

**A LABORATORY MANUAL
OF PHYSIOLOGICAL AND
CLINICAL CHEMISTRY
AND TOXICOLOGY**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649480678

A Laboratory Manual of Physiological and Clinical Chemistry and Toxicology by Arthur E. Austin & Isador H. Coriat

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

ARTHUR E. AUSTIN & ISADOR H. CORIAT

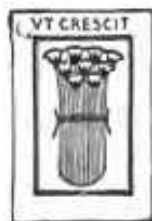
**A LABORATORY MANUAL
OF PHYSIOLOGICAL AND
CLINICAL CHEMISTRY
AND TOXICOLOGY**

A LABORATORY MANUAL
OF PHYSIOLOGICAL AND
CLINICAL CHEMISTRY
AND TOXICOLOGY

By ARTHUR E. AUSTIN, A.B., M.D.
Professor of Medical Chemistry, Medical Department of
Tufts University, Boston

AND

ISADOR H. CORIAT
Laboratory Assistant in Medical Chemistry, Medical
Department of Tufts University, Boston



LAMSON, WOLFFE AND COMPANY
Boston, New York, London M D C C C X C V I I I

Educ T 228.98.175

HARVARD COLLEGE LIBRARY
GIFT OF
GINN & COMPANY
MARCH 17, 1927

Copyright, 1906
By Larson, Wolfe and Company

All rights reserved

PRINTED BY
Hobbs, Bonnell and Churchill
BOSTON

Table of Contents.

Preface	PAGE ix
-------------------	------------

PART I.

Physiological Chemistry.

I. Egg Albumen	3
II. Nucleo-Proteids	6
Nucleo-Albumen	8
III. Albuminoides	9
IV. Blood-Serum	10
V. Albumoses	12
VI. Sugars and Starches	13, 16
VII. Fats, Fatty Acids, and Glycerine	17, 19, 20
VIII. Chemistry of Blood	21
IX. Clinical Analysis of Blood	26
X. Saliva	32
XI. Chemistry of Gastric Juice	33
XII. Clinical Analysis of the Stomach Contents	37
XIII. Bile	41
XIV. Pancreatic Juice	43

PART II.**The Urine.**

	PAGE
I. General Characteristics	49
II. General Chemistry and Clinical Analysis	50
III. Sediment	60

PART III.**Toxicology.**

I. Acids:	
Sulphuric	67
Nitric	67
Hydrochloric	68
Oxalic	69
Carbolic	69
Hydrocyanic	70
II. Metallic Poisons:	
Arsenic	71
Antimony	72
Mercury	73
III. Metallic Poisons (continued):	
Copper	74
Lead	75

Contents

vii

	<small>PAGE</small>
Phosphorus	76
Nitro-Benzol	76
 IV. Alkaloids:	
Morphine	78
Strychnine	78
Veratrine	79
Atropine	79
Cocaine	80
Stas-Otto Method	80
V. Scheme for the Detection of an Un-	
known Poison	82

Appendix.

Reagents	87
Standard Solutions	92
Scheme for Analysis of Blood	95
Scheme for Analysis of Gastric Contents .	96
Scheme for Analysis of Urine	97

PART I.

PHYSIOLOGICAL CHEMISTRY.

