

to light. If Captain Hutton had lived in Galileo's day, I strongly suspect Pope Urban VIII. would have taken him through hands for saying that "the doctrine of Evolution" must be accepted as true, and is the sole scientific proof of the existence of God. We might suppose his Holiness addressing the Captain when brought up in some such terms as these—Sir, I greatly respect you, and admire your abilities and zeal for science, and have no doubt of the rectitude of your intentions as a Christian. I cannot, however, approve of the confident manner in which you propound a doctrine of science as infallibly true when it may be quite the reverse; seeing that it tends in its present shape to endanger the religious principles of many of the people, I, therefore, dismiss you with a caution. Human science may be abused to the most dangerous of purposes, as well as used for the best. Prosecute your scientific enquiries as much as you please, the Church commends you for doing so. But in publishing the result of your enquiries and speculating upon them, do it with diffidence and prudent caution, so that the interests of revealed religion may not suffer, and avoid mixing your speculations up with questions of theology. The doctrines of revealed religion stand upon an entirely different footing from those of physical science. Christ has appointed his Church to be the sole teacher and judge of religious truth. In questions which are kept entirely within the domain of physical science, the Church does not desire to interfere.

Auckland, November.

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### A RUSSIAN CHURCH.

(From Correspondent of 'Irish Times'.)

Most Parisians know that their city possesses a Russian Church, but comparatively few have ever seen it, or know where it is. The Church of St. Alexander Newski is remote from the chief points around which the life of the metropolis centres. A good walker would take three quarters of an hour to reach it from the Boulevard Montmartre; while to pay it a visit from the Latin Quarter, one must be either extremely devout or an enthusiastic pedestrian. It is situated in the Rue Daru, off the Rue de Faubourg St. Honore, close to its western extremity. Once a year, on the feast of Alexander Newski, the quiet little street puts on an unwonted air of grandeur. An hour before noon, elegant equipages begin to arrive, officers in full uniform, diplomats in court dress, and ladies in *grande toilette* alight and ascend the flight of steps leading to the portico of the church. Till near one o'clock the passers-by hear the subdued strains of sacred music, and gain glimpses of the soft light of lustres shedding a yellow glow on the twilight dimness of the interior. Then the congregation streams out, the waiting coachmen drive up in turn to the church front, and in a short while the Rue Daru resumes its ordinary physiognomy. On Monday last this annual ceremony, intended at once to honor St. Alexander, to celebrate the Czar's birthday, and to commemorate the foundation of the church fifteen years ago, attracted most of the notabilities of the Russian colony in Paris. Thinking that a description of the service would be of interest to your readers, I repaired to the Rue Daru at a tolerably early hour. At the time I arrived the ceremony had not begun, nor was it to begin for some twenty minutes, yet there was no standing room in the edifice. The meaning of the last expression will be better understood when I add that there are no chairs in St. Alexander's and that everyone stands who is not obliged by age or infirmity to be seated. Notwithstanding the economy of space resulting from this arrangement, many were obliged to stand in the vestibule; and even the steps outside the door were thronged with worshippers before the conclusion of the service. I secured a pretty good place eventually, and was enabled to follow most of the ceremony. Before entering, I had a good look at the exterior of the building, which is quite an architectural exotic. The body may be styled cruciform, though the limbs of the cross are so short and wide as to make it look like a square with indented corners. Over the centre of the edifice rises what is neither a spire nor a dome, but something between the two; a high cone in fact, with sliced sides, resting on a ring of slender columns linked by small arches. Surrounding this tower or spire are four facsimiles of itself on a much smaller scale. All are richly gilt and support pear-shaped ornaments of burnished copper, with chains pendent from the upper or smaller extremity. The façade and portico are Byzantine, the latter being elaborately sculptured and gilt. On the whole the effect is gaudy to a European eye—especially in sunshine—though it is not difficult to conceive a state of the atmosphere in which St. Alexander's might serve to enliven the minds of the people in its neighborhood. The interior strongly recalls impressions derived from one's reading about Mohammedan ecclesiastical architecture. Everywhere, in all scales of magnitude, are arches composed of segments of three eccentric circles—I don't remember the technical name—slender, profusely-colored columns, rich masses of gilding, elaborate and beautiful carvings. Right in front of the entrance is the sanctuary, which is divided from the nave by a carved wooden partition, gilt and painted in designs emblematic of the Old and New Testament, the Holy Trinity, etc. Among the figures, which were brilliantly colored, but scarcely too much so for the light in which they were placed, are those of the Saviour and Virgin; St. Alexander Newski, St. Nicholas, the Emperor Constantine, Moses, David, St. John the Baptist, and St. Vladimir, Grand Prince of Kiev, who established Christianity in Russia. Much cannot be said for these paintings from the point of view of general artistic effect, but the details are undoubtedly worked out with great elaboration, and the harmony of color is well preserved. Inside this partition is the sanctuary, to which access is given by three doors. Through one of these I could see the altar, over which was suspended a seven-limbed lustre. Round this altar three of the ministrants frequently moved in the course of a service strikingly resembling the Roman Catholic High Mass. The arch-priest, M.

