

BRITISH NAVY LIEUTENANT IS THE HERO OF THE ANTARCTIC

Lieutenant Shackleton of the Nimrod Expedition Gets Within One Hundred and Eleven Miles of the South Pole



LIEUT. E. H. SHACKLETON

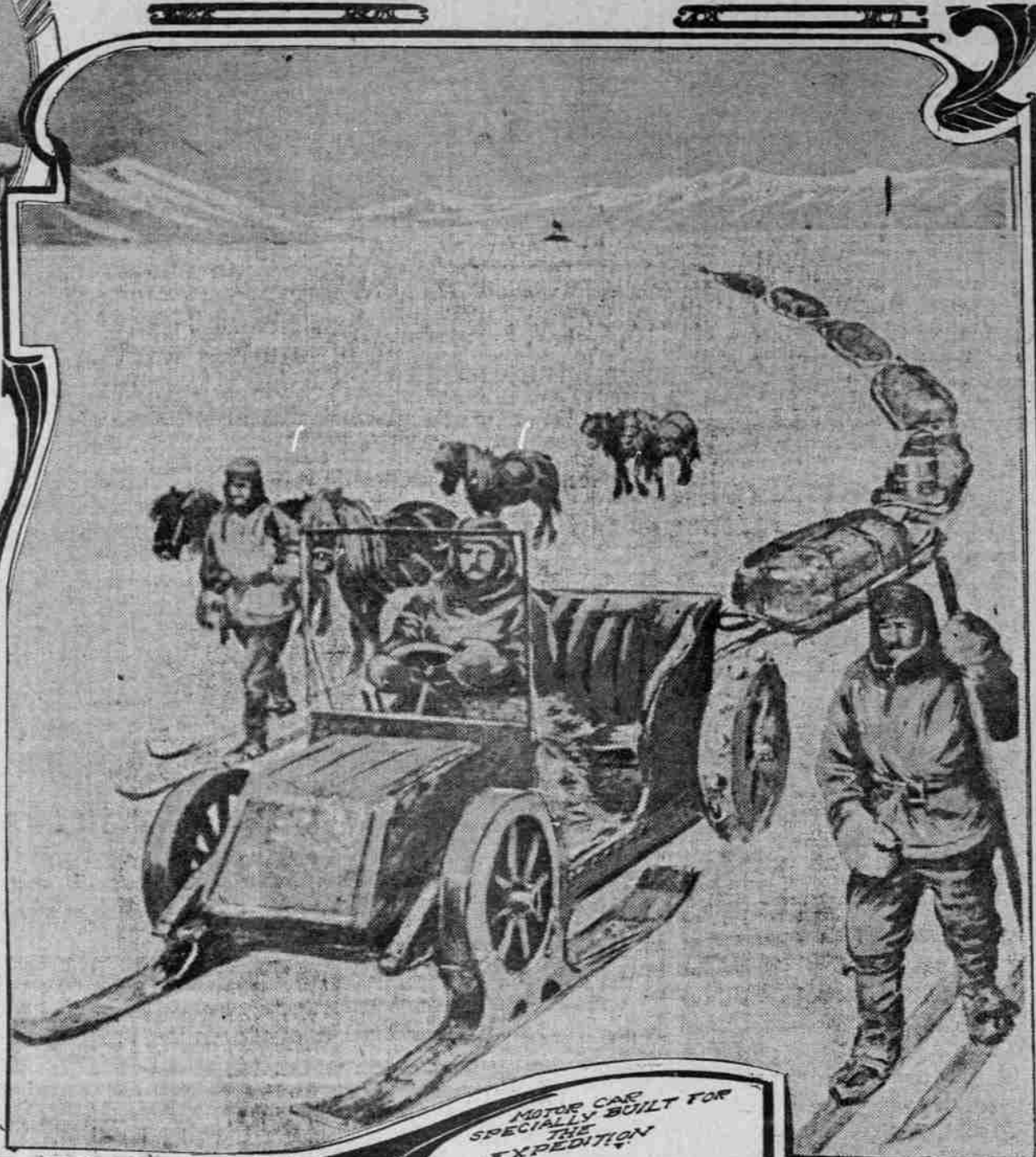
BY LEON CASS BARR.

