the Semitic group of Abyssinia in the midst of the Hamitic populations of Somaliland. The town of Harar itself was never the capital of an independent kingdom, as has been wrongly stated by many writers, but simply a large emporium and station of great importance between the old Abyssinian empire and Massawa on the Gulf of Aden. Some years ago it was attached to the possessions of the Khedive, but on the withdrawal of the Egyptian troops the district was overrun by the fierce Oromo (Galla) people, who exterminated most of the old Amharic (Abyssinian) population.—In the same number is an editorial note, with illustration, on a human foot incised by the Bushmen of South Africa on a stone, which has been presented by Dr. Holub to the Society, and is now deposited in the Royal Prehistoric Museum, Rome.

THE general census of Japan, taken on the first day of the present year, gives the total population of the country at 36,700,110, made up of 18,598,998 males, and 18,101,112 females. The population of the larger towns is given as follows:—Osaka, 1,772,333; Hiogo, 1,418,521; Nagasaki, 1,204,629; Tokio, 987,887; Kioto, 835,215. To avoid erroneous conclusions it may be well to state that the figures here given are not the populations of the towns and cities mentioned, but of the administrative districts, locally known as *fu* or *ken*, bearing these names. In some instances, *e.g.* Hiogo and Nagasaki, these districts are as large as a medium-sized English county, and in all cases they include the towns and villages for several (from ten to thirty) miles around. Thus these statistics can by no means be accepted as data for the respective sizes of the towns. These would run, we believe, as follows: Tokio, Osaka, Kioto, Nagasaki, Hiogo; the two latter being smaller than probably a dozen other Japanese towns which might be mentioned—Nagoya, Sendai, Niigata, Kagoshima, Shimonoseki, &c. Statisticians should therefore receive these figures with the explanation here given.

AMONG the papers in parts 3 and 4 of the *Verhandlungen der Gesellschaft für Erdkunde zu Berlin* for the current year, we find one by Dr. Schwarz on Montenegro, the land and people; another by Dr. Uhle of Dresden on the divinity *Batara Guru* of the Malays; and also some geographical sketches of Portugal by Herr Müller-Beeck.

SOCIETIES AND ACADEMIES

PARIS

Academy of Sciences, July 30.—M. Blanchard, president, n the chair.—Active or dynamic resistance of solids. Graphic representation of the laws of longitudinal thrust applied to one end of a prismatic rod, the other end of which is fixed (continued), by MM. de Saint-Venant and Flamant.—Experiments on the reproduction of albite (white shorl) in an aqueous medium, by MM. C. Freidel and Ed. Sarasin. From a composition of silicate of soda and albite (Na_2O, Al_2O_3, $6SiO_2$) in a temperature ranging from 432° to 517° C., abundant precipitates of albite were obtained in the form of minute particles, which appeared as fine needle-points and short thick crystals with facets distinctly visible under the microscope. Steel and platinum vessels strong enough to resist this high temperature were specially constructed by MM. Golaz, père et fils.—Separation of gallium (continued). Separation from vanadium, by M. Lecoq de Boisbaudran.—Experimental researches on the action of a liquid introduced by a special process into the tissues of the vine for the purpose of destroying phylloxera (continued), by M. P. de Lafitte.—Capacity of various soils for retaining water under conditions suitable for viticulture, by M. P. Pichard. Appended is a comparative table showing the various degrees of resistance offered to the infiltration of water by siliceous, argillaceous, calcareous, and other soils in the south-east of France.—On the integration of a certain class of partial differential equations of the second order with two independent variants, by M. A. Picart.—On the critical temperature and critical pressure of oxygen, by M. S. Wroblewsky. The critical point is approximately determined at −113° C.—A determination of the inward inert resistance of any electric system, independently of the disturbing action of ts interior electromotor forces, whose number, seat, and size remain unknown quantities, by M. G. Cabanellas.—On the visibility of the ultra-violet rays, by M. J. L. Soret.—A silicophosphate of crystallised lime obtained by liberating phosphorus in the process of iron-smelting, by MM. Ad. Carnot and Richard.—On the artificial production of rhodonite (silicate of manganese) and tephroite, by M. Alex. Gorgeu. A new and easy method is explained for producing these two natural crystallised silicates of manganese based on the reciprocal action of silicium and the red chloride of manganese in aqueous vapour.—On the "chloride of menthylum" obtained by Oppenheim from menthol by the action of a concentrated solution of chlorhydric acid, by M. G. Arth.—Experiments on poisoning by the oxide of carbon, with a view to ascertain whether this gas passes from the mother to the fœtus, by MM. Gréhant and Quinquaud. The authors, who experimented on bitches, arrived at an opposite conclusion from Andreas Hogyes of Klausenburg, who experimented on rabbits, and who concluded that the fœtus remained unaffected by the poison which was fatal to the mother.—On the open epithelium ("cellule epithéliale fenêtrée") of the closed follicules of the intestine of the rabbit, and its temporary stomata, by M. J. Renaut.—Researches on the structure of the constituent parts of the vent in Cephalopods, by M. P. Girod.—Observations and experiments on the circulation of the sap in plants under the tropics, by M. V. Marcano. From the experiments carried on at Caracas, Venezuela (10° 30′ 50″ N. lat.), the author considers that in intertropical vegetation the cycle of circulation is completed within a period of twenty-four hours, presenting two *maxima* of relative fixity, and that the inner pressure of the sap is inferior to that of the atmosphere during the dry but far greater during the rainy season, a phenomenon attributed mainly to the water directly absorbed by the leaves.—On the differentiation and anatomic variations of the branches of forest and fruit-bearing trees, and some other plants, by M. Laborie.—On the action of silica on the growth of maize, by M. V. Jodin.—On the alterations produced by age on wheat-flour preserved in bins and sacks, by M. Balland.—Experiments on evaporation made at Arles during the years 1876-82, by M. A. Salles. In his remarks on this paper, M. Lalanne dwells on the great importance of the subject in connection with the projected inland sea towards the southern frontier of Tunis.—Observations on Part IV. of M. de Koninck's work on the carboniferous fauna of Belgium, by M. Hébert.

CONTENTS