

# SEEKING THE SOUTH POLE.

The two most important exploring expeditions which have ever been fitted out for the South Polar seas will start from England and Germany this month—the English in the Discovery and the German in the Gauss, both of them new ships especially constructed for an Antarctic exploration and equipped with everything needful for the most complete and varied scientific observation, even including a captive balloon and an electrical plant. The two vessels are about the same size—170 feet in length and 35 feet in breadth, and have displacements of about 1,500 tons. They are strongly built of oak and sheathed with greenheart. The bows are steel-plated, and made with a great sheer, so that they will tend to ride up on the ice and break it with their weight. They are rigged for sailing, but carry auxiliary steam engines of about 400 horsepower, and the screws and rudders are so arranged that they can be hoisted out of the water in case of danger from ice. The living rooms in both vessels are amidships, the stoke hole

there was originally a uniform fauna throughout all the seas of the globe, which is now surviving only at the poles, having been superseded in the warmer regions of the ocean by newly developed forms. The North pole, chiefly for geographical reasons, has been much more successfully and continuously attacked than its southern counterpart. The cause of this is plainly shown by the two diagrammatic maps. The North pole is closely surrounded by large land masses, all of them inhabited and fairly accessible. The Antarctic continent (if it is a continent) lies in the midst of a great ocean, the nearest land being the narrow extremity of South America, many hundreds of miles away. So that while the North pole has been approached to within about 225 miles, no human being has ever been nearer than about 700 miles to the South Polar axis. It seems at first rather surprising, notwithstanding the many geographical difficulties, that an enormous region of this sort, full of fresh material

the earth began to gain ground the old geographers decided that an antarctic continent would be necessary to preserve the symmetry of the earth. According to Pomponius Mela, between the "real world" which he knew and his hypothetical Antarctica there lay an intensely torrid zone, scorched by the sun and enveloped in mist, over which it was impossible for man to sail. And he accounted for the volume of the Nile by supposing it to rise in this southern continent, pass under the waters of the torrid zone, and again come to the surface in South Africa. As commerce was gradually extended in all directions these fantastic notions were one by one dispelled, and although during the middle ages the idea of an antipodes, or antichthon, as it was also called, was considered heretical and rejected by the church, geography was being gradually perfected on the basis of Ptolemy's great work. Through the perseverance of Prince Henry the Navigator, who sent out vessel after vessel, the southern limit of Africa was fixed, and it was clearly shown that whatever land lay to the south had no connection with it. An antarctic continent appeared on Schoner's globes in 1515.

Portuguese, Spanish and Dutch explorers worked away at the islands just south of the known continents, and many of them were named as portions of a great antarctic land. Cook, in his second voyage, 1772-5, sailed around the globe between 40 degrees and 60 degrees south latitude, discovered the great ice barrier, and finally settled the much discussed question of land connection between the continents and Antarctica. Cook reached a south latitude of 71 degrees 10 minutes, the highest then attained. Here he found immense fields of ice, which extended, unbroken, for miles. Whales, blue, brown, and white, and a few sooty albatrosses were the only animals seen. The Russian expedition, commanded by F. G. von Bellinghausen, 1819-21, reached 69 degrees 53 minutes in longitude 92 degrees 19 minutes. James Weddell, in 1822, sailed with two vessels on a sealing expedition. He reached a south latitude of 74 degrees 15 minutes in longitude 34 degrees 16 minutes west. At this high latitude, exceeding Cook's by three degrees, he found the sea open and only three icebergs visible. Many minor expeditions followed these, and a number of new islands were discovered and named. Among these minor expeditions may be mentioned those of Lieut. Wilkes of the United States navy, and a French expedition in charge of M. D'Urville. The next expedition of leading importance was that of Sir James Clark Ross, 1840-3, and, indeed, the only one, up to the two which will start this month, with anything like a satisfactory equipment, which has ever attacked the Antarctic seas. This was a purely scientific expedition, its chief purpose being to study the magnetic