THE bond which exists between America and England has recently been strengthened by the fact that the Union Jack has been set within 110 miles of the South Pole, while the Stars and Stripes wave over the northern apex of the world.

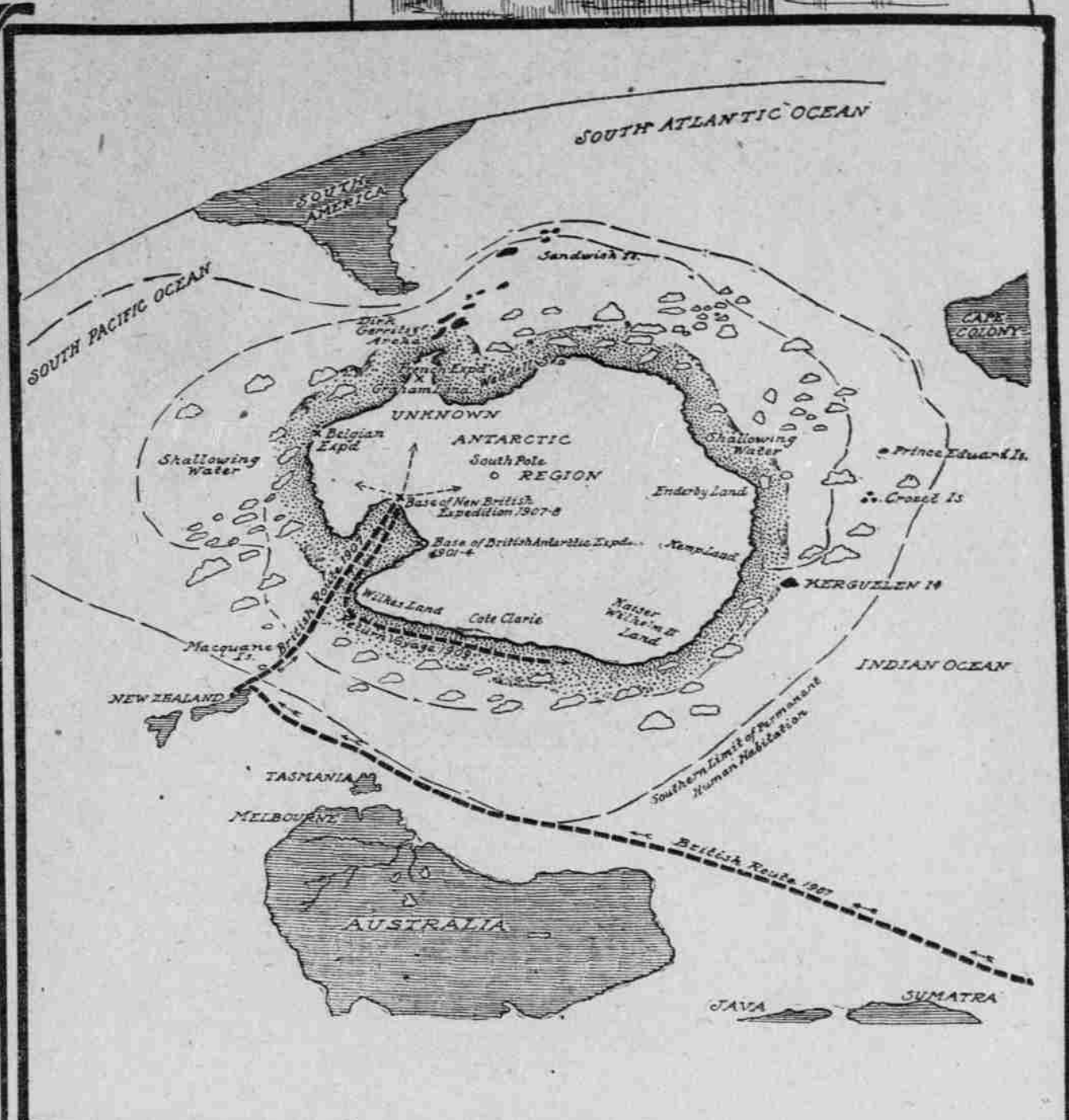
To Lieutenant E. H. Shackleton, of the British navy, and commander of the Antarctic expedition which left England in July, 1907, belongs the credit of the achievement, the journey, after reaching the ice fields, consuming 126 days and extending 1708 miles southward. The explorers reached latitude 88°26' and longitude 152° east. Since the expedition was made rather for the purpose of reorganizing the survey than with the idea of reaching the pole itself, it may be said to have succeeded beyond the most sanguine expectations, reaching 34 miles nearer the goal than any point ever made before.

