AMERICAN HEART ASSOCIATION, INC.
44 EAST 23RD STREET, NEW YORK 10, N. Y.
Telephone GRamercy 7-9170

AMERICAN HEART ASSOCIATION
PROGRAM AT AMA MEETING

The American Heart Association will be represented by a special program at the 103rd Annual Meeting of the American Medical Association, to be held at the Civic Auditorium in San Francisco from June 21-25. The program will consist of a four-day "Question and Answer" Conference on various aspects of cardiovascular disease similar to the series conducted by the Association at the AMA Annual Meeting in Chicago in June, 1952. The program has been arranged by Howard B. Lewis, M.D., University of Oregon School of Medicine. An exhibit of professional educational materials available from the Association is also planned.

COUNCIL ON RHEUMATIC FEVER AND CONGENITAL HEART DISEASE

A special program devoted to a discussion of rheumatic fever will be presented at the Annual Meeting of the American Rheumatism Association at the St. Francis Hotel, in San Francisco, on Saturday morning, June 19. The program will be presented in conjunction with the Council on Rheumatic Fever and Congenital Heart Disease of the American Heart Association. The program is as follows:

1. Natural History of Hemolytic Streptococcal Infection in Children. Lowell A. Rantz, San Francisco
2. Functional Status of the Pituitary Adrenal System in Rheumatic Fever. Vincent C. Kelley, Salt Lake City
4. Rheumatic Heart Disease in Colorado School Children. H. J. Dodge, J. A. Lighty, Denver

SECOND WORLD CONGRESS OF CARDIOLOGY AND 27TH SCIENTIFIC SESSIONS OF THE AMERICAN HEART ASSOCIATION

All those planning to attend the Congress, scheduled to convene in Washington, D. C., September 12 through 17, are urged to submit their applications at the earliest possible date to facilitate arrangements for groups participating in the scientific tours and social functions. Because these groups will be limited in number, those who register for the Congress will receive a special Form C, on which they may indicate their choice of the medical sightseeing tours of scientific significance, in addition to the social functions, such as the banquet and receptions. Any physician who is interested may attend the Congress by filling out and sending in the application blank and paying the required registration fee. Detailed information concerning the Congress is available from the Secretary-General, L. W. Gorham, M.D., Second World Congress of Cardiology, c/o American Heart Association at 44 East 23rd Street, New York 10, N.Y.

Medical Tours

A highlight of the Congress program will be a series of medical sightseeing tours to institutions of scientific interest. On Wednesday, September 15, from 2:30 to 5:30 p.m., participants may attend lectures, demonstrations and exhibits dealing with various aspects of cardiology which are planned as follows:

Auditorium of Armory—Clinical Pathologic Conference.
George Washington University Hospital
Georgetown University Medical Center
Color moving picture, "Use of Artificial Kidney." Demonstrations in Renal Research Laboratory.
Surgical treatment of aortic insufficiency.
Howard University Medical School

Angiocardiographic and cardiac catheterization studies. Embryonic cardiovascular anomalies. Experimental hypertension in animals. Potassium accumulation and heart function during non-specific stresses. Technic of instruction of heart beat set to music.

Children's Hospital

Endocardial fibroelastosis, case demonstrations and autopsy findings. Hypothermia and cardiomyotomy in the treatment of congenital heart disease.

Veterans Administration Hospital, Mt. Alto


National Naval Medical Center

Radioactive isotopes in diagnosis and therapy. Tissue transplantation. Case reports from cardiologic department. Surgical concepts and techniques of tissue transplantation.

Walter Reed Army Medical Center

Auditory and visual aids in group teaching. Cardiac catheterizations and angiocardiographic findings in 200 patients.

Army Medical Service Graduate School

Surgical repair of vascular injuries.

Research Laboratories of Army Medical Service Graduate School

Demonstration and discussion of pressure flow in pulmonary bed of lung before and after pulmonary embolism. Demonstration of method; hypothermia; dye dilution; cardiac biopsy; strain gauges; optical manometers; spectrophotometric techniques; meter measurement of gas composition and paper electrophoretic techniques.

Armed Forces Institute of Pathology—Conducted tours

U. S. Public Health Service, National Heart Institute—Conducted tours

Discussion of programs, grants, research, fellowships, traineeships by Director, James Watt, M.D.

A sightseeing program on Friday afternoon, September 17, will include conducted tours of the Armed Forces Institute of Pathology and its Medical Museum; Armed Forces Medical Library; and the National Heart Institute. Dr. Watt's discussion at the National Heart Institute will be repeated.

Membership

A registration fee of $25.00 has been established for the combined World Congress and Scientific Sessions. Although it has been customary in previous years to waive registration fees for professional members of the American Heart Association attending the Annual Scientific Sessions, the heavy expense entailed by the enlarged and integrated sessions of the forthcoming Congress and the many events associated with an international meeting of this kind require that a fee be charged this year. The $25.00 fee entitles members to attend all scientific sessions, the opening reception, formal banquet and other social events planned for Congress delegates, and exhibits and special sightseeing tours to medical installations in Washington and its environs. Also included are the printed program, directory of registrants, Congressional badge and other items.

Associate membership (wives and family) has been arranged at a cost of $15.00. It will include all privileges mentioned above except the printed program. A schedule of reduced fees has been provided for limited attendance by physicians and for attendance by such groups as medical students, interns, and nurses.

Exhibits

Scientific and industrial exhibits have been planned for the Congress, as well as a motion picture program of professional and scientific films on cardiovascular subjects. Those wishing to present scientific exhibits or films should communicate with Charles D. Marple, M.D., Medical Director of the Association. Industrial firms interested in presenting an exhibit should communicate with the Exhibit Manager, Steven K. Herlitz, 280 Madison Avenue, New York 16.

Schedule

A tentative schedule of the Congress follows:

Saturday, Sept. 11, 5:00 to 10:00 p.m.: Registration, Mayflower Hotel
Sunday, Sept. 12:
9:00 a.m. to 10:00 p.m.: Registration, Mayflower Hotel
10:30 a.m.: Opening ceremonies at Constitution Hall
5:00 p.m.: Reception for Congress Members, Pan American Building
Monday, Sept. 13 through Friday, Sept. 17: Scientific Sessions at National Guard Armory.

Morning sessions will be held every day from 9:00 a.m. to 12:30 p.m.
**Afternoon sessions** will be held every day except Wednesday, Sept. 15 and Friday, Sept. 17, from 2:00 p.m. to 5:30 p.m. Sessions will be composed of round table and clinical pathologic conferences (panel discussions) in a large auditorium and presentation of scientific papers in four smaller section rooms.

Monday, Sept. 13, 8:30 to 10:30 p.m.: Visit to National Gallery of Art, for Congress Members only.

Tuesday, Sept. 14, 8:00 p.m.: Formal banquet for Congress Members, to be held simultaneously at Mayflower and Statler Hotels.

Wednesday, Sept. 15, 2:30 to 5:30 p.m.: Medical sightseeing tours.

Thursday, Sept. 16, 8:30 p.m.: Special entertainment for Congress Members.

Friday, Sept. 17, 2:30 to 5:30 p.m.: Medical sightseeing tours.

**SECTION ON CIRCULATION**

The Section on Circulation of the Scientific Council is planning a special scientific session for members on matters of peripheral circulation as well as a general session to be held in connection with the Second World Congress of Cardiology in Washington, D. C., September 12–17. The exact dates of this Section's meeting will be announced later.

The Executive Committee of the Section on Circulation will meet on Monday evening, September 13. The Annual Dinner of the Section will be held on Wednesday evening, September 15, at the Shoreham Hotel. Additional details may be obtained from the Secretary, Grace M. Roth, Ph.D., Mayo Clinic, Rochester, Minn.

**SECTION ON CLINICAL CARDIOLOGY**

Over 2,000 doctors—the largest attendance at any medical meeting in the history of the American Heart Association—attended a two-day scientific program of the Association’s Section on Clinical Cardiology held in Chicago on April 3–4 in conjunction with the Association’s 30th Annual Meeting.

The printed program of the scientific meetings of the Section, containing abstracts of the papers presented and those read by title only, is available at 50 cents a copy. Copies may be obtained by writing to the Medical Director, Charles D. Marple, M.D.

Officers of the Section on Clinical Cardiology elected at a business meeting of the Section in Chicago include: Chairman, Emmet Bay, M.D., Chicago; Vice-Chairman, William P. Thompson, M.D., Los Angeles; Secretary, Hugh Hussey, M.D., Washington, D. C.

New members elected to the Executive Committee of the Section are: Wright Adams, M.D., Chicago; Francis F. Rosenbaum, M.D., Milwaukee; Edward Orgain, M.D., Durham, N. C.

**PROCEEDINGS OF HIGH BLOOD PRESSURE RESEARCH MEETING**

The Proceedings of the 1953 Annual Meeting of the Council for High Blood Pressure Research have been published as a cloth-bound, 96-page hard cover monograph which is available from the American Heart Association or Affiliated Heart Associations at $2.00 a copy. The book includes five reviews of recent original investigative work presented at the 1953 Annual Meeting of the Council held in Cleveland last May. It complies in one convenient reference volume material which otherwise is scattered throughout medical literature.

The authors are Drs. R. W. Sevy, Georges M. C. Masson, Simon Rodbard, D. M. Green and George A. Perera. The subjects covered include the relations between hypertension and the anterior pituitary, the adrenal cortex, renin, salt-water balance, sodium metabolism and electrolyte metabolism.

The 1953 Proceedings is the second volume in a projected series. The first volume, the Proceedings of the 1952 meeting, is still available at a cost of $1.75, paper-bound.

**UNIVERSITY OF MINNESOTA SYMPOSIUM**

The Proceedings of a symposium on recent advances in cardiovascular physiology and surgery presented last September at the University of Minnesota are now available at $1.00 a copy from the Minnesota Heart Association. The symposium was presented by the Minnesota Heart Association and the University of Minnesota. Copies may be obtained from Mr. G. Ray Higgins, Executive Secretary, Minnesota Heart Association, 542 Endicott-on-Fourth, St. Paul 1, Minn.
MEETINGS

June 14–18: Canadian Medical Association; Vancouver B. C.; T. C. Routley, M.D., General Secretary, 244 St. George Street, Toronto 5, Ont.
June 18–19: American Rheumatism Association; San Francisco; W. H. Kummer, Secretary, 33 East 61st Street, New York 21.
June 19: International Society of Angiology; North American Chapter; Hotel Mark Hopkins, San Francisco, Calif., Dr. Henry Haimovici, Secretary, 105 East 90th Street, New York.
June 20: Society for Vascular Surgery; San Francisco; George D. Lilly, Secretary, 25 S. E. Second Avenue, Miami 32, Fla.
June 21–25: American Medical Association, Annual Meeting; San Francisco; Dr. George F. Lull, Secretary, 535 North Dearborn Street, Chicago 10, Ill.
July: South American Congress of Angiology; São Paulo, Brazil; Dr. Rubens Carlos Mayall, Rua Senador Vergueiro 73, Rio de Janeiro, Brazil, S. A.
July 9–10: European Society of Cardiovascular Surgery; Edinburgh, Scotland; A. J. Slessor, Department of Surgery, University New Building, Edinburgh 8, Scotland.
July 12–22: International Gerontological Congress; London and Oxford, England; Professor R. E. Tunbridge, President, General Infirmary, Department of Medicine, The University, Leeds, London.
July 20–24: International Conference on Thrombosis and Embolism; Basle, Switzerland; W. Merz, M.D., Honorary Secretary, Chief Medical Officer, Gynecological Clinic, University of Basle.
Sept. 6: American Society of Clinical Pathologists, Washington, D. C.; C. G. Culbertson, Secretary, 1040 W. Michigan Street, Indianapolis, Ind.
Sept. 6–10: International Congress of Clinic Pathology; Washington, D. C. Dr. Robert A. Moore, Chairman, Committee on Arrangements, Washington University School of Medicine, St. Louis 10, Mo.
Sept. 6–11: Congress of Physical Medicine and Rehabilitation; Washington, D. C. Francis Baker, Secretary, One Tilton Avenue, San Mateo, Calif.
Sept. 9–10: Vermont Heart Association and University of Vermont College of Medicine Seminar on Cardiac Arrhythmias; Burlington, Vt.; E. Lepeschkin, M.D., University of Vermont College of Medicine, Burlington, Vt.
Sept. 11: Vermont Heart Association and University of Vermont College of Medicine Symposium on the U wave of the Electrocardiogram; Burlington, Vt., E. Lepeschkin, M.D., University of Vermont College of Medicine, Burlington, Vt.
Sept. 12–17: Second World Congress of Cardiology and the 27th Annual Scientific Sessions of the American Heart Association; Washington, D. C. L. W. Gorham, M.D., Secretary-General, Care of the American Heart Association, 44 East 23rd Street, New York 10.
October 22–23: Annual Meeting and Scientific Program, Council for High Blood Pressure Research, American Heart Association, Cleve’and. Irving S. Wright, M.D., Chairman, Program Committee, c/o American Heart Association, 44 East 23rd Street, New York 10.
October 31–Nov. 1: American Society for the Study of Arteriosclerosis, Annual Meeting; Sheraton Hotel, Chicago. Arthur C. Corcoran, M.D., Program Chairman, Cleveland Clinic, Cleveland, Ohio.

ASSOCIATION FELLOWSHIPS AND GRANTS

Applications for Research Fellowships and Established Investigatorships for the 1955–56 fiscal year must be received by Sept. 15, 1954. Applications for research grants-in-aid may be filed up to Dec. 1, 1954. Information and forms may be obtained from the Association’s Medical Director.
EDITOR-IN-CHIEF

THOMAS M. McMILLAN

EDITORIAL BOARD

E. Cowles Andrus, Baltimore, Md.
Benjamin M. Baker, Baltimore, Md.
George E. Burch, New Orleans, La.
Howard B. Burchell, Rochester, Minn.
J. Scott Butterworth, New York, N. Y.
Clarence E. de la Chapelle, New York, N. Y.
André Cournand, New York, N. Y.
Thaddeus S. Danowski, Pittsburgh, Pa.
Charles T. Dotter, Portland, Ore.
Harold D. Green, Winston-Salem, N. C.
Dwight E. Harken, Boston, Mass.
Hans H. Hecht, Salt Lake City, Utah
Edgar A. Hines, Jr., Rochester, Minn.

