRAVAIL

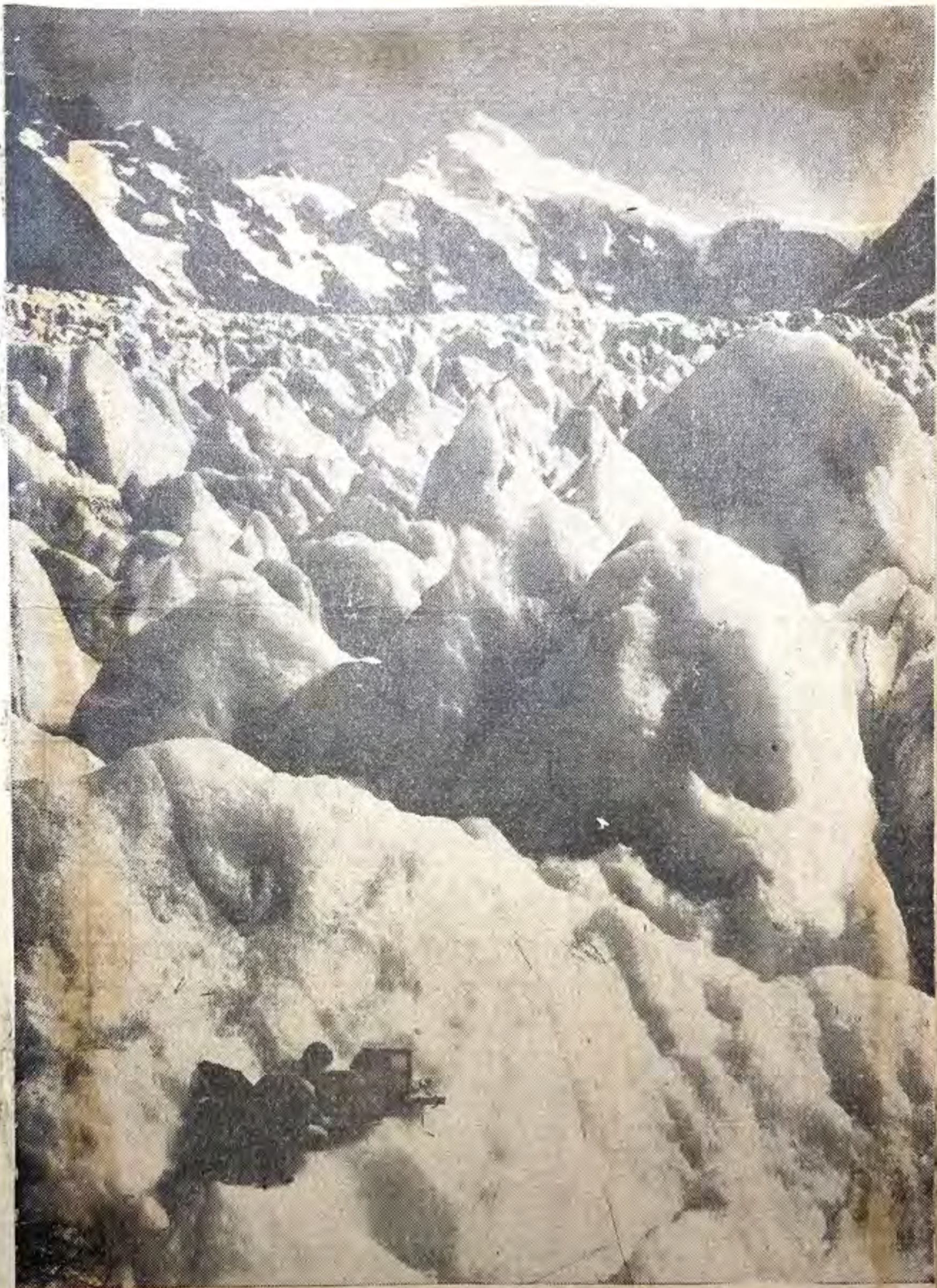
Sun shines 22 hours a day during the summer months at Mt. Lucania. Washburn and his party expect to work 12 to 14 hours a day during their 80 days stay in St. Elias range.

No radio will be carried by the party. "Too much weight to back-pack, and if anyone was hurt it wouldn't do us any good to send out an S. O. S. because no one could get in to help us."

Few people realize that no complete picture of a mountain climb has ever been made. Brad Washburn hopes on this expedition to take in motion pictures the ascent right from the base to the top. "The reason for the failure," Brad explained, "to take a complete film of the climb is not the physical difficulties of manipulating the camera over rough terrain, but the narcotizing effect upon your mental faculties when you remain constantly above 10,000 feet.

Your mind goes numb at high altitudes, will power, desire, van-

ishes, your critical reasoning becomes dull. Your handwriting, for instance, becomes a child-like scrawl, yet you notice nothing unusual, and think you are writing in a perfectly normal way. The number of reasons that you can think up for not setting up the camera to take pictures is amazing. You honestly believe that it is too cold to take pictures, or that it is too cloudy, or that tomorrow will do just as well. The result is that the camera never does record the most thrilling and difficult part of the ascent, and always ends up merely showing the party at the summit munching while gazing off at the sunset."



Richard Goldthwait, of the Mount Crillon expedition, on the surface of the glacier with the expedition's apparatus for discovering the depth of ice. Mount Crillon rises 10,000 feet above the surface of the glacier far in the background surrounded by its great barrier cliff. Later calculations showed that the ice on the glacier here was over 800 feet deep.

Washburn Quits Boston to Invade Ice Age Stronghold

May 21, 1937

Cambridge Explorer's Route Up Unscaled Lucania Mapped from Aerial Photos of Yukon

Four young, hardy and intrepid explorers will undertake within a month the conquest of the highest unscaled mountain peak in North America. Their objective is the summit of Mount Lucania, a huge and rugged hulk of snow, ice and rock, which rears its head to a height of 17,150 feet in the southwest corner of the Yukon Territory, thirty miles from the border between Canada and Alaska.

Bradford Washburn of Cambridge, young in years but old in experience in the loftiest mountain ranges in America and Europe, will be the leader of the expedition. His companions will be Robert H. Bates of Philadelphia, Russell Dow of Woodsville, N. H., and Norman Bright of Sunnyvale, Calif., all experienced mountain climbers.

They will invade a vast and barren region of rough mountains and glaciers, covering an area of 5000 square miles and known to scientists as the last stronghold of the ice age, and they are confident that their quest, sponsored by the New England Museum of Natural History in Boston and the Harvard University Institute of Geographical Exploration, will yield knowledge of unknown terrain which will prove of value to mankind.

Peak is Perilous

Although the expedition will be as well prepared and protected as modern science can make it, the attempt to make the first ascent of Mount Lucania, last unclimbed major peak on this continent, will not be without its perils. The last outpost of civilization is 150 miles away. The area is wild and desolate. No life exists there. Sub-zero temperatures prevail even during mid-summer, terrific winds and heavy snowfalls are frequent and yawning crevasses invite disaster to the climber whose footing is unwary.

In striving for the goal, the expedition will employ the most modern and the most primitive methods of locomotion. An airplane equipped with skis, which must take off from the tidal mud flats on the Alaskan coast and land on the glacial ice at the foot of the mountain, is relied upon to transport the adventurers to their base camp, but by the time they are ready to return a month or more later, warmer weather may have opened fissures in the ice field which would make a safe take-off impossible. In that event they will have to make their way back to civilization on foot, packing enough food to sustain them during the journey—a trek of 150 miles over a trailless waste to the nearest settlement.

The purpose of the expedition is not only to scale Lucania for the first time, but also to make a complete photographic record of the trip, both in still and motion pictures, from the ground and from the air. The climb was attempted unsuccessfully in 1935 by the Wood Expedition of the American Geographical Society, which made the first ascent of Mount Steele, twelve miles east of Lucania.

To Map New Area

The expedition will undertake to map the vast expanse of unexplored country to the north and to the south of the two peaks, an area packed with ice and snow that feeds the huge glaciers of the St. Elias range, largest in the world outside the polar regions.

In their attempt to climb Mt. Lucania, the explorers will be guided by aerial photographs made by Mr. Washburn on his mapping flights over that region for the National Geographic Society's Yukon Expedition two years ago. Study of the photographs revealed an unknown approach up the southernly cliffs of the mountain.

Mount Lucania is so isolated

that it would take several months to reach its base on foot, but by using the photographs and existing maps, Russell Dow and Robert Reeve of Valdez, pilot of the expedition, succeeded last week, in making three airplane flights to land the party's supplies on Walsh Glacier at the foot of the mountain. The landings were made on a patch of smooth snow, surrounded by rough crevasses, at an altitude of 8500 feet.

Supplies for 100 Days

Complete supplies for the expedition, including food enough to last 100 days, sledges, gasoline and fuel, rope, camera, film, tents and sleeping bags, are now cached on the glacier, marked by tall bamboo poles with flags, so that they will not be lost if buried by snow.

Mr. Washburn will leave Boston tomorrow for Valdez, where he is scheduled to arrive on June 11. Bates and Bright will join him there a week later. Before their arrival, Washburn and Dow will seek to establish the expedition's base camp at the site where the supplies are now cached.

The success of the expedition will depend on whether the ski-equipped airplane will be able to take off from the tidal mud flats at Valdez, a feat never before attempted in exploration. The plane must be mounted on skis, because otherwise it could not land on the glacier. It is planned to make two flights, with the plane carrying two members of the party on each trip to avoid an excessive load. Without the airplane it would take months to reach the base camp.

Plan of Conquest

When the four members of the expedition are united on the glacier, probably by July 1, the date being dependent upon flying conditions, the attempt to ascend the unclimbed pass between Lucania and Steele will be started at once, and Mr. Washburn hopes that by the end of the month the party will have attained the peaks of both mountains. The condition of the glacier and the weather will then determine whether the expedition will return to civilization by airplane or on foot.

Although only twenty-seven years old, Bradford Washburn has been climbing mountains for fifteen years. He started in the White Mountains of New Hampshire and at the age of sixteen scaled Mount Blanc, highest mountain in the Alps. He led the Harvard-Dartmouth Expeditions in exploring the Alaska coast range, the National Geographic expedition, which achieved the first crossing of the St. Elias range, and the Mount McKinley flight expedition, which made the first photographic flights round the highest peak in North America.

EXPLORER IS GUEST OF B. U. STUDENTS



Dr. Donald B. MacMillan, center, who addressed the student body of the Boston University Sargent College of Physical Education yesterday, was guest of honor at a tea given by the students later in the afternoon. Miss Campinet Owen of Logansport, Ind., left, presided at the meeting, and Miss Dorothy Cash of Whitman, right, assisted at the tea.

