of technics of the two-stage method is provided by Ferguson.

The application of zeta-potential measurements to the study of blood coagulation is reported by Wood.

Like the transactions of the two preceding conferences, this book has the most valuable feature of frank, informal exchange of opinion between re-

search investigators, some of whom in their publications hardly seem even to speak the same language. Under these circumstances, the coherence and readability of the transactions are altogether remarkable, and are greatly to the credit of the editor.

FRANK D. MANN, M.D.

AMERICAN HEART ASSOCIATION, INC.

1775 BROADWAY, NEW YORK 19, N. Y.

Telephone Plaza 7-2045

AMA EXHIBIT

The Association will be represented at the Annual Meeting of the American Medical Association in Chicago, June 9 to 13, by several exhibit booths and a series of daily "Question and Answer" sessions on various phases of heart disease.

The exhibit will be presented in conjunction with the Illinois and Chicago Heart Associations and will demonstrate how the associations aid the physician in the prevention, diagnosis, treatment and management of the cardiovascular diseases. There will be a visual summary illustrating highlights of the achievements of the Association's research support program. Publications issued by the Association, which are designed to help the physician, also will be displayed.

The new series of heart models produced by the Association as visual aids in the undergraduate and postgraduate education, as well as for the teaching of fluoroscopy, will also be exhibited.

STIPEND INCREASES

The Research Committee of the Association's Scientific Council recently voted to increase the stipends granted to Research Fellows and Established Investigators. Under the new scale, Research Fellows will start at $3,500 with increments to reach a maximum of $5,500, and Established Investigators will be started at $6,000, with increments up to a total of $9,000.

NEW AFFILIATE

The Board of Directors of the Association has approved the affiliation of the Mississippi Heart Association.

HEART BULLETIN

The first issue of the bimonthly Heart Bulletin, designed particularly for the physician in general practice, appeared in March.

The bulletin is published by the Medical Arts Publishing Foundation of Houston, a non-profit service organization affiliated with the University of Texas.

Paul D. White, M.D., Boston, is Chairman of the Advisory Board, members of which were selected in cooperation with the Association and the National Heart Institute. R. Lee Clark, Jr., M.D., is the editor.

The Bulletin is available through subscriptions purchased by a local or state agency—an affiliated Heart Association, State Medical Society, or State Health Department—for the physicians in the state.

This bulletin does not duplicate any publication of the Association.
congestive heart failure...

"Aminophyllin may be given in the form of rectal suppositories...both for its diuretic effect and for its bronchodilating action, which relieves dyspnea."


As a diuretic and myocardial stimulant for the relief of pulmonary edema or paroxysmal dyspnea of congestive heart failure and as a bronchodilator in bronchial asthma, Searle Aminophyllin has proved itself an efficient therapeutic agent.

For rectal administration, Searle Aminophyllin is available in the form of nonirritating, promptly disintegrating—

**SEARLE AMINOPHYLLIN® SUPPOSICONES®**

500 mg. (7 ½ grains)

Searle Aminophyllin is also available in ampuls, powder and tablets. Uncoated tablets are identified by the imprint SEARLE.

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

Contains at least 80% of anhydrous theophylline.

HEART DISEASE IN PREGNANCY

A. MORGAN JONES, M.Sc., M.B., F.R.C.P.

Deputy Director of the Department of Cardiology, Lecturer in Clinical Cardiology and in Applied Physiology, University of Manchester.

Is it safe for a woman with heart disease to bear children?

Basing his attack on this question on clinical experience with over 1500 pregnant patients with organic heart disease, with a detailed study of 352 consecutive cases treated and followed up, Dr. Jones strikes straight at the core of the problem.

A clear picture results of what is and what is not hazardous in these cases. This concise study comes straight to the point in such matters as: circulation, cardiovascular signs and symptoms, and diagnosis of organic heart disease during pregnancy; causes of maternal death; assessment of fitness for pregnancy; management of confinement and termination; antenatal supervision; problems of the post-partum period; effect of pregnancy on the course of rheumatic heart disease.

This book will correct the exaggerated pessimism of the physician who sees only a few cases of heart disease in pregnancy, point out the specific dangers to the overly optimistic. Clinically orientated, it will enable any physician to make a clear appraisal of the specific problems involved in his cases.

76 pages illustrated $1.50
The THORACIC SURGICAL PATIENT

Preoperative, Anesthetic, and Postoperative Care

By LEW A. HOCHBERG, M.D., Formerly Clinical Professor of Surgery (Thoracic), State University of New York Medical School, and Visiting Thoracic Surgeon, Kings County Hospital, New York. Foreword by FRANK B. BERRY, M.D.

