

south no man ever ventured within 1,500 miles. What causes this great difference? The explanation is plain.

Owing to its eccentric movement around the sun our northern summer is some eight days longer than our winter, while in the south the winter is eight days longer than the summer. This sixteen days makes such difference, which is emphasized by the additional fact that during the long southern winter the earth is farthest from the sun.

Thus year after year, for a long period, there has been a steady accumulation of ice material about the south pole, adding weight to that hemisphere. Then as this weight of ice increased the earth's centre of gravity has gradually moved to the south, and the waters fluent and obedient to gravitation have slowly gathered into southern seas, covering the lowlands of the south. At the same time this transfer of weight from the north has drawn the waters away from the Arctic regions and left the scabars and shoals to project and become habitable. But this state of things is not always to go on. The north is not always to bask in the longest summer.

The earth, in addition to its diurnal and annual revolutions, has a slow wobbling of its axes in the heavens. It is precisely as when one touches the rim of a top in rapid motion, the upper end of the stem describes a small circle. So the mighty sun lays hold of the protuberant rim of the great terrestrial top, and it begins to oscillate in the long period of 21,000 years. That is to say, on December 21, 1248, the earth made its nearest approach to the sun; and it will approach equally near in 10,500 years from that time, or in the year 11,748, on the 21st of July. In the period comprising the first case our northern winters are short and mild and our summers long and sunny. During the period of which the year 11,748 will be the middle, our winters will be severe and our summers short. The northern hemisphere is now losing its great summer. In about 10,000 years it will be in the midst of its great and terrible winter. Then the southern hemisphere will be full of sunlight and prolonged warmth.

Now let us see what would result from this. The melting of a mile in thickness of the ice-cupola of the south pole would raise the sea-level at the north pole 300 feet, at London 200 feet, and at New York 200 feet. If the whole ice-cupola were removed and an equal quantity deposited at the north pole, there would be a deepening of the sea at the arctic circle of 1,500 feet; at New York of considerably more than 10,000 feet.

Thus it is seen that, as certainly as terrestrial revolutions continue, in the course of 10,000 years there must come an entire reversal of polar conditions. The southern waters must be drained off to make the oceans of an opposite hemisphere. New lands, enriched with the sediment of a hundred centuries, will rise up to extend the borders of the old south continents, and islands joining together will expand into mainlands. At the same time the northern continents must be in a great part submerged and their summits and ranges become the bleak islands and the bold headlands of a tempestuous ocean. Central Asia, with its broad table lands, may still retain the name of a continent; but beyond a few out-lying islands there will be no Europe and but little of North America left. The Atlantic waters will stand 500 feet over Lake Superior, and will wash the base of the Rocky Mountains in all their length. A new Gulf stream may again, as it must often have done before, flow up the Valley of the Mississippi; returning the deltas to the prairies and remaking the beds of the garden of the world. These are no idle or impossible fancies. Not only are they results of rigorous calculation, but they accord perfectly with the unmistakable evidences which the ocean has left on all our land of its recent work and presence.

SOCIAL AND RELIGIOUS CONDITION OF BERLIN.

A MISSIONARY of the Protestant Church gives a deplorable account of the religious and social condition of Berlin in the 'Church Gazette': "The missions of the state," he says, "lately enabled us to have a deeper look into the interior condition of the population. The experiences made on this occasion have procured us the certitude that spiritual misery has gained a frightful extension among the poorer classes. Their views of life show that the most absurd materialism has replaced the Holy Scripture. Among the working-classes the belief has got a footing that men are but animals, only with a little more sense, and we frequently hear the scornful remark: 'Do you think we are still stupid enough to believe in the immortality of a soul?' The distinction of position and fortune, the different adversities of life, contribute to undermine the belief in God. They consider religion good enough for children, but mere nonsense for grown-up people. We can well imagine that such ideas cannot further Christianity. 'Christ was a good man,' said one of the workmen to me, 'but he preached too much of loving our neighbors, whilst everybody ought to love themselves best.' I only quote these expressions to illustrate the general decay of religion. It is fortunately not only among the lower classes, but it is equally increasing among the so-called well educated. Only lately I heard in good society the hope expressed that thirty years hence there will be no more clergymen, because nobody wants to study theology; 'and how pleasant that will be,' said a man of high standing, 'when all the churches be turned into places of amusements.' Many, even ladies, boast of not having been to church since their childhood. The Bible is not true, they say, and the life after death a fable, but when such impious people are on their death-bed, and when we are sometimes called to them, we find nothing but despondency and despair. As people have neither the want nor the time for prayer, they also neglect to teach their children to pray. When we request our parishioners to attend the church and receive the sacrament, they tell us that common sense has now triumphed over faith, which is falsehood and swindling. Those who are not quite so bad have other excuses for not attending the church; the women say that their husbands prevent them from doing so, and the poor plead the want of proper clothes as an excuse.

