

those interested in the liqueur manufacture and continue its reputation as a standard authority. SAMUEL P. SADTLER.

A MANUAL OF LABORATORY PHYSICS. BY H. M. TORY AND F. H. PITCHER. New York : John Wiley & Sons. 1901. 8vo. ix + 288 pp. Price, \$2.00.

This little manual embodies in book form the directions for the performance of the various experiments given in the course in elementary physics at McGill University, Montreal.

The arrangement and presentation of the subject-matter is original and somewhat novel, and is, as stated in the preface, "the outgrowth of experience in teaching large classes with a limited number of instructors."

Explanations and directions for 84 experiments are given. These are distributed as follows : Sound, 10 ; Light, 21 ; Heat, 9 ; Magnetism, 9 ; Electricity, 35.

The directions for each experiment are divided into a number of sections: 1. "References" for collateral reading; 2. "Apparatus Required;" 3. "Theory of Experiment;" 4. "Practical Directions;" 5. "Example" illustrating the data and results to be obtained; and lastly there is given a blank which is to be filled out by the student after the completion of the experimental work.

The directions are brief and terse, yet quite to the point. It is evident that there has been a studied effort on the part of the authors to give just what is absolutely essential, and to do this in as few words as possible.

As in all manuals of a similar nature there is the unavoidable local flavor as to apparatus and methods. It must be said, however, that the authors have apparently succeeded admirably in reducing this to a minimum and have so presented their subject that the book can be used as a manual in any properly equipped institution.

Viewed from the standpoint of the physicist, the experiments are doubtless well selected and described; but from the chemist's point of view, it is to be regretted that the authors have omitted experiments which, it would seem, should be given to every student intending to follow up the natural sciences, as, for example, experiments dealing with polarized light, etc.

The manual is up to the usual excellence of the publishers, the paper being heavy, of good quality, and the impression neat and clear.

E. M. C.