Here is a book written not for the accomplished thoracic surgeon alone but for all those charged with the care of the thoracic surgical patient—surgeon, physician, anesthetist, physiatrist. Giving only enough details of surgical technic to fill in background and make the main text more meaningful, The Thoracic Surgical Patient stresses instead the considerations which surround and cannot be divorced from surgery—and which critically affect in many instances the success or failure of operation.

These considerations determine the plan of most of Dr. Hochberg’s chapters: a general survey of each subject of discussion; preoperative preparation; a brief statement on surgical procedure; postoperative care; and complications—their recognition and management.

Thus a book which is for the entire surgical team, in the larger sense of the term. As Dr. Frank Berry puts it in the Foreword: “It fills a long-standing gap and may be read and studied with profit by teacher, clinician and student alike.”

Three chapters, of great importance and yet ordinarily not given such emphasis in surgical texts, deal with “Physiology and Pathologic Physiology,” “Anesthesia,” and “Rehabilitation.” The first of these, as Dr. Berry says again, “might well appear as a monograph by itself, for it describes in full the basic principles of preparation and treatment upon which modern thoracic surgery rests.”

Cardiologists and all others with special interest in the heart and circulation will find much of value in every chapter, but perhaps will appreciate most the comprehensive section on “Cardiovascular Surgery.” It includes discussion of pre- and postoperative care, considerations of surgical procedure and the problems of postoperative complications as they relate to: constrictive pericarditis, aortic aneurysm, mitral stenosis, mural thrombi of the auricular appendage, patent ductus arteriosus, coarctation of the aorta, pulmonary stenosis and atresia, anomalies of the aortic arch, and coronary artery disease.

Whatever the physician’s interests, if they touch at all on surgery of the chest he will find here specialized experience interpreted in broad terms, considering the patient not just as a “surgical case” but as a clinical entity.
MODERN MEDICAL MONOGRAPHS

a new idea in medical publishing,
providing the practitioner with concise,
up-to-date sources of reference
on special subjects

1 The Pathogenesis and Treatment of Thrombosis

IRVING S WRIGHT, M.D., Professor of Clinical Medicine, Cornell University Medical College

This monograph reviews the mechanism of thrombosis and techniques of treatment, with attention focused also on certain hitherto unemphasized aspects of thrombosis. Of special interest is the section on Newer Anticoagulants and the “Clinical and Laboratory Guide to Anticoagulant Therapy,” giving practical instruction in the use of each of the available anticoagulants, step-by-step directions in controlling hemorrhage, and techniques for determining prothrombin and clotting time.

2 Clinical Progress in Cardiovascular Diseases

Edited by HERRMAN L. BLUMGART, M.D., Professor of Medicine, Harvard Medical School

Here, from the pages of Circulation, are outstanding contributions of immediate and practical import to any clinician interested in the heart and circulatory disorders. The chapters include: Atherosclerosis, A Symposium (Experimental Atherosclerosis, Human Atherosclerosis and the Diet, Blood Lipids and Human Atherosclerosis); Management of Acute Cardiac Emergencies; Surgery for Mitral Stenosis; Management of Cardiac Patients in Relation to Surgery; Emotion and the Circulation.

3 Accelerated Conduction

MYRON PRINZMETAL, M.D., et al., Institute for Medical Research, Cedars of Lebanon Hospital, and University of California Medical School, Los Angeles

This study of the Wolff-Parkinson-White Syndrome and related conditions illuminates the basic abnormality. Investigating both the mechanism and the clinical significance of accelerated conduction in a variety of forms, the authors present new data and offer a new explanation of an important phenomenon.

4 Circulatory Dynamics

CARL J. WIGGERS, M.D., Professor and Director, Department of Physiology, Western Reserve University College of Medicine

Dr. Wiggers lays down a firm foundation for an understanding by either practitioner or investigator of the physiology of circulation. The main sections are: Basic Hemodynamic Principles in the Interpretation of Circulatory Disorders; Determinants of Cardiac Performance; Dynamics of Ventricular Contraction under Abnormal Conditions.