H. M. Marvin, New Haven, Conn.
David F. Opdyke, Rahway, N. J.
George A. Perera, New York, N. Y.
David D. Rutstein, Boston, Mass.
Roy W. Scott, Cleveland, Ohio
Ephraim Shorr, New York, N. Y.
Howard B. Sprague, Boston, Mass.
Helen B. Taussig, Baltimore, Md.
C. J. Van Slyke, Bethesda, Md.
George E. Wakerlin, Chicago, Ill.
James V. Warren, Durham, N. C.
Paul D. White, Boston, Mass.
Harold G. Wolff, New York, N. Y.
Irving S. Wright, New York, N. Y.

ASSOCIATE EDITORS

Edgar V. Allen
Rochester, Minn.

Samuel Bellet

Herrman L. Blumgart
Boston, Mass.

PUBLICATIONS COMMITTEE OF THE SCIENTIFIC COUNCIL
AMERICAN HEART ASSOCIATION

Irving S. Wright, Chairman
New York, N. Y.

H. M. Marvin, Vice Chairman
New Haven, Conn.

J. Scott Butterworth
New York, N. Y.

Charles A. R. Connor
New York, N. Y.

Irving B. Hexter
Cleveland, Ohio

Charles D. Marple
New York, N. Y.

Benedict F. Massell
Boston, Mass.

Thomas M. McMillan

Carl J. Wiggers
Cleveland, Ohio

Spanish Summaries by Remy Rodriguez, M.D., San Juan, Puerto Rico
INDEX OF AUTHORS

Abildskov, J. A., 267, 381, 719
Abrams, W. B., 400
Ackerman, R. F., 581
Adams, W. R., 741
Aldrich, R., 905
Anderson, R. M., 641
Angrist, A. A., 908
Askovitz, S. I., 648
Bahnsen, H. T., 494
Bailey, C. P., 22
Barreda, P., 903
Bay, E. B., 741
Beckner, G. L., 835
Berglund, E., 706
Bergström, J., 687, 700
Bird, G. S., 813
Bisten, A., 83
Blount, S. G., Jr., 501
Boag, L. M., 813
Boag, T. J., 813
Bolton, H. E., Jr., 22
Boyle, A. J., 247
Bridges, W. C., 416
Broadbent, J. C., 890
Brooks, L., 199
Brown, G. M., 813
Bucht, H., 857, 700
Burch, G. E., 267, 381, 719
Burnum, J. F., 89, 511
Catchpole, B. N., 408
Chandler, D. E., 247
Chapman, C. B., 57, 103, 347
Cheesley, G. L., 400
Coehran, B. Jr., 527
Cole, D. R., 321
Cronvich, J. A., 267, 381
Cullen, C. F., 335
Dailey, R. E., 32
DeGraff, A. C., 115
Delahaye, J. D., 813
Delisle, C., 65, 68
Dexter, L., 758
deWolfe, V., 1
Dimitroff, S. P., 533
Drury, D. R., 238
Edelman, I. S., 199
Ek, J., 657, 700
Elasch, H., 837, 700
Elliott, R. V., 281
Ellis, E. J., 521
Eurman, G. H., 586
Ferenez, C., 161
Field, H. Jr., 32
Finland, M., 392
Fisher, H., 367
Flasher, J., 228
Flick, D. F., 32
Fox, A. C., 352
Frank, E., 555, 724
Fraser, R. S., 57, 193, 347
Frasher, W. G., 527
Freeman, N. E., 180
Freis, E. D., 540
French, R. M., 571
Gardberg, M., 563
Gensini, G., 801
Gifford, R. W., Jr., 363
Gigee, W., 592
Gilbert, R. P., 847
Gilfillan, R. S., 180
Glass, M., 908
Glover, R. P., 881
Goldberg, M., 847
Goldman, L. H., 220
Goyette, E. M., 17
Green, D. M., 416, 521
Green, J. E., 513
Griffin, J., 847
Griffith, G. C., 527
Grusin, H., 860
Halpern, M. H., 547
Hamilton, B. E., 922
Hamilton, W. F., 276
Harken, D. E., 199
Harris, A. E., 82
Hatcher, J. D., 813
Haynes, F. W., 758
Helm, R. A., 426
Hick, F. K., 857
Hickam, J. B., 80, 511
Hoffpaur, C. W., 82
Humphries, A. W., 1
Iseri, L. T., 247
Jamison, W. L., 22
Janes, J. M., 363
Janton, O. H., 881
Jepson, R. P., 408
Jiménez Díaz, C., 903
Johnson, A. D., 416
Johnson, A. L., 161
Johnston, E. D., 255, 668
Jones, R. J., 741
Katz, L. N., 321
Kay, C. F., 555, 724
King, H., 504
Kleinerman, J., 443
Kotte, J. H., 425
Kyrizias, D. T., 281
Lau, F. Y. K., 571
Leeds, F. H., 180
LeFevere, F. A., Jr.
Lehmann, J. H., 416
Lilienfield, L. S., 540
Linenthal, A. J., 96, 482
Lukash, L., 908
Lurie, P. R., 504
McClure, W. W., 600
McCord, M. C., 501
McDonald, L., 758
McFee, R., 255, 568
McGuire, J., 425
McIntosh, H. D., 89, 511
Mandelbaum, H., 388
Mandelbaum, R. A., 388
Mendolowitz, M., 586
Meyers, R., 719
Molina, A. F., 903
Moore, F. D., 190
Mosser, M., 73
Myers, G. B., 247
Myrden, J. A., 190
Nerlich, W. E., 527
Nichols, H. T., 22
Norman, L. R., 482
Olwin, J. H., 230
O’Neill, T. J. E., 881
Overholt, E. L., 17
Packard, R. G., 281
Page, J., 813
Page, R. G., 741
Parkin, T. W., 363
Partenope, E. A., 540
Pascale, L. R., 230
Pettit, G. A., 82
Phalen, G. S., 1
Prandoni, A. G., 73
Pullman, T. N., 600
Raab, W., 592
Rabinowitz, M., 758
Rapaport, E., 17
Redisch, W., 63, 68
Reilly, W. A., 571
Richards, D. W., 606
Rivin, A. U., 535
Rose, J. C., 540
Sampson, J. J., 38
Sancetta, S. M., 443
Sarnoff, S. J., 706
Saxton, G. A., Jr., 758
Schild, A., 648
Schnabel, T. G., Jr., 648
Scott, J. W., 853
Scott, K. G., 571
Seide, M., 741
Shaw, M. B., 1
Shore, M. L., 581
Shumacker, H. B., Jr., 504
Singian, E. B., 521
Smith, W. W., 352
Soloff, L. A., 367
Sprague, H. B., 127
Starr, I., 648, 664
Steele, J. M., 63, 68
Stephen, J. D., 866
Stephens, C. A. L., Jr., 682
Swan, H., 801
Swank, R. L., 335
Swell, L., 92
Tandowsky, R. M., 48
Tedeschi, C. G., 916
Thomasson, B., 687, 700
Tulloch, J., 823
Tuna, N., 853
Uhl, H. S. M., 247
Varnauskas, E., 687, 700
Wallace, W. B., 527
Wallach, J. B., 908
<table>
<thead>
<tr>
<th>Author</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warren, J. V.</td>
<td>511</td>
</tr>
<tr>
<td>Werkö, L.</td>
<td>687, 700</td>
</tr>
<tr>
<td>Wertheimer, L.</td>
<td>63, 68</td>
</tr>
<tr>
<td>White, A. E.</td>
<td>238</td>
</tr>
<tr>
<td>White, C. W., Jr.</td>
<td>916</td>
</tr>
<tr>
<td>White, P. D.</td>
<td>481</td>
</tr>
<tr>
<td>White, W. E.</td>
<td>371</td>
</tr>
<tr>
<td>Wiglesworth, F. W.</td>
<td>161</td>
</tr>
<tr>
<td>Wikler, N. S.</td>
<td>352</td>
</tr>
<tr>
<td>Wilson, G. M.</td>
<td>199</td>
</tr>
<tr>
<td>Winsor, T.</td>
<td>835</td>
</tr>
<tr>
<td>Witham, A. C.</td>
<td>276</td>
</tr>
<tr>
<td>Wood, E. H.</td>
<td>890</td>
</tr>
<tr>
<td>Wright, I. S.</td>
<td>748, 823</td>
</tr>
<tr>
<td>Young, J. M.</td>
<td>220</td>
</tr>
<tr>
<td>Zatuchni, J.</td>
<td>367</td>
</tr>
<tr>
<td>Ziegler, R. F.</td>
<td>371</td>
</tr>
<tr>
<td>Zilversmit, D. B.</td>
<td>581</td>
</tr>
<tr>
<td>Zipser, A.</td>
<td>38</td>
</tr>
<tr>
<td>Zoll, P. M.</td>
<td>482</td>
</tr>
</tbody>
</table>
INDEX OF SUBJECTS

(Page numbers in italics refer to abstracts)

Acceleration ballistocardiography, 281-290, 307, 457
Accident, cerebrovascular, electrocardiogram in, 719-723
Accommodation, visual, after pentapyrrolidinium in hypertension, 544
Acetylcholine, 315
and heart beat, 782
membrane potentials of heart after stimulation of, 315
Acetyldigoxin, 147, 148, 629
Acetylene method, vs. blood pressure method for determining cardiac output, 668-670, 672-673, 677
Acid, in arterial blood in congenital heart disease, 987
Acidosis, during anestheisia, 629
Acridine, orange of, 947
Acrosclerosis, 867
Actinomycosis, 867
ACTH.
Acetylcholine, 306
Acetylene
Accident, accommodation, in sodium resection of heart, 799
Accident, pulmonary hypertension in atrial septal defect, 802, 590
and serum lipids, 683
in stroke volume determination, 652-655, 660-662
Agnesis, of lung, 618
Aggregation of chylomicra, 342
of red blood cell in lipemia, 336-344
Air
residual, in mitral stenosis, 149
venous embolism due to, 153
Airplane pilot, electrocardiogram of, transmitted by radio, 136
Albumin, as plasma expander for shock, 608
Alcohol, and antabanue, 959
during anticoagulant therapy, 743-744
ethyl, cerebral circulation after, 912
and kidney circulation, 146
and liver circulation, 146
and myocardiaval infarction, 366, 392
Alkalosis, hypokalemic, and potassium in nephrectomized rat, 466
respiratory, in electrocardiography, 306
Allergy, of skin, to procaine amide, 914
Aluminum hydroxide, in rheumatic fever, 629
American Heart Association, Inc.
Albert D. Lasker Award, 799
at AMA Annual Meeting, San Francisco, 794-795, 957
American Society for the Study of Arteriosclerosis, 160
639, 799
annual dinner, 319
annual elections, 759-796
annual meetings, 159, 478
schedule, 319
annual report, 639
Chair of Cardiovascular Research, 640
Congenital Malformations of the Heart," 478
Council on Community Service and Education, 319, 639
Council for High Blood Pressure Research, 479, 639, 798, 959
1953 proceedings, 798, 359
Council on Rheumatic Fever and Congenital Heart Disease, 636, 795, 957
electrocardiographic interpretation course, 160
film series on congenital malformations, 478
Gold Heart Awards, 798
Heart Fund, 320
1954 campaign, 158
Lasker Award, 1954, 799
meetings, 640, 800, 960
annual, 159, 319, 479
"The Motion of the Heart," 320
1954 Heart Fund Campaign, 158
postgraduate courses in pediatric cardiology, 479
Scientific Council Section on Clinical Cardiology, 319, 959
program of, 478
Second World Congress of Cardiology and Twenty-seventh Scientific Session, 158, 319-320, 475, 481, 638, 797-798, 957-959
Section on Circulation, 608, 798, 960
Stamford Heart Association Lecture Series, 160
University of Minnesota Symposium, 960
Vermont seminar, 640

Amine, adrenergic, in blood, 784
pressor, excretion of, 461
Anmiotic fluid, embolism due to, 931
Anaphylaxis, hypersensitivity due to, 471
Anastomosis
in aortoiliac occlusion, 4
carotid-jugular, 649
internal mammary-coronary artery, 629
Anemia, and ventricular function curve, 712
Anesthesia
acidosis during, 629
arrhythmia during, 787
and cerebral vascular reactivity to carbon dioxide, 962
circulatory effects of, 316
of heart, 151
hemorrhage during, 316
hypotension during, 151
peripheral vascular bed during, 631

Aneurysm
aortic
abdominal, 494-502, 680, 631
dissecting, 630, 632
electrothermic coagulation for, 630
fibrogenic material for, 498
ligation of, 498, 630
resection and replacement of, 494-502, 628
saccular, 155, 638
thoracic, 638
wiring of, 498, 630

