that the Greeks computed time by them. The period of four years between one celebration and the next was called an "Olympiad." The games had also the privilege of suspending wars during the time necessary to go to the festival and return. Since the eighteenth Olympiad, in 708 B. C., those who had shown themselves qualified entered in the lists for the javelin contest. The best four champions in this trial presented themselves for the foot race, which eliminated one contestant. There then remained three for the quoits and two for wrestling. A crown of wild olive was the reward of the victor. When he returned to his native city, the walls were torn down to give him entrance; he was borne in a triumphant procession, and he was given freedom from taxes. The Olympic Games were only abolished by Theodosius in A. D. 394. The contests were all held in the stadium, which was so constructed that fifty thousand spectators could find a place around the arena. The stadium is 656 feet long and 100 feet wide, and there are twenty-five ranges of seats. The seats, steps, etc., are built of stone from the Piraeus and of Pentelic marble. Thanks to the munificence of a wealthy Grecian gentleman, the work of repairing the stadium was done. In the SCIENTIFIC AMERICAN for January 11, 1896, the work of restoring the ancient stadium is illustrated.

In one respect the coming games will be remarkable, as women may now compete in the arena for athletic honors, according to the old Grecian custom. The games will inaugurate a series of international contests, the next being held in Paris in 1900. The Olympian Games will begin April 6, the seventy-fifth anniversary of the proclamation of Greek independence, and will continue for five days. The games will be under the presidency of H. R. H. the Crown Prince of Greece. The games will consist of athletic sports, including:

Running Contests.—Flat races for distances of 100, 400, 800, and 1,500 meters; also a hurdle race of 110 meters, under the rules of the Union des Sociétés Françaises de Sports Athlétiques. Special cross country race, from Marathon to Athens, a distance of forty-two kilometers, for the cups offered by Mr. Michel Bréal. The winning post for this race will be at the Panathenaic Stadium restored through the munificence of the Hellenic citizen Georges Avéroff. Competitions also in long and high jumps, pole jumps, putting the weight and disk. There will also be gymnastic competitions; fencing and wrestling, also foil, saber, and sword exercises for amateurs and professionals. Wrestling — Roman and Greek styles.

Shooting with any kind of rifle (military or otherwise), distance 200 and 300 meters; and with revolvers.

Nautical sports will include yachting (supplementary programme). Steam yacht race under the rules of the "Cercle de la Voile de Paris," distance 10 miles. Sailing races under the English Yacht Racing Association's rules and tonnage regulations. 1. For yachts of not more than 3 tons (in two sections, if necessary), distance 5 miles. 2. For yachts from 3 to 10 tons, distance 10 miles. 3. For yachts from 10 to 20 tons, distance 10 miles. 4. For yachts of more than 20 tons, distance 10 miles. Races will also be arranged for native sailing vessels and seamen. Rowing, single sculler, 2,000 meters over a straight course (skiffs); double scullers, over a straight course, for yawls and outriggers; four oar race, over a straight course, for yawls. A special race will be arranged for men-of-war crews. The rules will be as those of the Italian Rowing Club. Swimming.—Long and short distance races, for distance varying from 100 to 1,000 meters. There will also be water polo competitions.

Cycling.—Short distance races. 2,000 meters on the track without pace makers; 10,000 meters on the track without pace makers. 100 kilometers on the track with pace makers. Twelve hours' race on the track with pace makers.

Lawn Tennis.—Single, double (Rules of the All England Lawn Tennis Association). Cricket (under the rules of the Marylebone Cricket Club). Football (Rugby and Association).

M. RAOUL PICTET, who has done much original chemical work at low temperatures, suggests that by making use of low temperatures syntheses may be obtained which would be otherwise impossible. In many chemical operations the heat generated so raises the general temperature of the bodies acted upon that all control over the combination is lost. At very low temperatures, however, all chemical action ceases. By choosing the right temperature, therefore, reaction between chemicals may be made as slow as desired. By this means M. Pictet has effected combinations that are impossible at ordinary temperatures.

NANSEN'S POLAR EXPEDITION.

As our readers are aware, the news has been published in the daily press to the effect that a report from Irkutsk in Siberia has been received, stating that Nansen had discovered the North Pole, and was now on his way home. The report has not been definitely confirmed. We present our readers a map of the North Polar region, believing that it will be of interest to recall some of the particulars of his expedition.

We have in several of our SUPPLEMENTS described the pathetic starting of the expedition from Christiania, the little ship passing close by the explorer's home, where his wife, dressed in white, and the companion of many of his trips, standing on the shore, saw the last of her husband.

The theory on which the expedition was based was that ocean currents exist whose direction is from the islands of New Siberia across the North Polar region to Greenland. The Jeannette sank off these islands and it was claimed that relics of the Jeannette were picked up on the shores of Greenland. Other drift relics were cited as additional proofs of these currents. In the face of this theory there were most emphatic denials, not only of the existence of such currents, but even of the authenticity of the finding of the relics.