GREATER BOSTON BOYS SAIL WITH MacMILLAN



These Greater Boston boys, shown with Lt.-Com. Donald B. MacMillan, were in his crew of 12 when he started from Boothbay Harbord, Me., Saturday on a 6000-mile trip to Arctic waters. Left to right: Harold Evans, second mate, of Newton Highlands; Damon Howard, Brockton; MacMillan; Chan Waldron, West Newton, a student at Oberlin College; and Charles Rounds, of Winchester, student at Princeton.

May 27, 1933

Trousers' Arctic Adventures

First Proof of Polar Ice Drift

Siberian Journey of Louis Loreau's Pants Shows Soviet Base Useless, MacMillan Declares

Louis Loreau's pants drifted from the North Pole to Siberia in three years, Commander Donald B. MacMillan said today, and established from that time on, 1881, that the polar ice moves as much as 600 miles a year.

The noted Arctic explorer was discussing the value of the Soviet expedition to establish a base for weather calculations on the top of the world.

"It's a mighty courageous attempt but they've never proved anything since attempts were first made back in 1881," he said, "because the pole is a mass of ice moving on water with a considerable drift every day," making a permanent base for meteorologists impossible."

To elaborate on Hr. Loreau's pants, Commander MacMillan added that Loreau was a friend of his. Loreau was on the ship Jeannette which was established as a base at the pole in 1879. June 12, 1881, the Jeannette was crushed until her gunwales met and eleven of her crew of thirty-seven succeeded in reaching Siberia.

Loreau, while the Jeannette was drifting on the current which runs from the Bering Sea before the prevailing wind, had thrown an old pair of pants on the ice with his name sewed in them. Three years later, Perry said, they fetched up in Siberia where they were identified. Their trip made certain the rate of drift.

The next attempt was that of George W. deLonge of the United States, who built a boat to withstand the terrific ice pressure. But that expedition left the boat, which turned up three years later in Spitzbergen on the cur-

rent which circles from Siberia to the island now owned by Norway.

Commander Peary, who reached the North Pole in 1909, dropped a coil of piano wire through a crack in the ice and it sank for 9000 feet, Peary stated.

"I suppose the water is two miles deep. The ice varies from one inch to forty feet. The way the lead on the piano wire was dropped was this.

"You'll be standing on ice when suddenly there'll be a hissing rumbling noise. You'll see a crack appear at your feet. It'll run down the ice away from you, gradually widen as hissing black clouds of escaping pressure gas arise. Sometimes, the floe in front of you will be pushed five miles away by the escaping air. It was down a crack like this the wire was dropped. Then when the ice comes together again it comes with the force of terrible power behind it, smashing the edges into ridges of ice forty feet high. That's when the boats break up."

Commander MacMillan leaves Boston June 19 on another expedition, but this time it's only to Baffin Bay with a group of scientists and students for a ten-week cruise in the old Gloucester racing schooner, the Gertrude Thibaud.

"But the field of exploration, now that both poles have been discovered is the area of some 1,000,000 square miles between Alaska and the North Pole," MacMillan said.

"It's never been explored. There may be land there, perhaps an unknown race, animals strange to zoology. That should

Teeth for Toothless Eskimos

Taken to Arctic by MacMillan

Explorer Heads for Labrador with Twenty-Three Students and Research Group

Gloucester's famous fishing schooner Gertrude L. Thebaud sailed out of her home port today carrying Commander Donald B. MacMillan on his sixteenth Arctic expedition.

With him on the 6000-mile voyage will go twenty-three college and preparatory school students and a group of distinguished botanists, mineralogists, zoologists and anthropologists for work in Labrador and its coastal waters.

To the dental clinics Commander MacMillan established several years ago he will take toothbrushes, toothpowder, 20,000 store teeth and the equipment for making more. Tons of supplies are going to the Eskimos at Nain, and two complete electrical power plants for the settlements at Nain and Hopedale.

The vessel should reach Portland tonight and Boothbay Harbor tomorrow, whence she will proceed to Sydney, N. S., and turn north up the Labrador coast.

This expedition will go as far as 70 degrees north latitude if ice conditions permit, by way of Belle Isle Strait, searching, among other things, for relics of the Frobisher expedition of 1578. The Thebaud will return to Gloucester about Aug. 25.

Captain John T. Crowell, Jr., a Gloucesterman who has been on previous expeditions with Commander MacMillan, commands the Thebaud this time with a professional crew of five.

The party of scientists includes:

David Potter, associate professor of botany, Clark University; Martin J. Buerger, associate professor of mineralogy and petrography, M. I. T.; Captain John T. Crowell, Jr., navigator; Alfred O. Gross, professor of biology, Bowdoin College; Kenneth W. Sewall, Massachusetts Memorial Hospital; Harold S. Peters, U. S. Biological Survey, who will join the expedition at Hebron, and V. C. Wynne Edwards, assistant professor of zoology, McGill University.

Students aboard are Willard Streeter Bass, Jr., Wilton, Me.; Charles P. Eford, Milton; Harold Brown Evans, Newton; John Ripley Forbes, Stamford, Conn.; Richard Warren French, Seymour, Conn.; Philip Haigis, Foxboro; Paul W. Hains, Jr., San Mateo, Calif.; John Henry Halford, Jr., Norristown, Pa.; Robert Clifton Howard, Brockton; Richard Levy, Brookline; Robert Ray Mulligan, Pawtucket; Willis M. Partridge, Jr., Brockton; Robert Perkins, Boston; Bredan P. Phibbs, Winnetka, Ill.; Amos J. Shaler, Brussels; Walter S. Staples, Kittery, Me.; Peter Dodge Stengel, Belmont; Russell Welch, Wyckoff, N. J.; and Wilfrid M. Monters of Wrentham.

Elliston Perot Walker of Ardmore, Pa., will join the ship at Portland, and John Endicott, Worcester; Williams S. Sherman, Loudonville, N. Y.; and Douglass R. Starrett of Athol will meet the schooner at Boothbay.

MacMillan to Sail North for 17th Trip

PROVINCETOWN, May 3 (AP) — Off to map unknown harbors and study the geology of Labrador, Commander Donald B. MacMillan and a party of ten students will leave Boothbay Harbor, Me., June 25 on the auxiliary schooner Bowdoin for the sixty-three-year-old Arctic explorer's seventeenth expedition into the far North.

PEARY



THE COMMANDER RETURNS FROM HIS NORTHERN EXPLORATION
Photographed Aboard the Peary at Monhegan

(Photo by Underwood & Underwood)



The Famous Schooner Gertrude L. Thebaud Was the Object of Great Interest to the Gloucester Throng Gathered on the Dock as Her Crew Busily Prepared to Hoist Her Sails for the Start of the 8000-Mile Cruise to Baffin Land with MacMillan



Far from Snow and Ice — MacMillan on the Lecture Platform

Alpinist Playground Found in Colombia

Boston Men Explore Santa Marta Range

By R. P. Waters, Jr.

A playground for Alpinists and a fertile field for geologists and biologists lie in the surprisingly little known Sierra Nevada de Santa Marta range of mountains of Colombia, in South America, highest coastal range in the world and nearest high glacial range to Boston.

This is one of the observations made by Thomas D. Cabot, one of the two Boston men in the Cabot Colombian Expedition which recently returned from a trip during which the 19,000-foot East Peak, highest summit in the range, was scaled by three other members of the seven-man party.

The purpose of the expedition was to climb and map the central part of the range, make geological and biological studies and combine it all with having some fun, Cabot said. The reason the range is so generally little known, he believes, is because of the inaccessibility of the interior.

Higher than the Alps or the Rockies, the Santa Marta range lies less than 25 miles from Santa Marta, an important banana port near the northernmost point of South America. Glacial peaks rise to nearly 19,000 feet in the world's highest coastal range, home of the Arhuaco Indians, an ancient lost civilization and a variety of flora and fauna, peculiar to mountainous regions.

Bostonians in Group

The expedition, sponsored by the American Geographical Society and the Boston Society of Natural History, included Cabot, president of the Appalachian Mountain Club and vice president of the Harvard Travelers Club; Henry S. Hall of Boston, secretary of both the American Alpine Club and the Harvard Travelers Club; Frank B. Notestein, chief geologist for the Colombian Petroleum Company; Walter A. Wood of New York and Anderson Bakewell of St. Louis, from the American Geographical Society; a Swiss prospector in Colombia, Henry Praolini, and Juan M. Ujueta, of Barranquilla, Colombia.

At Barranquilla, the expedition studied air views of the central range and laid plans for the trip into the interior. The members of the party made estimates which led them to believe the East Peak was higher than the Central Peak which was later confirmed. They also learned of a tragic Swiss expedition which had lost a man two years before in an attempt to scale East Peak.

The range is divided into three parts, the central and highest called the Chundas, meaning "death" in the native language, the Eastern section, or the Nevittas, and the Southern section, the Guardian.

The East Peak of the Chundas was scaled on March 16 by Bake-



(Cabot Colombian Expedition photo)

Above: Towering over 19,000 feet in the Sierra Nevada de Santa Marta range in Colombia is East Peak, at right, scaled by three members of the Cabot Colombian Expedition on its recent South American trip to the highest coastal range in the world. At the left in this airplane view from the south is Central Peak, nearly as high as East Peak. Below: The five American members of the seven-man expedition, sponsored by the American Geographical Society and the Boston Society of Natural History, are, left to right, Anderson Bakewell of St. Louis; Frank B. Notestein, chief geologist for the Colombian Petroleum Company; Thomas D. Cabot of Boston, Henry S. Hall of Boston, and Walter A. Wood of New York. Bakewell, Wood and a Swiss prospector made the ascent of East Peak.

well, Praolini and Wood. They finally made the ascent by a "bold attack on a rock face that first looked impossible," Cabot said. The rock face is just to the right of East Peak in the accompanying picture.

Biologically, the region is one of the most interesting in the world, he believes, since it is isolated from other high land so that peculiar species are numerous. The climate ranges from tropic to arctic according to the elevation, and from dry desert to damp jungle according to the trade winds. Some familiar forms of plant life are of enormous size, the Alpine rose, for example, growing to a height of 25 feet.

The species of fauna found in the range varied according to the elevation, and included parrots and macaws in the tropical areas, deer and bear on the higher levels and in the upper paramos domestic animals which had gone wild.

The Arhuaco tribes of Indians in the mountains are not descended from the Tairones, the race which inhabited the range in Pre-Colombian time and had a high civilization as evidenced by the ruins of roads paved with great granite blocks on the northern side of the range.

The inaccessibility of the interior is illustrated by the different methods of travel used on

the route inland. The expedition went by tin to Fundacion, by bus to Valdupar, took mules to San Sebalen and used bulls to carry loads from there. From Valledupar the party followed a trail ascending the Valley of Rio Gustapi to a 7000-foot pass and in the San Sebastian Valley. The expedition next made for a 6000-foot pass to Duriamaineid then through a 12,000-foot pass to a base camp at 10,900 feet Manancanaka Valley and on "Gloomy Gulch." The "harsh members," Cabot said, then pack-packed to establish a bivouac at 16,500 feet, from which the final ascent of the East Peak was made.