The profanation of Sundays increases more and more; it seems as if the day of Our Lord was established in Berlin to indulge in pleasures, which are very often criminal. The desire of gain induces the proprietors of manufactories to compel the poor workmen to work on Sundays, and thus, between the burden of labor and pleasures, people forget that which is most necessary—their salvation. An accruing restlessness characterises now the populations of all large cities. It makes one uncomfortable to witness the discontent of the working-classes and their hatred against the rich. As long as they earn they never think of saving, and when they are out of work and suffer from poverty, they make their employers responsible for it. Another deplorable condition is that the ties of families are no longer respected, which must hasten social and moral ruin. The introduction of civil marriage has done great harm, because people in their ignorance will not understand that this new law does not release them from their duties to God, and the enemies of Christianity use it to confirm them in their belief. A great number of children remain unbaptised, or are only what they call christened by the magistrate. The Church has no longer a right to ask whether people are married by a minister of God or by secular authority. In one word, the confusion in this sphere is already great, and unconscientious people still increase it. "These are only a few sketches of the religious condition at Berlin," concludes the missionary. "Do not imagine that these few examples which I have given are exceptional cases; on the contrary, they could be counted by thousands. The few remarks which I have quoted are symptoms of an impiety which is predominating."

PARISIAN JOURNALISM.

THE Paris correspondent of the London 'Daily Telegraph' writes to that journal on April 14: "A new journal—or, rather, an old one revived—the 'Gazette,' has lost no time in anticipating the efforts of the innumerable sheets which are about to court the favor of definitive Republicans. With a gentleman at its head who was for many years the right-hand man of M. de Villermessant, editor of the 'Figaro,' the 'Gazette' very naturally inspired some distrust in the men of the Third Republic. But M. Alfred d'Aunay was not to be balked by such a trifle as his antecedents. He declared that after having passed the best of his days with Bonapartists, Royalists, and the intimate friends of Henry Cinq, he had come to the conclusion that their morals and customs were not calculated to regenerate France. Henceforth he was a Republican, and those who dared to suggest that he was anything else would have to answer for their temerity in a mortal combat. Nobody, however, thought it worth his while to take up the challenge—perhaps because no one had any doubts as to the sincerity of a conversion so rapidly performed, and perhaps, also, on account of the very innocuous character of the political leaders publishing in the 'Gazette.' Be this as it may, one thing is certain, and that is the enterprising spirit displayed by the new editor in the conduct of his journal. On finding that light political articles wherein the new régime was supported in the fantastic style proper to the 'Figaro,' when it treats its readers to a political *hors d'œuvre*, did not answer, M. d'Aunay ventured upon another tack. He offered to every six months' subscriber two books containing the history of the Revolution and the Empire by M. Thiers. The idea was by no means a new one, and yet some people who had never read the works, and thought it a good opportunity of giving a Republican tone to their library, bought the two huge volumes, and did not object to receive the 'Gazette' into the bargain. Now, there is no limit to the inventive genius of a journalist who has been trained by M. de Villermessant, and the veteran representative of the Parisian press was surely proud of his pupil when he saw on the walls of the city the following notice: "Read in to-morrow's 'Gazette' the article on a diamond, by M. Alfred d'Aunay." What was still a mystery to the public could be none to the experienced eye of the editor of the 'Figaro.' M. d'Aunay was going actually to hand over the counter a diamond ring to every one of his subscribers. Sure enough the next day the entire first page of the journal was taken up by an address to all the ladies of France, in which the writer promised that they should all wear a jewel of price if their husbands, brothers, and lovers would subscribe to the 'Gazette' for the year. In the middle of the sheet were the different models of stones specially cut for those who patronised the paper. The gold ring and diamond could be had for fifty francs on condition of receiving the 'Gazette' for a whole year. Not only the first sheet of the journal, which is daily filled with this interesting notice, carefully varied by the record of scenes between husband and wife on the subject of the gem, but the office of the 'Gazette' in the Rue Drouot has been turned into a regular jeweller's shop. All signs of the newspaper have disappeared: nothing but diamonds are to be seen. Small crowds collect in front of the windows and gaze intently upon these wondrous stones. M. Gambetta's modern Athenians will now be able to wear rings on their fingers, and if the Republic lasts there is no reason why the 'Gazette' should not supply them with all the other necessities of Athenian life. *Qui vivra verra*. It may be that M. d'Aunay is destined to become the victim of his passion for adorning Republicans, and that the extraordinary circulation of the new diamonds may render him unable to pay the expenses of his journal.

HISTORICAL! Vide "Jurors Reports and Awards, New Zealand Exhibition." Jurors: J. A. Ewen, J. Butterworth, T. C. Skinner. "So far as the Colony is concerned, the dying of materials is almost entirely confined to the re-dying of Articles of Dress and Upholstery, a most useful art, for there are many kinds of material that lose their colour before the texture is half worn. G. HIRSCH, of Dunedin (DUNEDIN DYING WORKS, George street, opposite Royal George Hotel) exhibits a case of specimens of Dyed Wools, Silks, and Feathers, and dyed sheepskins. The colors on the whole are very fair, and reflect considerable credit on the Exhibitor, to whom the Jurors recommended an Honorary Certificate should be awarded." Honorary Certificate, 629: Gustav Hirsch, Dunedin, for specimens of Dying in Silk Feathers, &c. England.