have shown their willingness to overcome the handicap. The spirit of this university is as liberal as in any other, but some ancient special requirements have been interpreted as placing it outside the prescribed list of beneficiaries. An attempt has been made to revise the charter so as to put it into conformity with the conditions of the foundations, and while that might have been a properly expedient step to take, there may be a feeling of larger satisfaction in attaining the same results through its own efforts. After twenty-five years of service in some cases and fifteen in others, any one connected with the active work of the university is entitled, after the age of sixty-five, to a pension of four hundred dollars, plus fifty dollars for each hundred dollars of active pay. Retirement at seventy is mandatory. This overcomes what otherwise might prove a disadvantage and puts the institution on both a strong and an independent basis.---Boston Evening Transcript.

SCIENTIFIC BOOKS

Allen's Commercial Organic Analysis. Fourth edition, Volume VII. Philadelphia, P. Blackiston's Son and Co. 1913. \$5.00 net. Volume VII. of this comprehensive and useful work deals with vegetable alkaloids, glucosides and other "bitter" principles, animal bases, putrefaction bases, animal acids, lactic acid and cyanogen and its derivatives. Like nearly all such extensive compilations representing the joint work of many authors there are to be noted considerable variations in the excellence and value of the different chapters. Hundreds of different compounds of animal and vegetable origin are described. Their formulæ when known are given together with their medicinal value and chemical properties including characteristic tests used for their detection and estimation.

It would be easy to pick flaws in a book of that kind, since much of the material represents compilations of variable value from other books. The individual contributors have evidently been hampered more or less by the decision of the general editors to preserve the classifications of the older editions. Thus the purines are discussed in Taylor's excellent chapter on the animal bases, but uric acid, the most important of the purines, is not included. It is discussed in the chapter on animal acids. Urinary calculi and bile pigments, but not lactic acid, are included in the latter chapter.

To the commercial chemist who has to analyze many different substances and to continually turn from subject to subject, in many instances to subjects with which he has had no experience, this volume of Allen's "Commercial Organic Analysis" will prove a valuable source of information.

HARVARD MEDICAL SCHOOL

House Sanitation. By MARION TALBOT. Boston, Whitcomb & Barrows. 1913.

In view of the rapidly growing conviction that home-making is a science as well as an art, and the increasing purposefulness with which women are preparing themselves for this function, there is no more important need in public health than for authoritative manuals of home sanitation. It was one of the most substantial achievements of the late Mrs. Richards that she saw the need before it was generally recognized and met it by the preparation of a series of books which will always remain as inspiring models for workers in this field. Public health science has developed with such rapidity, however, that every few years makes necessary a revision of the older viewpoints. The reviewer has of late frequently been puzzled when asked to recommend a good book on home sanitation. The Sanitary Science Club of the Association of Collegiate Alumnæ, under the guidance of Mrs. Richards herself, published a book upon this subject twenty-five years ago. It has naturally become in many respects out of date; and the new work just published by one of Mrs. Richards's most distinguished pupils has been so completely rewritten as to constitute an entirely new contribution, and one which shows that the mantle of the pioneer in scientific home-making has fallen on no unworthy shoulders.

It is, indeed, refreshing, to one familiar with

OTTO FOLIN

the ordinary type of pseudo-sanitation contained in current literature for the housewife, to find that Dean Talbot in her first chapter quotes as a text Dr. H. W. Hill's statement that "The old sanitation was concerned with the environment, the new is concerned with the individual, and finds the sources of infectious disease in man himself rather than in his surroundings." The following principles of "the new sanitation" immediately follow as illustrations which "show changes in sanitary theory which have been abundantly and conclusively proved."

"Night air is purer than day air, and should be admitted freely to the house.

"Gases from marshes do not cause malaria.

"The quality of the air in the breathing zone is more important than the general air of the room.

"The quantity of carbon dioxide or 'carbonic acid' is not a measure of the unhealthfulness of air.

"Ordinary variations in the normal gaseous constituents of air produce no apparent effects.

"High humidity, combined with high temperature, produces the discomfort ordinarily attributed to 'bad air,' and is unhealthful.

"Ordinary buildings and rooms ventilate themselves to a considerable extent. A small house needs comparatively less provision for change of air than a large building.

"Air from properly constructed sewers is not harmful.

"Sunlight can not be depended on for disinfection or as a substitute for cleanliness. Its value is physiological, psychical, and chiefly moral.

"Actual light rather than window area should be the measure of the efficiency of room-lighting.

"Odors are not harmful physically, but when unpleasant should be eliminated by cleansing methods rather than by ventilation.

"Disinfection as ordinarily practised, especially by amateurs, is practically valueless."

These brief statements, which so well present some of the chief conclusions of recent public health science, almost constitute a syllabus of the book. They are elaborated in

eight chapters, dealing with the situation of the House and Care of the Cellar, Plumbing, Air and Ventilation, Heating, Lighting and Light, Furnishing, The Country House and Household Control of Infection, and each chapter is followed by some twenty direct practical questions intended to focus the attention of the housewife on the immediate problems of her own dwelling which fall under the general subject discussed. The viewpoint is throughout thoroughly sound and up-to-date and this little book of 116 pages ought to do notable service in the cause of public health education. C.-E. A. WINSLOW

COOPERATIVE INVESTIGATION OF THE MISSISSIPPIAN FORMATIONS

THE Mississippian formations of the Mississippi valley states will be studied in cooperation as a result of an important field conference held during October in Missouri. The following states were represented:

ArkansasPurdue.
IllinoisDeWolf.
IndianaBarrett, Beede.
IowaKay.
MissouriBuehler, Hughes.
OhioProsser.
Oklahoma Ohern, Snider.
TennesseePurdue.
U.S. Geological Survey W. H. Herron.

These formations measure approximately 2,000 feet, and they have been described at various times in the past without much regard for previous usage of stratigraphic units or names. Thus in a single state the same rocks are represented under three distinct names, even in comparatively recent literature.

Since considerable work on the Mississippian formations is now being done, it is important that cooperation be established between the several states concerned, and the U. S. Geological Survey. A permanent committee in charge of this matter on behalf of the states includes H. A. Buehler, of Missouri, G. F. Kay, of Iowa, and A. H. Purdue, of Tennessee. The chief geologist of the U. S. Geological Survey will cooperate with this committee in order to give future work suitable oversight, and in order to prevent friction.

The significance of this cooperative move-