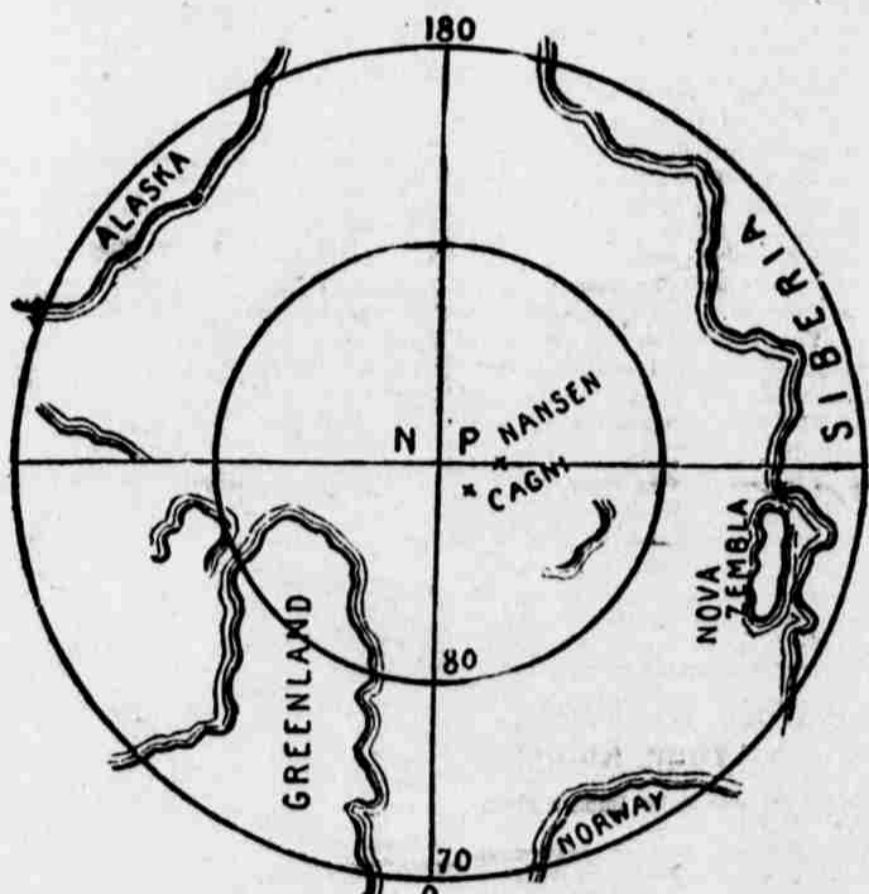
and engine room being placed right aft, while the whole lower hold is utilized as a coal bunker. Captain Scott commands the English expedition and Dr. von Drygalski the German.

It is expected that the commanders of the two expeditions will work together and follow a system suggested by Sir Clements Markham, president of the Royal Geographical Society, which divides the region into four quadrants, two on the Australasian side and two on the Cape Horn and Cape of Good Hope side. The first quadrant, from 90 degrees east to 180 degrees, he names Victoria; the second, from 180 degrees to 90 degrees west, in which the only known land is Peter Island, is called the Ross Quadrant; the third, from 90 degrees west to the meridian of Greenwich, is Weddell, and the fourth, extending from the Greenwich meridian to 90 degrees east, about which the least is known, is called the Enderby Quadrant. The English expedition will confine its operations to the Victoria and Ross Quadrants, the Germans taking Weddell and Enderby.

The great unknown region comprised in these four quadrants covers millions of square miles, extending over practically thirty degrees of latitude. It is continually modifying the atmosphere of the whole southern hemisphere, and yet we know almost nothing about its meteorology. It is one of the most interesting volcanic regions on the face of the globe; recent volcanic rocks are present everywhere and active volcanoes are quite numerous, and we are entirely ignorant of its geology. It is one of the two great world centers of magnetic phenomena, and yet we know scarcely anything regarding the magnetic conditions which prevail, not even with any certainty where the southern magnetic pole is located. It is by all odds the grandest field for ice study now existent, and yet no one has studied the ice there. The mysterious ice barrier rising out of 250 fathoms of water and stretching its perpendicular face for hundreds of miles through the frozen seas like a gigantic wall—perhaps the sea face of the greatest glacier in the world; perhaps the edge of an enormous island of ice anchored over the pole; perhaps, indeed, something still more remarkable than either of these—is certainly one of the greatest natural curiosities in the world.