Basing his expedition on this theory, Dr. Nansen had a special ship built for his trip, the Fram. She was a three masted schooner in rig, with engine and screw, rather of the auxiliary type. With a consumption of 2¾ tons of coal a day the Fram would develop a speed of 6 miles an hour, the idea being to use sail whenever possible and economize coal for use in emergencies. She was built with a very round bottom and her keel came even with the outer planking, so that nothing was presented for the ice to take hold of. The hopes were that if caught between opposing floes she would be lifted up bodily, the ice sliding in under her sloping sides and bottom. She was very strongly built, being planked with double layers of oak 3¼ inches and 4½ inches thick, sheathed again with ice planking varying from 3¼ inches to 6½ thick. The ceiling was in alternate strakes 4½ inches and 8½ inches thick. The enormous mass of timber for so small a vessel, in conjunction with her shape, seemed enough to make her stand anything. The screw and rudder were arranged so that they could be raised into a well for protection if desired. The ship was 101 feet 6 inches long, displacing 800 tons at 15 feet 6 inches draught with 3 feet 3 inches freeboard. Her carrying capacity was put at 380 tons and she carried five years supply of provisions.

Her crew consisted of eleven men in addition to Dr. Nansen, and they departed prepared for an absence of three to five years. The ship was to coast along the northern shores of Europe until she reached the vicinity of the New Siberian Islands; here she was to strike north, depending largely on ocean currents to carry her along. The course would carry her past the North Cape and then approximately along the 70th and 80th circles of latitude until at or about the 150th parallel of longitude east from Greenwich, and just north of Bennett Island, the course would be changed to the north. Hence the explorer hoped to pass by the pole, to work down along the east coast of Greenland and thence to the east back to Christiansand. In many ways it is the most interesting of the attempts yet made to reach the pole. The specially built ship, the personnel of those who manned her and the unselfishness of her commander gave an element of the romantic to the whole. The explorer is said to have had the smallest and least comfortable cabin in the ship.

Nansen's previous work in the Arctic indicated his ability to use all the possible resources of the region for his work. He utilized skees or Norwegian snow-shoes in traversing the Greenland ice caps, and in his book on his Greenland expedition will be found a singularly interesting account of these aids to snow travel. It is to be hoped that his resourceful mind will prove equal to the task he has assigned himself. He departed on June 24, 1893, and the present day seems too soon for him to be heard from.

As an interesting appendix, we print a table of the most northerly points attained by Arctic voyagers. The figures will be impressive in showing how slow the advance to the north is, and how little has been gained since the days of Henry Hudson. The table is taken from General A. W. Greely's work, "Hand-book of Arctic Discoveries."

DR. NANSEN'S PROPOSED ROUTE. THE STARRED LINE SHOWS COURSE OF DRIFTWOOD FROM THE JEANNETTE.

An Opportunity for Draughtsmen.

The Municipal Civil Service Board, of this city, will soon hold examinations for the positions of computer and topographical draughtsman in the parks and annexed district. It has been difficult to get a sufficient number of candidates for either of these positions, and quite a number of vacancies exist in consequence. The salaries paid the computers range from $900 to $1,200 per annum. The salary of draughtsman is $1,200. The board is anxious to receive applications at once, and will hold its examinations as soon as a sufficient number of applications have been received. Blanks may be procured at the office of the Civil Service Board, Criminal Courts building.

THE telephone, according to the Electrical Engineer, has got a footing in Iceland. It is said that an American is laying a line between Reykyavik and Akureyri, at a cost of 100,000 kr. ($27,000). It is also reported that an Englishman has submitted to the Althing a proposal for a telegraph cable between Iceland and the Shetland Islands.

EASTERN HEMISPHERE.

Commander.	Date.	North Latitude.	Longitude.	Locality.
William Barents	July 14, 1594	77° 20′	62° E.	Near C. Nassau, Nova Zembla.
Ryp and Heemskerck (Barents' third voyage)	June 19, 1596	79° 49′	12° E.	North Spitzbergen.
Henry Hudson	July 13, 1607	80° 23′	10° E.	Spitzbergen Sea.
J. C. Phipps	July 27, 1773	80° 48′	20° E.	Spitzbergen Sea.
William Scoresby	May 24, 1806	81° 30′	19° E.	Spitzbergen Sea.
W. E. Parry	July 23, 1827	82° 45′	20° E.	Spitzbergen Sea.
Nordenskiold and Otter	September 19, 1868	81° 42′	18° E.	Spitzbergen Sea (highest by ship).
Weyprecht and Payer	April 12, 1874	82° 05′	60° E.	Franz Josef Land (by Payer, highest land).

WESTERN HEMISPHERE.

John Davis	June 30, 1587	72° 12′	56° W.	West Greenland.
Henry Hudson	June 20, 1607	73°	20° W.	Off East Greenland.
William Baffin	July 4, 1616	77° 45′	72° W.	Smith Sound
E. A. Inglefield	August 27, 1852	78° 21′	74° W.	Smith Sound.
E. K. Kane	June 24, 1854	80° 10′	67° W.	Cape Constitution, Greenland, by Morton.
C. F. Hall	August 30, 1870	82° 11′	61° W.	Frozen Sea.
C. F. Hall	June 30, 1871	82° 07′	59° W.	Greenland, by Sergeant Meyer.
G. S. Nares	September 25, 1875	82° 48′	65° W.	Grinnell Land, by Aldrich.
G. S. Nares	May 12, 1876	83° 20′	65° W.	Frozen Sea, by A. H. Markham.
A. W. Greely	May 13, 1882	83° 24′	41° W.	New land, north of Greenland, by Lockwood and Brainard.