Red Cross Leader



THOMAS D. CABOT

Whose appointment as chairman of the Special Gifts Division for the November membership appeal of the Boston Metropolitan Chapter Red Cross Roll Call was announced today by Lawrence Coolidge, chairman of the roll call.

Sarnoff to Attend Suffolk Exercises

David Sarnoff, president of the Radio Corporation of America, will be Commencement speaker at the annual exercises of Suffolk University on June 15. Sarnoff, who came to America from Russia at the age of nine and

Just Climb of 19,000 Feet To Cabot's Picnic Ground

Mountains in Colombia Nearer Than Rockies And Alps and Are Higher than Either Range

Thomas D. Cabot, who led an expedition to South America this spring to conquer the summit of the world's highest coastal range, believes he has incidentally discovered the ideal picnic spot.

The place is the Sierra Nevada de Santa Marta in Colombia, whose 19,000-foot top peak towers above the shore-line 25 miles away, and Mr. Cabot, who is president of the Appalachian Mountain Club, says that "a visit can be called an expedition, but the trip there is as pleasant and easy as an ordinary excursion."

As Near as Rockies

In the forthcoming issue of Appalachia, semi-annual magazine of the Appalachian Mountain Club, Mr. Cabot writes:

"Considering that the range is as near as the Rockies, nearer than the Alps, and higher than either, it is amazing that the Sierra Nevada de Santa Marta is so little known. It is not only one of our nearest large ranges, it is also one of the easiest and cheapest to reach." He points out that it is a week away by United Fruit liner, a day by Pan American clipper.

"To the mountaineer, as well as the general traveler, this should be a Mecca," he continues. "Here are fine glacial peaks

less than 25 miles from the sea and rising nearly 19,000 feet from the low land that surrounds them in all directions. By almost any definition they form the world's highest coastal range and one of the highest ranges from base to summit.

Neglect "Amazing"

"Add to this, the wild Indians, the ancient lost civilization, the tremendous variety of flora and fauna, the superb granitic cliffs, large glaciers and crystal streams, the ideal camping conditions on the high panoramas in our winter, and it becomes amazing that Alpinists have neglected this range so long."

The Cabot Colombian expedition made the ascent to the highest peak in the range on March 16.

In the same issue of Appalachia, a story is told about Tom Corcoran, member of the White House inner circle, as a man of self-reliance. The writer, John C. White, tells of seeing Corcoran having a difficult time carrying a pack-load.

"I went out to help him but that did not seem to please him," White writes, "so I stood by and gave advice, but that pleased him even less."

"He finished the trip by himself without serious disorder, and without injury to himself or the load."

Mr. Thomas D. Cabot to Tell Of Expedition to Colombia

Pictures of Santa Marta Region to Illustrate Talk; Mrs. S. R. Thayer, Committee Chairman

By ALISON ARNOLD

There are many among the first families in Boston society who yearn to break the confining bounds of Beacon Street and the Back Bay to seek adventures in fresh fields and pastures new. Some of these restless souls are too timid to take the plunge, but others, backed by the courage of their convictions, go forth to conquer new territories.

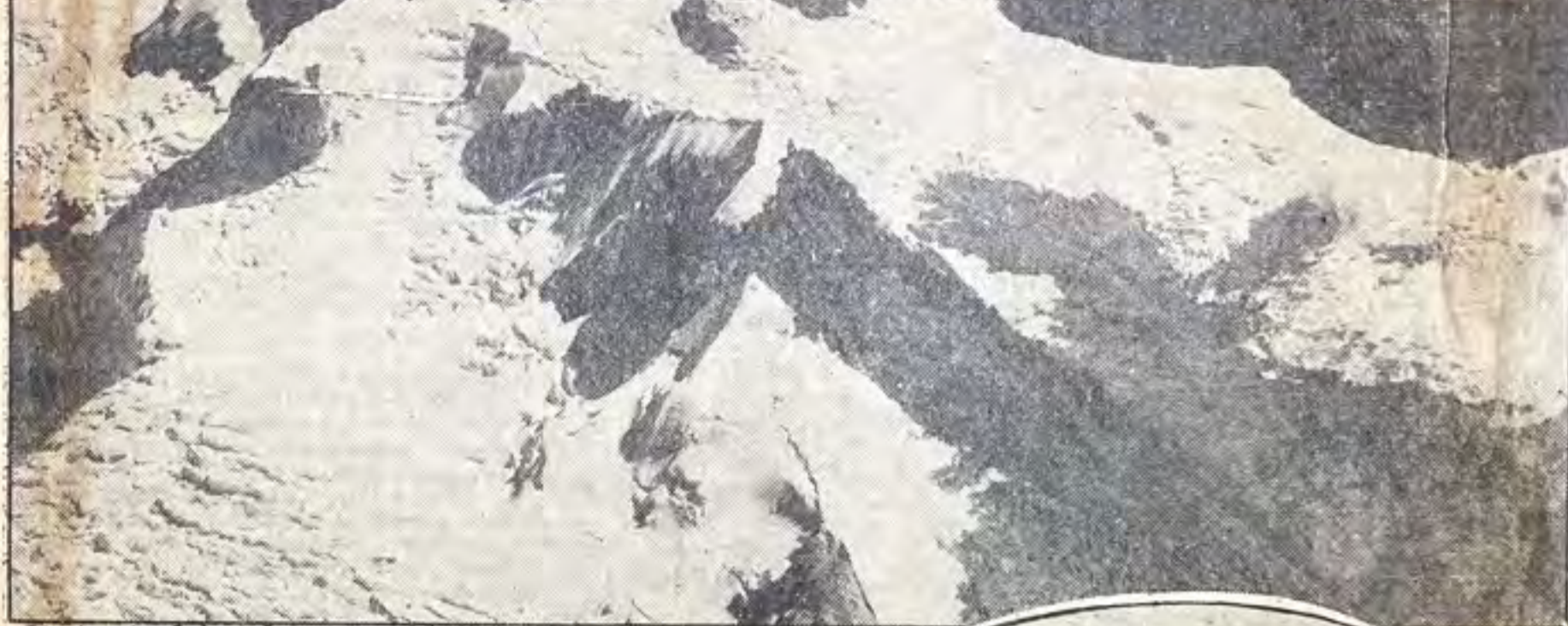
One of the latter, a member of one of Boston's very first and foremost clans, is none other than Mr. Thomas D. Cabot of "Hidden Hearth," Weston, and Cohasset, and perhaps he inherits his yen for exploring from his early Cabot ancestors, who assisted in discovering America. At any rate, he headed an expedition that set out to climb and map unscathed Sierra Nevada de Santa Marta, and on Thursday evening, August 3, he will transport the members and friends of the Cohasset Garden Club to this lofty summit in Northern Colombia, when he gives his interesting illustrated lecture describing his thrilling experiences. The lecture will take place at "The Oaks," the Cohasset summer estate of Mr. and Mrs. William C. Cox, and is under the auspices of the Cohasset Garden Club.

Mr. Cabot, who is the president of the Appalachian Mountain Club, made this adventurous journey, which was called the Cabot Colombian Expedition, as the outcome of a trip to this hazardous region made in 1930 on a Carribean cruise of the United Fruit Company accompanied

by Mrs. Cabot, who is a member of the Cohasset Garden Club. When the exploring party reached the seaport town of Santa Marta at the base of the 19,000-foot range, they found that a second secret expedition, led by a German from Vienna, had been the first to climb one of the higher summits. There was still much left to explore, nevertheless, as the Santa Marta region is biologically of tremendous interest with vegetation ranging from desert to dense tropical forest, and from lush grass lands to Arctic snow and ice within a few miles.

Mrs. Sherman R. Thayer is the chairman of the committee arranging for the lecture, and assisting her are Mrs. Richard H. Edwards, Jr., Mrs. Charles Sabine, Jr., Mrs. Blake Field, Mrs. C. Chester Cooper and Mrs. G. Roland Crampton. The officers of the Cohasset Garden Club include Mrs. Adelaide Moore Bell, president, Mrs. William C. Cox and Mrs. Philip Benson, vice-presidents, Mrs. Howard T. Swain, treasurer, and Mrs. John Bishop and Mrs. John Washburn Coolidge as secretaries.

DISCOVER ALPINE PARADISE IN COLOMBIAN JUNGLE



Photos by Cabot Colombian Expedition



Arhuaco women do most of the work, weaving being the lightest of it—but the men rarely live beyond 45. They chew too much of the coca leaf for its cocaine.

By John Durant

Jutting from lush jungle on Colombia's seacoast in South America, the Sierra Nevada de Santa Marta shoots up three and one-half miles in gaze with icy eye on the Gulf of Mexico below. With the exception of Mt. McKinley and Mt. Logan in Alaska, its peak is the highest in North America, and the range is higher than either the Canadian Rockies or the Alps.

A tall, tough mountain is to an Alpinist what a red flag is to a bull. Something to be conquered. Alpinist temperament being what it is, the towering ruggedness should have been a red flag to hundreds of mountain climbers. Only 1785 nautical miles from New York city, the Santa Marta range is nearer to eastern seaboard climbing enthu-

siasts than almost any of the often scaled peaks in Canada, the far West and Alaska. Yet, oddly, until a Bostonian, Thomas D. Cabot, president of the Appalachian Mt. Club, organized a seven-man expedition, sponsored by the American Geographical Society and the Boston Society of Natural History, to climb the Santa Marta range, this Alpinist playground was almost as unknown as it was unscaled.

A sketch map by an Englishman named Simons is the only authentic map of any value of the central portion of the Santa Marta range, which is known as Chundas, meaning "death" in the native Indian tongue. Other New Englanders have visited the foothills of the range but not until this year have the highest peaks been attacked by Alpinists or

surveyed to determine the topography and altitude.

Mr. Cabot advances several reasons why such a challenging mountain, convenient to the eastern seaboard, should so long have escaped the attention of Alpinists. One of the chief reasons is that economically the Santa Marta range is as barren as an abandoned desert mining town. The soil is poor without any indication of rich mineral deposits. The result is that neither wealthy companies nor adventurers hoping to strike a pot of gold have shown any desire to sink money in exploration expeditions to the Santa Martas.

Perhaps an even more fundamental reason why this rugged range has never attracted amateur Alpinists is that its base is located in a hot, and until recently, practically inaccessible jungle. At no point there is the land more than 600 feet above sea level. Mountain climbing is a cold weather sport and it attracts those who delight in a cold, stinging wind with a touch of snow in the air. When the Alpinist has to spend a week in tropical jungles being stung by insects before reaching the mountain of his

desire, his Alpine fancy turns to cooler climates.

fancy turns to cooler climates.

Ten years ago on a pleasure cruise to South America, Thomas Cabot's interest was first aroused in climbing the Santa Marta range. The north side of the range, that which faces the ocean, is heavily wooded, thanks to the rains that sweep in from the oceans. The inland, or south side slopes are barren and dry because the towering peaks cut off the moisture laden winds. For mountain climbing, the north slope has the advantage of an accessible approach at the base but the disadvantage of any accessible approach to the peaks above the timberline.

