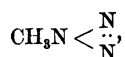


account of its peculiar properties, which rendered its isolation and investigation a matter of extreme difficulty.

Sodium azoimide, NaN_3 , when treated with dimethyl sulphate, yields methylazide,



and this, by the action of methylmagnesium iodide (Grignard's reagent) and water gives diazoaminomethane, which is a colorless liquid, melting at -12° . It is extremely reactive and is decomposed during the course of its preparation by the catalytic action of the small quantity of impurity usually present in magnesium. It boils at 92° , but promptly decomposes, volatilizes readily at the ordinary temperature, more rapidly at the boiling point of ether and is miscible in all proportions with every solvent. Acids convert it instantly into nitrogen, methylamine and the methyl ester of the acid. In dilute solution it has a sweet taste, but the pure compound rapidly cauterizes and blisters the skin, and its vapor, when inhaled, produces severe headache accompanied by a prolonged feeling of lassitude. Diazoaminomethane forms a *silver salt*, $\text{CH}_3\text{N}:\text{NN}(\text{Ag})\text{CH}_3$, and a *cuprous salt*, $\text{CH}_3\text{N}:\text{NN}(\text{Cu})\text{CH}_3$, the latter crystallizing in large, lustrous, yellow prisms. It is by means of this compound that the separation and final purification of the diazoaminomethane was effected.

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CURRENT NOTES ON METEOROLOGY

MOISTURE FROM CLOUDS

SOME interesting observations have lately been made by Marloth on the amount of moisture deposited by the S. E. trade clouds on vegetation growing on the summit of Table Mountain, South Africa (*Trans. So. Afr. Phil. Soc.*, XIV., Pt. 4, Oct., 1903; XVI., Pt. 2, Oct., 1905; *Met. Zeitschr.*, Dec., 1906). In this southwestern extremity of South Africa the winter is rainy and the summer dry. About three quarters of the annual precipitation falls in the six winter months, and in the

three summer months (Dec.-Feb.) only about eight per cent., 2.16 inches, falls on the average. It occasionally happens that two months may pass without a drop of rain. The vegetation on the hills and on the lower slopes of the mountains clearly reflects the deficiency of summer precipitation, but on the mountains vegetation is much more abundant, and shows much more favorable conditions of moisture supply. The latter has been shown by Marloth to come from the clouds formed over the mountains in the S. E. trade wind. The plants collect the cloud drops in sufficient quantity, not only to keep themselves wet, but even to furnish enough water to produce a permanent swamp on the top of Table Mountain in winter, and a periodic swamp in summer. The summer swamp dries up during long spells of clear weather, but appears again when the S. E. cloud is formed. Small ponds actually form, sometimes even in late summer, on the top of Table Mountain. A photograph of a pond appears in Marloth's report. An interesting piece of evidence as to the effect of the water thus collected by vegetation is given in the note that in the case of a mountain stream in this region, which can furnish sixty horse-power, three days after a fire which burned off the bushes and grass at the head of this stream, the water furnished only twenty horse-power. The cloud on Table Mountain is a mixture of an ordinary cloud and very finely distributed rain-drops in process of formation. The whole mass moves at high velocity (the trade velocity is there often forty miles an hour), which prevents the fall of small drops. It is not until they come in contact with a solid object, and when the velocity is reduced, that the drops are held by the obstacle, and gradually reach the ground.

In connection with this phenomenon reference may be made to various suggestions that have been brought forward regarding the possible utilization of fog for the uses of vegetation in California (*Mo. Wea. Rev.*, Oct., 1898, 466; 1899, 301, 473); also to Hann's 'Handbook of Climatology' (English translation), 195-196.

MONTHLY WEATHER REVIEW

THE October, 1906, number of the *Monthly Weather Review* (dated Jan. 4, 1907) contains the following papers of general interest: 'A Rare Cumulus Cloud of Lenticular Shape,' by H. H. Clayton; illustrated by three half-tone views, and accompanied by comments on similar clouds by Professor Abbe. 'Monthly Review of the Progress of Climatology throughout the World,' by C. F. Talman; notes on meteorological stations in Iceland, and on the climates of British East Africa, the Solomon Islands and of Sistan. 'Sonora Storms and Sonora Clouds of California,' by Archibald Campbell, with a weather map showing the conditions which prevail during a Sonora cloud period, and a half-tone picture of one of these clouds. 'Has the Gulf Stream any Influence on the Weather of New York City?' by James Page, of the Weather Bureau. This is a brief discussion which we hope may find its way very generally into the daily press, and set right the many erroneous ideas which are prevalent on this question. Professor F. H. Bigelow continues his study of the meteorological conditions of the Cottage City waterspout of 1896 with a highly mathematical paper.

ALTITUDE AND PNEUMONIA

DR. ISAAC W. BREWER, of Fort Huachuca, Ariz., after studying the medical statistics of the army concludes (1) that altitude has nothing to do with the mortality from lobar pneumonia; (2) that latitude within the range afforded by the territory of the United States has nothing to do with the mortality; (3) that the mortality among the colored troops is about twice as great as among the white soldiers (*So. Cal. Practitioner*, Dec., 1906).

THE FRENCH SAHARA

THE meteorological observations made in the French Sahara by the *Mission Saharienne* (*Mission Foureaux-Lamy d'Alger au Congo par le Tchad*, Pts. I. and II., pp. 551, Paris, Masson) are welcome as throwing light on the climate of a region concerning which but little is known. The temperature fell below freezing twenty-five times. The maximum was 119°.

The minimum temperature was recorded about 5 A.M.; the maximum between 1 and 2 P.M. Dew was observed on fourteen occasions. There was rain on 116 days (out of 645). In the Air highlands thunder and lightning were noted almost every afternoon.

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WILLIAM WELLS NEWELL

William Wells Newell, the founder of the American Folk-Lore Society, died at his summer home in Wayland on January 21st, 1907, at the age of sixty-eight.

The broad culture of Mr. Newell and his extended interest in many branches of literature and science made his name known throughout the country. Those best acquainted with him were often amazed at the accurate knowledge and the sincere appreciation of subjects widely diverse in interest. He was especially gifted as a student of folklore and comparative literature and as a classical scholar, a linguist and a craftsman. Mr. Newell made a special study of the Arthurian myth and his collection of tales, 'King Arthur and the Round Table,' published in 1897, showed deep research and an intimate knowledge of the literature of the time. His translation of Sophocles's 'Œdipus Tyrannus' reveal him as a student of the classics. 'Words for Music,' a little volume of verse, most of which was original, contains charming bits of a more or less personal nature which show Mr. Newell as his intimate friends knew him, lovable, kindly and appreciative of all that was good. The book itself is an example of Mr. Newell's abilities as a craftsman. It was printed upon his private press at Hazelbrook, Wayland, and is an example of typographical excellency.

It is, however, the cause of American Folk-Lore that has suffered most in the death of Mr. Newell. It has lost its most enthusiastic worker and devoted friend. The American Folk-Lore Society was his from the very beginning, and it was owing to his untiring energies that the *Journal of American Folk-Lore* was started and has since been successfully carried on.