In a summing up, the results of the expedition are: A point was reached within 110 miles of the South Pole; the magnetic pole also was reached; eight mountain chains were discovered and 100 mountains. Mount Erebus, which is 13,120 feet high, was ascended by the party; a new coast and high mountains were discovered running west from Victoria land, and coal fields were found in the Antarctic continent. The theory of the existence of an area of atmospheric calm around the South Pole was disproved.

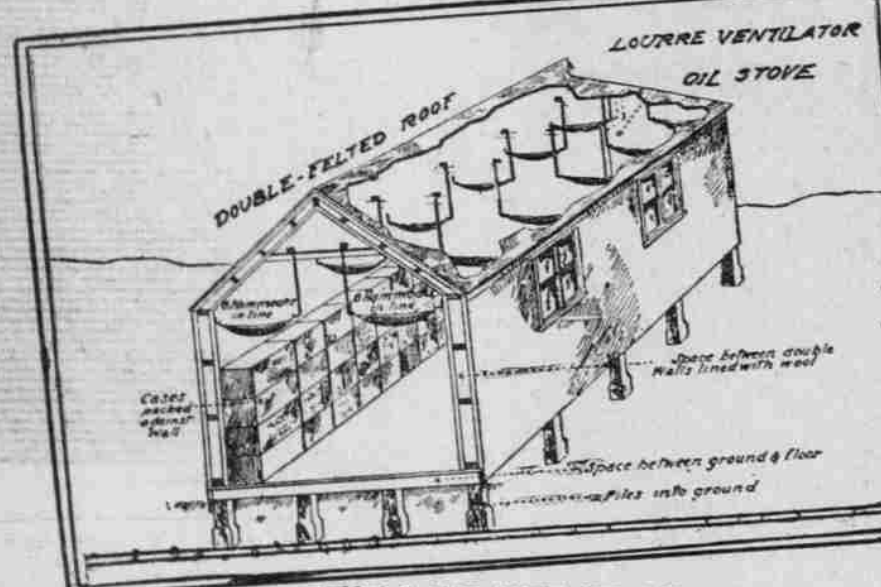
It has been, without doubt, the most costly polar expedition ever undertaken. Not a thing had been left to chance. The entire gamut of past experiences had been taken into account, and played an important factor in completing the equipment of this party. That a deep interest has been manifested throughout Australasia



