

of drugs has been derived from such experimentation. How great a benefit these discoveries have been to the human race it is impossible to over-estimate: every patient who receives the physician's prescription is deriving advantages from such researches. Pharmacological research has for its object the diminution of human suffering and the prolongation of life: much it has accomplished already, but much more still awaits to be accomplished, and great is the responsibility of those who, either through political motives, ignorance, or hysteria, seek to impede the work.

This is not a text-book on materia medica. In former days, when the practitioner had to gather his own simples and make his own preparations from the crude drugs, a knowledge of the characters and physical properties of these crude drugs was absolutely essential. But the duty of collecting, making preparations, and standardising remedies has long since been handed over to the druggist, and now it is of little more importance for the student to be able to recognise a Calabar bean, because he happens to use physostigmine, than for him to be acquainted with the art of printing because he reads. Nor do I consider it desirable that the student should be burdened by committing to memory the composition of various pharmacopœial preparations, especially before such time as he has had opportunities of seeing them prescribed. It is but an encouragement for him to learn, by the aid of *memoria technica*, facts forgotten as soon as the examination for which they are crammed is passed; they serve no educational purpose, and their formulæ are readily accessible.

The therapeutics included in this Manual are only such as serve to illustrate the pharmacology; it is in no sense a book on therapeutics, an art which can be dealt with properly only at the bedside.

It has been my aim throughout to cultivate the reasoning faculties of the student, to accept for granted as little as possible, and to subject all statements to experiment; by this treatment it is hoped that pharmacology may be learnt like any other science, and consist in something more than the mere committal to memory of many disjointed and often unassociated facts, as it has too often in the past.

To aid this object it is especially desirable that the lectures be supplemented either by a series of suitable demonstrations or by practical work. The majority of the tracings shown in these pages were recorded in my class-demonstrations.