

The introduction of the term premyelocyte (p. 49) for the non-granular cell with basophil cytoplasm which gives rise to the myelocytes is most regrettable, first because too many names have been given to this cell already, and secondly, because the very similar word promyelocyte has already been in use for some time to describe cells like those in plate i., Fig. 8, Nos. 3, 4, 5, *i.e.* early myelocytes with granules in a still basophil cytoplasm (Pappenheim). Likewise the term intermediate myelocyte is both clumsy and unnecessary when the word metamyelocyte is already well established (Pappenheim).

From what the author says on pp. 40, 48, 62, and his figure on plate xii., it is obvious that he confuses the Reizungsformen with the large mononuclears. They are absolutely distinct cells, only differing from the young megaloblast in that the narrow rim of cytoplasm is extremely basophil and free from hæmoglobin.

The most valuable thing in this book is the series of plates illustrating the author's macroscopic bone-marrow preparations. These are jewels of a pathological museum. Taken as a whole, the book contains very little that is new, and is not a serious contribution to science.

#### PROGRESS OF CLIMATOLOGY.

*Handbuch der Klimatologie.* By Dr. Julius Hann. Band i., Allgemeine Klimalehre. Dritte wesentlich umgearbeitete und vermehrte Auflage. Pp. xiv+394. (Stuttgart: J. Engelhorn, Bibliothek geographischer Handbücher, 1908.)

A NEW edition of Prof. Hann's well-known handbook of climatology will be greeted with pleasure by geographers and meteorologists alike. The second edition has been rendered accessible to English readers by Prof. De Courcy Ward's translation. The present edition has been largely extended and revised, and much recent work has been incorporated in it. The numerous references to original papers, a feature which the book shares with its fellow, the "*Lehrbuch der Meteorologie*," are specially welcome. They render the work no mere text-book, but a veritable encyclopædia to which the student will turn as a matter of course to ascertain what has been accomplished by others in the field in which he proposes to work.

In external features the book has gained considerably from an increase in the size of the page which makes it possible to set out tabular matter in more comprehensive style. The more detailed subdivision of the material into books, chapters and sections is also of great assistance to the reader.

A comparison of the two editions is of the nature of a survey of the progress of climatology in the past decade. Perhaps the most striking development lies in the greater prominence given to the question of radiation, which finds expression in an introductory section on solar radiation and in a considerable extension of the chapter on the solar or mathematical climate. Langley's work on the distribution of energy in the solar spectrum and the researches on the determination of the amount of radiation received from the sun,

which are associated with the name of Angström, are dealt with, and open what is practically a new chapter in the science of climatology. The question of cyclical changes of climate has also come to the forefront in recent years, and the chapter thereon, with its numerous references, forms a useful summary of the present state of our knowledge of this question and of the allied one of the dependence of variations of terrestrial climate on solar phenomena. In this connection a bibliography of series of observations extending over long periods, many of them to the second half of the eighteenth century, is of great value. Prof. Hann endorses the generally accepted view that all available meteorological records show no permanent change of climate. On the wider question of a change of climate within historic times he preserves an open mind, and considers the usual statement that our climate is not changing to be a no more justifiable deduction from known facts than the reverse opinion.

Increased space is devoted to the consideration of methods of computing averages for temperature and rainfall from incomplete or short series of observations which shall be comparable with those deduced from long periods, a question which is of great importance in forming an estimate of the climatic factors of regions which have only recently been opened to civilisation. Finally, we mention an entirely new chapter on the great climatic zones of the globe, which gives a concise summary of the main features of the climate of each of the regions into which the earth's surface may be divided. We look forward with interest to the appearance of the second and third volumes of the book, which are to deal with the climates of special regions in greater detail.

R. G. K. L.

#### SOME NEW TEXT-BOOKS OF INORGANIC CHEMISTRY.

- (1) *Cours de Chimie inorganique.* By F. Swarts. Pp. iv+706. (Paris: Librairie scientifique A. Hermann, 1908.) Price 15 francs.
  - (2) *A Text-book of Inorganic Chemistry.* By A. F. Holleman. Issued in English in cooperation with H. C. Cooper. Pp. viii+502. Third English edition, partly re-written. (New York: J. Wiley and Sons; London: Chapman and Hall, Ltd., 1908.)
  - (3) *General Chemistry for Schools and Colleges.* By Dr. Alexander Smith. Pp. xiii+529. (London: G. Bell and Sons, 1908.) Price 6s. 6d. net.
  - (4) *The New Matriculation Chemistry, specially adapted to the London University Matriculation Syllabus.* By Dr. G. H. Bailey. Pp. viii+528. Sixth impression, fourth edition; revised by H. W. Bausor. (Cambridge: University Tutorial Press, Ltd., 1908.) Price 5s. 6d.
- (1) THE "Cours de Chimie," so the author states in the preface, is a reproduction of his course on general chemistry. Theoretical questions are discussed as they happen to occur, and, it may be added, these theoretical questions are treated in a manner which few first-year students of an English University would grasp. It speaks well for the previous training in mathematics and physics of the Belgian schoolboy that on