On the cruise that took him to Colombia, Mr. Cabot saw the Santa Marta range for the first time. As an Alpinist he couldn't resist having a go at the mountains. Later, he did manage to climb above the timberline on the north side, but realized at the time that to reach the top he would probably have to tackle the mountain from the south side, a climb that would first require two weeks on donkey through insectiferous jungle. This estimate was confirmed when the Cabot ex-

**Expedition
Of Boston Mountain
Climbers Scales Forbidding
Peak Plotting Route After Taking
Airplane Views—Encounter
Tribe of Coca Eaters
On the Way**



An iron stew pot was the only evidence of civilization the explorers found among the Arhuaco Indians, the only one of the Colombian. LEFT — Only a bribe could persuade this native to pose.



Members of the Cabot Colombian Expedition. Seated, left to right: H. S. Hall, W. A. Wood, Thomas D. Cabot, leader, and A. Bakewell. Standing: F. B. Notestein, J. M. Ujueta and H. Praolini.

pedition 10 years later took airplane shots of the mountain range before starting its successful climb to the Sierra Nevada de Santa Marta peak.

The expedition of seven included five American members: Mr. Cabot; Henry Hall of Boston, secretary of the American Alpine Club; Frank Notestein, chief geologist of the Colombian Petroleum Company; Walter A. Wood of New York and Anderson Bakewell of the American Geographical Society.

From a port on the Colombian coast where bananas are loaded on to freighters, a dinky little road runs south into Fundacion, a banana plantation town. From Fundacion the route is to Valledupar, a tiny Indian village at the base of the east peak, the highest in the range. A new road, more ruts than road, built a year ago between Fundacion and Valledupar, helped the expedition save six days of steaming jungle packing. The journey that they made in a day between Fundacion and Valledupar would otherwise have taken a week.

That's no mean saving of time when you have to travel through a land infested with "garapata," ticks about the size of the head of a small pin. They stick to the clothes as men brush by brushes and they burrow under the skin and suck blood. Red, festering lumps all over the skin are results. These lumps can be as sore as a boil and as itchy as a cold sore. Flies and

"garapata" drive most of the natives out of the lowlands.

At 6000 feet, these tropical pests disappear, and the climate is cool and delightful. It was with relief that the expedition marched out of "garapata" territory into the highest Indian village of San Sebastian, up 8500 feet from the tropical lowlands. The village consists of three Capuchin missionary priests, two nuns, 100 Indian huts, and a dozen Indian families. The discrepancy between the number of houses and families is due to the Indian preference for roaming rather than sending their children to the missionary school there.

Men of the Arhuaco tribes which inhabit the mountains are about as lazy and shiftless a crew as you'd ever want to meet. Though the sight of white visitors to San Sebastian is rare, they treated the members of the expedition with apathetic indifference. They had to be bribed to hold still long enough to have their pictures taken.

The woman and children of the Arhuaco tribes do all the work. The man, and you might say the only, occupation of the men is to chew coca leaves which they salt with lime licked from a stick. Coca leaves contain the drug cocaine. The constant chewing of the drug, with effects heightened by the lime, in time paralyzes the muscles around the mouth, finally the body and mind. Every Arhuaco male carries

his bag of coca leaves and lime lollipop, the "poporo." Forty-five is a ripe old age for these dope-stewed Indians. Wisely, the men forbid women and children to chew coca.

The stench arising from one of these Arhuaco villages defies description. Sanitation and baths are matter of indifference. The only evidence of civilization the expedition could find at San Sebastian was one iron stewing pot. The food is cooked in a windowless adobe house with odors and smoke slowly seeping out through a hole in the roof. There isn't so much as a stone rock to sit on inside the house.

The principal diet of these Indians is beef. The animals are slaughtered outside the front door. What the family and the innumerable mangy curs don't eat is left to rot in the sun. Dogs and pigs wander at will in and out of the open door. When night comes they lie down with the family on the one-room dirt floor to sleep.

Wild horses, descendants of the stallions of South America's Spanish conquerors, roam by the hundreds on the highest grassland. There is also an abundance of

roving wild dogs. Biologically, the country is one of the most interesting in the world. The climate ranges from tropical to arctic, from dry desert to damp jungle. Some familiar forms of plant life are of enormous size. The Alpine rose, for example, grows to a height of 25 feet.

The Cabot expedition that reached Fundacion by train, Valledupar by bus, and San Sebastian by mule, used bulls to carry its loads up to the base camp at 10,000 feet in Manancanaka valley, and on to Gloomy Gulch. The hardest members back-packed from there to establish a bivouac for the final assault on the east peak.

The ascent was made by a "bold attack on a rock face that first looked impossible." The choice of this seemingly impossible ascent was based on a careful study of their airplane photographs while in Barranquilla, where they learned also that a member of a Swiss expedition two years before had lost his life trying to scale the east peak.

Up this rock face and on over snow and ice, three members struggled the last 2500 feet to stand on the top of east peak.



(Photo by Schervee)

Mr. and Mrs. Thomas D. Cabot photographed with their children at "Hidden Hearth," their home in Weston. Sitting on the sofa with Mrs. Cabot is young Robert and Miss Linda Cabot, while Mr. Cabot stands between Louis W. and Thomas D. Cabot, Jr. Mrs. Cabot heads the committee in charge of the unusual lecture on birds and moving pictures of bird life, which Mr. Cleveland P. Grant, former curator of the Field Museum of Natural History in Chicago, will show next Saturday afternoon in the Weston Town Hall, under the sponsorship of the Weston League of Women Voters.



Wide World: Copyright North American Newspaper Alliance

FOUND, AFTER NINE WEEKS' SILENCE IN ANTARCTIC WASTES:
LINCOLN ELLSWORTH, ('03 S.)

This photograph was taken at the Dundee Island base before the November 23 flight over Antarctica, in their plane "Polar Star," of Ellsworth and his companion, Herbert Hollick-Kenyon. No word had been heard from the explorers until they were sighted and rescued late last week by a searching plane, two months after their disappearance. In the picture, besides the Stars and Stripes, and tied to a ski and ski-poles, are the flags of the National Geographic Society, Yale, the Quiet Birdmen, and the New York Athletic Club.

Lincoln Ellsworth

HIS stay at Yale was short, but those who were with him for a year in the Class of 1903 S. recall Lincoln Ellsworth as a fellow student. Yale men generally, as the University expressed itself when he received an honorary degree in 1933, rank him among those "intrepid explorers" who are slowly opening up the few remaining unknown regions of the earth, often at their own extreme peril, as was nearly the case with Ellsworth. We published last month (Dec. 6) the statement that Ellsworth had left from his Antarctic base for a thousand-mile flight over the South Pole, and Admiral Byrd's prophecy that it would turn out that he had landed but had been unable to use his radio sending set to report where he was. This is what happened. The episode, which at times seemed to us back home to be approaching another tragedy in the history of fearless exploration, began and ended under conditions that could not have been duplicated a few years ago. The airplane carried Ellsworth to what might easily have been his death; the airplane had its part in rescuing him to the relief of the world.

Academic Freedom Again

REPRESENTATIVES of over four hundred American universities and colleges met last week in New York for their twenty-second annual convention, and took vigorous issue with the current spread of state legislation imposing "loyalty oaths" on teachers.

We have had occasion to call attention to this tendency in these columns and to raise the question of what it means in American education. That it means something that American education has never before had to face was the sentiment of the presidents and chancellors of America's leading colleges as they discussed its import last week. Said President Wriston of Lawrence College, Wis.: "People do not seem to realize that such compulsory oaths of loyalty are copied from Fascism. The mark of democracy is confidence in both the loyalty and capacity of the citizens composing it. These bills have been enacted because people have heard talk of 'Reds' in American schools

and colleges. Their teachers are more conservatively loyal than many editors and preachers who influence public opinion more profoundly and who are not asked to swear to their 'loyalty.'"

This question and all that it carries with it is undoubtedly a fundamental one in American education. There are of course two sides to it, as there are to all public questions where the individual finds himself interested for public or personal reasons in the solution. There are many American university graduates who believe that too much freedom now exists in University classrooms for the unrestricted expression of subversive political and social doctrines, and that "Academic freedom" is a misnomer for mischievous teaching that tends to unsettle young men and introduce Continental ideas to America through the levels of and under the protective banner of higher education.

Every university has this problem, and it is not a comfortable one. For there is the other side of the picture, defined under the idea of "the integrity of the American college," which, for instance, Dean Herbert E. Hawkes, '96, of Columbia College, spoke on at this same meeting. Dean Hawkes was quoted in the press as saying:

"If by the integrity of the American college we mean the possession of that uprightness and rectitude which enables us and our students to meet the world in which we are submerged squarely and intelligently, there is only one way to maintain it. Surrounded by intellectual and social and moral confusion, it is absolutely necessary for us to see to it that during the entire college experience our students acquire the habit of viewing dispassionately and objectively all sides of the questions that they meet in their college work. To refuse to analyze and place in their setting the various approaches that men have made and are making toward a solution of our problems is to turn our backs on rectitude and integrity.

"It is not always easy for us really to comprehend why other peoples and individuals think and feel and act as they do. It is not easy to understand how rational human beings can be either intellectually or emotionally satisfied

with some of the divergent approaches of the social situation favored by various groups today; the Capitalistic, the Communistic, the Socialistic, the Fascist, the Autocratic, the Old Deal and the New Deal approaches.

"But unless in our colleges we treat all these approaches dispassionately and seriously we do not know the human spirit, for all these attitudes are attitudes of sincere and serious human beings with whom our next generation must live. The only way that they can do so with the support of a satisfying philosophy of their own is to understand the point of view of those with whom they are in complete disagreement.

"The only way to preserve the integrity of the college and that of the students whom the college serves is to prove all things in the hope that an informed and honest person will cling to that which is right."



FROM A WELCH HALL WINDOW
Harkness Memorial Tower and the bare outlines of old elms on the Campus. At the right, in the lower corner of the window just above the window seat, is Wright Hall, which now houses Yale Station in the basement.

ELLSWORTH RESCUED

Fifty-five Days After He and his Co-pilot, Herbert Hollick-Kenyon, Flew 2,000 Miles over Antarctic Ice Wastes, Lincoln Ellsworth and his Companion Are Found Alive and Well

WHEN Lincoln Ellsworth ('03 S.), Hon. M.S. 1933, and his co-pilot, Herbert Hollick-Kenyon, were found alive and well at Little America on the Ross Sea's ice shelf a week ago today by the Royal Research Society's ship, *Discovery II*, predictions made by Rear Admiral Richard E. Byrd, Hon. M.A. 1927, and other experienced Antarctic explorers were substantiated. No word was heard from Ellsworth for days after he left Dundee Island November 23 to fly to Little America, but Byrd predicted that he was probably safe but unable to communicate with his base ship (*Y.A.W.*, Dec. 6).

