amachineoralaboratory retort, there will always be a place for the clinician to give voice to an opinion and lead medicine in the future as he has led it until now. Therefore he should not abandon his high human values and he should stubbornly enrich his culture. If because of the exigency of the age, his specialization turns toward pure science, his humanism will help him to bow with humility before the immensity of what he does not know. Shortly before his death, Newton, one of the giants of scientific thought, said sadly: ‘I do not know what I may appear to the world, but to myself I seem to have been only like a boy playing on the seashore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me.’

I think it is time to stop. While we walked through the garden of Academe, discussing these general matters of medicine, the afternoon has ended. The sun has set beside the Pireus and there is only to be seen the brightness, half rose and half gold, of the sacred hill of the Acropolis. By good fortune this light is enough to guide our steps.

IGNACIO CHAVEZ

Pre-Harveian Doubts of Galenic Doctrine

Among our self-righteous forebears it was frequently the fashion to attach to the condemned man some indication or symbol of his crime, and in the case of Servetus, chained to the stake and about to be burned alive, a copy of his recently printed Christianismi restitutio was fastened to his leg. To Calvin it symbolized the heresies of the condemned man and Calvin’s determination that they should be destroyed. That the book also contained the first printed description of the pulmonary circulation meant nothing to him. As a lawyer and theologian he would not have understood it, and as a believer in predestination and himself as one of “the choice elected few” it was of little consequence anyway. As a matter of fact, the entire edition of one thousand copies of the book was tracked down and almost completely destroyed so that to our knowledge only three copies have survived, but sufficient to gain for the author a recognition denied him in his own day. Thus the book which went with Servetus to his destruction and symbolized for Calvin the end of both the heretic and his heresies has, on the contrary, revived the name of the victim and for many has gained him a brighter place in history than that of his executioner. Finally, the fact that this first account of the pulmonary circulation is imbedded in a theological work is in the case of Servetus no cause for amazement.—CHARLES D. O’MALLEY. The Complementary Careers of Michael Servetus: Theologian and Physician. History of Medicine and Allied Sciences 8: 378, 1953.
tentia del fndite prime sono. Disparition o reduction del intensitate del murmure systolic e del sono de ejection systolic. Reduction del grado de fission in le secunde sono. Disparition del murmure del fluxo tricuspide e del tertia sono dextero-ventricular.

REFERENCES

In the meantime this I know and declare to all men, that sometimes the blood passes in less, sometimes in more abundant quantitie, and the circuit of the blood is perform'd sometimes sooner, sometimes slower, according to the age, temperature, external and internal cause, accidents natural or innatural, sleep, rest, food, exercise, passions of the mind, and the like.—WILLIAM HARVEY. De Motu Cordis, 1628.
men had vascular catastrophes than did women. However, there was no sex difference demonstrated in the distribution and severity of atherosclerosis.

**SUMMARIO IN INTERLINGUA**

Le distribution e le severitate de atherosclerosis grossier notate in 153 necropsias de patients morte con evidentia morphologic de catastrophes atherosclerotic in corde, aorta, o cerebro esseva comparate con le observaciones correspondente in 347 casos "nonecatastrophic." Le presente studio utilisa un sistema de notas evaluatori pro le varie casos de atherosclerosis que prende in consideration tanto le extension como etiam le severitate del affection intimal. Le serie includeva le casos de 78 masculos e 28 femininas con catastrophes cardiac, de 26 masculos e 10 femininas con catastrophes aortic, e de 20 masculos e 20 femininas con catastrophes cerebral. Un significativamente plus alte proportion de masculos que de femininas habeva catastrophes vascular. Tamen, nulle differentia sexual esseva demonstrabile in le distribution e le grado de severitate de atherosclerosis.