Aneurysm
experimental, 954
INDEX

heart, 304
intrasacral, with polycythaemic
kidney, 631
of popliteal artery, atherosclerotic, 367-368
of pulmonary artery, 953
pulmonary arteriovenous, congenital, 956
of renal artery, 638
of splenic artery, 636
Angina pectoris
ballistocardiography in, 390-391
due to effort, 451
heparin for, 450, 451
kstellin for, 456
and myocardial infarction, 324-325, 329, 331
and myocardial metabolism, 456
Angiocardiography
in congenital heart disease, 628, 629
exposure rate in, 627
Anoxia, postarterial pulmonary vascular resistance due to, 628
Antabuse, electrocardiogram after, 939
Antibiotic
as anticoagulant, 451
for bacterial endocarditis, 292-297
for pericarditis, 434, 438
tuberculous, 17-21, 145
Anticoagulant
alcohol during therapy for, 743-744
in ambulatory patients, 685
antibiotic as, 451
aspirin as, 743
for auricular fibrillation, 756
for congestive heart failure, 742
contraindications, 749-750
Dipaxin, 230-237
dosage variation, 742-744, 749
for embolism, 742
arterial, 630
recurrent, of cardiac origin, 801
hemorrhage during, 750
long-term therapy with, 745, 748-757, 823-833
and menstrual cycle, 744, 756
for myocardial infarction, 452, 747
overdose due to stoppage of, 754
phenylindanedione, 450
in private practice, 682-685
short-term therapy with, 742
for thromboembolism, 742
for thrombophlebitis, 753
Trebrun, 450
vascular fragility after, 154
warfarin, sodium derivative, 984
white thromboembolism after, 154
See also Dicumarol; Heparin
Antistreptolysin-O, 317
Aorta
abdominal
aneurysm of, 494-502, 630, 651
excision of, and replacement by homograft, 494-502
aneurysm of, 628
dissecting, 630, 952
electrothermic coagulation for, 630
fibrogenic material for, 498
ligation of, 498
resection and replacement of, 494-302, 623
saccular, 165, 628
wiring of, 498
coarctation of, 302
electrocardiography in, 371-375
endocrine disturbances in, 998
and pregnancy, 927
dissection of, and pregnancy, 927
distensibility of, after death, 674
homograft in, 788
overriding, 937
perforation of, by benign esophageal ulcer, 471
phospholipid in, in rabbit atherosclerosis, 881-884
pressure pulse in, 945
stenosis of
and femoral pulse, 622
in infancy, 632
and intermittent claudication of hip, 1-15
and ventricular function curve, 713
surgery of, 789
terminal, thrombosis of, 488
thoracic
bridging defect in, 788
coarctation of, 302
diety phosphoryl for graft in, 787
aneurysm of, 688
thrombosis of, 465
thromboendarterectomy for, 790
Aortic valve, 24
bicuspid, 23
calcification of, 367-370
insufficiency of, syphilitic, 781
regurgitation, with mitral stenosis, 764
phonoangiography, 133
stenosis of arteriosclerotic, 23
calcareous, 785
commissurotomy for, 22-31, 781
congenital, 23
with mitral stenosis, 26-28,
phonoangiography, 133-134
rheumatic, 22-31
surgery, 781
Aortography
abdominal, 638
in arteriosclerotic aortic aneurysm, 495
in intermittent claudication of
hip, 4, 14-15
Aphena, right heart pressure in, 511
Apoplexy
adrenal, with hypertension, 810
cerebral, with coronary thrombosis, 455
Appetite, in digitalis intoxication, 124
Apresoline
bladder paralysis after, 148
circulation after in visceral and peripheral vascular beds, 70, 71
death due to, 778
for hypertension, 141
hypotension due to, 148
kidney function after in mitral stenosis, 700-704
See also Hydralazine; Hydrazinophthalazine
Arrest, cardiac. See Standattill
Arrhythmia
during anesthesia, 787
in aortic commissurotomy, 27
chaotic, 146
due to digitalis, 117-118, 120-121
in myocardial infarction, 327
after norepinephrine for shock following myocardial infarction, 45
potassium for, 119
ventricular, and thyroid inhibition, 145
See also Fibrillation; Flutter; Tachycardia
Arterenol, for shock, 783
Arteriography
of coronary circulation, 150
percutaneous, catheter replacement of needle in, 688
Arteriole
circulation in, after sympathectomy for arterial occlusive disease, 654
pulmonary resistance in, 780
Arteriolonephrosclerosis, bilateral adrenal, hemorrhage with, 310
Arteriosclerosis
aortic
aneurysm due to, 494-502
stenosis due to, 23
cerebral
and vascular reactivity to carbon dioxide, 952
and circulation, 609
and intermittent claudication of hip, 14
Mönckeberg’s, 465
obliterans
Priscoline for, 77
sympathectomy for, 787
obliterative circulation to extremities in, 66
and pressure gradient in arterial wall, 999
Arteritis
catechin for, 460
rutin for, 460
temporal, 155
Artery
blood gases in
in congenital heart disease, 937
in normal children, 944
embolism in
anticoagulant for, 630
surgery for, 778
graft, 152
infection in obliterator disease of, 650
infusion into, 613
to shock, 600
for shock due to myocardial infarction, 528-529
**Artery (Cont’d)**

insufficiency of, and intermittent claudication of hip, 1–15
neurovascular disease of, Friscole for, 75–77
occlusive disease of
arterial circulation after sympathectomy for, 634
Priscoline for, 77–79
sympathetic denervation for,
238–246

peripheral in diabetes, 639, 965
Priscoline for disease of, 73–80
pressure in and extracellular fluid, 312
after kidney stimulation, 311
in myocardial infarction, 356–358, 360
in unanesthetized rat, 620
pressure gradient in wall of, in arteriosclerosis, 899
renal, calcified, 626
secretion from wall of, in regulation of blood pressure, 905–907
to sinalertial node, in dog heart, 547–553
splenic, calcified, 626
transfusion into, 528–529, 609, 613
See also under name of artery

**Arthritis**

hypertrophic, of hip, 5
rheumatoid, heart in, 816
Aschoff bodies, and rheumatic activity, 766
Ascites, and hepatic arterial ligation, 158
Aspiration, pericardial, 428–429, 431, 436
Aspirin, dicumarol-like effect of, 743

**Atherosclerosis**
aortic phospholipid in, 581–584

after bile, 146
of coronary artery in males under age of 46, 304
estrogenic hormones for, 533–538
after ferrie chloride, 146
and hypercholesterolemia, 455
intermittent feeding of cholesterol in, 638
do with mast cell, 496
and myxema, 455
after oophorectomy, 535–538
of popliteal artery aneurysm, 363–366
visceral, 773

**Ativoventricular node**

pacemaker in, 96–104

**Atrium**
electrogram, in mitral stenosis, 139
endocardium of, in congenital mitral stenosis, 167
effect of initial length on work of, 779
left pressure in, in mitral stenosis, 619
transplantation of left anomalous pulmonary vein to, 364

pressure wave of, with right ventricular hypertrophy, 312
septal defect of, 618, 790, 987
closure of, 504–510, 801–811
polyvinyl sponge plug for, 518
with pulmonary artery thrombosis, 453
with transposition of pulmonary vein, 790

See also Auricle

**Atrophy**

Sudeck’s, Priscoline for, 76

**Atropine**

555

**Auditory nerve**
after dihydrostreptomycin, 205
after streptomycin, 205

**Aureomycin**

for bacterial endocarditis, 296
for pericarditis, 434

**Auricle**

fibrillation of anticoagulant for, 756
due to digitalis, 117, 121–122
in hyperthyroidism, 311
with mitral stenosis, 304
with mitral stenosis in bacterial endocarditis, 906–914
and mitral surgery, 767, 768
in myocardial infarction, 328, 329
quindi for, 623
flutter of, 621
in digitalis intoxication, 122
heart sounds in, 784
in myocardial infarction, 329
involvement of, in myocardial infarction, 135
left, enlargement of, in endocardial fibroelastosis, 946
paroxysmal tachycardia of, due to digitalis, 117
premature systole of, in myocardial infarction, 328
standstill of, with ventricle standstill in Stokes-Adams attack, 855–855
tachycardia in childhood, 146
paroxysmal, in myocardial infarction, 329
thrombus, occlusive, 791
See also Atrium

**Auscultation**
device for, 635

**Autograft**
of subclavian artery for bridging defects in thoracic aorta, 788
venous, dicetylphosphate for, 787

**Autonomic nervous system**

and Valsalva maneuver, 150
recovery after, 515

**A-V block**

774

**Azotemia**

sodium administration in, 118

**Bacitracin**

for bacterial endocarditis, 295–296

**Ballistocardiograph**

portable electromagnetic, 388–398

**Ballistocardiography**

acceleration, 281–290, 397, 457
in angina pectoris, 390–391

borderline, 157
deep K stroke pattern, and hypertension, 158
direct, surface effects, 940
displacement, 507
exercise test in, 388–398
in hypertension, 392–394
in myocardial infarction, 391–392
in myocarditis, 393
normal, 157, 307
in peripheral vascular disease, 940
photoelectric, 899
piezoelectric, 899
in rheumatic fever, 400–406
after smoking, 775
velocity, 507

**Barrier**

blood-brain, effect of dietary fat on, 341–342

**Basal metabolic rate**

of Eskimo, 818

**Base**

in arterial blood, in congenital heart disease, 937
intracellular, in heart failure due to beriberi, 253

**Benemid**

and penicillin, 294

**Beriberi**

high-output heart failure due to, 247–251
heart disease due to, 618

**Bicarbonate**

in electrocardiography, 906
in plasma, and electrocardiography, 908

**Bile**

plasma cholesterol after, 146

**Bipolar lead**

773

**Biscomacetate**

ethyl, clinical evaluation of, 314

**Bishydroxycoumarin**

liver function after, 148

**Bladder**

heart involvement by carcinoma of, 225
paralysis of, after Apresoline, 148

**Blast**

injury due to, 785

**Block**

atrioventricular, 774
brachial, hypoxemia and arterial blood pressure after, 35
bundle branch alternating, 774
in coarctation of aorta, 375–379
electrocardiography in, 186
after exercise, 309
intermittent, 136
left, with infarction, 945
vectorcardiography, 137
conduction, 495
and digitalis, 117
intoxication due to, 121–122
ganglionic, kidney function and blood pressure in, 312
intraventricular, 458
in myocardial infarction, 329
sympathetic, for arterial occlusion, 238–246
vasomotor, and position of lower extremities, 465
ventricular fibrillation during, 144

**INDEX**

[Artery-Block]
Blockade, adrenergic, with dibenzylamine, 841

Blood
adrenalin in, 784
adrenergic amines in, 784
arterial gases in, 811
in congestive heart disease, 857
in normal children, 944
and brain barrier, effect of dietary fat on, 341–342
electrolyte in, after running, 836
noradrenaline in, 784
oxygen in, determination of, 625
for shock, 608-609
sludging of, 343
transfusion, for shock, 607-608
velocity of, in retinal capillary, 778
viscosity of, in lipemia, 342
volume of
in congestive heart failure, 576, 578
determination of, 462, 571–579
in Eemko, 818
and kidney circulation, 944
in mitral stenosis, 576, 578, 579
in myocardial infarction, 358, 360
normal, 621
in pregnancy, 944
in ventricular failure, 578–579
See also Circulation; Coagulation; Plasma; Serum

Blood pressure
arterial
and extracellular fluid, 312
due to hypcapnia, 89–95
after kidney stimulation, 511
in unanesthetized rat, 620
arterial wall secretion in regulation of, 903–907
capillary, in hypertension, 459
during cardiac massage, 944
and cardiac output, 645–662, 654–679
in children, 945
continuous observation of, 149
and exercise, 193–197
after healed myocardial infarction, 349, 350
femoral, and sartor constriction, 622
in heart
after arteriovenous fistula, 513
right, 779
after Hydergine, 54
intrinsie, 641–647
after ischemia in mouse tail, 779
and kidney function in ganglionic blockage, 312
in myocardial infarction, 356–360
in pulmonary artery, 779
after Dihydroergotamine, 814
direct measurement of, 621
after Hydergine, 814
in mitral stenosis, 160
and pulmonary arterial resistance, 769
metabolism of, 812
pulmonary capillary, in heart disease, 142
pulmonary vascular, 143
after running, 836
in skin, 180–191
during tachycardia, 426–427
after vagus stimulation, 903
venous
after digoxin, 945
in myocardial infarction, 356, 359, 360, 550
after ouabain, 945
in shock due to myocardial infarction, 550
after strophanthosid, 948
during surgery, 168
See also Hypertension; Hypotension

Blood urea nitrogen, after mitral valvuloplasty, 213, 215–217
Blood vessel
fragility of, after anticoagulant, 164
rupture of, due to physical exertion, 155
Body, electrolytic model of, 261
Body weight
and digitalis dosage, 119
and spatial QRS and T vector, 106–107, 111–112
Bone
Priscoline for atrophy of, 76
vascularization of, in Paget’s disease, 184
Bone marrow, embolism, fatal, 791

Book reviews
Bellet, S.: Clinical Disorders of the Heart Beat, 696
Braunstein, R.: The Ballistocardiogram: A Dynamic Record of the Heart Beat, 473
Flynn, J. E. (ed.): Transactions of the Fifth Conference on Blood Clotting and Allied Problems, 472
Gould, S. E.: Pathology of the Heart, 473
Katz, L. N. and Stamler, J.: Experimental Atherosclerosis, 636
Kisch, B. (ed.): Transactions of the American College of Cardiology, Volume II, 474
Scherf, D.: Extrasystoles and Allied Arrhythmias, 792
Schnitker, M. A.: Congenital Anomalies of the Heart and Great vessels, 472
Transactions of the Fifth Conference on Blood Clotting and Allied Problems, 472
Zdansky, E.: Roentgen Diagnosis of the Heart and Great Vessels, 385
Brachial plexus, hypocapnia and arterial blood pressure after block of, 93
Bradycardia
due to bronchogenic carcinoma, 312
due to cardiac glycoside, 85–87
due to morphine before and after ventricular tachycardia, 84, 87
after Valsalva maneuver, 518
in mitral stenosis, 515, 519
Brain
and aging, 309
apoplexy
with circulatory insufficiency, 465
with coronary thrombosis, 465
and arteriosclerosis, 309
and blood barrier, effect of dietary fat on, 341–342
circulation in
after carbon dioxide inhalation, 950–951
after corticotropin, 159
after cortisone, 159
after epinephrine, 147
after ethyl alcohol, 312
in hyperthyroidism, 142
after l-epinephrine, 147
after l-norepinephrine, 147
after Priscoline, 147
hemorrhage into, 470
after Hydergine, 54, 55
and hypertension, 309
metabolism in, in pulmonary emphysema, 946
oxygen consumption in, in hyperthyroidism, 142
stroke, 470
thrombosis, 470
vascular reactivity of, to carbon dioxide, 953
Bronchus, bradycardia and syncope due to, 512

Bundle branch block
alternating, 774
in coarctation of aorta, 375–379
electrocardiography in, 136
after exercise, 309
intermittent, 136
left, with infarction, 943
vectorcardiography in, 137

Bundle of Kent, auriculoventricular conduction over, 652

Bursitis, of hip, 5

Cadaver, lead fields in, 261

Calcification
aortic, in aortoiliac occlusion, 4
with diffuse phlebothrombosis, 144
within heart, 367–370
mitral, and mitral surgery, 767
Calcium, in digitalis intoxication, 119
Calcium chloride, for poor contractility of heart, 768
Calorimetry, gradient, for measuring skin circulation, 408–414

Capillary
blood pressure in, in hypertension, 459
fragility of, in skin, 958
pressure in, 181
pulmonary, in heart disease, 143
retinal, blood velocity in, 778
Carbohydrate, metabolism of, in heart, 956