Thirteen hours and twelve minutes after he and Hollick-Kenyon had taken off at 3:03 that morning in their plane the *Polar Star* from their base ship, the *Wyatt Earp*, then anchored in the lee of Dundee Island south of Cape Horn, their radio failed. Ellsworth radioed, in his personal account of his miraculous adventure to *The New York Times* from the rescue ship that a defective switch and a faulty antennae lead caused the failure, and, although they sought to communicate by means of their trail set and emergency outfit continually during the four forced landings they made on their twelve-day, 2,000-mile flight across Antarctica's lofty, frozen plateaus, they knew of their efforts' futility. They persisted, nevertheless, in their attempts, hopeful that somehow they might get word out to civilization that they were safe but stranded, until their gasoline ran out on December 5 when they were only twenty-five miles from Little America.

Then, after determining their exact position and finding that they were within easy sledging distance of Admiral Byrd's old base, Ellsworth and Hollick-Kenyon, in no hurry to abandon the *Polar Star*, camped beside her for four days before tramping out to Little America and establishing themselves in the radio shack. Once intrenched there, they spent their time correlating data that they had accumulated on their flight, the first ever made by man, across Antarctica. They had undertaken the flight to determine whether Antarctica is a solid continent or is split in two by an ice-choked strait, whether its mountain ranges are continuations of South America's Andes, and, finally, whether there exists any definite relationship between severe winters in Antarctica and droughts the following summers in the Argentine pampas. Ellsworth will probably not make any statements about his findings and conclusions until he has had an opportunity to study his materials. He did mention in his personal account, however, a range of mountains seventy-five miles long which rise to heights of more than 13,000 feet in unclaimed territory, territory on which he

dropped an American flag, thus establishing this country's claim to the region.

Ellsworth's own ship, the *Wyatt Earp*, a little Norwegian whaler, which had taken him into the Antarctic twice before on expeditions which proved unsuccessful, broke the Ross Sea's ice barrier last Friday morning and took the explorer and his pilot aboard on Sunday. Preparations to bring the *Polar Star* out to the water's edge for loading were immediately begun. The *Discovery II*, which rushed medical aid to Admiral Byrd two years ago when he lay seriously ill after his isolation for months at an advanced weather observatory, then resumed her scientific work, which has been seriously disrupted with nearly half of the short season of open water having already passed.

Ellsworth's account tells in succinct, simple

style of one of the greatest exploratory adventures. He radioed the *Times*:

"After passing the mountains of Hearst Land on our flight on November 23, we flew at an altitude of 10,000 feet over a high plateau which isolated mountains at intervals. Then these gave way to an unbroken plateau.

"At 4:15 P.M. we found that the radio transmitter failed to work and later we discovered that the switch and the antennae lead were defective.

"At 5:45 P.M. I dropped the Stars and Stripes on hitherto unclaimed territory. At that time we were near another mountain range. At 7:35 we were right opposite the mountains, which seemed to extend for at least seventy-five miles, and some of the peaks were 13,000 feet in altitude. The visibility so far on the flight was excellent and we could see for about 130 miles.

"At 9:05 P.M. we ran into bad visibility and went down to 6,400 feet, then lower, and at last we were forced to land. Our position was then latitude 79 degrees 12 minutes south, longitude 104 degrees 10 minutes west.

"After some time the weather seemed to clear, and on the 24th, at 5 P.M., we warmed up the engine and took off, but the flight was short. After flying for half an hour we were again forced down by bad visibility.

"We stayed there until November 27, on



Wide World

AT THE AMERICAN MUSEUM OF NATURAL HISTORY

Lincoln Ellsworth ('03 S.), center, presents a model of the *Polar Star*, the low-wing Northrop monoplane used on his Antarctic expedition, to the Museum. At the left is Dr. Roy Chapman Andrews, Director; at the right, F. Trubee Davison, '18, Hon. M.A. 1931, President of the Museum.

ELLSWORTH'S DISCOVERIES.

From LINCOLN ELLSWORTH'S dispatch of yesterday we must infer that the remarkable flight from Weddell Sea to the Bay of Whales is one of the great scientific achievements in the history of exploration. The time has not yet come to evaluate the discoveries that have been made, yet it is already evident that some of the more hotly disputed issues of Antarctic geography have been settled.

Even in ancient times when the earth was still thought to be flat, geographers spoke of Terra Australis, thus hinting at a vast southern continent. So strong was the belief, that the map-makers shared it. Isolated known areas were boldly connected with regions that had been seen only from afar. But there were skeptics. Perhaps this hypothetical continent, one and a half times as large as Europe, might be an archipelago sheeted in one huge, deceptive covering of ice and snow.

ELLSWORTH'S flight across the continent removes the last of these doubts. Imagine a pilot starting from London and flying over a snowclad Europe to Rome. What he sees immediately to the right and the left reveals nothing about Northern Russia or Western Spain. Yet it is a triumph to discover the Alps and to note that the ocean does not cut Europe in half from north to south, and that Germany, Switzerland and France are not islands. Antarctica, the old Terra Australis, exists as the romanticists have it—a single mountainous mass sharply defined by Weddell and Ross Seas and the oceans. The towering ranges that ELLSWORTH describes are undoubtedly continuations of the Andes. But what of the other end which lies south of Australia? The contrast with the continental elevation over which he flew is puzzling. There is much work for the geographer and geologist to do.

As one recalls the recitals of Antarctic adventurers, from the days of the eighteenth century whalers to BYRD, WILKINS and ELLSWORTH, one cannot but help marveling at the speed and the ease with which discoveries are now made. Wearily BRUCE, SHACKLETON, SCOTT and AMUNDSEN toiled over the ice and snow, rejoicing if they covered five miles a day. And here is ELLSWORTH, soaring off into the leaden sky of Antarctica, seeing more in one glance than they ever beheld in months, and covering more land in twenty-odd days than would have been possible in as many years on foot. Generously he praises the sturdy airplane that carried him to his goal despite blizzards in the

coldest land on earth. It took courage and skill to fly that straight, bird-like course over land that no eye had ever seen before. The hazards were greater than in the old days. A crippled machine in an icy wilderness—what is a ship crushed in ice compared with this? With BYRD and WILKINS, ELLSWORTH must go down as a pioneer in the new aerial exploration of the frigid zone. The day of the athletic dash to the Pole is over. That of science has dawned.

ELLSWORTH FOUND ANTARCTICA 'SPINE' OF MOUNTAIN PEAKS

Ranges and the High Plateau
Discovered May Be Units in
One Great System.

MANY PHOTOGRAPHS TAKEN

Correlating of New Material to
Take Some Time—Distance
Covered Still Unknown.

By LINCOLN ELLSWORTH.

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ABOARD THE MOTOR SHIP
WYATT EARP, Jan. 22.—We had planned to make the 2,200-mile transantarctic flight in fourteen hours if the weather held good throughout the journey, but, as you will see, it took us twenty-two days to go from Dundee Island at the head of the Weddell Sea across the continent to the Bay of Whales in Ross Sea. This fact, however, upholds the theory upon which my original plans were based.

It seemed to me that the only really safe and sensible plan in regard to such a long flight over unknown topographical conditions and from where it was impossible to get any meteorological data for weather forecasting was to set out in fine weather, fly as far as the weather was good and, if the point reached was more than 500 miles from our base, land at the edge of the bad weather and wait for it to clear.

By landing while still in good weather a suitable surface for a landing could be selected, and furthermore by so doing we could augment our observations. From the very start my whole organization was built upon that plan. I selected a low-winged Northrop monoplane not only because of its supreme efficiency but partly because its low wing and pedestaled landing gear were the best available for fastening the machine to the snow in case we should have to land and lay over throughout a blizzard.

The Texaco fuel and oil were selected because of their known efficiency in all temperatures. My pilots were selected for their proved ability to care for their machine under all conditions and for their known quality of being equal to all emergencies.

ELLSWORTH FOUND ANTARCTICA 'SPINE'

Continued From Page One.

and the continent of Antarctica proper.

We observed this strait to be not more than a mile or so wide, which is much less than that shown on maps. For the first 300 miles of the flight and to about Latitude 69 South we found the Weddell Sea quite open, which seemed surprising so early in the season. At 12:22 P. M. we crossed Stefansson Strait. The compass bearing of the coast was S. E. 138 degrees and W. 242 degrees. The low black, conical peaks of Cape Eielson rose conspicuously out of the mantle of white on our left. We had climbed to an elevation of 13,400 feet, where the temperature was 7.6 degrees below zero fahrenheit.

We were now over the unknown, and it was with a feeling of awe and curiosity we gazed at the bold and rugged mountain peaks across which our route lay ahead. Some of them seemed to rise almost sheer to 12,000 feet, and they extended as far as we could see. This range I called Eternity Range, and the three prominent peaks we passed at 2:25 P. M. on our right I named Mount Faith, Mount Hope and Mount Charity.

Strikingly contrasted to these rugged Hearst Land mountains were the low-topped Graham Land ranges we had been following south which dwindled down into isolated peaks as they neared Stefansson Strait. Both ranges are undoubtedly of sedimentary formation.

The Hearst Land mountains, or at least the section over which we flew, was a loosely formed range with none of the crowded topography of peaks with glacier-filled valleys and high crevassed bottoms such as pictures of the Queen Maud range show.

Merge Into Snow Plateau.

We saw neither glaciers nor crevassed surfaces in crossing. At 3:30 P. M. the mountains beneath us dwindled out into isolated nunataks and merged into a great snow plateau surface with an elevation of between 8,000 and 7,000 feet. Isolated patches of sastrugi appeared at intervals on our right during the following half-hour, but no crevasses. At 4:45 P. M., on the distant right horizon, a mountain range became visible with isolated black peaks which faded out twenty minutes later. At 5 o'clock a few more peaks showed on the same horizon.

From 5:20 to 5:45 mountains 120 to 140 miles distant appeared on our left horizon; also a few peaks on the right horizon. At 6:20 o'clock it became very hazy ahead; below it was dead flat, with a patch of sastrugi on our left. One hundred ten miles further on we came abreast of a solitary little range about seventy-five miles long on left to which I took bearing. It was asymmetrically formed, with peaks rising to 13,000 feet and all clustered into a central mass which dwindled down at either extremity to merge into the plain around.

I named it Sentinel Range and its central peak Mount Mary Louise Ulmer, after my wife. Fifteen minutes later on the south horizon and 100 miles distant appeared a long black-topped range which visibly extended through at least one degree latitude.

This appeared to be the last of the mountains we were to see, for ahead and around swept only a vast plateau meeting the horizon in a vista of white. Our visibility throughout the journey so far had been from 120 to 150 miles, for we

were flying at an average of 10,000 feet in clear weather. At 9:55 P. M., after 13 hours and 50 minutes flying, the visibility was getting low so we landed and fixed our position as Latitude 79:12 South, Longitude 104:10 West. Our altimeter here showed the surface elevation as 6,400 feet and the plateau extended with slight undulations in every direction.