**Evans, W.: Hypertonia or Uneventful High Blood Pressure.** Lancet 2: 53 (July 13), 1957.

The blood pressure was recorded in 400 consecutive healthy male military recruits. The behavior of the blood pressure was then observed in 200 of these individuals over a period of 10 years in 4 groups: 50 healthy recruits with normal blood pressure, 50 recruits with somewhat elevated blood pressure (180 mm. Hg systolic or 100 diastolic or both), 50 older male and female patients examined in private practice whose blood pressure was elevated without cardioarterial derangement (200 mm. Hg systolic or 110 diastolic or both), and 50 patients with proved arterial hypertension and cardioarterial changes. The normal recruits did not show any constant tendency toward an increase in blood pressure over the 10 year period. Forty-two of the 50 young adults with moderate hypertonia showed lower readings at the second examination compared to 10 years previously. Thus, moderately high values in young people did not presage a significant hypertension in later life. High blood pressure in older adults was not serious provided it was not associated with cardioarterial derangement manifested by refractory contraction of the lesser arteries and electrocardiographic evidence of left ventricular hyper trophy. The term hypertonia is proposed for the more benign state.
It has taken long ages of toilsome and often fruitless labour to enable man to look steadily at the shifting scenes of the phantasmagoria of Nature, to notice what is fixed among her fluctuations, and what is regular among her apparent irregularities; and it is only comparatively lately, within the last few centuries, that the conception of a universal order and of definite course of things, which we term the course of Nature, has emerged.

But, once originated, the conception of the constancy of the order of Nature has become the dominant idea of modern thought. To any person who is familiar with the facts upon which that conception is based and is competent to estimate their significance, it has ceased to be conceivable that chance should have any place in the universe, or that events should depend upon any but the natural sequence of cause and effect. We have come to look upon the present as the child of the past and as the parent of the future; and, as we have excluded chance from a place in the universe, so we ignore, even as a possibility, the notion of any interference with the order of Nature. Whatever may be men's speculative doctrines, it is quite certain that every intelligent person guides his life and risks his fortune upon the belief that the order of Nature is constant, and that the chain of natural causation is never broken.—THOMAS H. HUXLEY. American Addresses with a Lecture on the Study of Biology. London, MacMillan and Co., 1877, p. 2.
DIGITALIS DELIRIUM

relative a iste importante manifestation de invenenamento per digitalis.

Es presentate tres casos de delirio per digitalis, resultante ab toxicitate inducethe per tres diferente preparatos, i.e. gitalina, digoxina, e digitoxina. Le prime caso illusta como le signos de intoxication precoce in un sol patiente pote variar con diferente preparatos e, de facto, con le mesme glycosido administrate a diferente tempores. Le secunde caso representa un alarmante exemplo de delirio que durava plus que duo septimanas ben que illo habeva essite provocate per un glycosido a action non prolongate. Le tertia caso demonstra quanto facilemente le diagnose de intoxication per digitalis pote escappar al detection quando iste condition se superimpone a un complexe tableau clinic.

Le aspectos clinic de iste casos es discutite in le lumine de previe reportos.

REFERENCES


These things being prov'd, I think it will appear that it doth go round, is returned, thrust forward, and comes back from the heart into the extremities, and from thence into the heart again, and so makes as it were a circular motion.—WILLIAM HARVEY. De Motu Cordis, 1628.
AND WOOD, E. H.: Localization and estimation
of severity of regurgitant flow at the pulmo-

carboeyanine dye for continuous record-
ing of dilution curves in whole blood
independent of variations in blood oxygen

improved cuvette densitometer for car-
diac output determined by dye dilution
method. Rev. Scient. Instruments 2: 696,
1953.

output from initial portion of arterial in-
dicator-dilution curves. Fed. Proc. 14: 72,
1955.

14. —, Swan, H. J. C., Ramírez de Arellano,
A. A., and Wood, E. H.: Estimation of car-
diac output from first part of arterial dye-
dilution curves. J. Appl. Physiol. 13: 92,
1958.

15. CHIDSEY, C. A., III, FRITTS, H. W., Jr., Hardewig, A., Richards, D. W., and
Cournand, A.: Fate of radioactive krypton

16. BRAUNWALD, E., MORROW, A. G., SANDERS,
R. J., and LONG, R. T. L.: The characteri-
zation of circulatory shunts by foreign gas

17. —, LONG, R. T. L., and Morrow, A. G.: In-
jections of radioactive krypton (Kr\textsuperscript{85})
solutions in the detection and localization of
cardiac shunts. Abstracted, J. Clin. In-
vest. 38: 990, 1959.

18. LONG, R. T. L., WALTHER, J. A., CORNELL,
W. P., and SANDERS, R. J.: The detection
of right-to-left circulatory shunts. A new
method utilizing injections of a radioactive
In press.

19. —, LOMBARDO, C. R., and BRAUNWALD, E.: The use of radioactive krypton and card-
io-green dilution curves in the detection of ex-
perimental portal-systemic venous shunts.

