

Three Nations Preparing to Find the South Pole, ENGLAND, GERMANY, SWEDEN.

While the most strenuous attack in the world's history is being made upon the North Pole, the still less known and the South Pole is being approached by three expeditions. These expeditions are now being fitted out, and will start, one after the other, upon the dangerous and unknown voyage that stretches for millions of miles across the Southern Pole.

There are no known regions as more than four times as extensive as those about the North Pole, says the New York Herald. The unknown area of the latter is equal to that of European Russia, while that about the South Pole is in extent twice that of all Europe.

According to the French geographer, Adrien de Gerlache, the moon might fall in the unknown regions of the Antarctic without touching any known country. There has never been anything like the activity in Antarctic as in Arctic discovery. During the last century only a half dozen expeditions put forth in the long quest of the Antarctic. The French explorer, conducted two expeditions south of Cape Horn and New Zealand. At the same time the American, Wilkes, made some observations in the same neighborhood. And then James Ross, leading an English expedition, discovered Victoria, the most southerly of the great ice fields. This is the region of land in all the world. A huge shelf of ice rises in crystalline cliffs more than three hundred feet in height, and is the very midst of the frozen world volcanoes spout fire and lava.

Sixty years rolled away before any further work was carried on in the Antarctic field. Then Carsten Borchgrevink awoke new interest in this field, after a somewhat desultory trip in a whaling vessel to the land that had been discovered.

The well equipped Belgian expedition commanded by Lieutenant de Gerlache returned Arctic seas in 1897 and for thirteen months were frozen in the ice pack. The members of this expedition were the first human beings to pass through the Antarctic winter. Their experiences and the results of their labors have been graphically described by the American member of the expedition, Dr. Frederick A. Cook.

The main results of the expedition were the discovery of a new strait, nearly as large as the Strait of Magellan; the discovery of about five hundred miles of new coast, and of a sub-merging plateau west of Graham Land and a complete series of meteorological and magnetic observations throughout one year.

The last Antarctic expedition was an English one, under the command of Brochegrevink. With his ship, the Southern Cross, he penetrated to latitude 78 degrees 50 minutes or to within 71 miles of the South Pole. This is a record which remains to be broken by the expeditions now about to venture forth. Borchgrevink also located the southern magnetic pole, and this will be of great value in helping scientists to determine the nature of magnetism.

The sending out of three expeditions during one year discloses an unprecedented interest and stimulus in Antarctic work. Early in the sixteenth century Magellan "put a line round about the earth" from east to west, and it is in the very midst of the twentieth century would see an earth encircling line run through the poles.

ALASKA SQUAW MEN.

Some Great Fortunes With a String to Them — Does It Profit a Man to Be a Millionaire if He Have an Indian Family on His Hands? — Held in Contempt by White Men.

Special Correspondence.

Indian brothers-in-law helped him win his wealth and shared it. He took the children to the States to be educated. I saw the half of them as they were starting for San Francisco, the low browed, shrinking Indian wife trying to look like a white woman and falling miserably, the wild little half breed children dodging hither and thither, the man standing by them like a man, but looking worried and ashamed, not a chum or a friend among white men who knew him. He said he would put his children to school, then he would return to Dawson and live with his brown wife's people. "I know," he said, "that she would never be received in society in the States."

"If that fellow with the Injin wife comes in here on the trip down," said the sturdy engineer, "I'll turn the hot water on him."

There, too, was that white man at the Yukon trading post who had an Eskimo wife. The wife wore rich silks, but she was a drunkard and carried on wild orgies with her Indian mate. The husband's financial interests lay about the post, so that he could neither run away from his wife nor his business. There he stood, there he says, transformed half as high as the mast, were in the soul of a white person that revolts against "herding with narrow foreheads." It must be nature's safeguard for the preservation of the superior race.

There is yet another case, to my mind the most melancholy of all. At another trading post is a white man of the highest education and culture. In a fit of desperate pique against society one day he ran away to the northwest. While the fit was on he took an Eskimo wife. Perhaps he thought to revenge himself on society, when, poor wretch, he was only revenging society on himself. He behaves himself as a gentleman, he has manners that would grace any court, he has the singing voice of an angel, he has ample means, but—he has also the Indian wife and the half breed children. He can never return to his own.

