

tence, "No one lives alone." So condensed is the substance of this section that a scant page separates the Sumatran Kubu tribes from the Christian ideal of charity, healing and restoration. Venereal disease, tuberculosis, leprosy and mental disease are the *leit motifs* in the exposition of the interrelationships of disease and social life.

From here on the story runs smoothly through the interrelationships between disease and the law; disease and history (the role of the bubonic pest typhus, cholera, dysentery, malaria and scrofula as world plagues); disease and religion (with a sanely balanced and appreciative concept of faith healing as demonstrated by the rationalized Emmanuel movement, the decidedly nebulous cult of Christian Science and the frank humbug based on auto-suggestion techniques); disease and philosophy; disease and science (stressing such factors as the ferment in thought flowing from the labors of Vesalius, Harvey, Morgagni, Bichat and Pasteur); disease and literature; disease and art (largely a restatement of the objectives of Charcot and Richter in the "Nouvelle Iconographie" and other publications, and Hollaender's "Atlas of Medicine in Classical Art").

The final chapter on "Civilization Against Disease" furnishes Sigerist a platform for a short restatement of his well-known humanistic interest in social needs and the methods of their accomplishment.

All in all, the volume is a fine example of "infinite riches in a little room," substance that one may read as he runs. Its brevity lends charm through the skill with which the condensation is wrought. To the cognoscenti, there is evidence on every page of mastery, no small part of which displays itself in the selection of admirably suitable illustrations. An accurate index contributes value to the whole. Only one minor note jars a bit, Sigerist's loose use of "tubercular" for "tuberculous."

No review of this book on "Civilization and Disease" would be complete without reference to the peculiarly appropriate time of its appearance. To those of us who are sufficiently optimistic in temperament to visualize peace just around the corner and sufficiently hedonistic in our thinking to hope for a happier post-bellum world, there is solid substance in the lessons of the historic past, as Sigerist has set them down. Whether or not we shall be wise enough to see to it that these lessons are taken to heart in peace planning—well, in the language of the immortal Kipling, that is another story.

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BAROMETRIC PRESSURE

Barometric Pressure. By PAUL BERT. Translated by M. A. and F. A. HITCHCOCK. xxxii + 1055 pp. 89 figs. Columbus, Ohio: College Book Company. 1943.

THE completion of the formidable task of translating this celebrated monograph must afford its authors a great satisfaction, and must inevitably call forth well-deserved praise from its readers. Seldom are we privileged to study as careful and accurate a translation of a monumental treatise such as this chef d'oeuvre of Paul Bert. Constant attention undoubtedly has been paid to a presentation as close to the original as possible, and although at times a smoother translation could be desired, one feels that its sacrifice in favor of accuracy in most instances was wise. The improvements mentioned by the authors in their translators' preface are helpful indeed. They have arranged the format in a way to which most of us are much more accustomed than the French method, by placing the table of contents at the front of the book, and by including an admirable index at the end. The brief foreword, written by Professor John F. Fulton, sets the stage and forms an admirable curtain-raiser for the text that follows.

Although it might seem proper to restrict the present remarks to Professor and Mrs. Hitchcock's most timely and long needed translation, the reviewer feels that in this case it is necessary to say something about the work itself; a work which won for its author a high place, not only among his colleagues of the Academy of Sciences, but also among scientists of past and future generations. Remarks related to existence at high altitudes can be found in the literature as far back as Aristotle, and observations on air pressure have accumulated since the days of Galileo and Torricelli, but it remained for Paul Bert to point out the role of diminished partial pressure of oxygen in producing the physiological effects reported as a result of exposure to high altitude experiences. How astounding the revelation must have been to those aware of his discoveries, that oxygen, the basic necessity of life, so easily could become a prime factor in the destruction of cells and tissues, and in their ultimate death!

