time, the authors, while very briefly alluding to hot-water treatment for the control of leaf nematodes on chrysanthemums in their general discussion of control practices, fail to mention this experimentally tested and published method in their specific discussion of the control of chrysanthemum leaf nematodes.

To the specialist in the field covered by the book, the inaccuracies and omissions may assume an exaggerated importance, yet he will appreciate the difficulties involved in preparing a complete and up-to-date presentation in a field so wanting in critical literature. Despite its shortcomings, the book in its present form is a work for which its authors may be commended.

A. W. DIMOCK

CORNELL UNIVERSITY

RAYS

These Mysterious Rays. By ALAN L. HART, M.D. New York: Harper and Brothers. 1943.

THIS fascinating book describes some of the uses of x-ray, radium and ultra-violet radiation for diagnostic and therapeutic procedures in medicine. It is based upon the author's wide experience in the practice of radiology and his equally wide knowledge of the work of the leaders in this field of medicine.

This book is written for the layman. It describes, by simple theoretical discussions and very often by interesting examples, the apparatus and the technical procedures which the radiologist employs. The clarity of presentation is enhanced by reproductions of photographs of x-ray apparatus and of roentgenograms of several parts of the body.

It appears to the reviewer, an electrical engineer who has had the privilege of working with radiologists, that Dr. Hart has effectively and cogently described radiology for the layman, and that the layman is likely to be a more cooperative and understanding patient if he reads this book.

S. REID WARREN, JR.

MOORE SCHOOL OF ELECTRICAL ENGINEERING,
UNIVERSITY OF PENNSYLVANIA

REPORTS

A PROGRESS REPORT ON THE CONSTRUCTION OF POPULATION AND PHYSIOGRAPHIC MAPS FOR THE STATE OF MISSOURI[1]

A FEW years ago plans were laid to construct twin wall maps for the State of Missouri; namely, one showing the physiography, the other showing the distribution of population (1940) within the state. The project is one of compiling and of mapping data and analyzing the distribution of population in Missouri in terms of the physiography of the state. This report indicates the work already done, and the steps to be taken in the future in order to complete the project.

POPULATION MAPS

A map, scale of 1:500,000, published by the U. S. Geological Survey, has been used for the work-sheet maps. This map with rather complete drainage, rail and town patterns provides a convenient size suitable for reproduction as a wall map or even for reduction to desk-size maps.

A map of Missouri has been completed showing the variations in sizes of incorporated places according to 1940 Census data. Circles for cities were left open so that dots representing rural population near cities will show through where necessary. Nine categories of incorporated places from "Under 500" to "cities over 100,000" were set up for the classification of incorporated places. A fairly uniform distribution exists throughout the state except in the south central portion where a wider spacing exists and in the St. Louis area where the suburbs form quite a cluster.

Mimeographed forms were set up on which were tabulated total population by minor civil divisions; incorporated populations by minor civil divisions; unincorporated population for each minor civil division; and the area and density per square mile for the unincorporated population for each minor civil division. All population and area data by minor civil divisions were obtained from the Bureau of the Census. Student assistance was possible through NYA and an university research grant.

The terms "incorporated" and "unincorporated" have been used in place of "urban" and "rural" in order to recognize as many settlements as possible in addition to those listed under the census classification of "urban." In addition the plans call for an isopleth inset map of the unincorporated population. This density map will be developed on a basis showing the urban areas by size categories and the density of rural population per square mile by density categories.

PHYSIOGRAPHY MAP

The physiographic map of Missouri on the scale of 1:500,000 has been partially completed. Contours from the many topographic sheets of the state were pantographed on an interval of 100 feet. The coloring of the map, however, has been on the basis of a

[1] No illustrations accompany this considerably condensed article because the maps and tables are not ready for publication or release to the public.