THE MULE MILITANT.

America's Big Contribution to the Boer War.

By a stroke of the pen declaring live stock contraband of war this country could have added, at a moderate estimate, a year to the war in South Africa. We have mounted and re-mounted the British cavalry, supplied and furnished and refurnished the muskets and their artillery, and furnished and refurnished them with pack trains. We have been drained of mules, and Kansas, Wyoming, Missouri, and the other stock raising states of the West have been so nearly depleted that the animals of 1899 bring \$90 today, more than half as many mules and horses as men have gone to the English army. One hundred and one thousand have been shipped from this country alone. And still a transport a week with a thousand or more head goes New Orleans.

This is by far the largest exportation of live stock for military purposes the world has ever known. It has turned out only the great commercial eye of all nations toward this country, but also the general diplomatic notice. The stock millions of dollars have been sent in flocks and herds, in equine and veterinary surgeons, car-

Unprecedented Interest Aroused in Antarctic Exploration—Will the Twentieth Century See an Earth Encircling Line Run Through the Poles?—Questions That the Discovery of the South Pole Would Set at Rest.

every conceivable kind of instrument required for navigation, surveying, sounding and meteorological work, and she is being provisioned for three years.

THE GERMAN EXPEDITION.

To some extent the Discovery will work in conjunction with the German expedition, which has been equipped by the German government at the suggestion of Count Posadowsky-Wohner, minister of the interior. This expedition also expects to sail in the latter part of July or early in August. A special ship has been constructed at Kiel for this German Antarctic expedition, which in external appearance greatly resembles the Fram, though it is much larger. Her length is 168 feet and breadth 36 feet. She is 2½ feet thick, draws 13½ feet of water and has a displacement of 1,450 tons. She has roomy cabins and good ventilation, and will be lighted by electricity. Her engines, which are a triple expansion, all of a speed of seven knots. Part of her outfit consists of a captive balloon, and she carries five ordinary boats and one naphtha launch. The materials employed in her construction are oak, pine and greenheart, the latter being used chiefly as sheathing for protection from the ice.

The expedition will be led by Dr. Erich von Drygalski, and the scientific staff comprises: Dr. Ernst Vanheffen, zoologist and botanist; Dr. Hans Gazert, surgeon and bacteriologist; Dr. Emil Philipp, geologist and chemist; Dr. Friedrich Hildebrandt, magnetician and meteorologist. The vessel will be commanded by Captain Hans Russer, of the Hamburg-American line. Though nominally equipped for two years, the German vessel is being provisioned for a longer period. She will proceed by Cape Town to Kerguelen Island, where some members of the expedition will be left for a year to carry on terrestrial, magnetic and meteorological research, this being necessary as a basis for similar studies in the ice further south. The main expedition will leave the island for its field of research during December, its main object being to find a spot on the west side of Victoria Land where suitable winter quarters may be established and scientific experiments carried on. Meantime, individual members of the expedition will journey further south, toward the pole, more particularly toward the magnetic pole. After wintering the main expedition will continue to journey westward and attempt to get south of Kemp and Enderby islands, then sail across the Weddell Sea to South Georgia, and eventually to Tristan da Cunha, where the voyage will practically terminate.

The third Antarctic expedition goes from Sweden, and is under the leadership of Dr. Otto Nordenskjöld, of Uppsala University. He is a nephew of the famous discoverer of the Northwest Passage, and has distinguished himself by his expeditions to Terra del Fuego, Alaska and Greenland.

The vessel of this Swedish expedition, which has been equipped at Gothenburg, at a cost of \$5,000, has a strange history. She was built some years ago at Sandefjord, the Norwegian Dundee, in an attempt to revive the old sperm whaling industry in Antarctic seas. The scheme was a failure, and the vessel succeeded in securing but one whale. She was afterwards used as a whaler off the Greenland coast, and was then purchased by Professor Na-

thorst, the famous Swedish Arctic explorer, who accompanied Baron Nordenskjöld on the Vega's famous journey round Europe and Asia.

Professor Nathorst also used the vessel in a vain search for Andree. Afterwards she was employed in Greenland at the expense of the Danish government, by Lieutenant Andrup. Dr. Nordenskjöld then bought her from Denmark. It is the latter's intention to institute another search for Andree, and then sail southward for the more difficult Antarctic regions.

