

**LABORATORY MANUAL;
EXPERIMENTS TO ILLUSTRATE
THE ELEMENTARY PRINCIPLES
OF CHEMISTRY**

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Laboratory Manual; Experiments to Illustrate the Elementary Principles of Chemistry by H. W. Hillyer

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H. W. HILLYER

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EXPERIMENTS

TO ILLUSTRATE THE ELEMENTARY
PRINCIPLES OF CHEMISTRY

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INTRODUCTION

THIS book is written for the use of college students of general chemistry. In attendance on lectures in general chemistry there are students who may be put in three groups, although these groups are not distinct. For those who are beginning the study, the required experiments have been arranged. In this part, experiments on a few typical elements have been first introduced that their properties may illustrate the fundamental ideas of chemistry. These are followed by experiments on the remaining common elements so arranged as to lead from the study of elements of simple relations to those of more complex relations, while keeping together as far as possible those elements of similar chemical properties.

Along with these required experiments a few others have been introduced, which are for the most part exercises in preparing substances of such marked physical properties that their purification and identification require no knowledge of analysis.

These Elective Exercises are for the profitable employment of those to whom, from previous training, a part of the required work is already familiar, or of

those who for some special reason find time for more than the regular work.

The quantitative experiments of Part II are designed more especially for those students who have had, in their preparatory schools, a good laboratory course but are not far enough advanced to be passed in collegiate general chemistry. These experiments are intended to replace for them entirely or in part the other laboratory work.