ORDER FORM: Please send on approval from the first series

☐ Wright: Pathogenesis and Treatment of Thrombosis $3.00
☐ Blumgart: Clinical Progress $4.50
☐ Prinzmetal et al.: Accelerated Conduction $4.00
☐ Wiggers: Circulatory Dynamics $4.00
☐ check enclosed ☐ charge my account

NAME AND ADDRESS

381 Fourth Avenue, New York 16, N. Y.
The Starr-Type Horizontal
BALLISTOCARDIOGRAPH
for the
direct measurement of
cardiac output

- Standard hospital bed height—rigid extension feet—may be used as an operating table.
- Rolls easily and quietly on large rubber casters—useful as a litter when patients must be moved to another room for BCG determinations.
- Convenient and comfortable for non-ambulatory patients.
- Simple to operate—may be used with any standard recording device.

TECHNITROL MODEL 128
Horizontal Ballistocardiograph
with durable "Hammertone" finish, complete
less recorder, f.o.b. Philadelphia
$1000.00

TECHNITROL is proud to have added its contribution to the furtherance of cardiac research...the construction, in quantity, of the High-Frequency Undamped Ballistocardiograph. Full-scale production of this precision instrument has made possible a substantial saving in the cost of its skilled fabrication, bringing the price—for the first time—within reach of the small, unendowed research group or the individual investigator.

"...the ballistocardiograph provides a good empiric measure of cardiac output. Agreement with the direct Fick method is essentially the same as that of other methods...The ease of single or serial determinations with this technic contrasts markedly with most other methods."

The natural frequency of the loaded bed is above 14 cycles per second. When a human load is used, the damping produced by the body tissues is sufficient to eliminate after-vibration.

Further descriptive details and specifications are available. Please write to:

TECHNITROL
ENGINEERING COMPANY

MEDICAL INSTRUMENTS DIVISION, 2751 NORTH 4TH STREET PHILA. PA.

Two significant books on Diagnostics... and what reviewers say of them—

DIFFERENTIAL DIAGNOSIS OF INTERNAL DIS-EASES: Clinical Analysis and Synthesis of Symptoms and Signs · Julius Bauer, M.D.

Circulation: "It is clearly the work of a master clinician who has matured and who knows, as does every seasoned clinician, that the successful rehabilitation of ailing patients often requires more of the art than the science of medicine.... The book is well written, well printed and is a veritable storehouse of information in the field of differential diagnosis [and as such] will make a valuable addition to the internist's library."

Ann. Internal Med.: "This book can be highly praised. The author has combined with his individual approach to each subject in turn an extraordinary display of knowledge.... healthy attitudes pervade the well written text, which is amply illustrated with numerous case reports. [It] is an education to read and will remain an invaluable work of reference."

Pennsylvania Med. J.: "... learned and comprehensive... recommended."

Southern Med. & Surg.: "This review copy will be kept by the reviewer as his very own, and appealed to daily."

FUNDAMENTALS OF CLINICAL FLUOROSCOPY With Essentials of Roentgen Interpretation (Third printing) · Charles B. Storch, M.D.

Circulation: "A lucid style supplemented by outstanding illustrations, many of which are original and ingenious teaching aids of the author, make this text... required reading for anyone preparing for the performance of fluoroscopic examinations."

Ann. Internal Med.: "... highly recommended... will prove valuable reading for medical students, interns and residents... specialists and the general practitioner."

Bull. Johns Hopkins Hosp.: "... well illustrated and easy to read... definitely a welcome aid to... those wishing to study the elements of fluoroscopic examinations."

Ohio State J. Med.: "... a practical and comprehensive manual—fully illustrated—on [fluoroscopy's] basic diagnostic aspects. The only book of its kind that we know of and certainly one for which many physicians have been looking."

Am. J. Digest. Dis.: "... merits the attention of everyone doing diagnostic x-ray work, but it will prove particularly valuable—even indispensable—to the internist or general practitioner who attempts to do his own radiological investigations."
another important advantage of Thiomerin:

Suitability for Home Administration

The self-injection of the thionated mercurial diuretic, Thiomerin, has now become a well-established procedure for patients who have congestive heart failure, just as the self-injection of insulin has long been a well-established procedure for patients who have diabetes.

Numerous authorities recommend Thiomerin for home administration because it is as well tolerated and predictable in effect when given subcutaneously, as when given intramuscularly and intravenously. The technique of injecting Thiomerin Sodium may be quickly mastered.

Consequently, more and more physicians are finding that it is often desirable to instruct the patient or a member of his family in the use of Thiomerin so that injections between visits can be made on schedule—according to the dosage plan that best suits each patient.

A supply of printed instructions for patients will be sent to the physician on request.
For Dramatic Response...