Prilajaieff, generally faced the congregation. A strange feature in the ceremony deserves notice. Repeatedly during the Mass one of the assistant priests closed the doors of the sanctuary, and thus all view of the altar was shut out from those occupying the nave for several minutes at a time. M. Prilajaieff and his assistants were attired in copes and dalmatics (a species of tunic) of cloth of gold, and wore tall violet velvet caps, somewhat like the *bonnet* worn by French Magistrates. Incense was profusely employed during nearly the entire service, and at its close the atmosphere was stifling. Indeed, a young lady fainted while benediction was going on, and had to be taken to a neighboring apothecary's. A *Te Deum* succeeded the Mass. This was sung by a choir of children of both sexes—the priests leading—to a harmonium accompaniment. I would estimate the number of persons present at about 600, mostly belonging, as was easy to gather from the brilliant *toilettes* of the ladies and the decorated buttonholes of the men, to the upper strata of Russian society.

### THE RISE AND PROGRESS OF PENNSYLVANIA.

(From the Address of the Hon. B. H. Brewster.)

So great and so steady has been the advancement of the people of this State in the development and acquisition of the material resources that volumes have been written containing fatiguing tables, which are wise to record and useful to be read and remembered, but they are suited better for the eye of the student and thinker than for the ear of the hearer or mouth of the speaker. I shall not fatigue you by even an abbreviated recital of the events that occurred, or the condition of the people of the Province prior to the hundred years from this date. About one hundred and ten years ago Benjamin Franklin, who still is the greatest man that this country ever produced, and who is a philosopher and thinker to be ranked with Archimedes, Pythagoras, Socrates, Plato, and Aristotle, in his examination before the committee of the House of Commons, declared that the white inhabitants of Pennsylvania at that day numbered but 160,000, and that the white inhabitants of North America from sixteen to sixty years of age were but about 300,000. Contrast that with our present condition. The city of Philadelphia, where you now are, contains 817,443 citizens, and it lies and they live in an area of 229½ square miles. It has 1000 miles of streets and roads opened, and 500 miles of these are paved. It is lighted by nearly 10,000 gas lamps. It has 134 miles of sewers, over 600 miles of gas mains, and 546 miles of water pipes; over 212 miles of city railways, and over 1800 passenger cars passing over them daily; 425 steam boilers, more than 400 public schools with suitable buildings, and over 1600 school teachers, and over 80,000 pupils; 30,000 bath-rooms supplied with hot and cold water, and for the use of that water the citizens pay more than \$1,000,000 annually; 400 places of public worship with accommodation for 300,000 persons; 9000 manufactories having a capital of near \$200,000,000, employing 145,000 hands, the product of whose labor is near \$400,000,000. In 1873 we exported over \$34,000,000 and imported \$26,000,000. The amount paid for duties is near \$8,500,000. The real estate assessed for taxation is \$518,000,000, and we collected nearly \$9,000,000 for taxes. The very Park in which this grand Exhibition is now made contains 2991 acres, and is one of the largest in the world, and is enjoyed every year by millions of people; and we have 130,000 neat and comfortable residences and homes. Compare this condition of our great city now with its condition in 1776 and 1777. In October, 1777, General Howe, then being in possession of the city of Philadelphia, had an accurate census taken, and it was ascertained that in the city and liberties there were but 5470 houses, and of these 587 were untenanted, and there were but 21,776 inhabitants, exclusive of the army and strangers, and about the same time the number of churches were but 16. Why the population of the State itself, from being but 160,000, is now near 4,000,000.

From the day that Pennsylvania renounced her allegiance to the crown of Great Britain, and dissolved and overthrew the Proprietary Government, has her march been steady and uninterrupted in the course of political, social, commercial, and mechanical prosperity. In population she exceeds the Netherlands, Portugal, Greece, Chili, Morocco, Columbia, the Argentine Confederation, Peru, Venezuela, Bolivia, and Paraguay, and in dignity of character as a people she knows no superior. Since 1778 great cities that were unknown have grown up within her borders, and thousands now dwell where at that time was a wilderness frequented by wild animals. Alleghany City, Harrisburg, Lancaster, Norristown, Pittsburgh, Reading, Scranton, Wilkesbarre, Williamsport, York, and Erie were then, some of them, mere struggling settlements, and most of them did not exist.

Within the border of Pennsylvania there are elements of wealth, and material for productive industry in quantities, and of a character that are not to be found in any part of the United States, and I think I may safely say, in any part of the world. I speak of her coal fields, anthracite and bituminous, and her ever-flowing fountains of petroleum; and there are also her agricultural resources, her forests, her quarries of marble and limestone, and mines of iron. How much better is it for us as a people that we possess these elements of wealth, that stimulate all our energies, skill, and honest industry to produce and use, than to have mountains of gold or caves of precious gems. Such wealth as that would debauch and demoralize. It would make the rich creatures of silken luxury and the poor the abject slaves of these vicious masters.

The productive industry of this state down to 1870 in agriculture was \$183,946,027; in mining, \$67,208,390; in manufactures, \$711,894,344, and in fisheries, \$38,114. In that year there were 11,516,975 acres of productive land, and of woodland, 5,740,864 acres, making in all 17,094,200 acres of land. The cash value of the farms was \$1,043,481,582; of implements of husbandry, \$85,658,076; her live stock was valued at \$115,647,075; the whole value of her farm productions was \$183,946,027.