Carbomycin, for bacterial endocarditis, 297

INDEX
INDEX

Carbon dioxide
arterial blood pressure due to deficiency of, 89
breathing of, and, sodium excretion, 906
Cerebrovascular disease, 582-584
Carotids
brechogenic
bradycardia and syncope due to, 518
Cardiac output after, 512
endothelial, 438
heart involvement by, 229-228
Cardiac index, in myocardial infarction, 355-356, 848
Cardiac output
after arteriovenous fistula, 518
and exercise, 57-61
after healed myocardial infarction, 348-350
measurement of, 59-61
in myocardial infarction, 350-361
in nursing position, 518
in osteitis deformans, 945
after Valsalva maneuver, 511-519
Cardiopericardiopecty, for coronary artery disease, 905, 628
Cardiorrhexy, and pericardiomyx for heart wound, 788
Cardio-tachograph, 156
Cardiovascular disease, cinefluorography, 149
Cardiovascular system
adaptation of, to prolonged physical effort, 835-845
in beriberi, 616
function of, after exercise in healed myocardial infarction, 347-351
Carditis, rheumatic
ballistocardiogram, 400-406
in children, 149
Cardiot sis
hypersensitivity, 469
in digitalis intoxication, 125
pressure on cardiovascular effects due to, 96-104
in chaotic heart rhythm, 146
paradoxical response to, 146
paroxysmal ventricular standstill due to, 857-860
Castration, female, atherosclerosis after, 535-538
Catechism, for arteritis, 400
Catechol, urinary excretion of, 592-598
Catheterization, cardiac, 628
accidents in, 143
fatality after, 634
pyrogen-like complications of, 63-66
subendocardial trauma due to, 471
Cation exchange resin
for congestive heart failure, 454
for edema, 453, 454
and sodium conservation, 32-37
Causalgia
Dibenzylxine for, 76
hexamethonium for, 76
Priscoline for, 76
Cedilanid
first heart sound after, 315
operative course after, 147
Cell, oomolality of, in heart failure due to beriberi, 292-293
Celiotomy, 438
Cerebral artery, thrombosis of aneurysm of, 786
Cerebrovascular system, electrocardiogram after accident to, 710-723
Cerebrum
and aging, 309
apoplexy with circulatory insufficiency, 455
with coronary thrombosis, 485
and arteriosclerosis, 309
circulation in after carbon dioxide inhalation, 890-891
after corticotropin, 139
after cortisone, 139
after epinephrine, 147
after ethyl alcohol, 318
in hyperthyroidism, 142
after l-epinephrine, 147
after l-norepinephrine, 147
after Priscoline, 147
hemorrhage into, 470
and hypertension, 309
metabolism in, pulmonary emphysema, 946
oxygen consumption in, hyperthyroidism, 142
stroke, 470
thrombosis, 470
vascular reactivity of, carbon dioxide, 483
Cheek pouch, hamster
after anticoagulant, 154
circulation in, 336
in lipemia, 336-339
Chemotherapy, for pericarditis, 434, 438
tuberculous, 17-21, 145
Chest
circumference of, and spatial QRS and T vector, 108
lead field on surface of, 258
Child
auricular tachycardia in, 146
blood pressure in, 945
idiopathic myocarditis in, 946
normal acid-base balance in, 944
rheumatic carditis in corticotropin for, 149
cortisone for, 149
See also Infant; Newborn
Chloramphenicol, for bacterial endocarditis, 296, 617
Chloride
in blood, after running, 836
metabolism of, after mitral valvuloplasty, 213, 215-217
INDEX

[Carbon dioxide–Circulation]
in plasma, and electrocardiography, 508
in serum, bedside test for, 635
Chloromycetin, for bacterial endocarditis, 296
Chlorotetracycline, for bacterial endocarditis, 296
Cholecytostomy, electrocardiography during, 186
Cholesterol
dietary, in aortic phospholipid, 582-584
intermittent feeding of, in atherosclerosis, 632
in periacid fluid, 439
in plasma, after bile, 140
in serum
in coronary artery disease, 139
in diabetes, 139
in hypertension, 139
Cholinesterase, for shock, 613
due to myocardial infarction, 531
Chromium, radioactive, red blood cell tagged with, in determining blood volume, 571-579
Chylomicron, 342
Chylopericardium, 156
Cigarette, peripheral vascular system after, 635
See also Smoking
Cinefluorography, cardiovascular, 149
Circulation
during anesthesia, 316
to, sinotinal node in dog, 547-553
arteriolar, after sympathetomy for arterial occlusive disease 634
cerebral
and aging, 309
and arteriosclerosis, 309
after carbon dioxide inhalation, 850-851
in chronic pulmonary disease, 946
after corticotropin, 139
after cortisone, 139
after epinephrine, 147
after ethyl alcohol, 318
and hypertension, 309
in hyperthyroidism, 142
after l-epinephrine, 147
after l-norepinephrine, 147
after Priscoline, 147
in cold acclimatization, 813-821
coronary, 160
and heart hypertrophy, 303
due to ventricular function curve, 712
digital
after hexamethonium, 590
after hydralazine, 590
after sodium depletion, 590-590
and digitoxin, 144
to extremities
in arteriosclerosis, 66
and kidney, 65-66
after venous compression, 982
failure of, in accidental death, 482
in hamster's cheek pouch, 336
INDEX

Climate, and myocardial infarction, 305
Coagulation
and alimentary lipemia, 984
electrothermic for aortic aneurysm, 690
during first week of life, 618
and high fat diet, 344
after myocardial infarction, 301
prevention of. See Anticoagulant.
See also Prothrombin
Coagulation time
determination of, 451
and dietary cream, 451
Coarctation
aortic
electrocardiography in, 371-379
endocrine disturbances in, 888
and pregnancy, 927
thoracic, 308
Coccidioides, pericarditis, 439
Cold, circulation in aclimatization to, 813-821
See also Hypothermia
Cold injury
plasma lipoprotein after, 632
Priscoline for, 76
Colon, as sodium-conserving organ, 32-37
Commisurotomy
aortic, 22-31, 781
case histories, 789
mitral, 628, 788, 986, 990
with calcific emboli, 403
medical aspects of, 795-799
recurrence, 150
selection of patients for, 628
Compression, manual, of canine heart, 916-920
Conduction, auriculoventricular over bundle of Kent, 622
concealed, 774
Conjunctiva, bulbar, peripheral vascular bed in, 696
Constipation, after pentapyrrolidium in hypertension, 544, 545
Contraction, Volkmann's, thrombectomy in, 317
Contrast media, 787
Cooling. See Hypothermia
Cor pulmonale, digitalis for, 125
Coronary artery
anastomosis of, with internal mammary artery, 629
atherosclerosis of, in males under age of 46, 304
circulation in, 150
and heart hypertrophy, 393
and ventricular function curve, 712
disease of
in battle casualties in Korea, 773
cardiopericardiopey for, 305, 628
cholesterol in, 159
cholesterol-lipid phosphorus ratio, 159
heparin clearing of alimentary lipemia in, 998
S, 12-20 lipoproteins in, 159
origin of, from aorta and pulmonary artery, 985
pulsation of, roentgenkymography of, 690
sclerosis of, in castrated females, 535-538
thrombosis
anticoagulant for, 741-742
with cerebral apoplexy, 465
Corticotropin
and cerebral circulation, 189
in mitral surgery, 767
for pericarditis, 434
for rheumatic carditis in children, 149
Cortisone
in Addison's disease after sodium, 809
and cerebral circulation, 139
in mitral surgery, 767
for rheumatic carditis in children, 149
for rheumatic fever, 816
for shock, 613
due to myocardial infarction, 531
for shoulder-hand syndrome, after myocardial infarction, 183
Countershock, 916-920
Cranium, aneurysm in, with polycystic kidney, 631
Cream, dietary, and blood coagulation, 481
Cuff, in blood pressure estimation, in children, 946
Cumertin, 947
Curarization, intestinal circulation in, 621
Cyclopropane, 787
hypotension after, 622
Deafness
due to dihydrostreptomycin, 295
due to streptomycin, 295
Death, accidental, circulatory failure in, 462
Decholin, in determination of circulation time, 515
Decompensation, hazards in treatment of, 772
Decortication
of heart, 464
of lung, 518
Defibrillation, electrical, of canine heart, 916-920
Dehydration, plasma sodium as measure of, 955-956
Delirium, secondary, after thiocyanate for hypertension, 510
Dephosphorylation, adenosine triphosphate, 782
Depolarization of heart, vs. repolarization, 267-274
Dermatitis, exfoliative, fatal peripheral vascular failure in, 622
Dextran
circulation after injection of, 339
as plasma expander, 608
as replacement fluid in hemorrhage, 469
Diabetes mellitus
cholesterol in, 159
cholesterol-lipid phosphorus ratio, 159
Diabetes mellitus (Cont’d)
and myocardial infarction, 324, 331
and peripheral arterial disease, 663
sulfur polypeptide in, 468
S, 12–20 lipoprotein in, 189
Diarrhea
in digitalis intoxication, 125
epidemic of newborn, and kidney thrombosis, 164
Digilanid, hypotension due to, 611
Dihexylamine, hypotension due to, 611
Dihexylamine
for post-traumatic causalgia, 76
for Raynaud’s disease, 75
for thromboangiitis obliterans, 78
Dihexylamine vomiing due to, 86
for ventricular tachycardia due to K-strophantoside, 82–88
Dicyclomine, for venous autograft, 787
Dichloridol
ambulatory, 742–747
vs. Dipaxin, 234–236
dosage variation, 742–744, 749
hemorrhage due to, 745–746
vs. heparin, 617
liver function after, 148
long term therapy with, 745,
825–833
and menstrual cycle, 744
for myocardial infarction, 743
variation, 742–744, 749
Dicylurin procaine, 146
Diet
in mitral surgery, 767, 768
potassium-deficient, in hypertension, 777
Digitoxin
acetyldigoxin, 623
dosage, 124
Eggleston dosage method, 119
first heart sound after, 315
and gynecomastia, 624
intoxication due to, 115–126
in mitral surgery, 767, 768
operative course after, 147
and potassium in auricular tachycardia with block, 631
uricemia due to, 308
Digitoxin
acetyl, 147
acetyl α, 148
circulation, 144
dosage, 117
intraocular, 624
uricemia due to, 308
Digoxin
in mitral surgery, 767
systemic venous pressure after, 945
uricemia due to, 308
Dihydrazinophthalazine, hypotension due to, 148
Dihydroergotamine, pulmonary arterial pressure after, 374
Dihydrostreptomycin, for bacterial endocarditis, 295
Dilatol, 947
Dilator, aortic, 24–25
Dilution curve, in acyanotic congentive heart disease, 890–901
Dipaxin, 230–237
Diphenylamine, serum reaction to, in rheumatic fever, 949
Dipole, electrocardiographic, 458
Disc, calorimetry, for measuring skin circulation, 408–414
Displacement, electrocardiographic, 307
Diuretic
in digitalis intoxication, 122
evaluation of, 634
mercurial, 149
for congestive heart failure, 454
Cumaril, 947
Mercumarin, 947
in mitral surgery, 767, 768
neoxydren, 947
thiamine excretion after, 454
water as, 457
Dog
arterial supply to sinaloical node of, 547–553
cardiovascular lesion after bilateral nephrectomy in, 470
fibrillation, countershock, and manual compression of heart of, 916–921
pantothenic acid in kidney hypertension of, 309
Starling’s law of the heart, 706–716
vagal stimulation in, 945
Ductus arteriosus
fetal, and coarctation of aorta, 374–376
patent
and agenesis of lung, 618
and pregnancy, 926
Dye dilution curve, in acyanotic congestive heart disease, 890–901
Dyspnea
and mitral valvular disease, 467
in myocardial infarction, 329
in pericarditis, 426, 430
Electrogram
atrial, in mitral stenosis, 138
Electric shock therapy, 635
Electrocardiograph
in Addison’s disease after cortisone, 309
of African, 860–867
in cerebrovascular accidents, 719–723
after cooling, 899
daily variations of, 307
frontal-plane, accuracy of, 724–735
after hypoxia, 893
and mitral insufficiency, 941
after potassium, 899
precardial, in child, 940
time intervals in, 158
unipolar, in sportsmen, 458
ventricular esophageal, 775
Electrocardiography
in atrial septal defect, 811
bicarbonate in, 306
in plasma, 808
in bundle-branch block
anatomic-pathologic study of, 138
intermittent, 136
and carbon dioxide in plasma, 808
chloride in, 808
in coarctation of aorta, 371–379
in digitalis intoxication, 121
dipole concept, 458
fetal, 773
during gall bladder disease, 136
glucose in, 536
hyperkalemia in, 306
in hypertension, after methoxamine compounds, 137
lead field in, 225–226
mirror pattern cancellation, 306
in myocardial infarction, 327,
333
in pericarditis, 428, 432, 436, 437, 438
and pH of plasma, 308
potassium in, 306
in plasma, 308
radio transmission of, 136
respiratory alkalosis in, 306
after running, 837–845
in septal infarction, 439
sodium in, 306
in plasma, 308
spatial, after exertion, 807
in tumor metabolism to heart, 223–224, 226
during vagal stimulation, 776
in ventricular tachycardia, paroxysmal, 135
Electrode, indifferent, 257, 262
Electrograph, atrial, in mitral stenosis, 138
Electrolyte
in aged persons, 409
in blood, after running, 836
excretion of, after arteriovenous fistula, 156
and hypoxia, 148
[Diabetes mellitus–Electrolyte]

