The Principles of Pharmacognosy

Flückiger Friedrich August
THE

PRINCIPLES

OF

PHARMACOGNOSY

AN INTRODUCTION TO
THE STUDY OF THE CRUDE SUBSTANCES
OF THE VEGETABLE KINGDOM

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WITH ONE HUNDRED AND EIGHTY-SIX ILLUSTRATIONS IN THE TEXT

TRANSLATED FROM THE
SECOND AND COMPLETELY REVISED GERMAN EDITION

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THE AUTHORS' PREFACE.

In the present work, the "Principles of Pharmaceutical Materia Medica" (Grundlagen der Pharmaceutischen Warenkunde), by F. A. Flückiger, published in 1873, appear in a revised form, and materially extended. In this second edition, the above-named author has undertaken chiefly the preparation of the first part, and the newly associated author (A. Tschirch), the second part, comprising morphology and anatomy, so that really a new book has been produced. Although the original plan has been essentially retained, the arrangement of the material within the more extended space has, nevertheless, necessitated numerous changes.

It seemed to us appropriate in this revision to also take into consideration those crude substances of the vegetable kingdom possessing an organic structure which receive technical application. On the other hand, zoology has now been but incidentally considered, for the reason that pharmacognosy has to treat of only a very limited number of animal substances.

With regard to the classification of tissues, we have thought it proper to follow Haberlandt's "Physiological Plant Anatomy" (Physiologische Pflanzenanatomie), Leipzig, 1884, which, besides the anatomical consideration of tissues, also elucidates their physiological functions. In our capacity as teachers, we have acquired the experience that an anatomical description becomes of much more interest to the pupil by a reference to physiological relations. Although the system,
of physiological plant anatomy in its details is still in need of completion and general recognition, the outlines of the same appear to us, nevertheless, to be sufficiently well defined to be able to serve, in the manner intimated, as a foundation.

In one point, however, we have departed from Haberlandt's classification. The cell, its contents, and its membrane have been treated by us in a more complete manner, and placed before the tissues. This deviation recommends itself for practical and didactic reasons; for the beginner must be instructed regarding the cell and its contents before learning anything of the tissues. The substances contained in the cell also possess too great an interest for the pharmacognosist to be inserted in the text simply in a secondary manner.

A second change, as already intimated, is that we have likewise made a place for technico-microscopical investigation, of which every one will approve who takes into consideration the extent to which the apothecary of our day is called upon as an expert. In order to aid in furthering this service of pharmacy, which is of general interest, we have, for example, treated more thoroughly of starch and the textile fibres.

In the morphological portion, which has experienced a complete transformation, we have endeavored to give a brief sketch of the most important phenomena, whereby the technical expressions in present use have received explanation, especially those which occur in the deservedly widely distributed Syllabus of Eichler. Here, as in the anatomical portion, we have drawn the narrowest boundaries, since the present work does not pretend to be a complete text-book or manual. Nevertheless, some few sections which are of importance to pharmacy have received relatively somewhat greater development and more precise adaptation, as for example, that relating to the receptacles for secretions. A chapter on the galls has also been newly inserted.

In the selection of the woodcuts, we have chiefly considered the drugs and crude substances of technical application. The
same applies to the selection of examples from anatomy and morphology. The one hundred and four illustrations of the first edition have, for the most part, been again introduced, although increased by thirty-seven illustrations sketched by the newly associated author, as also by a number borrowed from other works, the names of which, as a rule, have been mentioned. With some of the illustrations which were placed at our disposal by the publishing house of Springer, it has not each time been stated whether these were derived from the works of Hager, Hartig, or Möller. Very often we were also obliged to content ourselves by referring to still other illustrations, for example, to the plates of the handsome anatomical atlas by Berg.

It has likewise been our endeavor, through abundant citations of the literature, to be of service to those members of the profession who may desire more complete information. Although not every one will be in a position to refer to the sources of information cited by us, we nevertheless wished, on the one hand, to show that we have endeavored to utilize the best and most recent acquisitions upon the wide field of the auxiliary sciences, and, on the other, we hope thereby to afford an impulse in many directions. The latter purpose was particularly kept in view with regard to the section devoted to the history of drugs.

The Authors.

Strassburg and Berlin, May, 1885.