20. SEPULEDA, G., and LUKAS, D. S.: The diag-
nosis of tricuspid insufficiency. Clinical fea-
tures in 60 cases with mitral valve disease.

21. BRAUNWALD, E., and MORROW, A. G.: Left
ventriculoro-right atrial communication: Di-
gnosis by clinical, hemodynamic and angio-

22. SCHRILDER, D. P., and HARVEY, W. P.: Confu-
sion of tricuspid incompetence with mitral
insufficiency. A pitfall in the selection of
patients for mitral surgery. Am. Heart J.
54: 352, 1957.

With the invention of the microscope we can mark the first positive step towards the
goal to-day. A Jesuit priest, Kircher, in 1671, was the first to investigate putrefy-
ing meat, milk, and cheese with the crude microscope of his day, and left us indefinite
remarks concerning 'very minute living worms' found therein. Four years after Kircher
a Dutch linen merchant, Antonius von Leeuwenhoek, by improving the lenses of the
microscope saw in rain-water, putrefying fluids, intestinal contents, and saliva, minute,
moving, living particles, which he called 'animalcula.' In medical circles of his day
these observations aroused the keenest interest, and the theory that these 'animalculae'
might be the cause of all disease was eagerly discussed. Plenicez, of Vienna, after much
observation of various fluids, putrefying and otherwise, wrote, in 1762, that it was his
firm belief that the phenomena of diseases and the decomposition of animal fluids were
wholly caused by minute living things.—William Osler. Aequanimitas and Other Ad-


Medical Eponyms

By ROBERT W. BUCK, M.D.

Bell’s Palsy and the respiratory nerve of Bell were described by Charles Bell (1774-1842) in a communication read July 12, 1821, by Sir Humphry Davy before the Royal Society of London, entitled “On the Nerves, giving an account of some experiments on their structure and functions, which lead to a new arrangement of the system.” This appears in the Philosophical Transactions of the Royal Society of London, second part for 1821, pp. 398-424.

After describing the “respiratory nerve of the face, being that which is called the portio dura of the seventh” and detailing his experiments, he says:

“We have proofs equal to experiments, that in the human face the actions of the muscles which produce smiling and laughing, are a consequence of the influence of this respiratory nerve. . . .

“Cases of this partial paralysis must be familiar to every medical observer. It is very frequent for young people to have what is vulgarly called the blight; by which is meant, a slight palsy of the muscles on one side of the face, and which the physician knows is not formidible. Inflammations of glands seated behind the angle of the jaw will sometimes produce this. All such affections of the respiratory nerve will now be more easily detected; the patient has a command over the muscles of the face, he can close the lips, and the features are duly balanced; but the slightest smile is immediately attended with distortion, and in laughing and crying the paralysis becomes quite distinct. The knowledge of the sources of expression teaches us to be very minute observers.”
permit the fenestration to become functional.

Although these defects are generally not important clinically, dynamic aortic insufficiency may occur on occasion, perhaps as a result of rupture of connecting tissue bands separating smaller fenestrations, with consequent enlargement of the defect. Another cause for enlargement of the defect is acute inflammatory change involving the fenestration. It is believed that this latter mechanism, i.e., bacterial endocarditis engrafted upon a congenital defect was an important contributing factor to the dynamic aortic insufficiency in the present case.

The valvular regurgitation in this patient was adequately repaired by use of an Ivalon patch to close the fenestration plus surgical union of the right and left coronary cusps to form a conjoined aortic valve cusp. Thus, a bicuspid aortic valve was created. Although a minor degree of residual aortic insufficiency was demonstrated postoperatively by thoracic aortography, it is not expected to be significant clinically.

**Summary**

A case of dynamic aortic insufficiency due to valvular fenestration is described. The defect was successfully repaired with an Ivalon patch to close the fenestration plus the surgical creation of a bicuspid aortic valve.

**SUMMARIO IN INTERLINGUA**

Es describite un caso de dynamic insufficentia aortic causate per fenestration valvular. Le defecto esseva reparate a bon successo. Le fenestration esseva claudite per medio de un pittacio de Ivalon. Un bicuspid alvaortic esseva create chirurgicamente.