Our next landing at Longitude 107:55 West, Latitude 79:30 South was at about the same elevation. Again at Latitude 79:58 South, Longitude 114:15 West, it was within 200 feet of the same level our altimeter showed a height of 6,300 feet. This point seemed to be about the end of the level plateau which had extended from the last seen mountains, for on Dec. 4, after leaving at 7:15 P. M., we found ourselves an hour and a quarter later about 140 miles ahead, at an elevator of 4,500 feet.

Plateau Drops Toward Barrier.

From here the plateau with undulations seemed to drop toward the Ross Sea barrier. At 10:04 P. M. we were over crevasses and at 10:40 we estimated the surface to be at an elevation of about 1,000 feet. We landed at 11:10 at an elevation of 980 feet at Latitude 79:15 South, Longitude 153:16 West.

The snow condition on the high plateau was granular and hard packed, so hard that the skis of the plane made little impression, and each time we landed it was easily possible to pick out smooth surface free from sastrugi. During the blizzard which we experienced at Lat. 79:58 South, Long. 114:15 West, the wind was from the east to southeast and the snow was of a hard fine-grained texture.

Throughout the whole period of flight over the continent the drift in relation to our course was never more than five degrees, and constant toward the same direction. In fact, during the whole middle section of the flight from the time of reaching the high plateau until we started on the down grade to the Ross Barrier we did not have anything but easterly and southeasterly winds.

Only twice did it blow from the north and then only for short intervals. It never did blow from the west. Once on the down-grade and after reaching the barrier itself the winds were from the south. All told we were in the air 19 hours 5 minutes. The actual mileage covered has not yet been determined. From the start to where we finally landed the Polar Star, the time on the way was thirteen days and two hours.

From where we left the plane to Little America was only about twenty miles in a direct line, but because of confusion caused by maps issued at different times we had some difficulty in locating Little America. At last, after twenty-two days from the start of our flight we reached Byrd's abandoned camp. When over the mountain area I was able to take many photographs but once over the plateau there was little to be shown on a photograph.

Science Demands Proof.

It will be some time before I will be able to correlate all the information gathered. Even then science demands proof, but does not the evidence of these lofty mountain ranges and high plateau discovered on the flight carry the thought that they are but units in a great mountain system that traverses Antarctica?

Does it not indicate that the Highlands of Graham Land must be regarded as a continuation of the South American Andes. Baking the mountains of Victoria Land on the Ross Sea, of which the Queen Maud range itself is but a connecting link, in a great mountain chain that forms the backbone of Antarctica? Does it not also indicate that a sea level channel between Weddell and the Ross Sea does not exist?

Well, my flight of discovery is

over, yet there are still unexplored areas at this end of our earth—regions of heights and depths and cold still touched with the mystery and the romance of the unknown. Great is their lure, but, what is more, they are all parts of our heritage; and it is man's duty to explore them for the data of natural sciences are like a gigantic jig saw puzzle and we cannot show the whole of the picture while some of the parts are missing.

Antarctica, with its 5,000,000 square miles of area, 75 per cent of which remains unexplored, is still a problem to be solved. After six Polar expeditions my enthusiasm has not dimmed. The love of great adventure is not an acquired taste, it is in the blood. Will I be tempted again? Who can tell; for

"Who has known heights and depths shall not again

Know peace, not as the calm heart knows.

Low ivied walls, a garden close.

The old enchantment of a rose,

And tho' he tread the humble ways of men,

He shall not speak the common tongue again.

Who has trodden stars seeks peace no more."

GEOGRAPHICAL MEDAL GOES TO ELLSWORTH

Livingstone Award Given to Him
for Antarctic Flight—Byrd
Last Recipient.

To Lincoln Ellsworth has been awarded the David Livingstone Centenary Medal for his flight across the Antarctic continent, it was announced yesterday by Roland L. Redmond, president of the American Geographical Society, who sent the following message to Mr. Ellsworth:

"The Council of the American Geographical Society at its annual meeting today unanimously approved the award to you of the David Livingstone Centenary Medal in recognition of your contribution to geographical knowledge by your transantarctic flight."

The medal was founded by the Hispanic Society of America in 1913, on the 100th anniversary of the birth of Livingstone, to be awarded by the American Geographical Society for "scientific achievement in the field of geography of the Southern Hemisphere."

Sir Douglas Mawson, for his discoveries in the Antarctic from 1911 to 1914, was the first recipient. The second award was made to former President Theodore Roosevelt for his explorations in Africa and South America. Admiral Byrd received the medal in 1929 after his flight to the South Pole.

Since its foundation in 1852 the American Geographical Society has been closely associated with polar exploration. Admiral Peary was its president from 1903 to 1908. The society sponsored Sir Hubert Wilkins in his plans for work in the Arctic which culminated in his flight from Point Barrow to Spitzbergen in 1928 and was also the scientific sponsor for Admiral Byrd's first Antarctic expedition and the Wilkins-Hearst Antarctic expedition of 1928-29.



ELLSWORTH ENDS MORE OF UNCERTAINTY IN ANTARCTICA.

The map shows explorer's route from Dundee Island to Little America. The shaded area is still part of the unknown. The section between 80 and 120 degrees west longitude was claimed for the United States and named James W. Ellsworth Land for the explorer's father. The three newly discovered peaks he named Faith, Hope and Charity. The new mountainous group he called Sentinel Range and the highest peak in it he named Mount Mary Louise Ulmer, for his wife. The plateau, above 6,000 feet, on which the fliers landed after thirteen hours in the air, was named Hollick-Kenyon Plateau.



Armed with charts and textbooks on Malayan languages, these members of the Philadelphia Academy of Natural Science Expedition are shown leaving for Dutch New Guinea where they will study the habits and customs of the Papuan tribe. Front row, left to right: Edward E. Goodale, Ipswich, Mass.; George S. Adams, N.Y., navigator, and Capt. Frederick Crockett, former associate of Admiral Richard E. Byrd. Back row, left to right: Charles Smith, Gloucester, Mass., Doane Nickerson, Gloucester and Charles McGregor.

Jeffa and Kimona, two islands, in the South Seas, within rowing distance of each other, and a lone white man philosopher have played their part in as strange an expedition as ever sailed out of Gloucester. It all begins with a meeting in tropical waters between an Austrian hermit and a prominent Boston clergyman, John Hopkins Dennison. Harry Kern, the Austrian, a man of good family who has fled his home to seek refuge in the South Seas, after the loss of his great fortune, owned the copra rights to Jeffa and Kimona. Lacking the capital to exploit them, he sold the rights to John Dennison, whom he met by chance, while on his way to his self imposed exile. And, thereby, hangs a tale.

On the passing of John Hopkins Dennison, the islands or rather the copra rights, for the Dutch government looks askance at a foreigner owning land, came into the possession of Mrs. Charis Dennison Crockett of Santa Barbara, anthropologist and world traveler. At the time of her inheritance, Frederick E. Crockett was trekking across the Queen Maud mountains with the geological party of the Byrd expedition. That was six years ago. Today, Fred Crockett and his wife are somewhere out in the Atlantic, westward bound, for the South Seas, and Netherlands New Guinea, land of head-hunters and fierce Tapiros.

Much of that six years was spent in California, researching in geology, and prospecting for gold in the Mojave Desert.

Two years ago, receiving the endorsement of the Academy of Natural Sciences, they laid their plans

to use Mrs. Crockett's legacy in the interests of science. The Dennison-Crockett expedition of the academy of natural sciences, to the South Pacific is the result.

"Specifically, we are bound for Netherlands New Guinea," Fred Crockett informed before leaving, "on the island of Papua, east of the Malay Archipelago, and north of Australia.

"We are going, first, to Philadelphia, to visit our sponsors and to board scientific equipment.

TO MEASURE NATIVE'S HEADS

"Calipers, for skull measurements, which Mrs. Crockett, our anthropologist, will make, have been supplied by Harvard. Prof. Hooton of Harvard is tremendously interested in our expedition and our objectives. They include anthropological research and zoological collections.

"From Philadelphia, we shall proceed down the coast to Cape Hatteras, through the Panama Canal, to Kingston. Mrs. Crockett and Mrs. Marion Lowndes will join the expedition there.

"Marion Lowndes, formerly of the 'Gachem' in the Macmillan expedition, will be assistant anthropologist and official scribe."

Mrs. Crockett is a graduate of Bryn Mawr and Radcliffe, where she studied anthropology. She is the grand daughter of Mark Hopkins, noted educator, on Williams College staff. She was reared in Egypt, has traveled through Persia, India and China. And though she has sailed the South seas she has never seen Jeffa or Kimona, or the strange white man who manages her copra plantations.

"There will, however," continued Fred Crockett, "be a full ship's company, as far as Kingston, for Norman

Vaughan and Edward Goodale are going to Jamaica."

Fred Crockett, Edward Goodale and Norman Vaughan were known as the "Three Musketeers" by their comrades of the Antarctic.

"From Kingston we will sail southwest, with stops at Galapagos, Tahiti and other islands. We expect to arrive at Kimona in May.

TO LIVE IN HUT

"Mrs. Crockett and I will leave the ship at this point, where we will take up residence for six months in a hut which Harry Kerns is preparing for us. We have had infrequent correspondence with him. His letters are very interesting and contain valuable information.

He says the natives, whom he has induced to live on the island, are looking forward eagerly to our arrival, hoping, perhaps, for shiny trinkets that casual white visitors have given them in the past.

"From Kimona, the rest of the group will go to Netherlands New Guinea where they will attempt to penetrate to the interior by means of the Mimika and Selptic rivers. Dillon Ripley of New York, our zoologist, hopes to establish friendly relations with the Parimou Papuans on the Mimika river in northwest Guinea."

The Parimou Papuans are a tall, well built, frizzly haired people inhabiting the lowlands. They wear boar tusks and eagle claws in their noses. Tattooing is unknown, but many of them carry snake and scorpion scars on their upper left arm, the result of cicatrization.

"Some of their country has been explored," Mr. Crockett said. "Cornelius Crane penetrated 150 miles up the Selptic river with the guidance of a Dutch missionary, surnamed Kersbomb. We know them

to be friendly. The trinkets and tobacco of the white man, they prize highly. A Parimou Papuan smokes both ends of a cigarette with great relish. They 'hold hands' rather than shake hands, and will talk your ear off, if you let them. In spite of their friendliness, they will go to any lengths to steal any metal you might have. If caught, they merely grin unashamedly.

Although of small stature, the Tapiros, or New Guinea Pygmies are well proportioned. Their homes are trees, on mountain crags, for protection against the coastal cannibals. It has been ascertained that they live in the stone age, as do the Papuans.

