

and so has no time to study. A day or more elapses between his classes and, busy with the store routine, he has forgotten—lost the thread of his studies. When he comes back to school he loses time getting into the spirit of things collecting his wits and finding out what he is doing. It is like having the Monday morning after vacation every day. And again, if the student gets behind with his laboratory work, for example, there is no time to slip in an extra hour or two, as the other days belong to his drug store job.

The chief argument for the system, of course, is that it gives the student the drug store experience that he needs while he is going to school. That argument presupposes that all drug store experience is of value to the future pharmacist, and of course we all know that this is not true. If we could only pick the store that each man should work in and impress upon the proprietor or the man in charge his duty toward his clerks, we could be sure of the value of drug store experience, but too many men are just looking for the cheap help above mentioned.

The state of Virginia has done away with all drug store experience whatsoever as prerequisite for registration. It says to the school of pharmacy, "the entire responsibility rests with you to make pharmacists." Our plan here in Cleveland has been somewhat different. We are giving each student internship work in the hospital pharmacies and dispensaries. This impresses him particularly with his primary function as a pharmacist and gives him training in this function, applied directly to the patient. We do, however, recognize the value of the proper kind of retail experience, and we find that we can go farther with a man who has had such experience. Ultimately we may extend this internship in the case of students who have not had actual retail experience to placing them in carefully selected drug stores, supervising their work so that they may obtain the greatest possible good from it. Such work will supplement, however, and not take the place of the regular school work.

NATIONAL CONFERENCE ON PHARMACEUTICAL RESEARCH.

RESEARCH INFORMATION* (APRIL, 1924).

A census of the research work now being performed by instructors and students of American colleges of pharmacy, either as candidates for higher degrees or as research fellows, brings out the fact that 29 persons have been so engaged during the current year. A tabulated list of these pharmaceutical research workers follows:

COLUMBIA UNIVERSITY COLLEGE OF PHARMACY.	H. C. Kassner, B.S.
C. W. Ballard, M.A., Phar.D., Candidate for Ph.D., Columbia Univ.—	(Plaut Fellow N. Y. C. P.)
Pharmacology of the genus <i>Erythroxylon</i> .	Ph.D. Univ. London, November, 1923—
	Histological and chemical examination of the seeds of <i>Ipomæa hederacea</i> .
W. J. Bonisteel, B.S., Candidate for M.S., Columbia Univ.—	Hugo H. Schaefer, Phar.D.
Pharmacognosy of Colombia cinchonas.	Candidate for Ph.D., Univ. Berne—
	Wax acids and coloring matter of stick lac.

* H. V. Army, Chairman National Conference on Pharmaceutical Research, 115 W. 68th St., New York City.

UNIVERSITY OF MICHIGAN COLLEGE OF PHARMACY.

W. J. McGill, M.S., L. R. Wagener, M.S.
(A. Ph. A. Research Grant)—

Electrometric methods of alkaloidal determinations.

Theodore F. Thorsberg, B.S.

Candidate for M.S., Univ. Mich.—
Composition of glycerite of bismuth.

UNIVERSITY OF MINNESOTA COLLEGE OF PHARMACY.

C. V. L. Netz, M.S.

Candidate for Ph.D., Univ. Minn.—
Effects of various charcoals on alkaloidal solutions.

PHILADELPHIA COLLEGE OF PHARMACY AND SCIENCE.

L. K. Sung, A.B, M.D.—

Botanical and chemical characteristics of Chinese cardamoms.

Leon Wasserman (Kilmer Research Fellow)—
Occurrence and significance of silicon in drugs.

UNIVERSITY OF WASHINGTON COLLEGE OF PHARMACY.

G. H. Needham, B.S. (A. A. Denny Fellow)

Candidate for M.S., Univ. Wash.—
Howard count on determination of spoilage of canned goods.

Paul Cheng, B.S.

Candidate for M.S., Univ. Wash.—
Analysis of some northwestern plants.

Helen Eheim, B.S.

Candidate for M.S., Univ. Wash.—
Determination of alcohol in drug products.

Dorothy Gaston, B.S.

Candidate for M.S., Univ. Wash.—
Pharmacology of synthetic esters.

F. J. Goodrich, M.S.

Candidate for Ph.D., Univ. Wash.—
Pharmacology of some new urethane derivatives.

Mrs. O. H. Nelson, M.S.

Candidate for Ph.D., Univ. Wash.—
Commercial production of benzaldehyde.

Harriet Snidow, B.S.

Candidate for M.S., Univ. Wash.—
Pharmacy of acetylsalicylic acid and allied compounds.

H. A. Shoemaker, B.S.

Candidate for M.S., Univ. Wash.—
Pharmacology of hydrazine derivatives.

UNIVERSITY OF WISCONSIN COURSE IN PHARMACY.

F. J. Bacon, M.S. (Hollister Fellow)

Candidate for Ph.D., Univ. Wisc.—
(a) Genetic problems in the biochemistry of mints.
(b) Digitalis.

J. G. Dellinger, A.B. (A. J. Marshall Fellow)

Candidate for M.S., Univ. Wisc.—
Chemistry of the seeds of *Bixa Orelanna*.

G. C. Jenison, M.S. (Fritsche Bros. Fellow)

Candidate for Ph.D., Univ. Wisc.—
Reduction of pulegone and other problems in the biochemistry of mints.

K. H. Rang, B.S. (A. Ph. A. Research Grant)

Candidate for M.S., Univ. Wisc.—
Decolorized tincture of iodine.

W. L. Rintelman, B.S. (Newport Chem. Co. Fellow)

Candidate for M.S., Univ. Wisc.—
Guaiacol derivatives.

B. V. Christensen, B.Ph.

Candidate for M.S., Univ. Wisc.—
Monarda studies.

G. L. Jenkins, M.S.

Candidate for Ph.D., Univ. Wisc.—
Datura.

J. C. Liu, B.S.

Candidate for M.S., Univ. Wisc.—
Chinese rhubarb.

E. T. Motley, M.S.

Candidate for Ph.D., Univ. Wisc.—
Precipitated sulphur.

A. H. Neumann, B.S.

Candidate for M.S., Univ. Wisc.—
Seidlitz powder.

J. F. Sabin, B.S.

Candidate for M.S., Univ. Wisc.—
Chlorine water.