to live in the open air, earning his own living as a cowboy for a year. Returning to the University of Pennsylvania he received his M.D. degree there in 1882. After a year as resident physician in the Episcopal Hospital he established himself in Kensington, turned his attention especially to the practice of gynecology and established a small private hospital, which later developed into the well-known Kensington Hospital for Women.

During 1886 and 1888 Dr. Kelly traveled in Europe, visited the leading gynecological clinics in Great Britain and in Germany and observed the abdominal and pelvic operations of the best surgeons there. In 1888 he was made associate professor of obstetrics in the University of Pennsylvania. On his second visit to Germany he was married in Danzig to Laetitia Bredow, who became the mother of nine children and who died on the same day as did Dr. Kelly.

Early in 1889 he was called to Baltimore to be professor of obstetrics and gynecology in the Johns Hopkins University and gynecologist-in-chief to the Johns Hopkins Hospital. He organized and developed the department at the hospital and arranged for courses of instruction for graduates in medicine. On the opening of the medical school a few years later he organized the courses of lectures and the clinical work for the students of medicine. Owing to the rapid development of his private practice he opened in 1892 a private hospital in the city, which gradually grew to be a large institution. He early relinquished the work in obstetrics but continued as professor of gynecology until 1919, when he was succeeded by Dr. Thomas S. Cullen; he then became emeritus professor.

As an operator in his special domain, it is said that he has never been equalled in skill, in celerity or in judgment. Many distinguished surgeons have watched him operate and all marveled at his manual dexterity. As the originator of new operative procedures upon the female generative organs and upon the kidneys and ureters he rapidly became world-renowned and in the development of operative technique his contributions have been designated as epoch-making.

His assistants through the training they received at his hands found the opportunity to develop into expert gynecologists. Many of them came to occupy important positions, among them Hunter Robb, W. W. Russell, John G. Clark, B. R. Schenck, J. E. Stokes, G. R. Holden, John Sampson, A. L. Stavely, C. W. Vest, L. R. Wharton, Otto Ramsay, D. B. Casler, E. H. Richardson, G. L. Hunner, Thomas S. Cullen, who succeeded him in the chair at Johns Hopkins, and Curtis F. Burnam and William Neill, Jr., who continued his work at his private hospital and in his radium clinic. Dr. Kelly was a good executive, for he learned early to delegate important responsibilities to his associates, developing them and at the same time giving him greater freedom for the exploration of new fields.

During his lifetime he was the author of more than a dozen books and he contributed some 500 articles to scientific journals. Among his books, "Operative Gynecology," "The Vermiform Appendix and its Diseases" (with Dr. Hurdon), "Walter Reed and Yellow Fever," "Gynecology and Abdominal Surgery" (with Dr. Noble), "Medical Gynecology," "Myomata of the Uterus" (with Dr. Cullen), "Cyclopedia of American Medical Biography," "Some American Medical Botanists," and "Diseases of the Kidneys, Ureters and Bladder" (with Dr. Burnam) have been widely read. His "Stereo-Clinic" consisted of some 20 volumes describing the more important gynecological operations, accompanied by stereoscopic photographs of their different stages; this represented a new method of teaching surgery. For the illustrations of his other volumes he brought the medical artist, Max Broedel, from Germany, who later developed the department of "Art Applied to Medicine" at the Johns Hopkins Hospital.

Dr. Kelly was always a naturalist, his great love for natural science having been promoted by his friendship with the paleontologist, Professor E. D. Cope, during his early student days. Professor Cope had even offered to send him in charge of an exploring and collecting expedition to South America, but owing to his father's objection, he entered upon the study of medicine instead. He always maintained his interest in botany and zoology and was an ardent collector of plants and animal specimens. He developed an especial interest in mushrooms and in snakes, and was made an honorary member of several botanical and zoological societies in this country and in Europe.

Always athletic, Dr. Kelly was a champion swimmer at the University of Pennsylvania and he became an expert canoeist during his summer holidays, which he spent at a camp in northern Ontario. He was a devoutly religious man and in 1925 wrote a book entitled "A Scientific Man and the Bible." He took his duties as a citizen seriously and tried to improve political and moral conditions in Maryland. At one time he was a watcher at the polls in South Baltimore and he participated in anti-vice crusades and in the movement for pure food laws.

Many honorary degrees were conferred upon Dr. Kelly, among them the LL.D. degree from the University of Aberdeen (1906).