**REFERENCES**


Therefore from these, and many such things as these, it is clear, that those things which are before spoken by former Authors concerning the motion and use of the heart and the arteries do either seem inconvenient or obscure, or admit of no impossibility, if one do diligently consider them; therefore it will be profitable to search more deeply into the business, and to contemplate the motions of the arteries and heart, not only in man, but also in all other creatures that have a heart; as likewise by the frequent dissection of living things, and by much ocular testimony to discern and search the truth.—William Harvey. *De Motu Cordis*, 1628.
are not helped. Accordingly, and in view of the hazards involved, carotid sinus stimulation is not considered to be clinically useful in the diagnosis or treatment of angina pectoris.

Carotid sinus pressure has also been found to terminate attacks of acute pulmonary edema in certain hypertensive patients. Prolonged application of pressure is described and this is undoubtedly hazardous. As in the case of anginal attacks it seems likely that this effect is independent of any action on the heart rate.

REFERENCES

BEING TRUE TO ONE'S CONVICTIONS

Thomas H. Huxley

English biologist, 1825-1895

Sit down before fact as a little child, be prepared to give up every preconceived notion, follow humbly wherever and to whatever abysses nature leads, or you shall learn nothing. I have only begun to learn content and peace of mind since I have resolved at all risks to do this.—Life and Letters of Thomas H. Huxley. From Great Companions. Readings on the Meaning and Conduct of Life from Ancient and Modern Sources.
Diffuse fibrosis myocardial es un morbo de diverse etiologias. Le causa le plus commun es morbo de arteria coronari. Physiologicamente illo produce un restriction del replena-
tion diastotic e assi resimila pericarditis constrictive e fibroelastosis endocardial. Clinica-
camente illo resimila pericarditis constrictive si intimemente que le diagnose differential inter le 2 conditiones pote esser effectuate in multe casos solmente per thoracotomy e le observation directe del pericardio.

REFERENCES
1. ROBIN, E. D., AND BURWELL, C. S.: Hemody-
2. BURWELL, C. S., AND ROBIN, E. D.: Some points in the diagnosis of myocardial fibro-
4. CHRISTIAN, H. A.: The Diagnosis and Treat-
ment of Diseases of the Heart. New York, Oxford University Press, 1940.
5. CABOT, R. C.: Facts on the Heart. Philadel-
phia, W. B. Saunders Co., 1926.
7. LEVINE, H. D., AND MCLEMORE, G. A.: The myocardial lesion in constrictive pericardi-
8. ISAACS, J. P., CARTER, B. N., AND HALLER, J. A.: Experimental pericarditis: The path-
ologic physiology of constrictive pericardi-
9. NYE, R. E., LOVEJOY, F. W., JR., AND YU, P. N. Clinical hemodynamic studies of myo-

BEFORE LAENNEC

Give me a calm and thankful heart
From every murmur free . . .
From a hymn by Anne Steele, 1760

From C. Sidney Burwell, M.D., and James Metcalfe, M.D. Heart Disease and Preg-
STUDY OF HEALTH APPEALS URGED BY AHA BOARD

The Board of Directors of the American Heart Association has resolved to seek the appointment of a group of physicians, scientists and community leaders to study problems arising from the increasing number of health agency fund appeals. The proposed study would create better understanding of the primary health needs of the nation and provide a yardstick for adequate and intelligent support of those health causes which are of greatest concern to the greatest number of people.

The AHA resolution has been endorsed by the Board of Directors of the American Cancer Society. Following is the full text:

"The increasing number of appeals for support made by health agencies has resulted in public confusion. It has diverted attention from the urgent goal of conquering the major chronic diseases which comprise the greatest threat to the health of the nation.

"United Funds and federated campaigns have not provided satisfactory solutions to the problem of multiple health appeals. Furthermore, they are not constituted to provide the leadership and support for the research and other programs essential to the reduction of disability and death caused by the major chronic diseases.

"Since the public interest urgently requires that the utmost support be given to the voluntary health agencies dedicated to the conquest of these major chronic diseases, the Board of Directors of the American Heart Association hereby resolves to seek the appointment of an impartial and qualified group of physicians, scientists and community leaders to undertake a study of the problem of multiple health appeals with the objectives of:

1: Defining the major areas of chronic disease which present the greatest threat to our national health and welfare; 2: Establishing criteria which will guide the public in making voluntary contributions of time, effort and funds to individual health causes."