Eight nerve
after dihydrostreptomycin, 295
after streptomycin, 295
Einthoven triangle, 256, 262, 263
Eisenmenger’s complex, physiopathology of, 309
Electric shock therapy, 635
Electrocardiograph
in Addison’s disease after cortisone, 309
of African, 860–867
in cerebrovascular accidents, 719–723
after cooling, 899
daily variations of, 307
frontal-plane, accuracy of, 724–735
after hypoxia, 893
and mitral insufficiency, 941
after potassium, 899
precardial, in child, 940
time intervals in, 158
unipolar, in sportsmen, 458
ventricular esophageal, 775
Electrocardiography
in atrial septal defect, 811
bicarbonate in, 306
in plasma, 808
in bundle-branch block
anatomic-pathologic study of, 138
intermittent, 136
and carbon dioxide in plasma, 808
chloride in, 808
in coarctation of aorta, 371–379
in digitalis intoxication, 121
dipole concept, 458
fetal, 773
during gall bladder disease, 136
glucose in, 536
hyperkalemia in, 306
in hypertension, after methoxamine compounds, 137
lead field in, 225–226
mirror pattern cancellation, 306
in myocardial infarction, 327,
333
in pericarditis, 428, 432, 436, 437, 438
and pH of plasma, 308
potassium in, 306
in plasma, 308
radio transmission of, 136
respiratory alkalosis in, 306
after running, 837–845
in septal infarction, 439
sodium in, 306
in plasma, 308
spatial, after exertion, 807
in tumor metabolism to heart, 223–224, 226
during vagal stimulation, 776
in ventricular tachycardia, paroxysmal, 135
Electrode, indifferent, 257, 262
Electrograph, atrial, in mitral stenosis, 138
Electrolyte
in aged persons, 409
in blood, after running, 836
excretion of, after arteriovenous fistula, 156
and hypoxia, 148
angiocardiography in, 626, 627
arterial blood gases in, 587
familial incidence of, 771
pulmonary circulation in, 803
rib notching after surgery for, 610
and eclampsia, 930
in New England, 467
and pre-eclampsia, 930
pulmonary capillary pressure in, 148
rheumatic
case history, 755
and chronic constrictive pericarditis, 151
circulation in, 686
after cortisone for rheumatic fever, 316
mitral valve in, 786
in pregnancy, 922-926
ventilatory changes in, 686
sodium excretion in, 695-606
Heart failure
congestive
anticoagulant for, 742
due to beriberi, 247-254
blood volume in, 576, 578
case history, 443-449
cation exchange resin for, 454
due to digoxin, 117
erythrocyte sedimentation in, 454
hazards in treatment of, 779
intrinsic blood pressure in, 644, 646
with mitral stenosis, 804
myocardial infarction in, 122, 325, 329, 331, 333
pulmonary embolization in, 447-448
sodium retention in, 454
thiamine excretion after mercurials in, 454
urinary catechol excretion in, 506, 507, 509
ventricular premature contraction in, 125
vitamin B6 for, 450
energy metabolism in, 779
high output, due to beriberi, 247-254
right, and kidney function, 691
ventricle in, 772
and ventricular function curve, 714
Heart-lung machine, 780
Heart sound
in atrial septal defect, 811
in auricular flutter, 784
first
after Cedilanid, 315
after Hydrgine, 516
in pericarditis, 426, 431
phonocardiography, 127-134
prececiial, 948
See also Murmur
Heat flow technic, for measuring
skin circulation, 408-414
Height, and spatial QRS and T vector, 107
Hemiplegia
and Hydrgine, 54, 55
due to rheomocytoma, 777
Hemopericardium
and constrictive pericarditis, 484
with tamponade, 618
Hemorrhage
after anticoagulant long-term, 528-529
in private practice, 684
bilateral adrenal, with arterio-
olephosphatosis, 310
cebroal
electrocardiogram in, 719-723
rehabilitation after, 470
circulatory effects of, during anesthesia, 316
due to Dicumarol, 745
due to Dipaxin, 255
pulmonary embolism after, 604
replacement fluid in, 459
shock due to, intra-arterial vs.
intravenous transfusion in, 458
subarachnoidal, electrocardio-
gram in, 725
thromboembolism during therapy
with, 750
vitamin C for, 754
Heparin, 741
for angina
of effort, 451
pectoris, 506, 511
vs. Dicumarol, 817
for frostbite, 818
indication for, 752
phospholipid synthesis after, 458
repository, and lipoprotein patterns, 785
Hepatic artery, ligation of, and as-
cites, 183
Hepatomegaly, after exposure to cold, 820
Hepes, Priscoline for neuralgia after, 76
Hexamethionum
bitartrate, for hypertension, 137
bromide, for hypertension, 137
for causalgia, post-traumatic, 76
circulation after, in visceral and peripheral vascular beds, 70
death due to, 776
digital circulation after, 590
circulation, for, 459
in plasma, 460
for Raynaud's disease, 75
salts of
absorption of, 310
excretion of, 817
splanchnic circulation after, 458
for thromboangiitis obliterans, 78
Hip
hypertrophic arthritis of, 5
interruption of claudication of, 1-15
pain in, 5
Hippel-Lindau disease, and pheo-
chromocytoma, 140
Hodgkin's disease, heart involve-
ment by, 225, 227
Homograft, aortic, 788
for aneurysm, 494-502
Hormone
estrogenic, for atherosclerosis, 533-538
effect on heart, 776
and sodium excretion, 697
Hydrgine
for arterial hypertension, 48-56
physical circulation after, in visceral and peripheral vascular beds, 70
first heart sound after, 315
pulmonary arterial pressure after, 814
in pulmonary hypertension, 311
skin circulation after, 411, 413-414
Hydrazinophthalazine
digital circulation after, 590
for hypertension, 139, 141
psychosis after, 943
See also Apresoline; Hydrazino-
phthalazine
Hydrazinophthalazine
in body fluids, 452
cardiohemodynamics after, 778
death due to, 779
for hypertension, 141, 461
hypotension due to, 148
See also Apresoline; Hydrazi-
none
Hypercapnea, and postanesthetic hypotension, 622
Hypercholesteremia, 470
and atherosclerosis, 455
Hyperemia, reactive, for estima-
tion of skin blood pres-
sure, 180-191
Hyperestrogenism
in female, and severity of atherosclerosis, 533-538
in male, and severity of athero-
sclerosis, 534-535
Hyperkalemia, in electrocardiogra-
phy, 506
Hyperplasia, in cardiovascular beriberi, 616
Hypersensitivity
anaphylactic, 471
catechol for arteritis due to, 490
rutin for arteritis due to, 490
Hypertension
with adrenal apoplexy, 310
adrenal resection for, 943
Apresoline for, 141, 461
arterial
in American Indians, 461
after Hydrgine, 48-56
pressure in, after expansion of extracellular fluid volu-
me, 318
urinary catechol excretion in, 594
ballistocardiography in, 392-394
capillary blood pressure in, 459
catechol for arteritis due to, 490
cholesterol in, 159
INDEX

poycetic, with intracranial aneurysms, 631
in potassium depletion due to
laxative, 156
response to hexamethonium, 810
thrombosis, in epidemic diarrhea
of newborn, 154
unilateral atriope hypotension
due to, 460
water excretion by, after mitral
valvulopathy, 208-209
King, Robert L., awarded Dis-
tinguished Service Silver
Medallion, 799
Korean War, acute vascular inju-
ries in, 952
Lanatoside, bradyardia due to,
85-86
Lanatoside C, urticaaria due to,
901
Largactil, 609
Laxative, potassium depletion due
to, 156
Lead
bipolar transthoracic, in
determination of spatial
ventricular gradient, 157
chest, for electrocardiographic
vector, 775
electrocardiographic, 255-265,
773
field, 255-265
injury, 261-262
new, 868-875
null point, 259, 264-265
synthesis of
by adjustment of lead field
current at body surface,
873-877
by combination, 868-873
limitations of, 869, 877-878
Leg
and intermittent claudication of
hip, 3
ischemia of, 853
ulcer of, postpartum, 790
venography of, 953
Ligation
of aortic aneurysm, 498
of hepatic artery and ascites,
158
of major veins, 950
papillary, for gravitational syn-
drome, 151
of pulmonary vein, pulmonary
arterial hypertension
after, 153
Limb, lower
and intermittent claudication of
hip, 3
ischemia of, 954
ulcer of, postpartum, 790
venography of, 953
Lindau-von Hippel disease, and
pheochromocytoma, 140
Lipemia
allimentary
circulation in, 335-344
heparin, clearing of, in
coronary artery disease, 938
prothrombin time after, 934
in hamster, 330-339
of plasma, heparin clearing,
effect on, 885
platelet in, 337
red blood cell in, 333-344
Lipid
in plasma
during menstrual cycle, 315
.milk test for clearing factor
in, 813
in serum, and age of patient,
633
Lipid clearing factor, in plasma,
milk test for, 816
Lipoma, mediastinal, simulating
cardiac enlargement, 654
Lipoprotein
after heparin, 853
in plasma, after cold injury, 652
S3, 12-20
in coronary artery disease,
139
in diabetes, 139
in hypertension, 139
Liver
circulation
after alcohol, 146
in dog, 146
enlargement of, after exposure
to cold, 820
function
after bishydroxyxycoumarin, 148
after Dipaxin, 235
isolated, vasomotor activity in,
779
phospholipid in, 582-583
Lobelin, in circulation time de-
termination, 824
Loop, spatial, of ventricular
gradient, 270-271
Lung
agenesis of, and patent ductus
arteriosus, 616
arteriovenous fistula in, 155
carcinoma of, heart involve-
ment by, 222, 227
decortication of, 318
function of, in rheumatic heart
disease, 620
infection of, and pulmonary
embolism, 163
Lung-heart machine, 780
Lupus erythematosus
disseminated, pericarditis in,
439
n retention mustard for, 788
triethylene melamine for, 782
Lutembacher syndrome, 618, 810
Lymphoma, malignant, heart in-
volve ment by, 225, 227
Magnanycin, for bacterial endo-
carditis, 297
Magnesium trisilicate, in rheu-
matic fever, 699
Male
atherosclerosis of, coronary
artery in, 804
hyperestrogenism in, and
severity of atherosclero-
sis, 534-535
Mammary artery, internal, an-
astomosis of, with coro-
nary artery, 889
Marathon runner, cardiovascular
adaptations of, 835-845
INDEX

Marrow, embolism, 781
Mast cell, and atherosclerosis, 466
Mediastinum, lipoma in, simulating cardiac enlargement, 683
Melamine, triethylene, for lupus erythematosus, 782
Melanoma, malignant, heart involvement by, 222, 227
Menstrual cycle and anticoagulant therapy, 744, 756
plasma lipid in, 315
Meralgia paraesthetica, 76
Mercumarin, 947
Mercurial diuretic. See Diuretic
Merethoxyline, 148
Mesothelioma, pericardial, 438
Methoden compound for hypertension arterial, 140
electrocardiography, 137
new, 14, 148
Methoxamine for shock due to myocardial infarction, 530
for supraventricular tachycardia, 780
Microphone, phonocardiographic, 128
Milk low sodium, 950
in test for lipid clearing factor in plasma, 516
Mirror pattern, electrocardiographic, 306
Mitral valve calcification of, 144, 367-370
and mitral surgery, 767
disease of, and pulmonary function, 467
insufficiency of electrocardiogram in, 941
surgery for, 2527-28
regurgitation diagnosis of, 785
with mitral stenosis, 764-765, 778
phonocardiography, 130-131
in rheumatic heart disease, 786
stenosis of, 149, 514
with aortic regurgitation, 764
with aortic stenosis, 26-28, 763-764
atrial pressure in, 619
with atrial septal defect, 810
ventricle in, 304, 767
with auricular fibrillation in bacterial endocarditis, 908-914
blood volume in, 576, 578
body water after, 206-209
body water in, 204
with calcific emboli, 463
circulation in, 619
circulation after Valsalva maneuver in, 514-515, 519
commissurotomy, 454, 453, 698, 780, 988, 950
congenital, 161-178
with congestive heart failure, 504

Marrow-Myocardium

electrogram, 388
exercise tolerance tests in, 620
kidney function after Apresoline, 700-704
kidney function after exercise in, 687-698
of Lutembacher's syndrome, 175
medical aspects of, 578-79
with mitral calcification, 767
with mitral regurgitation, 764-765, 778
phonocardiography, 129-131
postoperative, 417
potassium metabolism in, 204-206, 213
in pregnancy, 767, 925
preoperative body composition in, 204-206
pulmonary capillary venous pressure in, 619
pulmonary circulation in, 768
pulmonary circulation in, after oxygen breathing, 944
pulmonary hemodynamics in, 766
with pulmonary regurgitation, 766
with pulmonary stenosis, 766
reurrence after commissurotomy, 149
regurgitation, 149
residual air in, 149
rheumatic, 22
sodium metabolism in, 204-206
surgery for, 758-769, 781
surgery for, during pregnancy, 925
with tricuspid regurgitation, 766
with tricuspid stenosis, 766
utilization quotient of oxygen after exercise in, 513
Valvotomy for, 452
ventilatory studies in, 680
surgery, 317
valvuloplasty, metabolic changes in, 199-217
Münchberg's arteriosclerosis, 465
Mononucleosis, infectious, with acute pericarditis, 634
Morphine bradycardia due to, before and after ventricular tachycardia, 84, 87
for shock, due to myocardial infarction, 528

Mortality in aortic commissurotomy, 25-26, 27
infant, and maternal essential hypertension, 929
in long-term anticoagulant therapy, 832-833
maternal, in pregnancy with rheumatic heart disease, 922-925
in myocardial infarction, 330-331
right heart catheterization, 143
due to tuberculous pericarditis, 19

Mouse, blood pressure in tail of, after ischemia, 779
Mouth, streptococci in, and subacute bacterial endocarditis, 300
surgery of, during long-term anticoagulant therapy, 831

Murmur aortic systolic, 685
apical, 685
in atrial septal defect, 810
Austin Flint, 783
phonocardiography, 131
autochthonic, due to organic arteriopathy, 784
Flint, 131, 783
phonocardiographic, 129, 132-134
precordial, 648
systolic, in infant, 315

Mustard, nitrogen, triethylene melamine in, 782

Myocarditis acute isolated, in newborn infant, 846
ballistocardiography in, 203
Fiedler's, 781
idiopathic, in children, 946
isolated, in infant, 781

Myocardium adenosine triphosphatase in, 144
in angina pectoris, 486
in aortic stenosis, 26-27
calcification of, 367-370
after digitalis toxicity, 118, 125-126
failure of, and ventricular function curve, 714
hyperirritability of, 121
infarction of anticoagulant for, 458, 747, 752
auricular involvement in, 155
ballistocardiography in, 391-392
blood coagulability after, 301
blood pressure in, 536-530
blood volume in, 358, 399
cardiac index in, 355-356
cardiac output in, 359-361
case history, 750-751
circulation in, 847-851
climatic influence on, 505
in congestive heart failure, 122-123
cortisone for shoulder-hand syndrome after, 135
dicumarol for, 743
digitalis in, 122-123
healed, and cardiovascular response to exercise, 547-551
hemodynamic study of, 352-362
hemopericardium with tamponade during anticoagulant therapy for, 618
intrinsic blood pressure in, 543-544
kidney function in, 42
location of, 260
norepinephrine for shock after, 38-47
INDEX

xxiii

[Myocardium—Pericarditis]

pericarditis secondary to, 437
posterior, 773
prognosis, 321–334, 988
rupture of papillary muscle after, 306
shock after, 38–47, 325, 329, 331, 327–331, 512–513, 850–851
therapy, 455
urinary catechol excretion in, 596, 607
vaccination in, 441 with Wolff-Parkinson-White syndrome, 456
in pericarditis, 436
sarcoïdosis in, 886–889
myocardial tumor metastasis to, 220–222

