photography may offer the most delicate test we yet have of the color of a star, — differences too small to be perceptible by the eye, becoming distinctly visible in the photographic images.

NOTES AND NEWS.

PROFESSOR MILNE-EDWARDS writes to the Société de géographie in regard to the scientific work of the expedition on the Talisman. After having studied the profiles from the African coast into deep water, the vessel recruited at San Jago, Cape Verde Islands, and later at San Vincente; soundings being carried on during the various movements of the vessel, and proving of great interest, as in some cases they did not accord with those on the charts. Branco Island, which has never been visited by naturalists, was carefully explored. The shores are very rocky, and it became necessary to swim ashore, which the temperature rendered rather agreeable. The island is entirely volcanic, and the rocks of a singular nature. Those near the shore were blocks of lava cemented by a sort of calcareous coquina, containing many shells, into a kind of pudding-stone. Others consisted of sea-sand, drifted by the winds to an altitude sometimes of a thousand feet, and changed into solid layers by calcareous infiltration. Vegetation is very sparse, yet the great lizards peculiar to this island were found to be herbivorous. The Sargasso Sea was then examined, and proved to be of great depth, reaching nearly thirty-three hundred fathoms, and the bottom entirely volcanic, with a rather poor fauna. A collection of lava and scoriae was obtained, some of which appeared to be of quite recent origin. There is probably in the Atlantic an immense band of volcanoes extending parallel with the Andean system, perhaps to Iceland, and of which the culminating peaks form the Cape Verde, Canary, and Azores islands.

More than two hundred deep-sea soundings were made before the return of the expedition *viâ* San Miguel, Azores. Wonderfully rich collections were made, and specimens of the bottom throughout the whole region traversed. The topography of the ocean-bottom hitherto accepted will be considerably modified by these researches. It was expected that Professor Milne-Edwards would address the society on the general results of the work before a general session about Jan. 21, and exhibit at the same time some of the treasures obtained.

— At the meeting of the Paris academy of sciences, Dec. 10, Dr. Hyades gave a summary report on the geological, botanical, zoölogical, and anthropological work accomplished by the French mission to Cape Horn. In the southern islands of the Fuegian Archipelago the prevailing rocks were found to be schists and granites, greatly weathered wherever unprotected by vegetation. The dwarf Antarctic beech is limited to an altitude of four hundred metres, the Fagus betuloides to three hundred, forming with the Drimys and Berberis a forest zone with a humid soil poor in vegetable humus, and covered with mosses, heaths, and a considerable variety of small plants. The marine flora abounds in all kinds of algae (the most common being the Macrocystis pyrifera), affording a shelter to numerous zoophytes, annelids, mollusks, crustaceans, and migratory fishes of eight or ten species. Of the shell-fish, which abound on most of the seaboard, all the large species are edible. Although poorer than the marine, the land fauna includes several species of Coleoptera, Lepidoptera, Arachnida, some forty species of birds, but no reptiles or frogs. The mammals are represented by only one species of fox, two rodents, and an otter, besides the domestic dog. The natives all belong to the Tekeenika stock of Fitzroy, called Yahgans by the present English missionaries. They speak an agglutinating language, current from the middle of Beagle passage to the southernmost islands about Cape Horn. About one thousand words of this language were collected, including some abstract terms, such as *tree*, *flower*, *fish*, *shell*. The numerals get no farther than three, although the natives count also on the fingers. Over a hundred anthropometric observations were taken on individuals of all ages and both sexes. Good photographs were also obtained of a large number of Fuegians, besides numerous castings of all parts of the body, some skeletons, and a great variety of ethnological materials.

— Besides the analyses of snow made at Madrid and in Holland (in which was observed volcanic sediment similar to that of the ashes found in Java after the eruption of the volcano), mentioned by Mr. Upton in his article on the 'Red skies,' in *Science* of Jan. 11, *Nature* of Dec. 20–Jan. 3 contains a number of letters in which mention is made of a grayish volcanic (?) sediment having been found at several points in England after rain-storms in December.

— The International congress of geologists will meet at Berlin on the 25th of September next, and last five days; then a grand geological excursion will be made through the Hartz Mountains, Saxon Switzerland, from the 1st of October to the 5th, ending at Dresden by a visit to the Royal museum, under the guidance of its celebrated director, Prof. Dr. H. B. Geinitz.

— In Oregon City there is a large apple-tree in the Methodist-church lot, planted in 1842 by W. S. Moss, Esq., for Rev. G. Hines, who was then living there. The tree bears two kinds of fruit, but only one kind each year, and the different kinds appear on alternate years. It is still a vigorous, healthy tree.

— It is understood that the outer satellite of Mars, Deinos, has been observed by Professor Hall during the present opposition. As the planet Mars is now near its aphelion, its visibility would seem to show that the satellite can be observed at every opposition of Mars with the great telescopes which have recently been constructed.

— The Pi eta scientific society of Troy, N.Y., has changed its name to Rensselaer society of engineers.