AHA SCIENTIFIC SESSIONS

The AHA Committee on Scientific Sessions Program has selected 109 original scientific papers from a total of 400 submitted for consideration to be presented at the 32nd Annual Scientific Sessions of the American Heart Association. The Sessions will be held Friday, October 23 through Sunday, October 25 at Convention Hall, Philadelphia.

In addition to panels and symposia at which important clinical problems will be discussed, six clinical sessions will hear a number of investigative papers. One of the clinical sessions will be held jointly with the American College of Cardiology, which is conducting its interim meeting to coincide with the AHA Scientific Sessions. Heart Association members are invited to attend the College's popular "Fireside Conferences."

The Association's Council on Arteriosclerosis will participate in a panel discussion on "Conflicting Concepts of Atherogenesis." Concurrent special scientific sessions and programs will be held under sponsorship of other AHA Councils.

Titles of all papers to be presented and their authors are listed. Information relating to medical films, scientific and industrial exhibits and other features of the program will also be found.

Forms for registering and reserving hotel accommodations are obtainable from the As-
sociation. Physicians who register in advance will receive a complimentary copy of the program booklet which includes abstracts of the proceedings.

ASSOCIATIONS SUPPLEMENT NATIONAL RESEARCH SUPPORT

AHA affiliates and chapters have contributed nearly $26,000 through July 7, 1959 to supplement the Association’s national research support program for the 1959-60 fiscal year. These funds, which are in addition to amounts regularly assigned by Heart Associations for national research, have permitted support of 6 additional grants-in-aid effective July 1, for which funds would otherwise have been lacking.

In addition to helping reduce a deficit in the national grants-in-aid budget, the new sums aid in underwriting a record total of approximately $3,300,000 awarded by the National Office for the 1959-60 fiscal period. Associations which have provided funds are as follows:

Genesee County (N.Y.) Heart Chapter, $800 in partial support of the grant to Julian L. Ambrus, M.D., University of Buffalo School of Medicine, and Harrison F. Wood, M.D., Irvington House; Orange County (N.Y.) Heart Association, $5,500 in full support of the grant of Burtis B. Breese, M.D., University of Rochester School of Medicine; Napa County (Calif.) Heart Association, $1,000 and Tulare County (Calif.) Heart Association, $1,500 in partial support of the grant of Richard J. Havel, M.D., University of California Medical Center.

Also, Livingston County (N.Y.) Heart Chapter, $1,000 in partial support of the grant of Paul N. Yu, M.D., University of Rochester School of Medicine. As previously reported, the Illinois Heart Association provided $15,500 in full support of two investigatorships.

Other Heart Associations have pledged an additional $19,000 through July 7, making a total of more than $44,000 towards the program.
MEETINGS CALENDAR

October 14-17: American College of Chest Physicians, Albuquerque, N. Mexico, Murray Kornfeld, 112 E. Chestnut Street, Chicago 11, Ill.


November 2-4: Association of American Medical Colleges, Chicago. Ward Darley, 2530 Ridge Avenue, Evanston, Ill.
November 6-7: Central Society for Clinical Research, Chicago. A. S. Weisberger, 2065 Adelbert Road, Cleveland 6, Ohio.

November 8-9: American Heart Association’s Council on Arteriosclerosis, Chicago. Aaron Kellner, N.Y. Hospital, 525 E. 68th Street, New York 21, N.Y.


November 12-13: International Symposium on Cardiology in Aviation, Texas. Lawrence E. Lamb, Department of Internal Medicine, School of Aviation Medicine, USAF, Brooks Air Force Base, Texas.

November 13-14: Annual Symposium on Cinemicrofluorography, Rochester. George H. Ramsey, Department of Radiology, Strong Memorial Hospital, Rochester 20, N.Y.


1960

March 26-27: American Psychosomatic Society, Montreal. E. Wittkower, 265 Nassau Road, Roosevelt, N.Y.

ABROAD

1960

May 2-11: Pan American Medical Association Congress, Mexico City. Joseph J. Eller, 745 Fifth Avenue, New York 22, N.Y.
May 6-8: International Congress of Phlebology, Chambéry, France. J. Marnasse, 3 Rue de la Republique, Orleans, Loiret, France.
August 28-September 1: International Congress on Diseases of the Chest, Vienna. A. Sattler, American College of Chest Physicians, Frankgasse 8, Vienna, Austria.
September 18-25: European Congress of Cardiology, Rome. Secretariat, Clinica Medica, University of Rome, Italy.
CONTRIBUTORS TO THIS ISSUE

C. P. Bailey, M.D.
Director, Bailey Thoracic Clinic; Chief, Cardiopulmonary Division, Albert Einstein Medical Center; Former Professor and Head of the Department of Thoracic Surgery, Hahmemann Medical College and Hospital, Philadelphia, Pa.