Myxedema, and atherosclerosis, 455

Nausea
due to digitalis intoxication, 123
of duplicate gastric, 54
Necrosis, of foot, 184–189
Neohydrin, 947
Neomycin, as anticoagulant, 451
Neoplasms—pericarditis due to, 438–439
Neo-Synephrine, 39
for shock, 613
Nephrectomy, bilateral, cardiovascular lesion after, 470
and hypertension, 790
Nepresol
for hypertension, 141
hypotension due to, 148
Nervous system, autonomic, and post-Valsalva maneuvers, 501, 516
Neuralgia, postherpetie, Priscoline for, 76
Neurofibromatosis, multiple, and pheochromocytoma, 140
Neurosurgery, controlled hypotension in, 158
New England, heart disease in, 467
Newborn
coeagulation in, 618
epidemic diarrhea of, and kidney thrombosis, 164
prothrombin in, 300
Nicotine
and myocardial infarction, 326, 352
peripheral vascular system after, 955
Nicotinic acid ester, for skin test in rheumatic disease, 949
Nitrogen, nonprotein, in myocardial infarction, 326
Nitrogen mustard, for lupus erythematosus, 782
Nitrous oxide, 787
Nitrous oxide method, vs. blood pressure method for determining cardiac output, 671–675, 677
Node, sinoatrial, arterial supply to, 547–553
Noradrenaline
with Apresoline, 703–704
in blood, 794
in pheochromocytoma, 948
pulmonary circulation after, 948
for shock, 610
Norepinephrine
catechol excretion after infusion of, 506, 507, 508
cerebral circulation after, 117
kidney circulation after constant-speed infusion of, 600–604
for shock, 613
after myocardial infarction, 38–47, 520–530
Null contour, mean spatial vectors constructed from, 555–562
Occlusion
acute massive venous, of lower extremity, 638
aortic, in infancy, 632
arterial
Priscoline for, 78
sympathetic denervation for, 238–246
See also Stenosis; Thrombosis
Occupation, of older cardiac patients, 633
Oliguria, in shock after myocardial infarction, 42
Oophorectomy, bilateral, atherosclerosis after, 535–536
Orange juice, for digitalis intoxication, 122
Orange of acidine, 947
Osler’s Disease, circulation time in, 144
Osmolarity, cellular, in heart failure due to beriberi, 252–253
Osteitis deformans, cardiac output in, 943
circulation in, 953
Ousabain, systemic venous pressure after, 946
Oxygen
in blood, in congenital heart disease, 987
determination of, 625
cerebral consumption of, in hyperthyroidism, 142
consumption of, after hexamethonium, 943
utilization quotient of, after exercise in mitral stenosis, 513
See also Anoxia; Hypoxia
Oxymetry, in determination of circulation time, 784
Oxyphygogelatin, as replacement fluid in hemorrhage, 459
Oxytetracycline, for bacterial endocarditis, 296
subacute, 617
P-9205, skin circulation after, 411–412, 414
P wave
in African, 866
after running, 837, 844
Pacemaker
after carotid sinus pressure, 96–104
external, in Adams-Stokes disease, 482–492
Paget’s disease
bone vascularization in, 164
cardiac output in, 943
Pain
heart, after Priscoline, 148
in hip, 5
due to obstructive arterial disease, Priscoline for, 77–79
in pericarditis, 435, 430
posttraumatic, Priscoline for, 76
Pancreas, carcinoma of, heart involvement by, 225, 227
Pancytopenia, with bacterial endocarditis, 934
Pantothenic acid, in renal hypertension, 309
Papillary muscle, rupture of, after myocardial infarction, 306
Papilledema, in hypertension, 140
Para-aminophenol acid
clearance of, in shock after myocardial infarction, 42
Para-aminosalicylic acid
and probenecid, 294
for tuberculous pericarditis, 17–21, 145, 435
Paracoccidioidomycosis, pericardial, 428–429, 431, 438
Paranoia, after mitral surgery, 769
Paredrine, for shock, 613
Paresthesia, thigh, 76
Penicillin
as anticoagulant, 451
for bacterial endocarditis, 292–294
and Benemid, 294
for pericarditis, 434
and probenecid, 294
Pentamidine, 947
Pentamethonium bromide, 947
Pentapyrroldidinum, for hypertension, 540–546
Pentothal, 787
Periarteritis nodosa, and sarcoïdosis, 406
Pericardiotomy and cardiorrhaphy for heart wound, 788
Pericarditis
acute, 425–440
with infectious mononucleosis, 634
nonspecific, 420–434
acute diffuse, and myocardial infarction, 325, 332
cholesterol, 439
coccioidosis, 439
constrictive and hemopericardium, 464
and rheumatic heart disease, 151
due to echinococcus, 439
electrocardiography in, 428, 432, 436, 437, 438
friction rub, 426, 430, 435, 437
due to fungus, 439
in infectious mononucleosis, 439
in lupus erythematosus, 439
due to neoplasm, 438
pyogenic, 433, 437–438
rheumatic, 433, 436–436
secondary to myocardial infarction, 437
traumatic, 438
INDEX

[Pericarditis–Pulmonary artery]

urinary catechol excretion during,
506
Premarin, for atherosclerosis, 534
Pressor amine, excretion of, 461
Pressure, negative, in mechanical
respirator, 468
See also Blood pressure
Pressure gradient, in arterial wall
in arteriosclerosis, 939
Pressure pulse, aortic, recording of,
945
Pressure wave, right atrial, with
right ventricular hypertrophy, 318
Priscoline
for atherosclerosis, 75
for arteriosclerosis obliterans, 77
for causalgia, 76
heart pain after, 148
intra-arterial, for peripheral
arterial disease, 73-80
intravenous, cerebral circulation
after, 147
for Raynaud’s disease, 75
skin circulation after, 409-410,
412-414
skin temperature after, 74, 77,
79
for thromboangitis obliterans,
77-78
Probenecid
and para-aminosalicylic acid,
294
and penicillin, 294
and salicylate, 294
Procaïne
allergic skin reaction to, 514
for Wolff-Parkinson-White syn-
drome, 779
Proefy.
for arrhythmia due to digitalis,
117-118, 120-121
in mitral surgery, 767, 768
for ventricular tachycardia, 125
for Wolff-Parkinson-White syn-
drome, 779
Prostigmine
in mitral surgery, 768
Prothrombin
assay
one-stage, 235-236
two-stage, 235-236
dep. Dapix, 231-234
in long-term anticoagulant ther-
py, 826-833
in new born, 809
and Tromexan, 301
Prothrombin time, 934
and emotion, 744
Prooveratrine, circulation after,
in visceral and peripheral
vascular beds, 70
P. s. -loop in pregnancy, 384
Psychosis
after hydrazine for essential
hypertension, 448
after mitral surgery, 769
Pulmonary artery
aneurysm of, 863
blood pressure in, after pulmo-

