

ACCORDING to a brief despatch from Valdivia published in the *Times* of April 6, great volcanic eruptions occurred in southern Chile, to the south-east of Puerto Montt, and close to the Argentine border. They were accompanied by violent earthquakes. Much damage was caused to grazing lands on the Argentine side of the frontier, which for thirty leagues was covered with volcanic ashes.

WE learn from *Science* that a meeting to initiate the Gorgas Foundation Memorial, founded in memory of the late Maj.-Gen. W. C. Gorgas, who accomplished noteworthy work in connection with tropical diseases in Panama, was held at Birmingham, Alabama, on March 4 last. Among the speakers was the British ambassador, Sir Auckland Geddes, who said: "The name Gorgas will live long after the peoples of earth have forgotten the heroes of the world's greatest war."

AT the annual general meeting of the Chemical Society held at Burlington House on March 30, the following new members of council were declared elected: Vice-Presidents, who have filled the office of President: Prof. H. B. Dixon and Prof. P. F. Frankland; Vice-Presidents, who have not filled the office of President: Prof. E. C. C. Baly and Prof.

T. M. Lowry; Ordinary Members of Council: Dr. C. Dorée, Dr. J. J. Fox, Prof. I. M. Heilbron Prof. J. W. McBain, Dr. W. H. Mills and Prof. J. R. Partington.

UNDER its new constitution the Association of Assistants in Pathological and Bacteriological Laboratories is now admitting, as associate members, laboratory assistants from laboratories other than those of pathology and bacteriology. The organisation was founded in 1912, its chief object being to improve the status of the laboratory assistant by endeavouring to raise the standard of technical knowledge through the medium of an educational programme, culminating in an examination and the granting of a certificate of proficiency in laboratory technique. An official organ, *The Laboratory Journal*, is issued to members quarterly, and, in addition to Association news, the journal contains original articles and abstracts of technical interest to laboratory workers; there is also an employment bureau. From the first the founders had in mind the inclusion ultimately of all laboratory assistants in one federation, and it is hoped that the present movement will lead to the formation of sections embracing other branches of science. The Honorary Associate Secretary is Mr. F. C. Padley, 2 Eldon Place, Reading, from whom further information may be obtained.

Our Astronomical Column.

EVENING STARS.—After sunset the sky now presents some interesting planets for observation. At the middle of April Venus will be brilliantly displayed in the western sky, and sets about an hour and a half after the sun has gone down. Jupiter will be visible in the south-east sky and will pass the meridian at an altitude of about 35° soon after 11 P.M. Saturn crosses the meridian 35 minutes before Jupiter, as it is situated 9° westwards.

Mars will not be visible in the early hours, but rises at midnight at the middle of the month, and will remain visible throughout the morning hours. Jupiter and Saturn may now be very successfully observed in telescopes, as they reach a fairly good altitude, but Mars is very low in Scorpio and only 15° above the horizon when due south. The latter planet will continue so far south during the ensuing summer that its markings will scarcely admit of satisfactory investigation by European observers. When the planet is nearest to the earth on June 18 next, it will be only 42 millions of miles distant from us, but its greatest altitude will not exceed 12° . In such circumstances good definition of delicate features is almost impossible when high magnifying powers are employed on telescopes.

THE DISTANCES OF THE SHORT-PERIOD CEPHEID VARIABLES.—Bull. No. 8 of the Astr. Inst. of the Netherlands contains an important research on this subject by J. C. Kapteyn and P. J. van Rhijn. They note that the Cepheids may be divided into two classes with periods greater and less than 16 hours. Excluding those in clusters, there are 39 and 94 stars belonging to these classes respectively; the first class shows no galactic concentration, while the second

shows it strongly, an argument for the relative proximity of the former. Provisional proper motions are deduced for 14 of these stars, chiefly from astrophotographic plates with a time-interval of some 25 years. The mean parallax deduced is $0.0065''$, while the mean magnitude is 10.3; the parallax is 7.6 times as great as that given by Shapley's formula. It is pointed out that Schouten reached in 1918 the same factor 7.6 for Shapley's parallaxes of the clusters; he based this on the assumption that the luminosity curve for the stars in the clusters is identical with that found for the stars as a whole. It should be observed that neither method affects the relative distances of the clusters investigated by Shapley; it simply divides all of them by a factor. Further, the Cepheid method was only one of several used by Shapley in deducing his distances; hence it appears somewhat unlikely that they need division by so large a factor as 7.6.

Kapteyn and van Rhijn also reinvestigate the mean parallax of the long-period Cepheids, obtaining $0.0029''$ from 17 stars, of mean magnitude 5.32, which is in good agreement with Shapley's $0.0034''$ from 11 stars. They express the hope that trustworthy proper motions for all the 39 short-period Cepheids will be available in a few years, and ask for a suspension of final judgment on the distances of the clusters till that time.

Dr. Shapley gives some evidence on the other side in Harvard Coll. Observ. Bull. No. 765. He states that the light curves of several short-period Cepheids in the Small Magellanic cloud (mean period 0.64 days) give a mean median magnitude 16.1, closely agreeing with the value 16.2 predicted by his curve. He claims that this supports his previous estimate of the absolute magnitude of these stars.