to observe accurately and never to put their conclusions in their note books, until they can base such conclusions on what they have seen. I have known of teachers who require their students to balance large numbers of equations, outside of the laboratory and according to set rules, and thus entirely subvert the purpose of chemical notation, which is, at its best, but a short means of expressing observed chemical facts, and as such should only be used in the laboratory as a means of describing what the student has actually seen. The former course leads the beginner to the conclusion that chemical reactions must actually take place exactly as the equation demands; the latter teaches him to observe accurately and to express his observations in the terms of the science. Finally, I regard such work as this fitted only for advanced students; the chemical equation has but a small place in the beginning study of chemistry.

PAUL C. FREER.

CURRENT NOTES ON ANTHROPOLOGY.

MYTHS OF THE NORTHWEST COAST.

FOR some years Dr. Franz Boas has been collecting and publishing the myths and stories of the tribes of the northwest coast. In the last number of the *Zeitschrift für Ethnologie* for 1895 he sums up his theories of their development and extension. His conclusions are that the tribes there located not only borrowed from all parts of America, but drew largely for their material from the Old World also.

This conclusion from such an eminent authority will give considerable satisfaction to those who are on the hunt for traces of Asiatic culture in America. Dr. Boas reaches it by counting the number of 'elements' or incidents in a story, and then ascertaining how many of them reappear in a similar story told at a more or less distant point. If the coincidences are many, he considers it proof of borrowing.

There are various objections to this rough and ready method, notably one, to wit: that all 'elements' are not equally valuable for comparison, to which obvious fact he does not appear to attach much weight.

It is curious to note in the same number of the *Zeitschrift* that Frobenius, in discussing the prevalence of vase worship, quite positively condemns the hypothesis which is at the base of Dr. Boas' arguments. Evidently the subject is still an open question.

THE STORY OF 'NUMBER NIP.'

THE story of 'Number Nip,' the tricky wood and mountain sprite, is not unknown to English folklore, but is not prominent in it, and was introduced at a rather recent date from Germany. There, under the name Rübezahl, he figures, especially in the Riesengebirge, as a prominent personage in the tales and superstitions of the population. He has been made the subject of a singularly learned monograph lately by Dr. A. Lincke, of Dresden, who, in an octavo of fifty pages, brings together pretty much everything, at least references to it, that has been written about him.

The general conclusion appears to be that Rübezahl is no more at home in the Giant Mountains than he is in England; that perhaps he is of Slavonic origin, and that his name is a Slavonic word rendered into a German equivalent by that process of popular language which some linguists call 'otosis;' and that in this change of place and name, like many a human analogue, he left his good character behind him. Originally he was probably a divinity of the fields and crops, or vegetation and growth. Or he is a rain and thunder god of the old Germans, to which Dr. Lincke inclines; in either case, once a highly respectable god, and no mere Kobold. The title of Dr. Lincke's paper is 'Die Neuesten Rübezahlforschungen. Ein Blick in die

Werkstatt der mythologischen Wissenschaft.'

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CURRENT NOTES ON METEOROLOGY.

AUSTRALIAN METEOROLOGY.

Three valuable contributions to the meteorology of Australia have recently been published together in one volume by Hon. Ralph Abercromby, under the title *Australian Weather*. All of these papers have been previously published elsewhere, but they are now brought together and issued in book form for convenient reference. The first paper, by H. C. Russell, the Government Astronomer of New South Wales and Director of the Sydney Observatory, on *Moving Anticyclones in the Southern Hemisphere* (originally published in Quart. Journ. Roy. Met. Soc., Jan., 1893), gives a general account of the anticyclones which control Australian weather south of latitude 20° S. The average number of anticyclones which pass over the country every year is 42; they are most numerous in summer, and their average velocity is 400 miles a day. The author holds out the hope of possible long range forecasts for a month in advance, or even for longer periods.

The second paper, on *Southerly Bursters*, by H. A. Hunt, of the Sydney Observatory (originally published in Journ. Roy. Soc., N. S. W., xxviii, 1894), was awarded a prize of £25 offered by Hon. Ralph Abercromby for the best essay on southerly 'bursters.' The 'burster,' formally called the 'brick-fielder' because it was heralded by a cloud of reddish dust from the neighboring brick-fields, is a strong southerly wind associated with a V-depression, and bearing some resemblance to the 'pampero' of Brazil and the 'norther' of Texas. This is an exhaustive study of this interesting phenomenon. The last paper, also by Hunt, on *Types of Austrliana Weather*, is a clear and useful account of the typical atmospheric conditions controlling Australian weather, and is illustrated by numerous maps.

INTERNATIONAL CLOUD ATLAS.

The *International Cloud Atlas*, already referred to in these notes, may be purchased of MM. Gauthier-Villars et Fils, 55, Quai des Grands-Augustins, Paris, for 14 francs a copy. The *Atlas*, which contains 28 views, is now the official cloud atlas of the world, and the illustrations in it are the types to which all cloud forms must hereafter be referred. It is the work of the International Cloud Committee, appointed by the International Meteorological Conference held at Munich in 1891, and the standard types now adopted were selected from over 300 photographs collected from all parts of the world. The Cloud Committee is composed as follows: Hann, Hildebrandsson, Mohn, Riggenbach, Rotch and Teisserenc de Bort, and the sub-committee in charge of the publication of the *Atlas* comprises Hildebrandsson, Riggenbach and de Bort.

METEOROLOGICAL WORK AT BATAVIA.

From the 17th volume (for 1894) of the *Observations made at the Magnetical and Meteorological Observatory at Batavia*, we learn that the sub-director of the Observatory, Dr. S. Figee, is conducting an elaborate inquiry into the influence of the moon upon the magnetic elements at Batavia, some of the results of which study appear in the present volume. A large number of cloud photographs have also been taken at the Observatory, with satisfactory results, as a preparation for the work of the International Cloud Year. It is disappointing to note that it is feared the cloud observations by means of theodolites will prove to be too trying for the eyes of the observers at Batavia, and may have to be given up.