"From accounts of explorers," according to Fred Crockett, "it is known that, frequently, the little men visit the Parimou Papuans. One white observer relates that before entering the Papuan camp, their weapons are carefully hidden. Returning the visits, the Papuans make the same unique gesture of entering the Tapiro tribal lands, weaponless.

"On one expedition to New Guinea, I can't recall now whether Dutch or British, a tragedy occurred which might have been prevented had the explorers known of the Parimou Papuans.

"Nine men, captured on the mainland by hostile savages, were killed and eaten. The others fled for their lives."

"How about native food?" I ventured.

"We are told that, like the proverbial goat, the natives will eat almost anything. Beet's larvae, which is obtained by splitting rotten tree trunks, is, like the American turkey, considered a delicacy, and reserved for special feasts. Rats and snakes are a common food, as are lizards and crocodile eggs.

"Yes, there are known specimens of fauna in the country," he began, in response to my query, "many in a state of arrested development. A small kangaroo, known as a wallaby, is to be found in great numbers. This species stands about two feet in height, and has a very coarse flesh. Cassowarys, a species of bird, who at night affect a curious booming sound, not unlike the beat of tom-toms, make their home there. Native head-dresses are made from their feathers: arrow points from their claws.

PESTIFEROUS CRICKETS

Explorers have told of a mysterious bird, with a peculiar whistle, that has a nerve wracking effect, cause the natives to scream in terror. Fruit bats, with a wing spread of seven inches are a further source of horror to the savages. New Guinea's giant crickets will present a constant threat to food supplies and equipment. Tents, food, garments; all are meat to a Papuan cricket. Flies, too, especially the 'Blue Bottle' variety, which lay their eggs all over the place, making it necessary to scrape blankets and

other supplies, daily, are a common nuisance to a camp."

"Isn't it going to be difficult to get the natives to submit to having their skulls measured?" I inquired of Mrs. Crockett.

"To get them used to the idea," she replied, "we will take each others measurements before them. "At least, we won't have to start from scratch on Jeffa and Kimona, getting the natives used to whites. Harry Kerns has paved the way for us there."

Mrs. Crockett exhibited imitation silver cigarette lighters which she will present to the savages, among other things, to induce them to yield to the probings of science.

"We hope," she said, "to get some skulls, preserved from the dead and hanging in the homes of the natives. In many tribes they are worn about the neck and guarded jealously. To prevail on the native to part with his skulls, is very difficult."

According to Fred Crockett, the expedition will be gone about two years. After the zoological party rejoins the Crocketts at Kimona, the members will spend a year exploring the smaller islands around New Guinea, collecting land and marine specimens. The Academy is equipping them with diving helmets.

Questioned as to the possibility of bringing back gold, he said, "The rivers are full of gold but foreign exploitation is frowned upon. As a matter of fact, were it not for our copra rights, I question whether the Dutch government would have permitted us to invade the islands."

New Guinea's coastal lands are swampy. Mosquitoes abound, bringing with their bite dreaded malaria, scourge of the tropics. Many of her rivers and coastal waters are shallow. This, Captain Crockett gives as the reason for a small craft.

MAPS GALORE

"The 'Chiva' will be able to navigate where a larger schooner could not go. Though small, she is sturdy and especially fitted for her voyage. She carries a diesel engine auxiliary.

Her stores include camera and sound equipment and a radio receiving set. Since we are not carrying a transmitter, we will not be able to communicate with the outside world. One hundred volumes, together with a thousand charts and maps, purchased in England, and carefully catalogued for instant handling, are among our stores. Shot guns and milk cans for gathering small specimens are being taken along. The bottoms of the cans are coated with a specially prepared poison and preservative.

At first glance, Capt. Crockett seems rather young to head a voyage so fraught with danger. But a second glance and a little of his history soon convince you of his qualifications.

Frederick E. Crockett is the son of Dr. Eugene A. Crockett. He took a manufacturers course at Harvard University. At the age of 21 he left Harvard to go to the New Hampshire hills where he trained as dog-driver preparatory to embarking with the Byrd Antarctic expedition. He was with the geological party when Marie Byrd Land was claimed for the United States. His experiences in California and the Mojave were preparatory to the present expedition.

George S. Adams, a former marine major, will sail with Capt. Crockett as navigator.

Doane Michelson, ship's cook and a Gloucester man, cooked for the crew and cast of the "We're Here" (Imperator) used in the film, "Captains Courageous" last fall.

Two Women Join Expedition Leaving Gloucester to Study Head Hunters



AT THE WHEEL OF THE CHIVA

Mr and Mrs Frederick E. Crockett who'll sail away to islands off New Dutch Guinea in interests of anthropology.

By DONALD B. WILLARD

GLOUCESTER, Nov 19—In the raw wind along the water front here half-a-dozen members of "The Denison-Crockett Expedition of the Academy of Natural Sciences of Philadelphia to the Southern Pacific" are busily engaged in stuffing supplies aboard the 59-foot schooner Chiva.

Sailing date is next Sunday, weather and other factors permitting. Leader of the outfit is Frederick E. Crockett of Boston, whose first fame came when he went with Admiral Richard E. Byrd's expedition to the Antarctic as a sled dog handler.

Purpose of the expedition is to study anthropology and zoology on the islands off the northwest coast of Dutch New Guinea. It's a practically unstudied region, full of head-hunting Papuans, who are anything but nice people. The fauna includes marsupials, like the kangaroo. In this group are many cases of "arrested development"—that is, animals which have failed to evolve through the ages.

Two Women to Go Along

With the expedition will sail two women—Crockett's wife, Mrs. Charis Denison Crockett, and Mrs. Marion Lowndes of Wiscasset. Mrs. Crockett is the anthropologist and Mrs. Lowndes is assistant in anthropology and writer. Mrs. Crockett is also custodian of the first-aid kit.

The two women will not accompany the Chiva on the first leg of the journey, because they don't want to endure the rigors of a winter pas-

sage down the North Atlantic shore. They will join the schooner at Jamaica.

Crockett is skipper, George S. Adams of New York, who's not aboard yet, will be navigator. Dillon Ripley of Litchfield, Conn, is the zoologist.

Charles Smith of Gloucester is listed as "sailor" and Doane Nickerson is cook and sailor. Crockett said he had no difficulty in enlisting the Gloucester men—just the invitation was enough, practically.

"Cocoa Tree Rights"

The expedition will make its base on two little Dutch islands to which Mrs. Crockett some time ago inherited the "cocoa tree rights." There she will go to work with calipers and so on, measuring the Papuans' skulls—if the Papuans will stand for it. Meanwhile, the other members of the expedition will cruise around the wild islands of the region, collecting zoological specimens.

The Chiva is a "59-foot gaff-headed schooner, with Diesel auxiliary, square yard, fore square sail and raffles for trade wind sailing." She was built at Essex, Conn, in 1928, and she is a sturdy craft. Designed for just such business as this, she has tanks for 1600 gallons of water, carries fuel for 1000 miles, has extra heavy deck beams and bracing, and planking two inches thick.

She has an electric light plant aboard and 1000 charts, and a big electric refrigerator, to say nothing of special electric fans for use in the tropics.

With luck, the Chiva should arrive at Sorong, Dutch New Guinea next

May. Mr and Mrs Crockett have been planning the expedition for 2½ years, and the start is timed to avoid most of the bad weather of the 10,000-mile journey. The worst weather the Chiva faces will be that between Gloucester and Cape Hatteras.

Byrd Men Join Up

Aboard when the Chiva leaves Gloucester, will be Edward E. Goodale and Norman D. Vaughan, close friends of Crockett. Goodale and Vaughan were also dog drivers on the Byrd expedition, and they will go along as far as Philadelphia to give an old pal a good sendoff.

One of the objectives of the expedition is to interview the Austrian, who is the only white man on one of Mrs. Crockett's islands. He is a planter, philosopher and student, and writes, they say, amazing letters. Neither Mr nor Mrs Crockett have ever seen him, and they are looking forward to a meeting.

The party expects to be gone 18 months. Plans for the return from the other side of the world, however, are not yet made. But they have high hopes of accomplishing something of real scientific value, for the portion of the world for which they are heading has probably never before been visited by an American expedition.

It's a Great Invention

Vicar: "You promised me you would mend your ways this year. I can see you've done it yet!"

Reprobate: "Hey ye no' heard o' 'Inveesible mendin'?" — Edinburg "Express"

Gloucester Schooner with Boston Scientists and
Two Women Aboard Sails to Study the Aborigines
And Maybe the Pygmies of New Guinea



The Chiva, auxiliary schooner of the Crockett expedition to Dutch New Guinea, as she sailed from her berth at East River and 26th St.



Mrs. Marion Lowndes and Mrs. Charis Crockett, (left to right) who will join the party aboard the Chiva.

Paradise.

12/4/36

**EXPEDITION SAILS
FOR PACIFIC ISLANDS**

PHILADELPHIA, Dec. 3 (AP)—The Denison Crockett scientific expedition sailed today aboard the two-masted schooner Chiva for an 18-month voyage among south Pacific islands.

Five men and two women comprising the party plan to search the islands for certain specimens of bird and animal life.

They also hope to obtain new information about the geological structure of the island and the history and habits of the natives. The expedition is sponsored by the Philadelphia Academy of Natural Sciences.

The women members, Mrs. Charis Denison Crockett, wife of Frederick E. Crockett of Boston, leader of the expedition, and Mrs. Marion Lowndes of Wiscasset, Me., were not on board the 60-foot, 20-ton craft

ADVENTURERS SAIL ON 11,000 MILE VOYAGE



Just before setting sail from Gloucester yesterday for an 11,000-mile cruise to Dutch New Guinea, Capt. Frederick H. Crockett calls his crew together for final instructions. In the front row, left to right, are Mrs. Marion Lowndes, Mrs. Crockett, wife of the skipper; Capt. Crockett, Dr. Edward Goodale and George Adams. Back row are Caswell McGregor, Doane Michelson and Charles A. Smith.



After putting the finishing touches to preparations for an adventurous journey, these members of the crew of the 59-foot schooner Chiva set sail from Gloucester yesterday on an 11,000-mile trip to Dutch New Guinea.

Schooners Sail on Long Cruises, One for Science and One for Fun

Group Leaving Gloucester
Sets Dutch New Guinea
As Goal

WOODS HOLE CRAFT ON MYSTERY TRIP

Down to the sea in ships, with a stiff northwest wind whipping the waves into a fury of whitecaps and a swiftly dropping barometer giving ominous warning of treacherous storms to come—

From Gloucester, home port of hardy fishermen, one group of adventurers set forth on an 11,000-mile voyage to Dutch New Guinea in a 59-foot auxiliary schooner yesterday.

And from quaint Woods Hole on Cape Cod, the 57-foot schooner Zavorah headed out into the open sea with its crew of social registerites on a three-month mystery trip on which, it was hinted, search may be made for buried treasure.