The region has a fauna and flora of its own apparently very similar to that of the Arctic world. The few fossils which have been picked up indicate that there was a time when it was crowded with plants and animals. The life of the Antarctic seas is very varied and numerous. The tropical oceans which now separate the two poles seem to present an effectual barrier to any communication, and it is a matter of much interest to discover what the Arctic and Antarctic identity of life forms is due to. Various speculations have been put forward; one of these is that deep, cold currents traverse the warmer waters of the ocean and form hidden roadways, as it were, by which the two polar faunas are connected. Another theory is that

for the explorer and scientist, should still, at the beginning of the twentieth century, be practically untouched, especially in view of the great activity there has been during recent years in North Polar explorations, expedition after expedition going out every year—nine, for instance, being planned for 1901. But, apart from the purely geographical reasons, in the absence of closely surrounding populations and large land masses, the climate and temperature conditions of the Ant-



NORTH POLAR REGIONS—FARTHEST NORTH 86D. 33M. CAGNI, DUKE OF ABRUZZI EXPEDITION.

arctic reader it the most inhospitable and dangerous region on the globe; much more so than the Arctic.

The weird and fantastic quality of the whole region is well described by Henryk Arctowski, a member of the Belgica expedition. He says:

"The silence which broods at times over this unknown world is singularly impressive, but occasionally a mountain of ice collapses with a thundering crash. One could hardly believe one's eyes when these changes in the fairy-like scenes occurred were it not for the dull rumbling growl of the disrupted glaciers. In fact, this realm of eternal ice is so different from anything one has seen that it appears another world altogether. In sober truth, I do not believe that in any fable the human imagination has described what we have seen here." In view of the great interest which attaches to the expedition of 1901, and the very radical changes which their explorations may bring about in Antarctic geography, it will be of interest perhaps to go over briefly the history of the region and our present knowledge regarding it. When the belief in the roundness of

elements in the southern hemisphere, and to locate the south magnetic pole, which Gauss had placed at about 146 degrees east longitude and 66 degrees south latitude. (As determined by the Borchgrevink expedition, the south magnetic pole is 73 degrees 20 minutes south latitude and 146 degrees east longitude.) Sir Joseph Hooker, the famous botanist, then plain Dr. Hooker, accompanied the expedition. Its ships were the Erebus and Terror. Victoria Land was discovered and named; Mount Erebus and Terror, the former an active volcano, 12,400 feet in height, were discovered. The ice barrier from 150 to 200 feet in height, was followed for 250 miles, but no opening could be found. Ross subsequently reached 78 degrees 9 minutes and 30 seconds south latitude in longitude 161 degrees 27 minutes west. Since this expedition until the voyages of the Belgica, 1898-9, and the Southern Cross, 1898-1900, the Southern Arctic was left almost exclusively to sealers, Borchgrevink, of the latter expedition, reached a south latitude of 78 degrees 50 minutes, exceeding Ross by about 40 minutes.

