

the collimation error of the telescopic sights, and had promised a large flat surface for optical work. Mrs. Sworn had given two thermometers (used by her late husband). The report dealt also with the disturbance of magnetic observatories by electric railways, the steel rails committee, and the national Antarctic Expedition. With respect to the latter it was stated that the commander of the expedition, Commander R. F. Scott, R.N., the head of the scientific staff, Professor Gregory, and three other officers had been appointed, and it was confidently hoped that the expedition would be ready to start by August, 1901, when the German Antarctic Expedition was also expected to sail. Funds had been raised exceeding £91,000, including the grant from her Majesty's treasury of £45,000. This fund was raised in view of an expedition lasting two years, but appeals were being made for more funds to enable the expedition to remain in the Antarctic for three years, for which the sum of £120,000 was required. The report also dealt with malaria, into which the results of the investigations had now been published in part. Other subjects were the 'Solar Eclipse of May 28, 1900,' and the 'International Catalogue of Scientific Literature,' on which considerable progress had been made. Her Majesty's Government had guaranteed £1,000 a year for five years, 'to make good to the Royal Society a part of any loss which might be incurred by the publication of the proposed catalogue.' At the International Association of Academies, the first meetings of which were held at Paris on July 31 and August 1, 1900, the Royal Society was represented by Professor Rücker. As matters at present stood, the Royal Society being regarded as a scientific society only, the United Kingdom could only be represented on the scientific section of the Association. With respect to the Mackinnon Bequest it had been decided that the award should be in the nature of a studentship for the encouragement of research rather than a prize for the reward of past achievement, and that the studentship (which at present amounted to about £150 per annum) should be devoted to the maintenance of a student engaged in research. Under the will of the late Professor

Hughes, a bequest of £4,000 had been made to the Royal Society with a direction to award the income annually as a prize either in money or in the form of a medal, or partly one and partly the other, for the reward of original discovery in the physical sciences, particularly electricity and magnetism, or their applications, the prize or medal to be given under conditions to be fixed from time to time by the Society on lines similar to those followed in the bestowal of the Copley, Rumford and Royal medals. The report also dealt with terms of bequest, the apartments of the Society, electric lighting, the library, publications, the publication fund, the catalogue of scientific papers, the Government grant, general business and the presidency.

THE HARTMAN ANTHROPOLOGICAL AND
ARCHEOLOGICAL COLLECTION.

THERE has just been exhibited at Stockholm a fine collection of archeologic and ethnographic objects from Central America, made by Dr. C. V. Hartman (formerly naturalist of the Lumholtz Expedition to North Mexico) at the instigation and expense of Engineer Åke Sjögren. In a short guide to the exhibition by Dr. Hj. Stolpe, we are told that Dr. Hartman began his researches in 1896 at Mercedes, where he discovered a large work-place for the manufacture of stone gods and other antiquities of unusual interest. Among those now exhibited are two standing figures of stone, the largest as yet brought to Europe from Central America, which were erected at the east end of a large oval tumulus, about 300 feet in circumference and covered with stone to a height of 22 feet. East of this was a rectangular court, walled with stone on three sides, with a cairn of about 90 feet in circumference and 12 feet in height in each of its eastern angles; and on the flat tops of these lay fragments of smaller statues. Afterwards Dr. Hartman went up to the high plateaux of the interior and investigated many cemeteries, especially those of Orosi, Chiricot (3,000 feet above sea level), Lemones and Santiago. The graves were examined in the most exact and scientific manner, such as had never before been attempted in these parts, and a foundation was thus laid for a chronological grouping of

Central American antiquities. In all, over 400 graves were opened, and showed a typical stone-age culture; no weapon or cutting tool of bronze, still less of iron, was found. But though the majority of the graves were uninfluenced by European culture, proof was not wanting that in two cases cemeteries at Orosi and Mercedes were in use after the Europeans had reached the New World. In a grave at Orosi were found some mosaic glass beads, clearly of Venetian origin, and in a grave at Mercedes was a large bead of blue glass. Another valuable contribution to the chronology of the find is afforded by a clay bowl found at Salvador, and bearing Maya hieroglyphs, which probably denote the number of a year according to their chronology, which unfortunately has not yet been connected with that of the Old World.