In Hypertensive Crises

Solution

Intravenous

Veriloid®

A powerful hypotensive agent, Solution Intravenous Veriloid, on slow infusion by vein, is capable of dropping the blood pressure in a matter of minutes in the majority of patients.

Thus it presents a lifesaving emergency measure in the conditions in which a continuing state of extreme hypertension might lead to serious complications. Hence it has rightly been termed "A Must in Every Emergency Bag."

In hypertensive states accompanying cerebral vascular disease, in malignant hypertension, and in hypertensive crisis (encephalopathy) arterial tension can be reduced—under full control of the physician—to a point compatible with the patient’s condition. The only contraindications are pheochromocytoma and coarctation of the aorta; in patients receiving quinidine therapy the drug should be given with caution.

Solution Intravenous Veriloid makes available for the first time a purified fraction of Veratum viride, a product of Riker Laboratories research, generically designated alkavervir, which can be administered by vein. Complete instructions for its use accompany each ampule. Physicians are invited to send for detailed literature.

Riker Laboratories, Inc.

8480 Beverly Boulevard
Los Angeles 48, California
In congestive failure, Tablets MERCUHYDRIN with Ascorbic Acid provide a simple, effective and safe method of maintaining optimum weight levels by the oral route. Alone or supplemented by injection, Tablets MERCUHYDRIN with Ascorbic Acid simplify management and help the cardiac adjust to the requirements of long-term therapy.

**CONTINUOUS DAILY ADMINISTRATION**

The key to optimal clinical results in oral diuretic therapy is *continuous* therapy — Tablets MERCUHYDRIN with Ascorbic Acid, one or two tablets daily, morning or evening, preferably after meals. To secure the greatest efficacy and all the advantages of Tablets MERCUHYDRIN with Ascorbic Acid, prescribe an initial three-week supply... 25 to 50 tablets.

Any patient receiving a diuretic should ingest daily a glass of orange juice, a banana, or other supplementary source of potassium.
CONTENTS

SPONTANEOUS ATHEROSCLEROSIS IN THE RABBIT..................Joseph H. Bragdon 641
Mechanism of Iodide Action on Cholesterol Metabolism
Helen B. Brown and Irvine H. Page 647
Changes in Excretion of Intestinal Cholesterol and Sterol Digitonides
in Hyper- and Hypothyroidism
Meyer Friedman, Sanford O. Byers and Ray H. Rosenman 657
Intra-arterial Histamine in the Treatment of Occlusive Peripheral Arterial Disease
John A. Dixon, W. J. Merle Scott and Marvin A. Epstein 661
Endarterectomy, or Surgical Restoration of the Lumen of an Obstructed Artery in Arteriosclerosis Obliterans. A Preliminary Report
A. Neúñez Núñez, B. Milanés and J. Rodríguez Itígo 670
Cerebrovascular Thrombosis in Patients with Buerger's Disease
Heinz I. Lippmann 680
The Syndrome of Short P-R Interval, Normal QRS Complex and Paroxysmal Rapid Heart Action
Bernard Lown, William F. Ganong and Samuel A. Levine 693
Frontal and Sagittal Electrocardiograms of Normal and Hypertensive Subjects during an Experimentally Produced Phase of Lowered Blood Pressure..................Joseph Brumlik and Charles E. Kossmann 712
Congenital Aneurysmal Defect of the Membranous Portion of the Ventricular Septum Associated with Heart Block, Ventricular Flutter, Adams-Stokes Syndrome and Death
Richard J. Clark and Paul D. White 725
Arterial Hypertension in Dogs. I. Methods
Henry A. Schroeder and Melvin L. Goldman 730
The Effect on Blood Pressure in the Right Heart, Pulmonary Artery and Systemic Artery of Cardiac Standstill Produced by Carotid Sinus Stimulation
Cation Exchange Resin in the Treatment of Congestive Heart Failure. I. Electrolyte Exchanges during Initial Periods of Resin Therapy
J. R. Elkinton, R. D. Squires and W. C. Klingensmith, Jr. 747
Tissue Cations and Water in Arterial Hypertension
Louis Tobian, Jr. and John T. Binion 754
Heart Failure and Pulmonary Edema Produced by Certain Neurologic Stimuli
Robert Paine, John R. Smith, Harvey R. Butcher and Frank A. Howard 759
Clinical Progress: The Specific Treatment of Syphilitic Aortitis
R. H. Kampmeier and Hugh J. Morgan 771
Abstracts.............................................................779
Book Reviews.........................................................798
American Heart Association.................................800