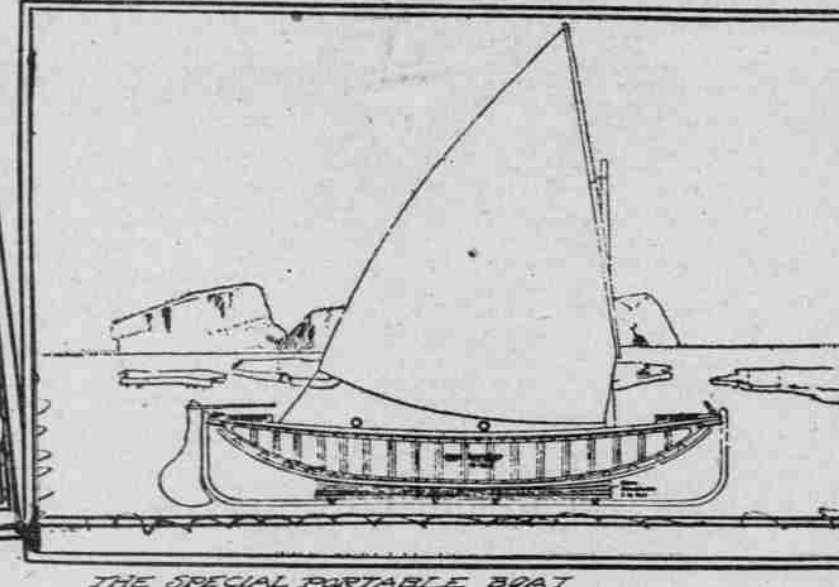
MOTOR CAR BUILT FOR EXPEDITION



MAP OF THE ANTARCTIC REGION



THE LAND HUT OF THE EXPEDITION



THE SPECIAL PORTABLE BOAT

is evidenced by the immediate response and readiness with which the government of Australia voted the sum of \$25,000, and that of New Zealand an additional amount of \$20,000, toward expenses.

The expedition set sail July, 1907, in the Nimrod, an old whaling boat, little more than a tub, which had been made for sealing and whaling in dangerous ice-packed seas. This boat had been built at St. John's, N. F., and had served a long apprenticeship to the seal fishery. She carried the record of having captured 250,000 seals, and had made many fortunes for her owners, and had also been used in the famous Scott expedition.

The Nimrod, in appearance, is battered and unattractive, but possesses a magnificent hull, solidly built of oak. She carries 200 tons of coal for her engines. Where an Atlantic liner would shatter into fragments among the icebergs, this boat of Shackleton's possessed enduring power, and could resist and emerge unscathed.

The vessel carried no appliance for wireless telegraphy, but carrier pigeons were taken to maintain communication with New Zealand, about 1800 miles distant.

Shackleton introduced several innovations and a few departures from the usual preparations on like expeditions. Of first importance among these was the motor car, which could be converted into a sledge. The motor was not intended, as many supposed, for the explorers to ride in. It was used merely to haul provisions, and then only over ground they had already traversed. In the equipment were special sets of wheels adapted to certain qualities of ground, and the material from which the motor was constructed had been especially hardened for low temperatures. Its speed limit was 25 miles per day.

Since the ice in the Antarctic differs completely from that in the Arctic Ocean, it was thought the motor would prove useful for traction purposes. The chief difficulty anticipated was the depth and thickness of snow. This, however, was to be solved by the three different sets of wheels used. The car was driven with a spring that gives satisfactory results in low temperatures. From the be-

ginning its employment was recognized as an experiment, and anticipations of the success of the expedition were far from centered in it as a means of locomotion. Much interest was manifested in the possibilities of the motor car, and Shackleton was deeply disappointed in finding it impracticable because of the character of the ice.

Another important innovation was the substitution of Siberian ponies for dogs. This was found to be a most successful feature for various reasons.

These ponies, eight in number, had been obtained from the coldest part of Siberia, and were seasoned to bear a very low temperature in their native land. Their powers of endurance are remarkable, and from a practical standpoint, they can carry more weight, do more work and consume less food than dogs. They can easily draw loads under which a dog team would lie down. The ponies carried on Shackleton's expedition were provided with stables, and since space was so limited, they were compelled to remain on their feet during the entire voyage. Their food consisted of compressed hay, and a special preparation composed of beef, carrots and milk, and in view of the fact that these wiry little animals have been actually known to subsist on wood shavings, one might say their bill of fare on the expedition was clover in comparison.