Newton C. Birkhead, M.D.
Fellow in Medicine, Mayo Foundation, Graduate School, University of Minnesota; Research Fellow, American Heart Association; Rochester, Minn.

Eugene Braunwald, M.D.
Chief, Section of Cardiology, Clinic of Surgery, National Heart Institute, Bethesda, Md.

Albert N. Brest, M.D.
Fellow in Cardiology, Hahmemann Medical College and Hospital, Philadelphia, Pa.

C. Sidney Burwell, M.D.
Samuel A. Levine Professor of Medicine, Emeritus, Harvard Medical School; Physician, Peter Bent Brigham Hospital, Boston, Mass.

Stefan A. Carter, M.D., M.Sc.
Fellow in Physiology, Mayo Foundation, Graduate School, University of Minnesota; Medical Research Fellow of the National Research Council, Canada; Rochester, Minn.

Ignacia Chavez, M.D.
Professor of the National University of Mexico; Director, National Institute of Cardiology; Member of the National College, Mexico, D.F.

Gerard Church, M.B., Ch.B. (Glas.)
Fellow in Cardiology, Mercy Hospital; Instructor in Medicine, University of Maryland School of Medicine, Baltimore, Md.

N. Perryman Collins, M.D.
Senior Assistant Surgeon, Clinic of Surgery, National Heart Institute, Bethesda, Md.

Nicolas Dantas, M.D.
Former Fellow, Department of Thoracic Surgery, Hahmemann Medical College and Hospital, Philadelphia, Pa.

James W. DuShane, M.D.
Consultant, Section of Pediatrics, Mayo Clinic; Associate Professor of Pediatrics, Mayo Foundation, Graduate School, University of Minnesota; Rochester, Minn.

Jesse E. Edwards, M.D.
Consultant, Section of Pathologic Anatomy, Mayo Clinic; Professor of Pathology, Mayo Foundation, Graduate School, University of Minnesota, Rochester, Minn.

Robert Eisenberg, M.D.
Instructor in Pediatrics, Stanford University School of Medicine, San Francisco, Calif.

Frank A. Finnerty, Jr., M.D.
Assistant Professor of Medicine and Pharmacology, Georgetown University School of Medicine, Washington. Established Investigator, American Heart Association.

Amasa B. Ford, M.D.
Senior Instructor in Medicine, Director of Rehabilitation Teaching Program, Western Reserve University School of Medicine; Assistant Physician, University Hospitals of Cleveland, Cleveland, Ohio.

Irwin B. Hanenson, M.D.
Research Associate, May Institute for Medical Research of the Jewish Hospital; Attending Physician, Department of Internal Medicine, Jewish Hospital; Assistant Professor of Experimental Medicine, University of Cincinnati College of Medicine, Cincinnati, Ohio.

Herman K. Hellerstein, M.D.
Assistant Professor of Medicine, Western Reserve University School of Medicine; Assistant Physician, University Hospitals of Cleveland; Director, Cleveland Work Classification Clinic, Cleveland, Ohio.
CONTRIBUTORS TO THIS ISSUE

JAMES C. ROBERTS, JR., M.D.
Formerly, Assistant Professor of Pathology, University of Pittsburgh School of Medicine; Presently, East Tennessee Baptist Hospital, Knoxville, Tenn.

EUGENE D. ROBIN, M.D.
Associate in Medicine, Harvard Medical School and Peter Bent Brigham Hospital, Boston, Mass.

MARTIN RYAN, M.D.
Research Fellow in Medicine, Georgetown University School of Medicine, Washington, D.C.

FREDRICK SIGDA, M.D.
Research Fellow in Medicine, Georgetown University School of Medicine, Washington, D.C.

RICHARD D. SMITH, M.D.
Fellow in Medicine, Mayo Foundation, Graduate School, University of Minnesota; Rochester, Minn.