LEWELLYS F. BARKER

RECENT DEATHS

DR. FRANCIS HUNTINGTON SWETT, professor of anatomy in the Duke University Medical School since

1930, died on February 10 at the age of forty-nine years.

GEORGE HERBERT BROWN, director of the department of ceramics at Rutgers University, died on February 8 at the age of fifty-eight years.

A CORRESPONDENT writes: Richard C. Cady died on January 15, at the age of 35 years, as the result of accidental injuries received while on duty overseas. For the past year he has served as a geologist in locating well sites to develop water supplies for military establishments of the United States Army in Africa and Asia. He was a member of the Geological Survey, U. S. Department of the Interior, for twelve years. His most important research was on the Pleistocene and Tertiary geology and ground-water hydrology of the Great Plains.

DR. C. TATE REGAN, keeper of zoology in the British Museum and an authority on systematic ichthyology and on the phylogeny of the lower vertebrates, died on January 13 at the age of sixty-five years.

SCIENTIFIC EVENTS

PURE MATHEMATICS IN RUSSIA

ONLY a few scholars in this country may have easy access to Russian publications since the war. It might, therefore, be of interest to give a short list of titles of papers in mathematics published from January to July, 1942, in the "Comptes Rendus (Doklady) de l'Academie des Sciences de l'URSS."

Pontrjagin: Mappings of the three-dimensional sphere into an n-dimensional complex.

Tschebotarëw: On a particular type of transcendent equations.

Khintchine: Lois de distribution des fonctions sommatoires dans la mécanique statistique.

Vinogradow: On the estimation of trigonometrical sums.

Linnik: On Weyl's sums.

Raikov: A new proof of the uniqueness of Haar's measure.

Raikov: On absolutely continuous set functions.

Šmulian: Approximation in the space of bounded functions.

Šilov: On the Fourier coefficient of a class of continuous functions.

Pontrjagin: Characteristic cycles on manifolds.

Tschebotarëw: On R-integrable polynomials.

Alexandroff, A.: Existence and uniqueness of a convex surface with a given integral curvature.

Wassilkoff: Partially ordered linear systems, Banach spaces and systems of functions.

Linnik: On the representation of large numbers as sums of seven cubes.

Tschebotarëw: On entire functions with real interlacing roots.

Tschebotarëw: On some modification of Hurwitz's problem.

Gnedenko: On locally stable probability distributions.

Gontcharoff: Sur la distribution des cycles dans les permutations.

Gnedenko: Investigation of the growth of homogeneous random processes with independent increments.

Malcev: Subgroups of Lie groups in the large.

Gontcharoff: Sur une extension du théorème de Gauss-Lucas.

Malcev: On the representation of an algebra as a direct sum of the radical and a semi-simple subalgebra.

This impressive list of research work in abstract "pure" mathematics, published during the most gigantic struggle which human history has seen, could easily be multiplied by papers from this and other journals concerning all parts of theoretical physics, astrophysics, celestial dynamics, etc. It is really significant that the first Stalin Prize (1940) has been awarded to I. M. Vinogradoff for his paper, "A New Method in the Analytical Theory of Numbers."

O. NEUGEBAUER
BROWN UNIVERSITY

NEW AND RARE INSTRUMENTS

THE Committee on Location of New and Rare Instruments has the following requests and offers:

INSTRUMENTS REQUESTED

Cathetometer ($32'' \pm 0.003''$).
Two-circle reflecting Goniometer.
Loewe Zeiss Liquid Interferometer.
Quartz Microscope.
Zeiss Optimeter.
Hypervac Vacuum Pump (Cenco No. 93,000).
Refractometers: Bausch & Lomb and Zeiss-Pulfrich.
Quartz Spectrograph.

INSTRUMENTS OFFERED

Leeds and Northrup Thermionic Amplifier No. 7673.
Alb. Rueprecht & Sohn Analytical Balances.
Roller-Smith Co. Surface Tension Balances.
Bausch & Lomb Centrifuge.
Gaertner Chronograph.
Fisher Electropode.
Leeds and Northrup Microammeter Type R.
Weston Microammeter for D.C.
Microscopes: Bausch & Lomb, Poller, Winkel-Zeiss, Zeiss.
Sartorius-Werke Brain Microtome.
Hartnack Polariscope 400 mm tube.
Cenco Hyvac Pumps.
pH meter model Chemie (Bergmann & Altmann).
Radio Test Instruments and Equipment.
Zeiss Refractometer, dipping type.
Bragg X-Ray Spectrometer.
Keuffel & Esser Spectrophotometers.
Franz Schmidt & Haensch—Spectroscope (student