## A BUSY TELEGRAPH OFFICE.

In a London Office 150,000 Telegrams Are Handled in a Day. The Central Telegraph office at St. Martin's-le-Grand is the busiest spot in London. Day and night, Sunday and week day throughout the year, the place is the scene of great activity, for the building is never closed. At this one telegraph office between 125,000 and 150,000 telegrams are handled daily. The record number of messages received and despatched in one day is 195,411, which was the number reached on the day before the late Queen's Diamond Jubilee in 1897. There are no fewer than 1,226 telegraph instruments, and a staff of nearly 4,600 persons is employed. There are 2,470 men telegraphists, about 1,200 lady telegraphists, 880 messengers and fifty special servants. It is wonderful what the little clicking machines are capable of accomplishing and the variety to be found in this immense building. There are hundreds of duplex machines, which signal two messages at the same time over one wire in opposite directions. More wonderful still is the multiplex machine, by which a clerk can dispatch six messages at the same time in different directions. For rapid working the Wheat-stone apparatus is called into play, whereby a speed of 350 words a minute can be obtained; indeed, the instrument has a record of 600 words a minute. When anything important occurs the Central Telegraph Office is exceedingly busy sending reports across its numerous wires. Often as many as 500,000 words are dispatched in the early hours of the morning of a famous parliamentary speech. When Mr. Gladstone introduced his Home rule bill, in 1886, over 1,000,000 words were dispatched over the wires from the head office. This is regarded as the Central Telegraph Office as a "night's record. Messages can be sent from this office to all parts of the world. In addition to the telegraph wires there are numerous telephones, one of the most interesting being that from London to Paris. As many as 300 persons have used it in a single day, and a charge of 8 shillings is made for every talk of three minutes' duration or less.

## FOR A NEGRO BUILDING.

Opportunity at St. Louis for an Effective Exhibit.

The suggestion of a negro building at the St. Louis exposition is one of eminent appropriateness. The exposition itself will be the first of its scope comparing with the Chicago world's fair. It will commemorate the purchase of territory including states which were the distinctive home of the American negro. And while the matter of geography is purely incidental, and while the exposition will not belong to the north or south, the East or West, there is something in the situation which makes it peculiarly the first chance the negro has had to show what he has done during the past third of a century. He has made marvelous advances in that short space of time. He should be judged not by the heights to which he has climbed, but by the depths from which he started. The showing that he could make at this time would be one of not merely great ethnological interest, but of special value in relation to the solution of the race problem. The problem is one which is unique in history, and anything which throws light upon it is to be encouraged. There is a special fitness in the suggestion that all the work in connection with the building should be done by negroes and that the entire management of the negro exhibit be placed in charge of members of that race. A building designed by negro architects, erected by negro workmen and containing a comprehensive and intelligent exposition of the life of the race in America would be in many respects one of the most interesting features of the entire fair. There is plenty of talent and material to be used for such a display, and the task would be taken up with an enthusiasm which would give a tremendous impetus to negro progress. This in itself would be one of the most important considerations. It would have an influence which would be felt many years after the exposition was a memory, possibly the greatest which has ever been exerted upon the negro race in this country.—Kansas City Journal.

## Origin of Stonehenge.

Stonehenge, one of the most remarkable examples of the ancient stone circles, is situated in Salisbury Plain, Wiltshire, England, about seven miles north of Salisbury. Stone is first mentioned by Nennius in the ninth century, who asserts that it was erected in commemoration of the 400 nobles who were treacherously slain near the spot by Hengist in 472. A similar account of its origin is given in the trials of the Welsh bards, where its erection is attributed to King Merlin, the successor of Vortigern. Inigo Jones, in his work on Stonehenge, published in 1655, endeavors to prove that it was a Temple of the Romans, but later writers of authority are generally agreed that it is of Druidical origin, although there are differences of opinion as to its probable date, some placing it at 100 years before Christ and others in the fifth century. It is therefore the generally accepted opinion that it was a temple or holy place with the Druids, the priest and wise men of the early Britons, whom Caesar found in possession of the island when he invaded it with the Roman legions, 55 B. C.

## Snow Line at Equator.

Fifteen thousand two hundred and sixty feet is the height of the snow line on the equator. It is about 5,000 feet in the latitude of London.

## MISTAKES OF AUTHORS.

Ignorance of English Writers Regarding Geography and Dates.

