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MATERIA
MEDICA
AND
THERAPEUTICS
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1884

A PRACTICAL TREATISE
ON
MATERIA MEDICA
AND
THERAPEUTICS.

BY
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COLLEGE OF PHILADELPHIA, ETC.

FIFTH EDITION, REVISED AND ENLARGED.



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TO THE MEMORY OF
FATHER, MOTHER, AND BROTHERS,
BY THE SURVIVOR.

PREFACE TO THE FIFTH EDITION.

THE appearance of the sixth decennial revision of the "United States Pharmacopœia" has imposed on me the necessity of preparing a new edition of this treatise. I have accordingly adapted the work to the official standard, and have also given to the whole of it a careful revision, incorporating the more recent improvements in the science and art of therapeutics. Many additions have been made, and parts have been rewritten. These additions and changes have added about one hundred pages to the body of the work, and increased space has been secured in some places by the omission of the references. In the new material, as in the old, practical utility has been the ruling principle, but the scientific aspects of therapeutics have not been subordinated to a utilitarian empiricism. In the new matter, as in the old, careful consideration has been given to the physiological action of remedies, which is regarded as the true basis of all real progress in therapeutical science; but, at the same time, I have not been unmindful of the contributions made by properly conducted clinical observations.

The improvements made in this edition render the work more than heretofore better fitted to occupy the place to which it has been assigned by the generous estimate of the medical profession. I should be singularly wanting in a proper feeling, if, in sending forth another issue of the work, I did not experience a grateful sense of appreciation for the uniformly kindly reception accorded to this and to my other publications.

ROBERTS BARTHOLOW.

PHILADELPHIA, *September, 1883.*

PREFACE TO THE FOURTH EDITION.

ENGAGEMENTS that admitted of no postponement prevented the preparation of the fourth edition of this work at an earlier period. Meanwhile, the activity prevailing on all sides in the study of experimental and practical therapeutics has contributed many new and important facts to this expanding science. New remedies, studied by the physiological method, are presented to us in the fullest detail of their actions, and old ones are examined anew in the brilliant light of modern scientific methods. Subjected to the strictest physiological tests, remedies are pursued into the closest recesses of Nature, their powers fully ascertained, and their uses suggested from the standpoint of their physiological actions. The old facts thus receive sifting and re-examination, and, with the new, demand recognition and adequate statement. It follows, that any therapeutical treatise which would keep pace with the progress of knowledge must be frequently renewed, amended, and improved. Appreciating fully the necessity for this periodical revision of my treatise, I have carefully reviewed the acquisitions of the period intervening since the publication of the last edition, and have in the present edition incorporated those improvements in our therapeutical resources which seem to be of permanent value. I have revised the text at all points, have rewritten many articles, made important additions to others, and have inserted, for the first time, the articles on *Barium*, *Nitro-glycerin*, *Curara*, *Muscarine*, *Resorcin*, etc. The group ANTISEPTICS has been transferred to a more appropriate position, among the systemic remedies. The growing importance in modern pathology of the germ theory requires this grouping of certain remedies possessing the power to destroy the mi-

nute organisms of disease, and to arrest septic processes. These properties are sufficiently distinctive to require their recognition in a separate group; but, in addition, the remedies composing this group have antipyretic effects. It has been suggested that the antiseptic action is the source of the antipyretic—that in the destruction of germs, or morbid ferments, lies the power to arrest the excess in heat-production.

Notwithstanding the numerous and important additions to the work, the number of pages has been increased only about seventy. In several instances important additions have been made, without any increase of space, by the sacrifice of the references. In the rewriting of old articles and in the preparation of the new, the utmost conciseness consistent with clearness and accuracy has been the ruling principle. True to the idea expressed in the first edition, I have, as far as possible, accepted the results of physiological research, but have not ignored the facts obtained empirically. Unquestionably, the tide of therapeutical knowledge sets strongly in the direction indicated by the former, and the latter is as distinctly ebbing outward. On all sides the conviction is growing, that the real and permanent advances in therapeutical art must be effected chiefly by the physiological method. Nevertheless, empirical facts of undoubted value are occasionally brought forward. In "the shapeless mass of inexact ideas," as Bichat entitled empirical observations, there are often found genuine therapeutical gems.