nary vein ligation, 152
circulation in, in mitral stenosis,
after oxygen breathing, 944
congenital absence of main
branch of, 771
emobilism in
during anticoagulant therapy,
141
in congestive heart failure,
447-449
elastinc stockings for preven-
tion of, 791
and myocardial infarction, 325
and pulmonary infarction, 183
after trauma, 154
infarction of, with mitral steno-
sis, 766
hypertension, Hydergine test
in, 311
pressure in
in atrial septal defect, 802,
808-810
after Dihydroergotamine, 314
direct measurement of, 681
after Hydergine, 314
in mitral stenosis, 150
normal, 779
and pulmonary arterial re-
sistance, 780
and ventricular hypertrophy,
927
regurgitation, with mitral steno-
sis, 766
stenosis
asymptomatic isolated, 483
cardiodynamics of, 986
congenital, with intact ven-
tricular septum, 928
infundibular, 771
moderate, 936
phonocardiography, 131-133
and pregnancy, 926
small pulmonary vessels in,
877
thrombosis of, with interatrial
septal defect, 453
Pulmonary vein
anomalous, 790, 950, 951
left, 944
drainage of, by persistent left
superior vena cava, 966
dilation of, pulmonary arterial
hypertension after, 152
pressure in, in mitral stenosis,
150
resistance in, 143
transportation of, with atrial
septal defect, 780
transposed, 985
Pulmonary vein
Pulsation, of coronary artery, 626
after running, 838
Pulse
femoral, and aortic constriction
of, 622
Pulse pressure, and stroke vol-
ume, 649-654, 661-662
Pulse rate
and exercise, 103-107
after healed myocardial in-
farction, 349, 350
after hexamethonium, for hyper-
tension, 523, 525
after Hydergine, 54
Pulse wave velocity
after death, 674
in stroke volume determination,
652-653, 660-661
Pulse volume, during tamponade,
420-427
Pulsus alternans, circulation in,
946
Pulsus paradoxus, 426-427
Pyrogen, bacterial, 471
Q pattern, in pregnancy, 386
Q wave, in pregnancy, 386
QRS complex
in African, 864
in pericarditis, 432
after running, 841, 845
QRS vector, spatial, in normal
middle-aged men, 105-113
QRS S6-loop, 271-273
in pregnancy, 382-387
QRS-T angle, 940
Q-T interval
and cardiac rate, 457
in cerebrovascular accidents, 719
and duration of systole, 508
prolongation of, 118-119
after running, 841, 845
Q-U interval, 774
Quinidine
for arrhythmia due to digitalis,
117-118
in auricular fibrillation, 628
in mitral surgery, 767, 768
for ventricular tachycardia
paroxysmal, 145
transient, 144
R wave
in African, 864
after running, 838-839
Rabbit
aortic phospholipid, in ather-
omaasis of, 581-584
vagal stimulation in, 945
Race (of patient)
and pericarditis
acute, nonspecific, 430
subacute, 430
subacute, tuberculous, 434
Radiochromium, red blood cell
tagged with, in determining
blood volume, 571-579
Radio-electrophysiologicalogram, 626
Radiotopassium, in circulation, 784
Radiosulfate, in determination of
extracellular fluid volume, 151
Rat
heart of, glutamic acid oxida-
tion by, 683
nephrectomized, potassium in,
466
unanesthetized, arterial pres-
sure in, 629
Rattlesnake venom, cardiovascu-
lar responses to, 467
Rauwolfia serpentina, for hyper-
tension, 159
Raynaud's disease
Dibenzyline for, 75
hexamethonium for, 75
Priscoline for, 75
Red blood cell
adhesiveness, in lipemia, 336-344
aggregation of, in lipemia, 536-
344
radiochromium-tagged, in de-
termining blood volume,
571-579
sedimentation of, in congestive
heart failure, 454
Reflex, carotid sinus, hypersensi-
tive, 469
Refrigeration, in aortic surgery,
789
Regainine, skin circulation after,
410-411, 413
Regurgitation
aortic
with mitral stenosis, 764
phonocardiography, 133
mitral, 149
with mitral stenosis, 764-765,
778
phonocardiography, 130-131
pulmonic, with mitral stenosis,
766
tricuspid
with mitral stenosis, 766
phonocardiography, 131
Rehabilitation, after cerebral
stroke, 470
Renal artery, embolus to, 796
Renin, for renal hypertension, 462
Repolarization of heart, vs. de-
polarization, 267-274
Residual air, in mitral stenosis, 149
Resin, cation exchange
for congestive heart failure, 454
for edema, 459, 464
and sodium conservation, 32-37
Resistance
peripheral, in myocardial in-
farction, 358, 359, 360
pulmonary arteriolar, and pul-
monary artery pressure,
118-119
Respiration
intermittent positive-negative
pressure, 779
right heart pressure in, 311
Respirator, mechanical, 468
Resuscitation, cardiac, 947
Retinal capillary, blood velocity
in, 778
Rheumatic disease, necrotic acid
ester skin test in, 949
Rheumatic fever
acute, ballistocardiogram in,
400-406
aortic stenosis due to commis-
surotomy, 22-31
carditis due to cortisone for, 149
cortisone for, 149
Rheumatic disease, necrotic acid
ester skin test in, 949
Rheumatism, acute articular, car-
diac lesions in, 949
Rhythm
ectopic, in myocardial infarac-
tion, 327-329
INDEX xxv
Rhythm (Cont'd)
gallop, and myocardial infarction, 325
Rib, nothing of, after surgery for congenital heart disease, 619
Rice diet, electrolyte metabolism after, 454
Roentgenkymography, of coronary pulsation, 626
Roentgenography
in calcification, 368
in constriction of thoracic aorta, 302
in intermittent claudication of hip, 2, 4, 14–15
in pericarditis, 427, 431
RS-T segment, after running, 845
Runner, cardiovascular adaptations of, 835–845
Rupture
of blood vessel due to physical exertion, 155
of papillary muscle after myocardial infarction, 506
Rutin, for arteritis
due to hypersensitivity, 460
due to hypertension, 460
S wave, after running, 838–839
S-A vector, in pregnancy, 385
S-Ar vector, in pregnancy, 385
Saliylyate
and probenecid, 294
for rheumatic fever, side effects of, 636
Saline, solution of, for shock, 609
Salt
in hypertension, 416–422
solution of, for shock, 609
Sarcoidosis
myocardial, 886–889
and periarteritis nodosa, 466
Sarcoma
pericardial, 438
reticulum cell, heart involvement by, 225, 227
Scleroderma, diffuse progressive, 468
Sclerosis
of coronary artery, in castrated females, 535–538
multiple, dietary fat in, 335, 343, 344
primary pulmonary, and pulmonary hypertension, 313
Season (of year), and myocardial infarction, 205
Second World Congress of Cardiology, Twenty-seventh Scientific Session, 319–320
451, 636, 799–800, 957–959
Sedimentation, of erythrocyte, in congestive heart failure, 466
Semilunar valve. See Aortic valve
Septum
atrial, defective, 618, 790, 937
closure of, 504–510, 801–811
polyvinyl sponge plug for, 318
with pulmonary artery thrombosis, 468
with transposition of pulmonary vein, 790
defect of
and pregnancy, 928
due to trauma, 787
infarction of, electrocardiographic diagnosis of, 459
ventricular,
with congenital pulmonary stenosis, 302
defect of, 464, 782
Serotonin, 314
Serum
antistreptolysin-O, 817
calcium in, determination of, 848
chloride in, bedside test for, 685
cholesterol in
in coronary artery disease, 139
in diabetes, 139
in hypertension, 139
diphenylamine reaction of, in rheumatic fever, 949
lipid in, 683
magnesium in, determination of, 942
polysaccharide in, in diabetes, 406
potassium in, after running, 836
Sex (of patient) and intermittent claudication of hip, 3
and myocardial infarction, 323
and pericarditis, 430, 434
SG vector, in pregnancy, 385
Shock, 606–613
arterenol for, 783
cyclopropane, 682
hemorrhagic, intra-arterial vs. intravenous transfusion in, 468
infection in, 611–612
irreversible, 610–612
medical, 612–613
in myocardial infarction, 305, 325, 331, 527–531, 612–613, 850–851
norepinephrine for, 38–47
traumatic, 606–607, 612
Shock therapy, electric, 685
Shoulder-hand syndrome
cortisone for, after myocardial infarction, 135
Priscoline for, 76
Shunt, left-to-right, dye dilution curves in, 890–901
Sinus bradycardia, due to morphine, before and after ventricular tachycardia, 84, 87
Skin
allergy of, to procaine amide, 514
blood pressure in, 180–191
capillary fragility of, 963
configuration in
heat flow measurement of, 408–414
after Hydrgine, 411, 413–414
after hypotensive drugs in hypertension, 70–71
after Priscoline, 409–410, 412–414
after P-9295, 411–412, 414
after Regitine, 410–411, 413
after Tolazoline, 409–410, 412–414
movement of interstitial fluid in, 948
temperature of
heat flow measurement of, 408–414
after Priscoline, 74, 77, 79
Sludging, of blood, 343
Smoking
ballistocardiogram after, 775
and myocardial infarction, 326, 332
peripheral vascular system after, 955
Sodium
in Addison's disease, after cortisone, 309
administration of, in azotemia, 118
conservation of, and cation-exchange resin, 32–37
by colon, 32–37
dietary, digital circulation after depletion of, 586–590
drastic depletion of, in essential hypertension, 942
excretion of, after Apresoline, 704
in feaces, 35
in heart disease, 695–697
in hypertension, 416–422
low, in milk, 959
metabolism of
in heart failure due to beriberi, 252
in mitral stenosis, 204–206
after nitrovasodilator, 209–213, 215–217
in plasma and electrocardiography, 308
as measure of dehydration, 955–960
postoperative retention of, 158
retention of, in congestive heart failure, 464
Sodium bicarbonate, in electrocardiography, 506
Sodium chloride, solution of, for shock, 609
Sodium hydroxide, in electrocardiography, 506
Sodium salicylate, for rheumatic fever, side effects of, 626
Sounds, cardiac. See Heart sound; Murmur
Spatial vector
mean, construction of, 555–562
in normal middle-aged men, 105–113
Splanchnecotomy, for essential hypertension, 942
Sportsman, unipolar electrocardiogram in, 458
S-T segment
in African, 880–897
changes in, due to digitalis, 121
in pericarditis, 428, 452, 490, 493
after running, 841
Standsstill, cardiac, 780
infrarenal approach for, 789
in Stokes-Adams syndrome, 853–855
of aortic valve
arteriosclerotic, 23
calcereous, 784
commissurotomy for, 22-31,
766
congenital, 23
with mitral stenosis, 26-28,
763-764
phonocardiography, 133-134
rheumatic, 22-31
of aorta
and femoral pulse, 628
in infancy, 682
and intermittent claudication of hip, 1-15
and ventricular function curve, 718
mitral, 149, 514
with aortic regurgitation, 764
with aortic stenosis, 26-28,
763-764
atrial pressure in, 619
with atrial septal defect, 810
with auricular fibrillation, 504,
767
with auricular fibrillation in bacterial endocarditis, 908-914
blood volume in, 576, 578
body water in, 204, 206-209
with calcific emboli, 423
circulation in, 619
circulation after Valsalva maneuver in, 514-515, 519
commissurotomy, 463, 628,
788, 938, 950
congenital, 161-178
with congestive heart failure, 504
electrogram, 138
exercise tolerance tests in, 620
kidney function after Apreoline in, 700-704
kidney function after exercise in, 867-868
of Lutembacher’s syndrome, 175
medical aspects of, 758-769
with mitral calcification, 767
with mitral regurgitation, 764-765, 778
phonocardiography, 129-131
postoperative, 517
potassium metabolism in, 204-206, 213
in pregnancy, 767, 925
preoperative body composition in, 204-206
pulmonary capillary venous pressure in, 619
pulmonary circulation in, 628
pulmonary circulation in, after oxygen breathing, 944
pulmonary hemodynamics in, 160
with pulmonary regurgitation, 766
with pulmonary stenosis, 766
recurrence after commissurotomy, 150
regurgitation, 149
residual air in, 149
rheumatic, 22
sodium metabolism in, 204-206
surgery for, 758-769, 781
surgery for, during pregnancy, 925
with tricuspid regurgitation, 766
with tricuspid stenosis, 766
utilization quotient of oxygen after exercise in, 513
valvotomy for, 542
ventilatory studies in, 620
pulmonary asymptomatic isolated, 453
cardiodynamics of, 906
congenital, with intact ventricular septum, 508
infundibular, 771
moderate, 499
phonocardiography, 131-133
and pregnancy, 926
small pulmonary vessels in, 507
tricuspid with mitral stenosis, 766
surgical treatment of, 881-885
Stilbestrol, for atherosclerosis, 553
Stocking, elastic, for prevention of pulmonary embolism, 791
Stokes-Adams syndrome, 857-859
with auricular and ventricular standstill, 583-585
external electric stimulation for, 482-492
neurogenic, 853
due to ventricular fibrillation and tachycardia, 144
Stomach
carcinoma of, heart involvement by, 225
ulcer of, and anticoagulant therapy, 745-746
Streptobacillus moniliformis, infection due to, with bacterial endocarditis, 921
Streptococcus, group A polysaccharide precipitin reactions in, 161
Streptococcus, in mouth, and subacute bacterial endocarditis, 300
Streptomycin
as anticoagulant, 481
for bacterial endocarditis, 294-295, 298
for pericarditis, 434
tuberculous, 17-21, 145, 435
Stress, preceding myocardial infarction, 326
Stroke, cerebral, rehabilitation after, 470
Stroke volume
determination of, 648-662, 664-679
and pulse pressure, 649-654, 661-662
ventricular, during taponade, 426-427
Strophanthoside
bradycardia due to, 85-86
dibucaine hydrochloride, for ventricular tachycardia due to, 82-88
systemic venous pressure after, 944
vomiting due to, 85
Subclavian artery, autograft of, for bridging defects in thoracic aorta, 781
Suction, to legs, for controlled hypotension, 168
Sudeck’s atrophy, Priscoline for, 76
Sulfonamide, for pericarditis, 434
Summer, and myocardial infarction, 308
Superior vena cava syndrome, 624
Surgery
for abdominal aortic aneurysm, 494-502
for aortic stenosis, 781
rheumatic, 22-31
of aorta, refrigeration in, 789
for aortoiliac thrombosis, 6
for atrial septal defect, 504
direct-vision closure, 801-811
after digitalization, 147
heart anesthetia, 151
heart standstill during, 817
hypotension used in, 163, 609
hypothermia used in, 609
for mitral insufficiency, 25
for mitral stenosis, medical aspects of, 758-769
oral, during long-term anticoagulant therapy, 831
for poipliteal aneurysm, 366
pulmonary embolism after, 164
for saccular aneurysm of aorta, 158
sodium retention after, 156
for tricuspid stenosis, 881-885
for varicose veins, 689
venous blood pressure during, 153
water retention after, 156
Sympathectomy
and arterial blood pressure due to hypopnea, 93
for arterial occlusive disease, 238-246
chronic, 787
peripheral, 934
for hypertension, 942
paradoxical response to, 78
thoracolumbar, urinary catechol excretion after, 594-596, 598
Syncope, due to bronchogenic carcinoma, 312
Syphilis
aortic aneurysm due to, 494
aortic insufficiency due to, 781
Syringa, in venuocutaneous, 451-452
Systole
duration of, and Q-T distance, 318
premature, in myocardial infarction, 327-328
simulated, at necropsy, 648-662
Szent-Györgyi, Albert, 799
INDEX

Thrombectomy, 517

Thromboangiitis obliterans, 153

Dibenzyline for, 78
hexamethonium for, 78
Priscoline for, 77-78

Thromboembolism
anticoagulant for, 742
in private practice, 682-685
during anticoagulant therapy,
750
long-term, 827-828
white, after anticoagulant, 154

Thromboendarterectomy, for
thrombosis of abdominal aorta, 790

Thrombophlebitis
anticoagulant for, 753
pulmonary embolism during anticoagulant therapy with, 141
recurrent, 752-754

Thrombosis
of aneurysm of cerebral artery, 786
of aorta
abdominal, thromboendarterectomy for, 790
in intermittent claudication of hip, 1-15
terminal, 465
cerebral, rehabilitation after, 470
coronary anticoagulant for, 741-742
with cerebral apoplexy, 458
and dietary fat, 344
kidney, in epidemic diarrhea of newborn, 154
Priscoline for, 78
of pulmonary artery, with interatrial septal defect, 453
venous management of, 790
post-partum, 790

Thrombus, auricular, occlusive, 791

Thyroid gland, in acclimatization to cold, 820-821

Thyrotoxicosis, auricular fibrillation in, 511

Thyroxin, in acclimatization to cold, 820-821

Tissue, nodal, arterial supply to, 547-553

Tobacco, 775
and myocardial infarction, 326, 332
peripheral vascular system after, 555

Tolazoline, skin circulation after, 409-410, 414

Tooth, extraction of, during longterm anticoagulant therapy, 831

Torsion, homogeneous, frontal plane studies of, 724-735

Trafuril, for skin test in rheumatic disease, 949

Transfusion
in cardiac arrest, 468
intra-aortic, 157
intra-arterial, 613
gangrene after, 468
potassium hazard in, 470

vs. intravenous, in hemorrhagic shock, 468
for shock, 607-608, 613

Transplantation, of left anomalous pulmonary vein to left atrium, 984

Traumatic, bipolar, determination of, 157

Trauma
pericarditis due to, 438
pulmonary embolism after, 154
septal defect due to, 787
shock due to, 606-610
subendocardial, due to cardiac catheterization, 471

Trebutaline, 850

Triparilid valve regurgitation with mitral stenosis, 766
phonoangiography, 131
stenosis of with mitral stenosis, 766
surgical treatment of, 881-885

Triethylene melamine, for lupus erythematosus, 782

Tromexan, 301
clinical evaluation of, 314
vs. Dipaxin, 223-236
long-term therapy with, 828-833
prothrombin response to, 801
vitamin K, for hypoprothrombinemia due to, 801

T vector-Vagus nerve

T wave
in African, 860-867
changes in, due to digitalis, 121, 125
in cerebrovascular accidents, 719-720
during gall bladder disease, 158
inverted, in African, 860-863
isoelectric, 270
in pericarditis, 428, 432, 436, 438
after running, 840-841

Tachycardia
auricular
in childhood, 146
due to digitalis, 117
in myocardial infarction, 329
paroxysmal supraventricular, methoxamine for, 780
and spontaneous flutter, 621
ventricular
Adams-Stokes syndrome due to, 144
due to digitalis, 117
due to K-strophanthin, 82-88
in myocardial infarction, 185, 328
after norepinephrine for shock in myocardial infarction, 45
paroxysmal, 135, 328
prolonged, 145
Pronestyl for, 125
quindine for, 145

Tamponade
heart, 426-427
with hemopericardium during anticoagulant therapy of myocardial infarction, 618
pericardial, 425

Temperature, of skin, after Priscoline, 74, 77, 79

Temporal arteritis, 155

Terramycin
as anticoagulant, 451
for bacterial endocarditis, 296
for pericarditis, 434

Test, bedside, for serum chloride, 635

Tests, tumor of, heart involvement by, 225

Tetraethylthiuramdisulfide, electrocardiogram after, 898

Tetralogy of Fallot
postural effects in, 985
and pregnancy, 926-927

Thiamine, excretion of, in mercurials in congestive heart failure, 454

Thigh, paresthesia, 76

Thiocyanate
delirious reactions secondary to, in hypertension, 910
for headache due to hypertension, 489

Thiophenalan, derivative of, for hypertension, 139

Thorax, electrical field of heart on surface of, 508

Thoraxectomy in Volkmann’s contracture, 517

vs. intravenous, in hemorrhagic shock, 468
for shock, 607-608, 613

Transplantation, of left anomalous pulmonary vein to left atrium, 984

Traumatic, bipolar, determination of, 157

Trauma
pericarditis due to, 438
pulmonary embolism after, 154
septal defect due to, 787
shock due to, 606-610
subendocardial, due to cardiac catheterization, 471

Tuberculosis, pericarditis due to, 17-21, 433-435
antimicrobial therapy for, 145

Tumor
metastasis to heart, 220-228
pericardial, 438-439
testicular, heart involvement by, 225

U wave
in cerebrovascular accidents, 719-720
after running, 844

Ulcer
esophageal, perforation of aorta due to, 471
of leg, post-partum, 790
peptic, and anticoagulant therapy, 745-746
postphlebitic, Priscoline for, 76

Unipolar lead, 773

Uremia
pericarditis in, 433, 436-437
urinary catechol excretion in, 596, 597, 598

Urinine, urticaria due to, 304

Urine
 catechol excretion in, 592-598
volume of, in shock after myocardial infarction, 42
Urokon, in venography of lower extremity, 155