Thackeray had a most confusing manner of mixing up the names of his characters, and in the Newcomes, after killing off old Lady Glenlivat and dismissing her from the story, he brings her to life again to help out the plot. Creasy, in his "Fifteen Decisive Battles of the World," makes Theodoric commander of the left wing of the allies at the battle of Chalons, although that battle took place four years before Theodoric was born. Anthony Trollope pictures one of his characters, Andy Scott, as "coming whistling up the street with a cigar in his mouth," which shows that Andy was a versatile genius. Dickens in "Hard Times" speaks of the Great Bear and Charles' Wain as if they were different constellations, and Zola, in his "Lourdes," states that the deaf and dumb received their sight and hearing. Wilkie Collins, on one occasion makes the moon rise in the west, and Rider Haggard, in "King Solomon's Mines," contrives an eclipse of the new moon for the benefit of his readers and the facilitation of the workings of his plot. In "The Battle of Naseby" Macaulay makes a Puritan soldier say of the Royalists, "Their coward heads predestined to rot on Temple Bar." Traitors' heads were not so exposed until thirty-five years after Naseby, and no Royalist head was ever so displayed. Campbell says, "On Erie's banks, where tigers steal along," and Ramsey, in his "Reminiscences," declares that the wild birds of America are songless. Shakespeare calmly introduces a printing press long before the days of Gutenberg, makes a clock strike in ancient Rome a thousand years before clocks were invented, makes cannon familiar to King John and his barons, and transports Bohemia to the seaside. He also in "Henry V." speaks of a turkey cock, a bird unknown in Europe in Henry's time. In Burke's Peerage are many marvelous things written. Not least among them are references to St. Louis, Massachusetts, and the statement that one of the Fairfaxes was "Clerk of the Supreme Court of California and Speaker of the House of Representatives of the State of Alcaidi."—New York Press.

## ATTRACT AUDIENCES.

British Parsons Have Some Curious Ways of Advertising.

The Rev. J. H. Scott, rector of Spitalfields, sent out a notice which read as follows: "If you want a smoke (free) come next Sunday afternoon at 3 o'clock to Christ Church Hall. A free cup of tea if you like. Tobacco gratis." Two hundred persons responded to his invitation. To each man was given enough tobacco for a couple of pipes, and the gentlemen who were to conduct the services also "lighted up." After a good, long smoke the services began, and when they were over a cup of tea with bread and marmalade was given to each present. "Very nice and sociable-like, to be sure," the congregation pronounced the Reverend Scott. A Methodist clergyman at Barrow was taking a walk around his parish the other day, when he saw two women hard at work at their washtubs and a number of men looking on and smoking. He invited the men to "come to chapel," an invitation which they flatly and gruffly refused. At length one of them said: "Say, here, mister, you do ten minutes work at that there dolly (washtub) and we'll come and hear what you've got to say." In a trice the minister threw off his coat, rolled up his sleeves and had his arms deep in the suds. For ten minutes he washed away like a veteran laundress and then went away, telling the men he should expect them to keep their part of the bargain. His congregation was increased by half a dozen the next Sunday, and two of the men are now regular members of his congregation. Lord Rupert Cecil, the Marquis of Salisbury's son, has posted a notice outside of Hatfield church, of which he is rector, saying, "Bicyclets are especially invited to come in the uniform of their clubs." The chaplain of St. James' Chapel Royal has made a decided "hit" by holding afternoon services for people who have dressed for dinner. One or two other clergymen have added to the attractiveness of their services by having Mrs. James Brown Potter recite from the chapel rail.

## Hates Visiting Cards.

If you want to insult a visiting countryman ask him to send up his card to the person upon whom he desires to call. His antipathy to cards must have been born of experience with bunco steers and gold bricks. Here is a typical denizen of the fields and woods come to New York to see a friend living in a big apartment house, fifth floor. To the bellboy: "Mr. Franklin live yere?" "Yes." "Tell 'im I want to see him." "Give me your card, please." "Card? Who said anything 'bout card? Jes tell Mr. Franklin I want to see 'im." "What name shall I sa'?" "Name? What business you got asking me my name? I tell you I want to see Mr. Franklin; he's expectin' me and I don't want none of your blame foolishness." The elevator ascends and descends, the boy returning with this message: "Mr. Franklin says what is your business; he is very much engaged just now. He wants to know who you are." "You jes tell Mr. Franklin he can go to—! He invited me to eat dinner with him, and now pretends he don't know me. That's New York all over." He goes away in a huff, and it takes Franklin a week to make peace.—New York Press.

