

ments, many of them occupying five or six months, the author concluded that pressure has little or no effect, while the influence of temperature is considerable. The results have a special bearing on the theory of quartz formation. The Royal prize for advances in archeological science was adjudged to Dr. Paolo Orsi, of Roveredo, for his investigations of the antiquities of Eastern Sicily. Dr. Orsi has thrown quite a new light on the prehistoric development of the people known as the Siculi, from the neolithic epoch down to the period of expansion of the Greek colonies. A special prize for philosophy and moral science had been offered for an essay dealing with either the theory of consciousness or the foundations of practical philosophy. This prize has been divided equally between Professor Bernardino Varisco and Professor Francesco de Sarlo. The Minister of Public Instruction offered a sum of 3400 lire for two prizes in the physical and chemical sciences, and a like sum for two prizes in the philological sciences, the prizes being confined to teachers in secondary schools. The committee for the prizes in the physical and chemical sciences have awarded two equal prizes—one to Professor O. Marco Corbino, more especially for his work on light traversing metallic vapors in a magnetic field, and the other to be divided between Professors Carlo Bonacini and Ricardo Malagoli, more especially for their joint papers on Röntgen rays. In philology, the prizes have been divided up into a number of minor awards, distributed between Signori Giuseppe Vandelli (whose work stood first), Antonio Belloni, Astorre Pellegrini, Giuseppe Rua, Giuseppe Lisio, Augusto Balsano, Giovanni Negri and Guglielmo Volpi.

#### THE IMPORTATION OF LIVING ANIMALS.

THE Hon. James Wilson, Secretary of Agriculture, has given notice that under the authority vested in the Secretary of Agriculture by Section 2 of the Act of Congress approved May 25, 1900, entitled 'An Act to enlarge the powers of the Department of Agriculture, prohibit the transportation by interstate commerce of game killed in violation of local laws, and for other purposes,' the list of species of live

animals and birds which may be imported into the United States without permits is extended as hereinafter indicated. On and after October 1, 1900, and until further notice, permits will not be required for the following mammals, birds and reptiles, commonly imported for purposes of exhibition: *Mammals*—Anteaters, armadillos, bears, chimpanzees, elephants, hippopotamuses, hyenas, jaguars, kangaroos, leopards, lions, lynxes, manatees, monkeys, ocelots, orang-outangs, panthers, raccoons, rhinoceroses, sea-lions, seals, sloths, tapirs, tigers or wild-cats. *Birds*—Swans, wild doves, or wild pigeons of any kind. *Reptiles*—Alligators, lizards, snakes, tortoises or other reptiles. Under the provisions of Section 2 of said Act (as stated in Circular No. 29 of the Biological Survey, issued July 13, 1900), canaries, parrots, and domesticated birds such as chickens, ducks, geese, guinea fowl, peafowl and pigeons are subject to entry without permits. But with the exception of these species and those mentioned above, special permits from the Department of Agriculture will be required for all live animals and birds imported from abroad, and such permits must be presented to the collector of customs at the port of entry prior to delivery of the property.

#### STREET CARS IN GLASGOW.

THE street car system of Glasgow is owned and operated by the city under the direct supervision of a committee of the town council. The report for the year ended May 31, 1900, as abstracted by our consul, shows that the total length of double track operated by the city is 41 miles. The gross capital expenditures for the system since 1894 (independent of operating expenses) have been \$5,164,975, and the present indebtedness is \$4,061,806. The capital invested is \$4,559,502. Of the 41 miles of double track, five miles have electric traction, the rest being operated by horses. The total receipts of the system during the year were \$2,286,850. The working expenses were \$1,676,412, leaving a balance of \$610,438, of which there was expended some \$84,000 for interest on capital, \$57,501 for sinking fund, \$156,096 for depreciation written

off capital, etc. One item of \$60,000 consists of payments made to the general revenue fund of the city, which is in lieu of the amount which the city would receive in taxes, it is presumed, were the system operated by a private company. The balance goes into the reserve fund. There are 3400 persons employed, including 100 clerks. The general manager receives \$6800; the chief engineer, \$2400; the electrical engineer, \$2000; and the mechanical engineer, who has charge of the powerstation, \$1216. Point boys receive 28 cents per day; trace boys, from 40 to 52 cents per day; car cleaners, from 88 cents to \$1 per day; drivers, conductors, and motormen, from \$1 to \$1.12 per day. These rates apply to Sundays and week days alike. The rolling stock consists of 384 horse cars, 132 electric cars (47 only of which are now running), 17 omnibuses, 39 lorries, and numerous carts, wagons, and vans. There are 4411 horses. Work is now progressing, with the object of changing the entire system to electric traction, which it is hoped to have completed within the next eighteen months. No underground conduits will be used, according to the present plans. Fares range from 1 cent for first half mile to 2 cents for a mile; the longest ride is 6 miles, costing 6 cents. No transfers are issued and tickets are not used. The committee of the town council having supervision of the tramways receives no compensation. For that matter, however, no member of the city government of Glasgow, including lord provost, town councilors, and bailies (police judges), receives compensation. The city of Glasgow has a population of about 850,000, and spreads over an area of nearly 12,000 acres. There are no electric or other tramways extending out of Glasgow to other towns or cities. Within the city is an underground cable road which makes a circuit of about five miles, and is owned and operated by a private company. The rate of fares on this road is about the same as that prevailing on the surface roads.

#### SCIENTIFIC NOTES AND NEWS.

DR. N. L. BRITTON, director-in-chief of the New York Botanical Garden, has been given leave of absence and is in attendance at the In-

ternational Congress of Botany in Paris, in which assembly he represents the Garden, and is also an official delegate of the United States. He will visit many of the museums of France and England before he returns. The Board of Managers have designated Dr. D. T. MacDougal as acting director-in-chief of the New York Botanical Garden in Dr. Britton's absence.

DR. B. T. GALLOWAY, chief of the Division of Vegetable Pathology and Plant Physiology, has been placed in charge of the grounds of the U. S. Department of Agriculture.

DR. TIMBRELL BULSTRODE, one of the members of the Food Preservatives Committee, and Mr. Charles J. Huddart, the secretary, have, during the past month, visited Amsterdam, Hamburg and various places in Denmark for the purposes of studying the dairying industry and the methods of transport of dairy produce, with special reference to the milk and butter supplies in Holland, Germany and Denmark, and the butter export trade, in relation to the use or non-use of chemical preservatives.

THE Duke of Abruzzi has been entertained by the Geographical Society of Christiania, the address of welcome being made by Professor Reusch. He has proceeded to Italy.

THE Danish scientific expedition for the exploration of East Greenland, under Lieutenant Amdrup, has reached the shore. The Swedish Kolthoff expedition near Sabine Island found a mast with a Danish flag and a communication from Lieutenant Amdrup to Captain Sverdrup.

THOMAS DAVIDSON, well known as an author of philosophical and educational works and as a lecturer, died at Montreal on September 14th, aged sixty years. Mr. Davidson was born in Scotland, but has been living in the United States for the past twenty-five years.

DR. LEWIS ALBERT SAYRE, one of the most eminent surgeons of New York City, died on September 21st in his 81st year. He was one of the founders of Bellevue Medical College and was professor there until the college was united with the New York University two years ago.

THERE will be a civil service examination on October 23rd and 24th for the position of assist-