HERTHA H. TAUSSKY, M.PH., M.Sc.
Senior Research Fellow, May Institute for Medical Research of the Jewish Hospital, Cincinnati, Ohio.

DAVID J. TURELL, M.D.
Post-Doctoral Rehabilitation Fellow, U. S. Public Health Service, Office of Vocational Rehabilitation, Cleveland, Ohio; Currently, Captain, Medical Corps, U. S. Army.

J. F. URICCHIO, M.D.
Assistant Professor of Medicine, Hahnemann Medical College and Hospital; Cardiologist, Bailey Thoracic Clinic, Philadelphia, Pa.

ROBERT H. WILKINS, B.S.
Fourth year medical student and Student in Pathology, University of Pittsburgh School of Medicine, Pittsburgh, Pa.

EARL H. WOOD, M.D., PH.D.
Consultant, Section of Physiology, Mayo Clinic; Professor of Physiology, Mayo Foundation, Graduate School, University of Minnesota, Rochester, Minn.

ALFRED ZETTNER, M.D.
Assistant Pathologist, Essex County Overbrook Hospital, Cedar Grove, N. J.
Correspondence concerning editorial matters should be addressed to the Editor-in-Chief, at the above address. All communications concerning business matters, including change of address, should be addressed to the Publisher, Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, N.Y.

Subscription rates, $14.00 per year within the United States and Canada; $15.00 per year elsewhere. Single copies, $2.00; foreign, $2.50. A combination subscription with Circulation Research is available at $21.00 per year within the United States and Canada, $23.00 per year elsewhere. Subscriptions are accepted on a calendar year basis.


Published monthly at the Publication Office, 120 N. Green St., Chicago, Ill. Second class postage paid at Chicago, Ill.

Original Communications. Manuscripts for publication, letters, and all other editorial communications should be addressed to the Editor-in-Chief, at the above address. Articles are accepted for publication on the condition that they are contributed solely to this journal.

Manuscripts. Duplicate manuscripts, tables and illustrations should be submitted to facilitate selection and processing of papers. Manuscripts should be typewritten on good quality paper, one side of the page only, with double or triple spacing and liberal margins. They should include the authors' degrees and hospital and academic affiliations (for use on the "Contributors" page), and an address for mailing proofs. References to the literature should be compiled at the end of the article in numerical sequence, the style of this journal being observed regarding the full amount of material to be included in each bibliographic entry, the order of material, capitalization and punctuation. If a "Personal Communication" is listed in the bibliography, a letter must be submitted in which the direct quotation is given with the signature of the original author.

A foreword not to exceed 100 words should also be submitted with the manuscript. This foreword should serve primarily as an orientation for the reader by stating the general problem, the purpose of the study, and the approach or lines of investigation utilized. The results and conclusions should generally be reserved for the Summary.

Illustrations and Tables. Position of figures and tables in the text should be marked on manuscript. Circulation uses arabic rather than roman numbering. Figures should carry their number and the author's name on the back; figure legends should be compiled in a separate list. To ensure clear reproduction, all copy for zinc cuts, including pen drawings and charts, should be prepared with black India ink, and a black ribbon should be used for typewritten material; for halftone work, good photographic prints or the original drawings should be supplied. Special arrangements must be made with the editor for printing of color plates, elaborate tables or an excessive number of illustrations.

Reprints. Reprints of articles will be furnished to contributors when ordered in advance of publication. An order form, showing cost of reprints is sent with proofs. Individual reprints of an article can usually be obtained by writing directly to its author at the address given on the "Contributors" page of that issue.

Exchanges. Contributions, letters, exchanges, reprints and all other communications relating to the Abstracts Department of Circulation should be sent to the Editor-in-Chief at the above address. Writers on subjects which are related in any way to cardiovascular disease are requested to place this address on their permanent mailing list.

Book Reviews. Books and monographs treating specifically of the same subject matter as this Journal will be reviewed as space is available. Send books for review to the Editor-in-Chief, at the above address.

Business Communications. Send all communications regarding advertising, subscriptions, change of address, etc., to the Publisher, at the address listed below. Remittances for subscriptions should be made by check, draft, post office or express money order to the Publisher. The Publisher should be advised of change of address about thirty days before date of issue, with both the subscriber's old and new address given. Advertising space is given only to articles of known scientific value. Forms close first day of month preceding date of issue. Advertising rates and page sizes on application.