## Sick Voter's Rights.

In Victoria a sick voter can record his vote by post; it has just been enacted that he can obtain his ballot paper through the local postmaster from the returning officer, fill it up in the presence of the policeman, who must not look at the name he is writing, and post it.

## Coyotes in Oregon.

Coyote hunting is profitable in Oregon, and the coyote appears to be plentiful. Of the \$100,000 in bounty warrants issued last month, \$1,106 went to a mighty hunter of Harney county, whose score was 490 coyotes and 63 wildcats.

## Compulsory Non-Resistance.

"Confucius teaches the beautiful doctrine of non-resistance." "That's all right, but a man can't lend another man money when he hasn't got it, can he?"

## SPREAD OF THE DISEASE.

Europe Alarmed at the Outlook—A Leprosan Sanitarium Established in Germany—One Proposed in France—Lax Spanish Methods—Disease in Norway.

Incident to colonial expansion, there has been, particularly in France and Germany, so marked an increase in the number of cases of leprosy in Europe that the matter is receiving serious attention. There are even alarmists who say that western Europe is on the eve of another outbreak of the disease such as followed the return of the Crusaders. The question was brought up before the French Academy of Medicine in 1885 and 1888. In Berlin, in 1897, there was an international medical conference to consider precautionary measures to prevent the spread of the disease. On May 21 last, Dr. Besnier of the French Academy of Medicine declared that it was advisable to establish in France a national leprosy sanitarium, where persons tainted with the disease might be isolated. Taking this state of affairs for his text, M. Dastre has contributed to the Revue des Deux Mondes a study of leprosy and the present danger of a spread of the disease. He points out that in two regions in France leprosy has existed continuously since the middle ages. These are Brittany and the neighborhood of Nice. The Nice lepers are supposed to be descended from a leper colony that dated back to the Saracen invasion. As recently as 1888 two distinct outbreaks of the disease occurred along the Alpes-Maritimes coast, causing the death of some twenty persons. Individual cases of the disease are still found in the neighborhood. In Brittany leprosy in the seventeenth century were very widespread and it has never been entirely stamped out. In a majority of the recently imported cases from the French colonies in the Orient the patients are government employes, commercial travelers, missionaries, soldiers and sisters of charity. All told it is estimated that the proposed leper colony in France would begin with between 300 and 400 patients. Germany established a leper sanitarium two years ago. Up to 1840 the disease was unknown in Russia. A few years ago it appeared in the Memel district, causing the death of nineteen persons. In 1899 seventeen districts around the city were found to be contaminated and the sanitary department of the German government opened a leper hospital, to which all sufferers were forced to go, and in which the isolation was complete. The regulations on the subject are very strict, as was shown in the case of a German merchant who came home to enjoy a fortune which he had amassed in one of the tainted colonies and who was found to be suffering from leprosy. He was ordered to move out of the town forthwith, purchase a country house remote from all neighbors and then live absolutely isolated from the world, under penalty of being removed to the leper hospital. The authorities even went so far as to designate the particular room in the house which the leper and each of the members of his family were to occupy. Great Britain, with more foreign possessions in which leprosy prevails than any other country in the world, has always fully protected herself from invasions of the scourge. In the 30 years from 1868 to 1898 only 96 imported cases were reported. In Portugal it is estimated that there are in the neighborhood of 1,000 cases of leprosy, while in Spain there are a certain number of breeding places of the disease. The lepers in Spain are not isolated. They work in the fields even marry. They are avoided only when the manifestations of their disease are particularly pronounced. There is one leprosy-infected region of Spain which has a curious history. It is Sagra in the province of Alicante. Leprosy was unknown there until 1850, when it was introduced by a man who had returned from the Philippines to enjoy the fortune he had acquired. The case was so far similar to that of the German merchant already described. Spanish methods are not as thorough-going as German and no restraint was put on the leper. He communicated the disease to his friends first and it gradually spread to the near-by villages of Jalon, Parent and Orba. Within a very few years more than 200 persons were pronounced lepers, and only recently as many as 150 of these unfortunates were still living.