second joint of the finger is flexed, rough crepitus is felt. The thumb is swollen to twice its normal circumference, the greatest diameter of the swelling being opposite the inter-phalangeal joint. In it crepitus can be felt. This crepitus did not develop until lately, however. There was no considerable redness or pain. The diagnosis here lies between a trophic disturbance such as Raynaud's disease, syphilitic dactylitis and papillomata, and tubercular dactylitis and warts. The tuberculin test showed a slight reaction. A Wasserman test was negative. The swelling of the thumb and finger was opened and some material curetted away and examined microscopically. It resembles syphilitic rather than tubercular granuloma. Finally, guinea pigs were inoculated with some of the material and died of general tuberculosis. Patient has been put on proper hygienic and medicinal treatment, and the usual ascending doses of tuberculin are being administered.

BOOK REVIEWS

Practical Suggestions in Borderland Surgery. By G. M. Blech, M. D. Professional Publishing Co., Philadelphia, 1910.

This book of 200 very small pages is presented, according to the publisher's note as a "veritable multum in parvo" a protest against the "somewhat unhealthy stimulation which has resulted from the marvelous surgical successes of recent years." The reviewer fails to understand how the question "when to operate and when not to operate" is solved by very lengthy and laudatory descriptions of Freund's operation for emphysema, Routte's sapheno-peritoneal anastomosis for ascites, the X-ray treatment of prostatic hypertrophy and the injection of alien blood into that gland as a therapeutic measure. It is interesting to read that "the prevalence of pneumonia in the early spring and late fall should cause us to postpone facultative operations to a time when climatic conditions are more favorable." Equally interesting is the statement that the author found it necessary to go to Germany to investigate the essentially American drop method of ether anesthesit and that his experience with cholelithiasis "comprises eleven cases, nine of **whom** have been operated on, the other two being still under observation (over five years)." Hence the following contra-indications: acute attacks, icterus, occlusion of choledochus, obesity, nephritis, etc.! In typhoid perforation the operative chances are termed problematic and internal medication is preferred. Hysterectomy for fibroid is said to have a considerable mortality.

Thus one may scan pages of interminable incongruities woven together without method or grammar. D. T.

The Elements of the Science of Nutrition. By Graham Lusk, Ph. D. S. D. H. R. S. (Edin.). Publishers, W. B. Saunders Company, Phila.

A second edition of Professor Lusk's work within three years is in itself testimony to the value of his contribution to the most important of all physiological subjects. It is in fact a book belonging to a type too little seen in contemporary scientific literature. The average modern treatise contents itself with stating results, and the larger number of the graduates of our schools have but the haziest notion how these results have been arrived at. Here we have a book whose stated aim is: "To review the scientific substratum upon which rests the knowledge of nutrition both in health and in disease. Throughout no statement has been made without endeavoring to give the proof that it is true." This ideal is strictly adhered to and we have a volume tracing with the utmost precision and great lucidity of language the long series of experiments and deductions that underlie our present teaching in the field of metabolism. Apart from the knowledge to be acquired, I can conceive of no more valuable mental training for student or physician than is afforded by the perusal and mastery of these pages. Commencing with the fundamental experiments of Lavoissier, the reader is led through the maze of experimentation resulting in the latest achievements concerning the complex problems of proteid metabolism.

Under the headings of Metabolism in Starvation, The Regulation of Temperature, The Influence of Proteid Food, The Specific Dynamic Action of the Foodstuffs, The Influence of the Ingestion of Fat, and Carbohydrate, The Influence of Mechanical Work on Metabolism, A Normal Diet, The Food Requirement During the Period of Growth, Metabolism in Anemia, Gout, Fever, Diabetes, Phosphorus Poisoning, Theories of Metabolism, we find practically all of the leading questions concerning normal and pathologic nutrition considered. The very fairness with which all facts and opinions are presented seems to preclude a full presentation of the author's own opinions, and we miss such able summaries of the drift of opinion as Professor Lusk might well give. This much will be apparent to the careful reader, namely, that however much we know, and though, as the author states, many of the laws of metabolism "are as fixed and definite as are any laws of physics and chemistry," still there is an enormous work to be completed before many of the most pressing questions concerning health and disease can receive a satisfactory solution. Furthermore, it will be seen how slim is the foundation on which rest many of our popular opinions; thus we learn that suboxidation, which has figured so largely in medical literature of the quasi-scientific type, is a myth. While primarily concerned with laboratory experiments and the deduction of general laws, the book is none the less of interest to the physician in the daily practice of his profession, and to such the chapters on Metabolism in Diabetes, Gout, and Fever will have great value. Finally, in the way of criticism we note that the author in his preface states that having collected for the American Text-Book of Physiology, the material for the chapter on the life history of the inorganic constituents of the body, he has allotted but little space to it in this volume. This we feel to be a mistake; to write a work on nutrition without reference to the absolutely essential inorganic elements leaves us with a sense of incompleteness. Lastly, then appears on page 31 the following passage: "Phenomena of life are phenomena of motion due to the liberation of energy in the breaking down of molecules. The motions are principally manifested as heat, mechanical energy and electric currents." Here we find Professor Lusk seemingly giving authority to a widely diffused fallacy, namely, that katabolic processes are a source of energy. Of course the exact opposite is the case, the dissociation of large molecules can only be effected by an expenditure of energy; in other words, the breaking up of a large molecule into many small ones can only be accomplished by work done on it. The liberation of energy that commonly, but not necessarily, accompanies katabolic processes is due to the oxidation of the products, and in the absence of such oxidation is not manifest. At the end of the passage in question the author finishes with the statement, "Metabolism vivifies the energy potential in chemical compounds." As literature this sounds pretty, as a scientific statement it is permissible to ask what it means.

H. D., A. P.