Bert's long series of investigations originally appeared in the *Comptes Rendus de l'Académie des Sciences* (1871-1875). The book, now translated for the first time, was published in 1878 and, as pointed out by Dr. Fulton, stands to-day as the cornerstone of modern altitude physiology. It is divided into three parts: historical, experimental and summary and conclusions. The historical section is an astonishing sum-

mation and discussion of all previous theories and experiments, and of the reports and events of balloon ascensions and mountain journeys in all parts of the world. It represents a prodigious amount of perseverant bibliographic collation and analysis, and stands out as a fine example not only of the lengths to which a scholarly investigator will go to familiarize himself with the contributions of his predecessors, but also of an exceptional example of medical historical writing.

The second part contains the experimental protocols. Over 660 experiments were performed, in which plants, animals, ferments, poisons, viruses and even Bert himself were subjected to changes in barometric

pressure. The experiments are beautiful in their simplicity and directness, and with the final résumé section, are remarkable examples of precise, logical scientific investigation and reporting. They include solutions of myriad problems as well as numerous signposts pointing the way towards future studies.

This work, one of the most important in the physiological archives, deserves to be read by many who have neglected it in the past, especially in these unfortunate days during which the ideas with which it is concerned have become of such vital importance in aviation medicine.

ROBERT GRENELL

SOCIETIES AND ACADEMIES

THE KANSAS ACADEMY OF SCIENCE

THE seventy-sixth annual meeting of the Kansas Academy of Science was held at Topeka, Kansas, on April 15, with Dr. Harvey A. Zinszer, Fort Hays Kansas State College, Hays, Kansas, presiding. The affiliated society, the Kansas Entomological Society, met with the academy. Other state societies which met with the academy were the Kansas Association of Teachers of Mathematics and the Kansas chapter of the Mathematical Association of America.

The meetings were at Washburn Municipal University of Topeka, where the society was organized on September 1, 1868. The societies were welcomed by President Bryan S. Stoffer, of Washburn University.

The meeting was shortened to the one day, as was the diamond jubilee meeting last year. The interest

encouraged to hold meetings at which the outstanding demonstrations, papers and exhibits were selected. In certain instances local civic clubs provided prize money for the winners. The academy council voted that high-school science clubs which are members of Science Clubs of America may become members of our Junior Academy of Science without payment of our membership fees.

The annual banquet was held in the evening with the newly installed president, Dr. Leland D. Bushnell, presiding as toastmaster. I. D. Graham, of Topeka, who became a member of the academy in 1879, was present. Dr. Harvey A. Zinszer as retiring president gave the address, entitled "Famous Early American Observatories." The banquet was followed by the annual public meeting. The program for this meet-

TABLE 1

Name of section	Chairman for 1944	Number of papers on program	Number attending	Chairman for 1945
Botany	Stuart M. Pady	12	40	Elva L. Norris
Chemistry	Worth A. Fletcher	9	30	Harry H. Sisler
Geology	W. H. Schoewe	8	10	J. R. Chelikowsky
Kansas Entomological Society	Elmer T. Jones	10	20	W. T. Emery
Kansas Chapter of Mathematical Societies of America	Paul G. Eberhart	7	60	Edison Greer
Kansas Association of Teachers of Mathematics	Herbert H. Bishop	7	60	Sara Belle Wasser
Physics	Ernest K. Chapin	7	18	P. S. Albright
Psychology	Maurice C. Moggie	11	21	Homer B. Reed

shown justified the decision of the academy council to hold short stimulating meetings annually during the war emergency. Cancellation of national and sectional meetings makes that of the state organization more important as a common meeting ground for scientists of the state.

During the day section meetings were held for Botany (interpreted broadly to include Bacteriology and Agronomy), Chemistry, Geology, Physics, Psychology and Zoology. No attempt was made to hold a section of the Junior Academy because of the transportation difficulties, but local chapters had been

ing consisted of an invitational address by Dr. Joel Stebbins, director of the observatory, University of Wisconsin, and research associate, Mount Wilson Observatory. His subject was "The Heavenly Spaces." This technical subject was presented in an interesting manner.

The total attendance was 210. The reports of the section chairmen are presented herewith in Table 1. The next annual meeting of the academy will be held at Kansas State College, Manhattan, Kansas.

The following officers were elected for the next year and meeting: *President*, Dr. Leland D. Bushnell,