BOOK REVIEW

HANDBUCH DER PHYSIKALISCHEN THERAPIE, in vier Banden

HANDBOOK OF PHYSICAL THERAPY, 4 volumes, edited by Prof. Dr. Grober, Bad Bodendorf, and Prof. Dr. Friedrich-Ernst Stieve, Munich. Vol. I: Significance of Physical Medicine—Physiological basis—Electrotherapy—Light Therapy. 1966, XIV, 480 pages, 229 illustrations, price DM 128, Publisher Gustav Fischer, Stuttgart.

The book is divided into three sections, excluding an introduction by Prof. Dr. Grober on the nature and significance of Physical Medicine.

Section I: **Physiology of the Cardiovascular System by Dr. Weidinger.** An excellent concise physiology of (*a*) the heart is given, its work done normally by a trained heart muscle, also mentions briefly abnormalities (fibrillations). Goes into some detail about nervous factors responsible for its functioning. The coronary system and the factors influencing it are mentioned. A short derivation and evaluation of the ECG is given. (*b*) Circulation is subdivided into arterial or high pressure system and capacity or low pressure system. Arterial system is mainly dynamic, low pressure system mainly static. Mentionable in the haemostatic chapter is (*c*) the Capillary circulation and the lymphatic system. Very good is the Regulation of Circulation. Finally there are two special sections: Circulation of (*a*) the skin, (*b*) the muscle. There are a great number of very good and clear diagrams in this chapter.

Basic Neurophysiology by Dr. W. Baust. Excellent in its briefness and clearness. It gives information on electrical and chemical changes at rest and at excitation. Chapter VI deals with electrical stimulation of excitable tissues. Chapter VII gives information on the neuromuscular system including factors responsible for voluntary and involuntary muscle work and muscle tone. There is a short chapter on sensation and finally on the autonomic nervous system. Also in this article are very good diagrams.

Section II. Electrotherapy by Dr. Koeppen. A short introduction and history of Electrotherapy is given Electromechanics include a portion on the production of Decimeter and Microwaves which is good. (D) deals with the electrophysiology of the motor unit, the electrical stimulation of innervated and denervated muscles by means of different impulse forms. In the portion on electrical muscle tests i/t curves with square and progressive impulses are described and evaluated. At the end of this chapter some special forms of Electrotherapy are mentioned: the electrical treatment of Chronic constipation and of the viscera, the pacemaker, defibrillation of the heart, electroshock. It also deals with dia-dynamic and neodynamic currents. (F) Treatment by High Frequency Currents starts off with the treatment by d'Arsonval's currents and Long Wave Diathermy. I think these two forms of treatment could be omitted today. In the chapter on S.W.D. physiological and therapeutic effects are mentioned first, then dangers, precautions and dosage. Then there is a chapter on the uses of S.W.D. and techniques employed in different conditions. It is a pity that in this chapter old illustrations are still used in which position and support of patient, position of leads, treatment through cloths are completely disregarded although every detail is stated in the text under preparation for treatment. Finally Hyperthermy by S.W.D. is dealt with in great detail. In the section on Decimeter and Microwaves quite a lot of information is given on effects and technique. The Chapter on Ultrasound is very brief. Little information on effects is given. It only deals with effects and application of continuous U.S. Indications for treatment by U.S. are stated including dosage, application and technique. (N) Electotherapy of the Heart. First the history is given then information on pacemaker, defibrillation and permanent stimulation of the heart by means of an implanted pacemaker.

Light Therapy by Dr. Tronnier and Prof. Dr. Schneider. Again a short history is given. Incidentally 'Light' includes U.V.R., vis. light and I.R.R. But it is mainly U.V.R. that is discussed in great detail. In (B) the Physics of Radiation are discussed. (C) Biological effects of U.V.R. gives very detailed information on photochemical reactions of various biochemical substances that take place under the influence of U.V.R. including its effects on bacteria and cells. In (D) Local and general effects of U.V.R. The effects of U.V.R. on the skin are discussed in great detail, and very valuable information is given. Equally good are the general effects. It also deals with filters and sensitizers on which a lot of work is done. (E) Sources of U.V.R. Natural and artificial sources of radiation are discussed, and diagrams of their spectra are given. It also deals with devices for measuring the intensity of radiation. In (F) Therapeutic uses of U.V.R. and I.R.R. The indications are discussed. (I) In general, conditions and conditions not manifested in the skin and lastly its use in Dermatology. A very good chapter indeed.

To conclude: This *Handbook of Physical Therapy* is an excellent book for the person who has a basic knowledge on Physical Therapy and who wants to get some more information on it.

M.K.
