during this time a height of approximately 2500 feet. Since 1925 its height has remained fairly constant but its diameter is increasing by accretions brought about by intermittent activity in various parts of the edifice. This activity is occasionally accompanied by eruptions.

When visited in 1935, the fumaroles were very active and the maximum recorded temperature of the escaping gases (mostly steam) was over 400° C. The presence of hydrofluoric acid was determined by analysis of the incrustations.

Attention was directed to the desirability of using this intensely active area as a field-laboratory for studying the various aspects of dome-building. Emphasis was laid on the necessity of determining the present dimensions of the dome for purposes of comparison with its dimensions in the future.

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CRYSTALLIZATION OF MELTS OF NEPHELINE AND ALBITE WITH FAYALITE

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(Abstract)

A thermal study of the system $NaAlSiO_4$-FeO-SiO_2 shows that the crystalline phases formed are cristobalite, tridymite, albite, fayalite, nepheline, carnegieite, nercynite, and wüstite. There are two ternary eutectics, one between tridymite, albite, and fayalite (980 ± 10° C) which may be regarded as a simplified fayalite-rhyolite, and the other between nepheline, albite, and fayalite (990 ± 10° C) which may be regarded as a simplified fayalite phonolite. The results are considered in their relation to the origin of natural phonolites, trachytes, and rhyolites carrying fayalite.

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TEMPERATURES IN A SINKING XENOLITH

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MODE OF EMPLACEMENT OF THE POST-PALEOZOIC INTRUSIVES OF THE TUCSON QUADRANGLE, ARIZONA

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THE VOLCANIC SEQUENCE IN THE BULL VALLEY REGION IN SOUTHWESTERN UTAH

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