during 1898,' compiled by H. C. Russell, Government Astronomer of New South Wales, show that the year 1898 is to be classed as a drought year, and was the fourth of that character to follow in succession. The average rainfall of the Colony for the year was 20.54 in., as against an average rainfall, derived from 28 years record, of 24.85 in. The heaviest average rainfall, 64 in., is found on the Tweed river, just at the foot of a range of mountains from 4,000 to 6,000 feet high, against which the trade winds blow. A hopeful view is taken by Mr. Russell regarding the possibility of long range weather forecasts in New South Wales. "I am fully convinced," he says, "that a complete record of the rainfall will enable us to forecast the seasons with some show of success, provided, of course, that the extended knowledge of our rainfall is concurrent with a careful study of Australian and tropical weather, which is now in progress. \* \* \* Further study will, there is reason to expect, explain the reason for dry years and when to expect them."

#### RAINFALL AND ALTITUDE IN ENGLAND.

THE Quarterly Journal of the Royal Meteorological Society, for October, contains a paper by Marriott on 'Rainfall in the West and East of England in Relation to Altitude above Sea-Level,' in which the mean annual and monthly rainfalls at the English and Welsh stations are discussed for the ten-year period 1881-1890. The stations are classed as 'eastern' and 'western,' the former being those that drain to the east and the latter those that drain to the west. A further classification was made according to altitude, the stations being grouped together for each 50 ft. up to 500 ft., and above that altitude for each 100 ft. The increase of rainfall with altitude may be compactly summarized as follows:

100 feet +	9 per cent.	600 feet	+ 5	per cent.
200 " +	3 "	700 ''	+38	66
300 " +	3 "	800 "	+ 3	16
400 " +	14 "	900 "	+ 4	"
500 " +	1 "	1000 "	. — 21	44

### A NEW METEOROLOGY.

A NEW 'popular' presentation of the essential portions of meteorology, within the compass

of a small octavo volume of 123 pages, at a cost of 80 Pfennige (20 cents) comes in a recent mail from Germany. This little book is by Paul Kaegbein; is entitled 'Meteorologie'; appears in the Wissenschaftliche Volksbibliothek; is published by Schnurpfeil, of Leipzig, and can really be recommended as giving a good general view of the subject with which it deals. The price is certainly low for the amount of information contained in the book. One of the chief objections to the book is the fact that the author has drawn largely on some of the standard works on meteorology, such as Hann's Handbuch der Klimatologie; Abercromby's Weather, etc., without acknowledging his indebtedness to the writers from whom he obtained his material.

### ATLAS OF THE INDIAN OCEAN.

THE Royal Meteorological Institute of the Netherlands has recently issued a meteorological atlas of the Indian Ocean for the month of June, July and August. The two preceding volumes for the months of December, January and February, and March, April and May, respectively, preceded the present volume by seven years. The charts contained in the third part of this important publication are stated in the preface to have been ready in September, There are in all twenty-two charts, showing surface temperatures of the ocean water; ocean currents (velocity and direction): pressure; air temperature; winds (by means of wind roses); rainfall (in percentages); the distribution of thunder, fog, hail, cloudiness: the average limits of whales, flying fish, etc.: the sailing routes; percentages of storm frequency, and the trajectories of cyclones.

R. DEC. WARD.

# THE INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE.\*

At the International Conference which met in London last June to discuss this subject, it was thought that the time had arrived when the great work of publishing a complete catalogue of all the scientific literature of the world might be undertaken with every prospect of success.

A Provisional International Committee was, therefore, appointed at the Conference to carry

<sup>\*</sup> From Nature.

out the preliminary work, and this Committee reported the results of its labors to an International Council which met last week in the rooms of the Royal Society.

At this meeting, which took place on December 12th and 13th, there were present: Professor B. Schwalbe, representing Dr. Milkau (Germany), Professor G. Darboux, representing Professor H. Poincaré, and Dr. J. Deniker (France), Professor A. W. Rücker, Sir M. Foster, Professor H. E. Armstrong and Dr. L. Mond (Great Britain), Professor J. H. Graf (Switzerland), Dr. E. W. Dahlgren (Sweden), Professor Korteweg (Holland), Dr. M. Knudsen (Denmark), Mr. Roland Trimen (Cape Colony), Dr. W. T. Blanford (India), Señor del Paso y Troncoso (Mexico), and M. Metaxas (Greece). Dr. Ludwig Mond represented Italy in the absence of Profesor Nasini. Sir Michael Foster was elected chairman of the meeting.

It is proposed that the annual cost of a set of seventeen volumes shall be 17*l.*, and on this basis it was announced that the number of sets subscribed for by the various countries was as follows:

FT 1: 1 0: : 4
United States of America68
Great Britain
Germany
France
Italy27
Japan
Switzerland 7
Sweden $6\frac{1}{2}$
Denmark 6
Holland 6
in the state of th
Mexico 5
Cape Colony 5
Canada $4\frac{1}{2}$
Hungary 4
Portugal 2
South Australia
Western Australia 1
Victoria
VICTORIA

One great difficulty in starting an enterprise of this magnitude is that a large amount of capital is needed to cover the preliminary expenses and to pay for the printing of the first set of volumes, and for other work which must be done before the grants from the various countries are received, and before any sales of the volumes to the public can be effected. This initial difficulty was met by the Royal Society, which generously offered to advance

the necessary capital. This offer was accepted by the International Council, which expects to be in a position to repay the sum advanced during the next few years.

The Royal Society offered to act as the publishers of the catalogue, and to sign the necessary contracts with the printers and publishing agents. This offer was unanimously accepted by the International \*Council\*, which, after carefully examining the clauses of the proposed contracts, declared its approval of them.

The three principal countries which have not yet joined in the scheme are Russia, Belgium and Spain; and the Royal Society was asked by the International Council to address the Imperial Academy of Sciences of St. Petersburg on the subject, and also to take steps to induce the other countries to join in the catalogue.

A code of instructions for the use of all who are taking part in the preparation of the catalogue was considered, and, after some amendment, adopted.

In this connection the chief point discussed was whether it is desirable to publish complete lists of new botanical and zoological species. It was decided that lists of new species should be published, and that they should, as far as possible, contain all the additions to our knowledge in this direction made within the year.

It was also decided to include translations in the catalogue, but to indicate that they are translations. Schedules of classification for the subject indexes of the several sciences were adopted.

An executive committee was appointed, consisting of the four delegates of the Royal Society and the representatives of the four largest subscribers to the catalogue—France, Germany, Italy and the United States. Dr. H. Forster Morley was appointed director of the catalogue.

Finally, it was resolved to begin the work on January 1, 1901, and to include in the catalogue all literature published after that date.

## SCIENTIFIC NOTES AND NEWS.

Dr. H. C. Bumpus, professor of comparative anatomy at Brown University and director of the Biological Laboratory of the U. S. Fish Commission at Woods Holl, has been appointed curator of invertebrate zoology and assistant to