Dr. Nordenskjöld proposes to sail to the Antarctic region via Terra del Fuego some time in November next, and thence he will go southward in January. At the beginning of March, when the days begin to shorten in the Antarctic region, he will gradually retreat northward and attempt to reach a station where he and the scientific party, with their hands, will winter, while the Antarctic proceeds on a voyage of research in the ice free waters around Terra del Fuego and the Falkland Islands.

In the following spring the members left on the Antarctic continent will be taken away, and the vessel will sail for home. Besides the leader, the expedition is composed of six savants, a geologist, two biologists and two experts in hydrographical, magnetic, meteorological sciences; a surgeon, fifteen hands, the captain of the ship and four officers complete the expedition.

The expedition will act in harmony with and be a support to the British and German ones. Dr. Nordenskjöld has for many years been engaged in planning this Antarctic expedition, and has naturally derived great benefit from the experiences of his famous uncle in this task.

The feeling of friendly rivalry and the willingness to co-operate among these three well equipped expeditions argue well for the interests of science and of mankind at large. In order to wrest from the Antarctic the secrets which have been held so long a cordon of vessels is required, all co-operating and co-ordinating their observations, and then is ample work for all.

INTERESTING ANTARCTIC QUESTIONS.

A number of interesting questions, interesting not only to the scientist, but

to people in general, can be set at rest by successful Antarctic research. The answers to such questions would be a great advance in the philosophy of terrestrial science. Is there land at the South Pole or water, and if land, is it populated? Has the geology of the land anything to say on the point whether a great climate has existed at the South Pole in ages long ago, a fact which has been abundantly proved so far as the North Pole is concerned?

In the northern hemisphere there is a polar sea almost completely surrounded by continental land, and continental conditions for the most part prevail. In the southern hemisphere, on the other hand, according to the best authorities, there is almost certainly a continent at the South Pole, which is completely surrounded by the ocean. These briefly are the fundamental topographical differences between the Arctic and Antarctic. In the Antarctic circle land has been sighted at numerous points, but what has been seen indicates small islands or a continuous coast line remains to be tested. The great Antarctic continent hidden by ice barriers and seas perpetually tortured by hurricanes blasts may not yet have been trod by the foot of man, save only if natives inhabit that land of mystery.

Every department of natural knowledge would, indeed, be enriched by the systematic observations of a few vessels closing upon the southern extremity. A more accurate knowledge of meteorological conditions in the Antarctic for instance, would aid greatly in forming correct weather prognostications, and the weather to come is naturally an absorbing question for all civilized men. Scientists also wish to know how the compass acts at or near the South Pole. For the present important work connected with the subject of terrestrial magnetism remains at a standstill because our polar observations are incomplete. When they are the causes of the slight but dangerous deviations in the mariner's compass will be known, and dealt with accordingly.

Our knowledge of oceanic currents and tides can be greatly increased by systematic series of observations on the shores of the Antarctic continent, and geology, zoology and hundred sciences would reap large benefits from Antarctic research.

clared. The Pruh carried out that day 671 mules—a small load. Subsequent shipments all ran higher, the City of Manchester, which sailed on the 21st of the following month, carrying the largest cargo of stock that ever sailed—2,000 mules and horses. Mules formed by far the largest part of all the shipments.

Regular shipments could not be secured. The growing live stock industry could not spare one. But the pieces offered were sufficient to make the owners of a number of cotton carriers, then awaiting cargoes of the south's king staple at its king port, turn them into equine transports. These ships are built almost airtight, so that when a fire occurs they can run for days before it becomes manifest. The steel sides were backed out above the water line for ventilation, and great canvas wind sails reaching half as high as the masts, were installed to convey fresh air through tubes to the lower compartments. The mules, chisel and saw had no more regale for the carved cabin work than they had for the rough slabs, of which the stalls were built from wheel

PRINCIPALS AND SCENES IN THE BIG STEEL STRIKE.