Shackleton's third pronounced change from the usual preparations was in the matter of dress. For the first time in the history of either Arctic or Antarctic explorations, fur clothing was discarded in favor of suits of pure woolen, which are conceded to be more advantageous and better adapted to climatic conditions of the extreme South. As an outer covering and protection, suits of burberry were worn by members in the exploring party.

The food question had been carefully studied before a final analysis was reached. The most varied and palatable provisions ever supplied a polar expedition were taken by Shackleton and his party. These consisted of 150 tons of stores, exclusive of salt meat, which was to be obtained by the three different sets of wheels used. The car was driven with a spring that gives satisfactory results in low temperatures. From the be-

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of egg to allow each man two eggs every day for two years. In the event of disaster and in addition to the other provisions, each sled carried airtight cases, only a few inches in diameter and containing enough nutriment to keep three men alive one month. The tins used in packing were of triple thickness and doubly painted.

In addition to the provisions and motor car, the Shackleton party carried a portable boat and a well-furnished house in sections, which was erected for use as winter quarters and utilized as a starting point for the line of depots trending southward.

An interesting feature concerning the portable house is that it was specially constructed with double wool-packed walls, in order to resist the cold. It was built on piles and lined with cases of goods.

The portable boat was carried by the exploring party in the event of meeting with a body of water. The boat possessed detachable buoyance apparatus, fitted to its sides. With the use of this craft the party was enabled to embark and navigate over any intervening water.

Only in recent years has the South Pole begun to attract much attention as a possible field for investigation. Yet the interest attached to this region should be proportionately as great as that centered about the North Pole, if for no other reason than that the South Pole is surrounded by a continent almost as large as Europe, and, until recently, absolutely unexplored. Also traces of mineral deposits have been found to exist there, and researches may some time yield other than purely geographical results.

The lands of the Antarctic were first discovered by Captain Cook in 1773-1775. He was the first man to circumnavigate the Southern polar continent. Since this time, and especially in 1842, various whaling vessels have ventured as far south as possible, reporting the discovery and naming of new territory. The farthest point south heretofore reached was 79 degrees, 50 minutes, where C. E. Borchgrevink, a Norwegian explorer, arrived March 17, 1900. The position of

the South Magnetic Pole has been fixed about latitude 73 degrees 20 minutes south and 146 east. A French expedition of the Pourquoi Pas, under Dr. Charcot, is at present in the Antarctic.

Conditions of travel in the Arctic and Antarctic are as different as night and day. In the Antarctic ships can penetrate 70 degrees 30 minutes without great risk, and the way lies over comparatively smooth ice fields, where stations could be easily established and, what is better, found again. On the contrary, Peary, in the North Pole explorations, has told of leaving supplies at certain spots on one day, to return in one week later and find them carried away by the incessant ice drift.

However, the hardships attendant on the Antarctic expedition are equally as great as are Peary's. The cold is terrific and strong winds blow for prolonged periods. During the Shackleton trip, on January 7, 8 and 9, the wind blew 20 miles an hour, with 52 degrees of frost. It was impossible, under such conditions, for the men to move, and they were frequently frostbitten, even in their sleeping-bags.

At all seasons of the year the snowfall is considerable. The normal temperature of summer in the South Pole region is several degrees below freezing point and in winter the thermometer indicates that this is the coldest place known.

Although covered with snow at varying depths, the ice is fairly easy to traverse and presents no such troublesome obstacles as predominate in the North Pole regions. Then, too, the season for traveling in the Antarctic is much longer, because there is no risk whatever from a sudden breaking up of the ice fields.

Lieutenant Shackleton is described as a tall, broad-shouldered, squarely-built young man, with a frame like iron. He possesses a firm British bulldog look and has achieved success through persistence and determination. He was second in command of the famous Scott expedition, which went to the Antarctic some years ago. He nearly died of cold and exposure. But nothing daunted, he organized his present party, consisting of nine men. Four members were in the principal

exploring party, Adams, Marshall, Wild and Shackleton, with a supporting party consisting of Brocklehurst, Joyce, Marson, Armytage and Priestley.