Urticaria, due to glycosides, 308

Utilization quotient of oxygen, after exercise in mitral stenosis, 513

Vagus nerve, stimulation of, 945
arterial wall secretion due to, 903-907
blood pressure after, 903-907
cardiovascular effects due to, 96-104
electric, 776
membrane potentials of heart after, 515
in Stokes-Adams syndrome, 853
Valsalva maneuver, and circulation, 160, 511-519
Valvotomy, mitral, 452
Valvuloplasty, mitral, metabolic changes in, 190-217
Varicose vein
surgery for, 629
treatment for, 653
Vascular bed
peripheral
during anesthesia, 631
in bulbar conjunctiva, 626
fatal failure of, in exfoliative dermatitis, 635
vs. visceral, 63-66
vs. visceral in hypertension, 68-71
visceral vs. peripheral, 63-66
in hypertension, 68-71
Vascular disease
capillary fragility of skin in, 953
peripheral, ballistocardiography, 940
Priscoline for, 73-80
Vascular system
anaphylactic lesion of, 471
injury to, in Korean war, 965
peripheral, after smoking, 955
pulmonary, injury to, during recovery, 655
Vascularization, of bone, in Paget's disease, 164
Vasodepressor material, 610-611
Vasodilation
due to arterial gas embolism, 951
due to reactive hyperemia, 181
Vasoconstrictor material, 610-611
Vasomotor block, and position of lower extremities, 465
Vasoxy, for supraventricular tachycardia, 780
VDM, 610-611
VEM, 610-611
Vector
electrocardiographic, from chest leads, 776
mean spatial, construction of, 555-562
spatial, calculation of angle between, 457
Vectorcardiogram, spatial effect of deep inspiration on, 384, 386
mechanical inscription of, 276-279
in pregnancy, 381-387
quantitative analysis of, 775
variations of, 468
of ventricular gradient, 267-274
Vectorcardiography, spatial in bundle branch block, 157
clinical value of, 467
cube system, and heart eccentricity, 187-188
frontal plane studies of homogeneous torso model, 724-735
limitations, 940
INDEX
in normal middle-aged men, 105-113
tetrahedral system, and heart eccentricity, 187-188
Vein
air embolism in, body position in therapy for, 158
blood pressure in, during surgery, 158
compression of, and circulation in extremity, 868
major, ligation of, 890
pressure in
after digoxin, 945
in myocardial infarction, 356, 359, 360
after ouabain, 945
in shock due to myocardial infarction, 850
after strophanthoside, 945
during surgery, 158
thrombosis
management of, 790
post-partum, 790
varicose
surgery for, 629
treatment for, 963
Velocity ballistocardiography, 307
Vena cava, persistent left superior, draining the pulmonary veins, 955
Venepuncture, syringe in, 451-452
Venography, 943
of lower extremity, 953
with Urokon, 165
Venom, rattlesnake, cardiovascular responses to, 487
Ventricle
arrrhythmia, and thyroid inhibition, 146
failure of, blood volume in, 578
fibrillation
Adams-Stokes syndrome due to, 144
in aortic commissurotomy, 27
quinidine sulfate for, 144
transient, 144
function curve, 706, 709-716
in heart failure, 772
hypertrophy of
in aortic stenosis, 26, 27
in coarctation of aorta, 372-379
and pulmonary arterial pressure, 307
and right atrial pressure wave, 319
intact septum of, with congenital pulmonary stenosis, 928
ischemic, and spatial QRS and T vector, 109, 111-112
in mitral insufficiency, 27-28
in mitral stenosis, congenital, 167
premature contraction of
bigeminal, 123
due to digitalis, 120-121
Pronestyl for, 120-121
in myocardial infarction, 327
rate of, in digitalis intoxication, 121-122
right
pressure in, 811
standstill of
with auricular standstill in Stokes-Adams attack, 853-855
due to carotid sinus pressure, 857-859
external electric stimulation for, 492
stroke volume, during tamponade, 426-427
tachycardia
Adams-Stokes syndrome due to, 144
due to digitalis, 117
due to K-strophanthoside, 82-88
in myocardial infarction, 135, 328
after norepinephrine for shock in myocardial infarction, 45
paroxysmal, 135
paroxysmal, in myocardial infarction, 328
prolonged, 145
Pronestyl for, 125
quinidine for, 145
Ventricular function curve, 706, 709-716
Ventricular gradient
clinical value of, 138
mean spatial, in pregnancy, 381-387
after running, 842-843
spatial, 267-274
determination of, 137
Vergito, after Hydergine, 54, 55
Viscosity, of blood, in lipemia, 342
Vision, after pentamorphoridinium in hypertension, 544
Vitamin B12, for congestive heart failure, 450
Vitamin C, for hemorrhage, 754
Vitamin K, in long-term anticoagulant therapy, 830
for recovery from Dipaxin, 233-235
Vitamin K, for hypoprothrombinemia due to Tromexan, 801
in long-term anticoagulant therapy, 830
for recovery from Dipaxin, 234-235
Volkman's contracture, thrombectomy in, 317
Voltage, Wilson central-terminal, 724-735
Vomiting
due to dibucaine, 86
due to digitalis intoxication, 123
after Hydergine, 54, 55
due to strophanthoside, 85
Warfarin (sodium derivative), 934
Water
de body, in mitral stenosis, 204, 206-209
as diuretic, 467
excretion of, and hypoxia, 142
metabolism of, in heart failure due to beriberi, 250-252
postoperative retention of, 169
Whale, heart rate of, 809
White blood cell, in myocardial infarction, 327
Wilson central-terminal voltage, 724-735
Wiring, of aortic aneurysm, 498, 630

Wolff-Parkinson-White syndrome myocardial infarction with, 466 procaine for, 779 Pronestyl for, 779 Work, spatial electrocardiography after, 507

World Congress of Cardiology, second, 319-320, 481, 638, 797-798, 957-959 World Heart Congress, 481 World Literature on Blood Pressure 1920-1950, 159
Pulmonary congestion produced by back flow from mitral stenosis.

Management of Cardiac Asthma with Aminophyllin

Lombardo and Harrison¹ define cardiac asthma as paroxysms of dyspnea occurring during sleep or after exertion, lasting minutes or hours, frequently associated with asthmatic squeaks and râles and with edema of the lungs. The basic underlying process is passive congestion of the lungs secondary to failure of the left side of the heart.

This cardiac asthma, or paroxysmal dyspnea, is one of the most frequent and distressing of the vicissitudes in the life of the patient with heart disease.

Searle Aminophyllin is almost a specific in the management of such patients. Its bronchodilating action increases vital capacity and relieves the dyspnea. It lowers venous pressure and shortens circulation time.

Other time-proved uses of Searle Aminophyllin include cardiac failure with or without Cheyne-Stokes respiration. Moyer and his associates² found that Aminophyllin increases the cerebral vascular resistance thereby decreasing the cerebral blood flow.

Searle Aminophyllin also is highly effective in bronchial asthma. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

SEARLE Research in the Service of Medicine

The First Commercially Available BALLISTOCARDIOGRAPH* that records the displacement, velocity and acceleration component of the body motion due to cardiac systole.


For All Foreign-Language Books . . .
For All Foreign-Language Journals . . .

Intercontinental Medical Book Corporation

THE INTERCONTINENTAL MEDICAL BOOK CORPORATION was organized to expedite your orders for foreign-language books and journals.

We can obtain such books and journals for you at prices prevailing in the country of printing, with no additional trans-Atlantic shipping charges. Thus, in dealing with us, you have the advantage both of speedy personal service and original net prices.

Your inquiries are invited. A catalog of books available will be sent to you on request. Moreover, free sample copies of many foreign-language journals are available, and we shall be pleased to send you any of these you are interested in.
The CARDIAC PACEMAKER was developed by the Electodyne Co. in conjunction with Paul M. Zoll, M.D. This has proved to be a quick, safe, and effective means of arousing the heart from ventricular standstill by external application of electric impulses across the intact chest.*

The C.P. has been demonstrated as a lifesaving measure in the treatment of heart block and Stokes-Adams attacks.** The pulse beat, blood pressure, and consciousness can be maintained indefinitely during ventricular asystole until independent cardiac activity returns. Also, when these attacks are due to rapid ventricular rhythm, the C.P. can maintain regular beats until ventricular irritability subsides.

The C.P. may also be used to evoke ventricular beats and resuscitate patients from unexpected cardiac asystole due to accidents, or anesthesia.

WRITE FOR FULL INFORMATION

ELECTRODYNE CO.

ENDICOTT ST. • NORWOOD, MASS.
Why We Became Doctors

Do you remember why? The recollections of 50 distinguished colleagues may stir your own memories—and this readable little volume is especially suitable for young people thinking of entering the profession. Fifty articulate men and women here reveal what inspired them to study their calling. Among the contributors are Drs. Frederic Loomis, Walter C. Alvarez, Walter B. Cannon, Somerset Maugham, and Albert Schweitzer. In explaining what drew their authors to medicine, these essays throw a good deal of light on its practice. ($3.75)

The Doctor Writes

This "Anthology of the Unusual in Current Medical Writing" will delight every medical man who hankers for that occasional article which is off the beaten path. From Sherlock Holmes as Dermatologist through Showmanship in Medical Teaching, the reader will find that each of these unique excursions into the unusual lives up to Editor Waife's criteria for selection: interest of subject, excellence of writing and, most of all, pleasure in reading. The book will grace the shelves of any library, medical or otherwise, provide many pleasant moments for the browser, and its receipt as a gift will be gratifying to any colleague. ($3.75)

Of Publishing Scientific Papers

For every prospective article writer (and for publishers and editors of same as well), Dr. Burch's pointed little book provides a handy guide to what's done and what's not. Illustrated with as delightfully sardonic a series of drawings as ever illuminated author's and publisher's predicament, it furnishes as well a number of solid, helpful suggestions, invaluable in the preparation of publishable manuscripts. ($2.75)

ORDER NOW—ON APPROVAL

Please send, on approval:

☐ Waife ($3.75) ☐ Burch ($2.75) ☐ Fabricant ($3.75)
☐ check enclosed ☐ charge my account

Name .................................................................
Address ....................................................................

GRUNE & STRATTON, INC. 381 Fourth Avenue
New York 16, N. Y.
Ciba products of performance

Apresoline

for the patient
with moderate
or severe essential
hypertension

THE PATIENT REPORTS
progressive relief of
hypertensive symptoms
if present.

YOU OBSERVE
benefits in up to 80% of cases:
e.g., hypertension gradually
reduced, renal circulation
improved, eye-ground changes
may be reversed.

THE LITERATURE REPORTS
therapy is generally well
tolerated with initial
low dosages, gradually
increased.\(^1,^2,^3\) Patient
response is the guide to
dosage adjustment.\(^4\) Optimal
maintenance dosage level
is usually reached only
after 3 weeks or more;
marked therapeutic effect
cannot be expected with
initial low dosages.\(^4\)

3. Riven, S. S., Pocock, D. G., Kory, R. C., Roehm, D. C., Anderson R. S., and

Ciba Summit, N. J.
ONE INJECTION . . .
ONE MONTH'S PROTECTION

INJECTION
BICILLIN®
(Long-Acting)

Benzathine Penicillin G
(Dibenzylethylenediamine Dipenicillin G)

IN RHEUMATIC-FEVER
PROPHYLAXIS

With only one injection a month, Bicillin—in the new dose form of 1,200,000 units—offers sustained action against streptococcal infection . . . provides effective prophylaxis¹ in rheumatic fever. The single injection promotes adequate, month-long blood levels² of penicillin for preventing streptococcal infection, combating rheumatic-fever recurrences. The Bicillin regimen permits effective long-term management, offers economy, makes certain that the patient receives medication, eases the burden of patient and physician alike.

Available: Injection Bicillin—1,200,000 units, single dose, disposable syringe (2 cc. size)

Individualized daily dosage of NEOHYDRIN — 1 to 6 tablets a day as needed — prevents the recurrent daily sodium and water reaccumulation which may occur with single-dose diuretics. Arbitrary limitation of dosage or rest periods to forestall refractivity are unnecessary. Therapy with NEOHYDRIN need never be interrupted or delayed for therapeutic reasons. Because it curbs sodium retention by inhibiting succinic dehydrogenase in the kidney only, NEOHYDRIN does not cause side actions due to widespread enzyme inhibition in other organs.

Prescribe NEOHYDRIN in bottles of 50 tablets. There are 18.3 mg. of 3-chloromercuri-2-methoxypropylurea in each tablet.

Leadership in diuretic research
LAKESIDE LABORATORIES, INC. MILWAUKEE 1, WISCONSIN
CONTENTS

INDEX ISSUE

ATRIAL SEPTAL DEFECT. CLINICAL AND PHYSIOLOGIC RESPONSE TO COMPLETE CLOSURE IN FIVE PATIENTS.................. S. Gilbert Blount, Jr., Henry Swan, Goffredo Gensini, and Malcolm C. McCord 801

THE CIRCULATION IN COLD ACCLIMATIZATION....... G. Malcolm Brown, G. S. Bird, T. J. Boag, L. M. Boag, J. D. Delahaye, J. E. Green, J. D. Hatcher, and John Page 813

LONG-TERM ANTICOAGULANT THERAPY. FURTHER EXPERIENCES John Tulloch and Irving S. Wright 823

CARDIOVASCULAR ADAPTATIONS TO PROLONGED PHYSICAL EFFORT George L. Beckner and Travis Winsor 835

CIRCULATORY CHANGES IN ACUTE MYOCARDIAL INFARCTION Robert P. Gilbert, Melvin Goldberg, and Joseph Griffin 847

STOKES-ADAMS ATTACKS WITH SIMULTANEOUS AURICULAR AND VENTRICULAR STANDSTILL................ Naip Tuna and John W. Scott 853

STOKES-ADAMS SEIZURES. CASE REPORT OF “PAROXYSMAL VENTRICULAR STANDSTILL” AND ITS PRODUCTION BY CAROTID SINUS PRESSURE.......... Ford K. Hick 857

PECULIARITIES OF THE AFRICAN’S ELECTROCARDIOGRAM AND THE CHANGES OBSERVED IN SERIAL STUDIES................................. H. Grusin 860

ELECTROCARDIOGRAPHIC LEADS. III. SYNTHESIS Richard McFee and Franklin D. Johnston 868


FATAL MYOCARDIAL SARCOIDOSIS......................... J. D. Stephen 886

INDICATOR-DILUTION CURVES IN ACYANOTIC CONGENITAL HEART DISEASE James C. Broadbent and Earl H. Wood 890


AURICULAR FIBRILLATION AND MITRAL STENOSIS IN BACTERIAL ENDOCARDITIS Jacques B. Wallach, Macelitis Glass, Leslie Lukash, and Alfred A. Angrist 908

A MORPHOLOGIC STUDY OF CANINE HEARTS SUBJECTED TO FIBRILLATION, ELECTRICAL DEFIBRILLATION AND MANUAL COMPRESSION C. G. Tedeschi and C. W. White, Jr. 916

CLINICAL PROGRESS. CARDIOVASCULAR PROBLEMS IN PREGNANCY Burton E. Hamilton 922

ABSTRACTS................................................................. 934

AMERICAN HEART ASSOCIATION 957