Besides the careful revision given to the whole work, I have rewritten the "Clinical Index," with a view to the addition of new matter, and to secure greater accuracy of expression. Prescriptions which heretofore had a place in this index, and were transcribed from the body of the work, have been omitted, as their repetition seemed unnecessary, and gave opportunity for serious errors. The page reference permits the easy finding of a formula, and in the search the context will be read, so that with the prescription will be obtained needful explanations.

In submitting this edition to my professional colleagues, I am again afforded the grateful opportunity to express my sincere appreciation of the favor with which each former edition has been

received. I must also repeat my acknowledgments to the kind correspondents who have informed me of errors, textual and typographical, coming under their notice, and I now thank in advance any one of my readers who, observing an error of any kind, will inform me of it.

R. B.

PHILADELPHIA, *September 1, 1881.*

PREFACE TO THE THIRD EDITION.

In the preparation of this edition, I have made changes demanded by the progress of knowledge, have omitted obsolete or unnecessary statements, and have added some entirely new articles. As examples of the additions made, I may mention the articles on Air, Massage, and Duboisia. The text has been thoroughly revised, and typographical and other errors corrected. Notwithstanding considerable additions, the volume is kept nearly within its original limits, by condensing the new material to the lowest point consistent with clearness of statement and fullness and accuracy of information.

The rapid sale of successive editions of the work is the most conclusive evidence of its adaptation to the needs of students and practitioners. To make it still more worthy of their approval has been my constant endeavor, as the best and most appropriate expression of my gratitude for the extraordinary favor with which the treatise has been regarded since its first appearance.

R. B.

1509 WALNUT STREET, PHILADELPHIA.

PREFACE TO THE SECOND EDITION.

THE success of my treatise has exceeded any reasonable expectations, and, under the circumstances, is peculiarly gratifying. Constructed on a somewhat different plan from the ordinary text-books, and brought into direct competition with several very able and well-established works on the same subject, I could not but feel that its progress to professional favor must necessarily be slow. That several considerable editions have been exhausted in the first year of its publication, and that the demand for the book has not abated, indicate that its appearance was opportune, and that its plan and execution are approved by the medical profession.

In this new edition various improvements have been made, and articles on the following subjects have been inserted:

Beverages.	Heat.	Digestion-Ferments.
Vegetable Acids.	Cadmium.	Cerium.
Picrotoxin.	Cannabis Indica.	Cuca.
Caffein.	Guarana.	Pulsatilla.
Grindelia.	Phytolacca.	Ailanthus.

Besides the new articles, additions have been made at various points. Notwithstanding these additions, the bulk of the work has not been materially increased, and its practical character has been strictly maintained.

Increasing observation satisfies me that an author, writing on such a complicated topic as the actions and uses of remedies, owes it to his readers to present them the results of his matured experience and his most composed judgment, rather than lay before them a multitude of opinions, experiments, and reports, out of which they must construct, if they can, a consistent theory,

or form an adequate conception of the nature and relations of all the facts. But few readers will give the time to so tedious a task, and the smallest number are fitted by education, training, and habits of mind, for working out results from such a complicated mass of materials. While every author is bound to indicate to his readers the sources of his information, it is equally his duty to present that information in the form most available for immediate use.

The classification of remedies must continue in an unsatisfactory state, and any scientific scheme is, at present, hopeless. The distinguished and able Prof. Edward H. Clark, M. D., of Harvard (Boston), in his review of this work (*The American Journal of the Medical Sciences*, January 7, 1877), justly remarks as follows:

“No scientific classification of the materia medica is possible in the present state of science. Writers are, therefore, justified in adopting any classification that may happen to suit their fancy, or in adopting none at all.”

Notwithstanding a scientific arrangement is unattainable, it is certainly convenient to group together those agents which are physiologically and therapeutically allied. I have adopted, in part, the classification proposed, in 1863, by Dr. Chambers (“Renewal of Life,” etc.), using the two great divisions of “agents promoting constructive metamorphosis” and “agents promoting destructive metamorphosis.” As respects the assignment of individual remedies, in accordance with certain conceptions of their powers and actions, the arrangement adopted is entirely my own.

The omission of certain botanical, chemical, and pharmaceutical details, except such as are necessary to a just appreciation of the physiological actions, or to “facilitate intelligent prescription-writing,” has been decidedly commended by the reviewers, and by my readers generally. In the present state of pharmacy, knowledge of the kind omitted would prove useless, in the main, to physicians, even if acquired. I beg, however, to call the attention of my readers to the fact that the official designation of the remedy, its pharmaceutical preparations, its chemical composition, and its active principles, are carefully stated, and should be mastered by every student. This knowledge of the *technik*

of his *armamentarium* is an indispensable requisite to its skillful use.