Shackleton's story as given out by himself regarding the expedition is most interesting, and is as follows: "The southern party, composed of Adams, Marshall, Wild and myself, with four ponies, and a supporting party consisting of Brocklehurst, Joyce, Marson, Armytage and Priestley, left Cape Boyd October 29, 1908. November 3 we left Hut Point with 81 days' provisions, but were held up on White Island, where we reached on November 5. The supporting party returned to the permanent quarters November 7. Owing to the bad light among the ice crevasses, Adams and his pony were nearly lost. A few days later we reached the depot at latitude 79°26', longitude 168 east. We commenced to reduce our daily rations and traveled south along meridian 168 over a varying surface of ridges and mountains of snow.

"In latitude 81°54' we shot a pony and made a depot of oil, biscuit and pony meat, taking the rest of the pony meat to eke out our dried rations. We reached the discovery's most southerly latitude on November 26. The ponies were attacked by snow blindness and the second of them was shot, the depot being made in latitude 82°45', longitude 170. On November 28 we killed our third pony.

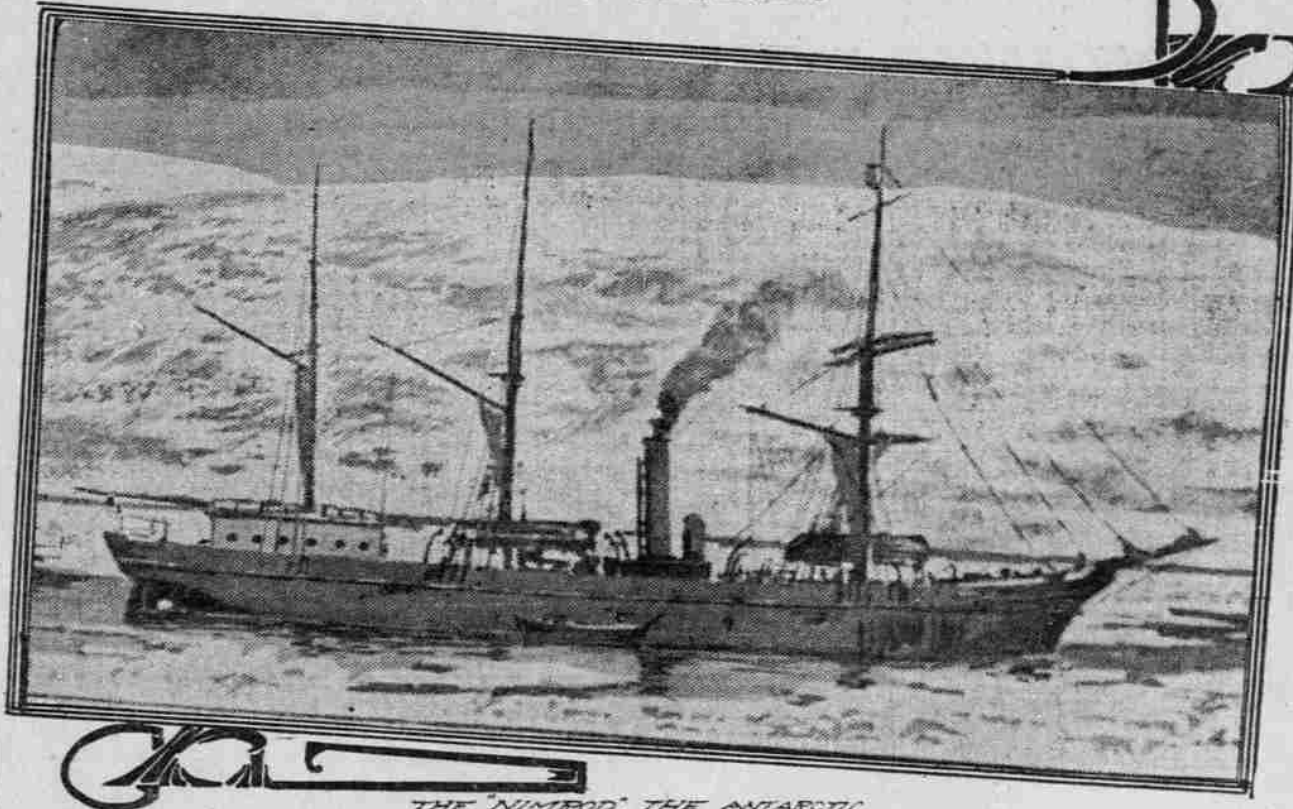
"In steering south and southeast we were now approaching a high range of new mountains, trending to the southeast. On December 3 we discovered a glacier 120 miles long and approximately 40 miles wide, running in a south and southwesterly direction, and on December 5 we started to ascend it at latitude 82°32', longitude 172. The glacier was