FACE STORM THREAT

True to the traditions of seafaring New England, the sailors began their journeys in the face of threats of sub-freezing temperatures and high seas.

Anthropological studies of the primitive natives of Dutch New Guinea provided the incentive for the voyage being made by the schooner Chiva which sailed from Gloucester with Frederick H. Crockett of Boston, a member of the first Byrd Antarctic expedition, as the skipper.

Seven men were aboard and two women will join the crew when the Chiva reaches Jamaica. They are the wife of Capt. Crockett, the former Charis Denison, Bryn Mawr graduate, who will study the natives. Assisting her will be Mrs. Marion Lowndes of Wiscasset, Me., who also will keep a log of the expedition.

Included on the expedition—formally known as the Denison-Crockett expedition of the Academy of Natural Sciences of Philadelphia—are Dillon Ripley of Litchfield, Ct., zoologist, and Maj. George S. Adams,

(Continued on Page Four)

SCHOONERS SAIL ON LONG TRIPS

Group Leaving Gloucester
Sets Dutch New Guinea
As Goal

(Continued from First Page)

retired Marine Corps officer, who is navigator. Charles Smith and Doane Michelson of Gloucester shipped as seaman and cook.

Just going along for the trip as far as Jamaica are Norman Vaughan of Hamilton and Edward E. Goodale of Ipswich.

The trip has been in preparation ever since Mrs. Crockett inherited the plantation rights of two small islands off the west coast of Dutch New Guinea. Those islands will be ports of call on the trip. Mrs. Crockett hopes to chart the bone structure types of the Papuans, natives of New Guinea, while Ripley will study rare specimens of animal life.

MYSTERIOUS ERRAND

No such definite objective will be admitted by Charles J. Hubbard, author, adventurer and former Harvard football captain, who is skipper of the Zavorah. He and the members of his crew, picked from the social register, say they have a mysterious errand in mind but refuse to give any suggestion as to its nature.

As the Zavorah prepared to leave its pier at Woods Hole, Hubbard said his first port of call would be Bermuda and that stops would be made at Haiti, Panama and San Pedro in California. Whether there will be other stops on the voyage was something Hubbard wouldn't discuss.

Questioners were informed that members of the crew might be seeking "local color" for literary efforts. But there was no attempt to make any one take that as the real explanation.

Nevertheless, Dwight Shepler of Newton, artist whose life sketches are a feature of The Sunday Herald, hopes to find interesting subjects in southern waters. Paul D. Rust, Jr., of Boston and Marblehead, who was host to President Roosevelt when he owned the Amberjack III a few years ago, is going along because he loves the sea.

Charles Lansing Baldwin, Jr., of Darien, Ct., "Hap" Olson of Boston and Richard Covel of Brookline, completed the crew on the first leg of the mystery journey. Bradford Shaw of Sandwich will fly to Panama to finish the voyage and one other man will be picked up there.

The start of the trip was delayed for several hours because "Winkle," a pet dog, and "Tony," a black kitten, failed to answer at roll call. They were located after members of the crew were sent ashore in searching parties.

SAIL FROM WOODS HOLE ON MYSTERY CRUISE



Bundled up in preparation for sub-freezing weather and storms, Capt. Charles Hubbard and two members of his crew board the Zavorah at Woods Hole for the start of a three-month mystery cruise. Capt. Hubbard is standing between Paul D. Rust, Jr. (left), and Dwight Shepler, Herald artist.

AT MYOPIA HUNTER TRIALS



Photo by Reynolds

Mrs. Albert Cameron Burrage, Jr., of "Candlewood Farm," Ipswich, an ardent amateur photographer, had just been taking some unusual shots at the recent Myopia Hunter Trials when she herself was snapped with Col. Francis T. Colby of "Elm Tree Lodge," Hamilton. Col. Colby will be host to Myopia members, after the drag hunt tomorrow afternoon, following the 24th annual race meeting of the Myopia Hunt Club, to be held at "Willow Dale," the Topsfield estate of Mr. Bradley W. Palmer.

Other Features and Special Publications

New material on the Netherlands, Tunisia, France, the Isle of Skye, Martinique and Guadeloupe, Trinidad, and Germany has also been gathered by editorial and photographic representatives. "Aboard the *Philippine Clipper*," by William Burke Miller, radio observer; "North About," another of A. J. Villiers' inimitable stories of sailing ships; "Voyage of the *Pilgrim*," Harold Peters' account of his cruise around the world in an 85-foot schooner yacht; and "Keeping House on the Lower Congo," by Ruth Q. McBride, are a few of many other fascinating titles to come.

The Society publishes, in addition to *The Magazine*, special Nature books—handsomely printed, illustrated, and bound—which members may obtain at the actual cost of publication. Gratifying was the response to last year's announcement of "Hunting Wild Life with Camera and Flashlight"—George Shiras 3d's two—~~ferred~~ by The Society, has been bestowed only 13 times in The Society's 49 years. The last previous awards were made at the close of 1935, when Hubbard Medals were presented by General John J. Pershing to the flyers of the stratosphere balloon *Explorer II*, Major Albert W. Stevens, commander, and Captain Orvil A. Anderson, pilot, for "Distinguished Achievement in Scientific Research."

During the past few months your Society has coöperated in a series of new explorations and scientific researches. An aerial survey of North America's loftiest peak, Mount McKinley, has just been successfully completed under the leadership of Bradford Washburn. Motion and still pictures of this 20,300-foot mountain, of cliffs more than three miles high, and of inaccessible, unmapped peaks south and west of Mount McKinley, will add much to world knowledge of this area.

N. E. Museum of Natural History Suggests White Fund Provide New \$1,000,000 Plant

Many Other Plans Offered at Hearing

The problem of how to spend \$1,140,000 of accumulated income from the George Robert White fund was discussed by two-score citizens and public officials yesterday as the trustees of the fund held an open hearing on the subject in City Hall.

Principal suggestions were a million-dollar building for the New England Museum of Natural History; a health unit for Dorchester; youth and recreation centers; small play spaces and adult game gardens; a Charles river bath house; and a floating hospital.

Bradford Washburn, noted explorer and executive director of the New England Museum of Natural History, and John K. Howard, president of the Boston Society of Natural History, presented a financial program whereby the city would be relieved of almost all cost of maintaining the new institution and might gain \$40,000 in new tax revenue from the sale of the present building.

Under the terms of the will projects must be "works of public utility and beauty" and the cost of operation may not be paid from the fund.

PLEDGES ENDOWMENT

Estimating that an annual budget of \$75,000 would be needed to provide an adequate educational program for children and adults by the museum, Howard pledged his society to raise an additional endowment of \$500,000 within the next 18 months.

"Our present income is \$32,000," he said. "The New York fund raising firm of Tamblin and Brown has investigated our potentialities and estimate we might well gain \$7500 from added membership; \$20,000 in endowment income; and \$3000 from miscellaneous sources. This would leave \$12,500 to be raised through annual gifts."

Howard pointed out that every other city of like size has far better facilities than Boston for a



PLANS FOR A NEW MUSEUM of Natural History for Boston were presented to the trustees of the George Robert White Fund yesterday at City Hall by Bradford Washburn, above, explorer and executive director of the New England Museum of Natural History.

natural history center and program.

Washburn presented sketches of a proposed building and stressed that its auditorium would be a convention place for scientific societies. He further emphasized advantages such a museum would offer to the public school system.

"A museum today must be a living, vital institution," he said.

HEALTH UNIT PLEA

A strong plea for a health unit for Dorchester was made by the city councilmen and state representatives from that district, as well as by spokesmen for a number of community agencies. They argued that the fund had already built seven health units in other sections of the city.

Councilman Joseph J. Gottlieb of ward 14, Dorchester, predicted that such a health unit would materially decrease the overhead cost of City Hospital. Others pointed to the present lack of adequate clinical centers in the area.

At least a dozen of the speakers at the hearing protested against the use of the fund money for the erection of a municipal stadium. None advocated it.

The "great need" for small play areas for young children in the congested streets of the South End was brought out by Thomas J. Turley, director of boys works at the South End House and chairman of the South End joint planning committee.

"The Boston playgrounds are designed primarily for children of 12 years or over who can participate in organized games," he said. "There must be some places where the young children can play and so be kept out of streets where there is heavy traffic. There should also be garden game centers for adults. These projects would have a low maintenance cost since community centers could supply the supervisory personnel."

YOUTH CENTER

Councilman Thomas E. Linehan of ward 7 was chief spokesman for a group advocating a youth and adult center for South Boston.

"Such a center would include a gymnasium, pools, showers and reading, hobby and game rooms. The probate court already has held that such a center would come under the terms of the will.

A bath house on the Charles River near the Longfellow Bridge was recommended by Jacob M. Burnes, executive director, West End House, who told the trustees that "on a hot day more than 5000 persons bathed there." Freida Rogosky, of the Elizabeth Peabody House, appealed for the bath house on the grounds that there should be more privacy for nursing mothers and the need of providing showers for families on relief who could not afford to heat sufficient hot water during the summer.

Joseph Lee, Jr., member of the Boston school committee, called for a recreation center to be located between the West and North Ends.

"By using available WPA supervisory facilities, the city would only

have to pay the cost of light, heat and custodians which would not amount to more than \$10,000 annually," he said.

Councilman Joseph Russo, Ward 3, favored a floating hospital.

Ralph Granara, president of the United Brigade, organized to combat "fifth columnists," requested that if recreation or youth centers were built the trustees rule that no communist or a member of a communist-affiliated organization be allowed to act as a director or teacher.

Trustees of the fund sitting at the hearing were Mayor Tobin, chairman ex-officio; Oscar W. Haussermann, president of the Boston Chamber of Commerce; Frederic H. Chase, president of the Boston Bar Association; William J. Galvin, president of the city council; Charles J. Fox, city auditor, and former Congressman Joseph F. O'Connell, manager of the fund.

1940

Washburn, Bride Head Party To Explore Alaskan Coast

Bradford Washburn, executive director of the New England Museum of Natural History, will leave Boston tonight on a three-month trip of exploration in the Glacier Bay and Fairweather Range regions of the Alaskan coast.

His bride, Barbara Polk Washburn, will accompany him in hope of being the second woman ever to climb an Alaskan peak. Seven others complete the party, which

plans to photograph terrain from earth and air, map regions yet unsketched and get geological specimens for a new geology room to be opened at the museum next fall.

Leaving the North Station tonight will be Mr. and Mrs. Washburn, Thomas Winship of Sudbury and Lee Wilson of Brookline, Harvard skiers, William Sherrer of Boston and five sled dogs lent by Norman Vaughn, dog driver of the first Byrd expedition.

Lowell Thomas, Jr., will join the expedition at Montreal. The others, already at Seattle in readiness to join the party at Prince Rupert, B. C., Wednesday, are Maynard Miller of Tacoma, Wash., Alva Morrison of Cambridge, both Harvard skiers, and Michel Feuersinger, a ski instructor.