Each side of the big steel strike now waging is confident that the other will weaken first. The steel trust magnates profess to believe that the end of the struggle is in sight and that their men will not be willing to lose the benefits of the prosperity that now flourishes in the steel industry. The strikers on the other hand, through President Shaffer, of the Amalgamated association, maintain their ability to hold out until the end. The above halftone shows principals and scenes in the big labor struggle.

only." A loss of 10 per cent on some trips in the summer is considered small. There is a veterinary surgeon aboard each boat, and from seventy-five to one hundred muleteers. The latter, after feeding and watering the stock and cleaning the stalls each day, have to give a hand doing the sick, binding the bruised sufferers from the ship's rolling, and slugging those too weak to stand longer. There is another task—that of holding over the dead. The transports seem to be known among, and spotted by, the great fishes. Porpoises, sharks and the like follow them for days, for they are sure of at least three good meals of mule per diem.

The swiftest vessels of the fleet make the distance to Cape Town in twenty-eight days. By this time many of the poor creatures, from standing still so long, with not room to turn around, are too stiff to move and have to be lifted out of the stalls. They soon recover—those not long gone—and when they realize that they are again on terra firma they jump and buck with joy beyond control. But it is simply giving them another taste of life before the slaughter for fever, insect and bullets make short work of them.

Occasionally storms are encountered that toss the ships about so that many of the beasts are maimed and crippled beyond recovery or killed outright. The Corinthia encountered a gale that blew her upon a reef off Hayti in January, 1860. After five days' work in attempting to float her she was given up. More than a thousand mules were taken up on deck, and after their noses had been pointed toward land so that they might see and scent it, they were lowered overboard. Four hundred swam the distance. The others were unequal to the effort after being pent up so long or spent their strength in vain efforts to get aboard the ship and tug boats about her.

Of late the percentage of loss among the animals has been growing less. At first any mule from thirteen to fourteen hands high or horse from fourteen to sixteen, sound of limb and in good condition, after three days rest to recover from the railroad journey to New Orleans, was loaded for Cape Town. Now only an animal with a tried constitution is sent. The whole workings of the business are now tempered. In Kansas City, St. Louis, Houston, corrals for collection are maintained. To these recruiting stations candidates are brought. Any that pass, be they one or fifty, are retained until the number has grown large enough to warrant the chartering of a train. Then they are shipped to New Orleans, where stable hands that will accommodate nearly 7,000 are operated. Here they are sorted and gotten into condition for shipment. The first assortment is the sick and bruised from the well. The former are sent to the hospital department. They are exercised daily and fed up for the journey. Each animal is vaccinated. Then they are ascertained for fitness for the various services. Each is numbered on the hoof, and marked with a broad arrow, for heavy artillery, and a double cross for the cavalry. Those simply numbered go into the pack trains or are assigned to some other routine work.

With the muleteers the qualifications have grown less rigid. At first at the offer of free transportation the officers could pick their men. All the discharged Spanish war soldiers who applied were chosen. But particular care was taken that they should not get near a Boer recruiting station. Finally when the South African enthusiasm began to wane the price had to be raised; return transportation was added. Later return transportation and \$15. But New Orleans was drained. Now hobos and tramps are enlisted from any old place. They get free transportation on the tops of the stock trains from as far away as Chicago; and the Britishers are scratching harder for them than they are for mules. It is interesting and pathetic to see the animals shipped, and it is amusing and ludicrous to see the motley congregation of vagabonds. Besides what covers his hide, a red handkerchief slung over his shoulder generally contains the entire worldly outfit of the American-British muleteer of today. Each goes with the intention of letting the light strike him only at meal times and lying in the hay under the shadow of a mule all the rest of the day. Each thinks he is "slick" enough to evade the "cockney" boss, and has the idea that his destination is a land of free gold and diamonds. Each meets a sudden and sore awakening when once aboard ship.

The British officers were very much agitated the other day after one of the shipments left to see the name "Samuel Pearson" on the list of muleteers. It didn't seem possible that it could be their arch enemy, the Boer general. Yet they were prepared to fear almost anything from Boer strategy and they were indeed relieved when the ship arrived at the other end safe. A hobo had slipped in alias—Los Angeles Times.

Brooklyn Bridge Opened to Traffic.

New York, July 25.—Brooklyn bridge was opened to general traffic this morning. A large force of workmen was kept going all through the night, and at 4:30 o'clock the repairs to the last break were finished. Traffic was very light even through the rush hours of the morning for public confidence had not yet been restored.