full of bad crevasses. It took the whole of the next day for us to fight our way 600 yards. On December 7 the last remaining pony broke through a snowdrift and disappeared in a crevasse. Fortunately the sledge was snapped and we saved Wild and the sledge, which was damaged. The party was now hauling a weight of 250 pounds per man. "The clouds disappeared December 8 and we discovered new mountain ranges, trending south and southwest. "On December 15 we reached an altitude of 6800 feet. In latitude 85°10' we made a depot and left everything there but our food, instruments and camp equipment and reduced our rations to 20 ounces per man daily. On the 26th we reached a plateau at an altitude of 8000 feet, thence gradually rising in long ridges to 10,500 feet. "Finding that the party was becoming weakened, we decided to risk making a depot on the plateau. On January 4 we proceeded with one tent, utilizing the poles of the second tent for guiding marks for our return. During January 7, 8 and 9 the wind blew 20 miles an hour, with 52 degrees of frost. It was impossible to move and members of the party were frequently frostbitten in their sleeping-bags. On January 9 we left camp and reached latitude 88°23', longitude 162 east, this being the most southerly point ever reached. Here we hoisted the Union Jack presented to us by her majesty, the Queen. No mountains were visible and we saw only a plain stretching to the south. We then started on the return trip. "We reached the upper glacier depot on the 19th. The snow had blown from the surface of the glacier, leaving only slippery surfaces, which presented the greatest difficulties in the descent. "On the morning of January 26 our food was finished. It was slow going. Sixteen miles were covered in 22 hours. We reached the lower glacier depot in lat-

tude 88°45' on the 25th. There we obtained food and proceeded with greater speed. On February 2 Wild was suffering from dysentery, the effects of the horse meat, and on February 4 the party was prostrated from the same disease and unable to move. For eight days the men suffered, but our condition improving, we managed to make our way to 'China-man depot' on February 13. The food had run out again.

"Three days later we came in sight of the depot on Minna Bluff, which had been laid by the Joyce party in January. Here we received news from the ship. Marshall had a relapse, and, though he suffered greatly, we made a forced march of 24 miles. He was unable to go beyond that, and on the 27th I left him in camp in charge of Adams, while Wild and I made another forced march to the ship for relief. On March 3 I returned with a relief party and all reached the ship at Hut Point on March 4 in a blizzard. The total distance of the journey, including relays, was 1208 miles, and the time occupied 122 days."

A Tale of Buttons.
Chicago News.
There was a single man who had no buttons on his clothes. A fact that made him very sad. As you may well suppose, he used to put those buttons on in every sort of way. With patient care he fixed them there, and yet they wouldn't stay. He hitched them on, he stitched them on, he sewed them on, he glued them on. Then presently he found them gone. What was the reason, pray? In time, as surely you have guessed, they were all gone. He beat his palpitating breast, and with his trousers toyed. A comely maiden passing then, beheld his horrid plight. And laughing cried, "You clumsy man! Need more be said? They soon were wed. Gripe, beat the song I sing: You use your buttons won't stay on. The men are marrying."



THE NIMROD, THE ANTARCTIC EXPEDITION VESSEL