Similar explorations were carried out in the Guanacaste peninsula on the Pacific coast, and on the islands in the bay of Nicoya, also at Carrizal on the neighboring mainland. Dr. Hartman then proceeded to Salvador, where for nearly a year he dwelt in one of the largest villages inhabited by the Pipilas, an Aztec tribe, and devoted himself to the study of their manners and customs, and religious ideas and

made an anthropometric examination of 100 Aztec individuals, and took a number of photographs.

In Guatemala Dr. Hartman visited the Indian tribes, Cakchiquels, Zutujils, Quichés and Xincas, as well as the Huavas on Cape Tehuantepec in southern Mexico. His notes on the language of the last two are of the greatest interest, inasmuch as there was previously no material for the classification of their tongue. Here also may be mentioned a test of the so-called nahuatlisms, remains of the ancient Aztec language which have been adopted in the Spanish now spoken in those regions.

Dr. Hartman returned to Sweden in October, 1899, bringing the valuable collections now exhibited, which Mr. Sjögren, with great generosity, has handed over to the Ethnographic Museum of the State.

THE GROWTH OF CITIES.

A RECENT census bulletin contains reports on the population of cities having 25,000 inhabitants, or more, in 1900. There were 159 of these cities which are placed in four groups according to their size. The increase in population from 1880 to 1900 is shown in the following table:

CLASSIFIED SIZES.	No.	POPULATION.			INCREASE FROM 1890 TO 1900.		INCREASE FROM 1880 TO 1890.	
		1900	1890	1880	Number.	Per cent.	Number.	Per cent.
Totals	159	19,694,625	14,855,489	9,933,927	4,839,136	32.5	4,921,562	49.5
Cities of 200,000 and over	19	11,795,809	8,879,105	6,311,653	2,916,704	32.8	2,567,452	40.6
Cities of 100,000 and under 200,000	19	2,412,538	1,808,656	1,009,163	603,882	33.3	799,493	79.2
Cities of 50,000 and under 100,000	40	2,709,338	2,067,169	1,368,309	642,169	31.0	698,860	51.0
Cities of 25,000 and under 50,000	81	2,776,940	2,100,559	1,244,802	676,381	32.2	855,757	68.7

language. Here he made a rich ethnographic collection, also a collection of Indian antiquities

The 19 largest cities are further classified as follows:

CLASSIFIED SIZES.	No.	POPULATION.			INCREASE FROM 1890 TO 1900.		INCREASE FROM 1880 TO 1890.	
		1900	1890	1880	Number.	Per cent.	Number.	Per cent.
Totals	19	11,795,809	8,879,105	6,311,653	2,916,704	32.8	2,567,452	40.6
Cities of 3,000,000 and over	1	3,437,202	2,492,591	1,901,345	944,611	37.8	591,246	31.0
Cities of 1,000,000 and under 2,000,000	2	2,992,272	2,146,814	1,350,355	845,458	39.3	796,459	58.9
Cities of 500,000 and under 1,000,000	3	1,645,087	1,334,686	1,045,670	310,401	23.2	239,016	27.6
Cities of 300,000 and under 400,000	5	1,724,455	1,351,539	960,767	372,916	27.5	390,772	40.6
Cities of 200,000 and under 300,000	8	1,996,793	1,553,475	1,053,516	443,318	28.5	499,959	47.4

from the neighborhood, and compiled the first vocabulary of a Central American Aztec dialect that has any pretence to completeness. He also

The cities of over 1,000,000 should, however, be separated, Chicago having had an increase of 54.4 per cent. and Philadelphia of only 23.5.