55° to 57° show only slight tendencies to blossom (January 25). Plants which were moved from 63° (average), after forming blossom buds, to 70° abscissed their flower clusters. Large percentages of the poinsettia plants grown in long days at temperatures of 55° to 57° are producing blossoms. A similar departure from the usual responses to photoperiod occurred in the case of Klondyke cosmos. In previous years *Rudbeckia* plants have never produced stems when in short days but only a rosette of leaves. The plants in a cooler temperature this season are producing typical stems. These show no tendency to produce blossom buds, however; the plants in long days at cool temperature are forming abortive blossoms.

Other plants which have had their customary responses to photoperiod altered by temperature effects are: alfalfa (seed setting), winter barley, castor beans, wax beans, Chinese cabbage, chrysanthemum, white clover, geranium, hemp, Jimson weed, lettuce, pansy, pigweed, spring rye, spinach, stock, timothy and spring wheat.

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SCIENTIFIC BOOKS

THE LUNG

The Lung. By WILLIAM SNOW MILLER. Charles C. Thomas. Baltimore, 1936. 209 pages. $7.50.

THE many friends and students of Dr. William Snow Miller will be delighted at the appearance of his book, "The Lung." Many have urged that he put into book form the knowledge gained from his long study of the anatomy of this organ. Some years ago the Committee on Medical Research of the National Tuberculosis Association provided funds with the hope that he could see his way clear to doing it. More recently Dr. Lawrason Brown gathered among Dr. Miller's friends funds for the same purpose. Now that it has come, it is beautifully illustrated and full of a wealth of knowledge.

Dr. Miller, as a great anatomist and no less keen historian, has combined these two talents in his book. Possibly the title, "The Lung," is a little too comprehensive, as the volume deals only with the anatomy, histology and architecture of the lung, and not with its living function. Nevertheless, the volume will do much to enable students to understand the fineness and delicacy of an organ which is difficult to visualize in detail.

All those students who have worked with Dr. Miller in his laboratory will miss in the photographs the depth and contrast made possible by the study of his actual models, which are such artistic pieces of work. They will not lack in understanding of the long, patient study of the structure of the lung, which he made by serial section, microscopic study, camera lucida drawings on scale paper to give exact proportions, for they will have seen Dr. Miller at work before finally completing his model with each system colored differently and checked against the serial sections. The skill with which these models have been conceived and executed have done what the author wished them to do—cleared up many vexed questions in lung and vascular architecture and lung function.

One very notable feature of Dr. Miller's work has been his ability to draw upon pathological material to illustrate many of the questions rendered difficult by histological methods alone. In particular is this true in determining the presence of an alveolar epithelial lining. This was accomplished by studying exudates in inflammatory conditions occurring between the basal membrane and covering cells of the alveoli, thus making clear the continuous epithelial covering.

Dr. Miller's work demonstrating the valves of the lymphatic system, which forces the flow in the lymphatics always in one direction, has always been helpful in understanding many pathological conditions. The different currents of the lymphatic flow in pleura and lung and his intimate study of elastic tissue layers has been invaluable also in understanding many pathological conditions.

The problem of anastomosis between the branches of the aortic system and pulmonary artery system Dr. Miller has also clarified. According to Dr. Miller's view, this probably only occurs in the capillary part of the two systems. The question of different blood supply to lymphatic tissue in different animals—for instance, by the bronchial artery in the rabbit and by the pulmonary artery in the guinea pig—probably explains in part the different distribution of tuberculosis in this disease in the two animals.

It would make too long a review to call attention to other interesting structures. It is possible that the book is too technical for many, but every student of anatomy and every clinician should have it for reference and should from time to time study it to clarify his picture of the fineness of this organ.

The historical division of this book every one interested in medical history will find delightful reading, but one thing is sure, that every one who has known Dr. Miller and his lifelong study in this field will be gratified that his knowledge has been put in such a satisfactory volume.

WM. CHARLES WHITE