The author has a strong conviction that, in the future of therapeutics, the law or principle of physiological antagonism must play an important rôle. He has indicated more fully, probably, than any other systematic writer, the application of this principle in practical therapy.

In the preparation of the articles I have studiously endeavored to preserve the harmony and proportion of the parts, and have treated them with a fullness and particularity according to their relative importance. In this way it may appear to some of my readers that I have exaggerated some topics, and have treated others, equally important, with indifference. Having given careful consideration to this subject in the course of my preparations for the new edition, I conclude that the judgments formed in the first instance are confirmed by more extended study and observation.

Any one discovering an error of any kind in this edition of my treatise will place me under great obligations by reporting it to me without delay.

I am indebted to my assistant, Dr. Frederic Kebler, for the revision of the indexes.

ROBERTS BARTHOLOW.

120 WEST SEVENTH STREET, CINCINNATI.

PREFACE TO THE FIRST EDITION.

To offer to the medical profession a new treatise on *Materia Medica* and *Therapeutics* may appear to be a labor of supererogation. The medical literature of this country is already well provided with able and elaborate works on this subject. The learned and encyclopedic volumes of Stillé, based on the empirical method, and the modern and scientific work of H. C. Wood, based on the physiological method, leave almost nothing to be desired. Entertaining such a profound respect for the work of my American colleagues, it may well be inquired why I have ventured to add a new book to those already existing in this department of medical knowledge. A belief, which I trust will not be regarded as egotism, that I have earned the right to address the medical profession, has moved me to the preparation of this work. Several years a teacher of *Materia Medica* and *Therapeutics*, I have necessarily formed opinions as to the kind of information which should be contained in a treatise on this subject. As far as such a course of experiment is practicable, I have demonstrated in my lectures the actions of remedies on animals. I have conducted in my private laboratory many independent investigations, and have contributed in this way, I submit with diffidence, some original knowledge to the subject of therapeutics. The information thus acquired has been supplemented by twenty-two years of clinical experience as a practitioner of medicine. Under these circumstances, I am induced to believe that my professional brethren, and medical students, will hold that I am entitled to a hearing.

A volume on *Materia Medica* and *Therapeutics* should, in these days, present some new features of importance if it would worthily occupy a place alongside of the excellent works now accessible to American readers. An examination of this treatise will disclose the fact that it differs from other works in its scheme of classification,

in the subjects discussed, and in the very practical character of the information. In the present state of our knowledge, it is impossible to make a classification free from defects, and I do not claim for mine that it is superior to others—only that its simplicity is a point in its favor. As respects the subjects treated of, it will be seen that the most elaborate section is that on aliment, and that remedies have been introduced not usually referred to by therapeutical writers. In the treatment of individual agents, I have, usually, adopted the description of the “United States Pharmacopœia,” and have omitted botanical and chemical details, unless they are necessary to elucidate physiological questions, or to facilitate intelligent prescription-writing. All pharmaceutical questions are most thoroughly handled in the “Dispensary” of Wood and Bache, and this kind of knowledge is more the province of the druggist than of the physician.

In describing the physiological action of drugs, two methods may be pursued: to present in chronological order a summary of the opinions of various authorities on the subject in question; or, to condense in a connected description that view of the subject which seems to the author most consonant with all the facts. I have adopted the latter plan, from a conviction of its advantages for the student, and of its utility for the practitioner. The authorities which I have utilized in making up my opinions are placed at the end of each article, in order to avoid interruptions in the methodical descriptions.

As respects the therapeutical applications of remedies, I have, as far as practicable, based them on the physiological actions. Many empirical facts are, however, well founded in professional experience. Although convinced that the most certain acquisitions to therapeutical knowledge must come through the physiological method, I am equally clear that well-established empirical facts should not be omitted, even if they are not explicable by any of the known physiological properties of the remedies under discussion.

My best acknowledgments are due to John Chatto, Esq., the learned Librarian of the Royal College of Surgeons, London, for numerous courtesies extended to me during my visits to Lincoln's-Inn-Fields.

ROBERTS BARTHOLOW.

120 WEST SEVENTH STREET,
CINCINNATI, OHIO, June, 1876. }

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