Washington A. Roebling, builder of the Brooklyn Bridge, has been given by his son, Mr. John A. Roebling, to the Smithsonian Institution. Accompanying the gift is an endowment of $150,000 to insure the maintenance of the collection.

This gift makes the Smithsonian Institution the possessor of the two greatest private mineral cabinets in this country, received within two months of each other. The first, containing 9,000 specimens, which is only surpassed by the Roebling collection of 16,000 specimens, came from Mr. Frederick A. Canfield, of New Jersey. It is also endowed to the amount of $50,000. These two gifts added to the 50,000 mineral specimens already owned by the Smithsonian put the institution ahead of any other in this country in mineralogical material, and class it with the British and Vienna Museums in the front of the world.

It has been claimed for the Roebling collection that it contains a greater number of species than any other, public or private, in the world. The number of well-defined species of minerals is about 1,500. Colonel Roebling lacked less than 15 of these. Included are an almost complete series of the varieties and of all dubious mineral species. In his attempt to get specimens of every known mineral, he kept an up-to-date list of desiderata, circulating copies of this among mineralogists and dealers in all corners of the globe.

The collection contains a number of rarities such as a 64 carat black diamond from South Africa. It is a perfect crystal and is believed to be one of the largest black diamond crystals known. A group of nine Arkansas diamonds contains one of 18 carats, which was, up till two years ago, the largest known from Arkansas. A black opal from Humboldt County, Nevada, weighs 18-6/10 ounces, being the largest precious opal known.

Among the cut stones there is a 319 carat peridot from the Island of Saint John in the Red Sea. It is supposed to have adorned the image of a saint in an Austrian church for some three centuries. A wine colored topaz from Brazil weighs 93 carats. An exceptional alexandrite of 32 carats from Ceylon shows green in sunlight and red in artificial light.

The finest group of precious tourmalines ever taken from Mesa Grande, California, are included in the Roebling collection. Maine contributed its finest purple apatite. A rare four carat cut blue euclase from Brazil is exceptional in color and size.

The collection contains many type specimens, which greatly enhance the scientific value of the cabinet, while the number of dubious minerals included will provide the Smithsonian mineralogists an opportunity to reinvestigate them and determine what they actually are.

REVISION OF THE U. S. PHARMACOPOEIA

SINCE the appearance of the tenth revision of the "Pharmacopoeia of the United States" the committee entrusted with the task of preparing this national standard has turned its attention to the problems that will arise in the preparation of the eleventh revision in 1930. Many revision problems involve extended research and the revision committee is hopeful that individual workers will take up these problems as a part of their regular research work.

A list of chemical problems has therefore been submitted to American chemists with the hope of interesting them in this field of research. Perhaps some of the problems are already being studied by certain chemists; perhaps others may interest individual chemists now looking around for a useful subject for research. In either event, it is desired that the person engaged in the specific research notify Chairman E. F. Cook, U. S. P. Revision Committee, 636 South Franklin Square, Philadelphia, Pa., or the chairman of the research group on chemistry, Dr. H. V. Arny, stating the topic of research taken up and when the research is finished either send in information as to where the article will be found, or better still, send in a reprint of the article. Copies of the list may be obtained by addressing the office of the general chairman.

The list of problems upon which information is desired has for convenience been classified under five divisions, each division having the corresponding members of the executive committee of revision, one member serving as chairman of the group. The divisions are as follows: (1) Committee on therapeutics and pharmacologic research, H. C. Wood, Jr., *chairman,* with C. W. Edmunds, George W. McCoy and Torold Sollmann; (2) committee on pharmacognostic research, Edwin L. Newcomb, *chairman,* with W. O. Richtmann; (3) committee on chemical research, H. V. Arny, *chairman,* with Frank R. Eldred, Charles H. LaWall, W. O. Richtmann and George D. Rosengarten; (4) committee on pharmaceutical formulas and processes, Wilbur L. Scoville, *chairman,* with George M. Beringer and Jacob Diner; (5) committee on miscellaneous research topics, A. G. DuMez, *chairman,* with Theodore J. Bradley.

NEW LABORATORY OF ENGINEERING FOR LEHIGH UNIVERSITY

A GIFT of a million dollars for the erection of an electrical and mechanical engineering laboratory at Lehigh University by James Ward Packard, a graduate of the class of 1884 and originator of the Packard automobile, was announced at a meeting of the board of trustees of Lehigh University on January 14. The

gift is unconditional. The new building will be known as the James Ward Packard laboratory. This is the largest gift ever made to Lehigh University by a single individual since its establishment in 1865 by Asa Packer.

Preliminary plans for the James Ward Packard laboratory have been prepared by Visscher and Burley, architects, of New York. It will have an overall width of 225 feet and a depth of 184 feet, designed in the collegiate Gothic style with exterior walls of native stone trimmed with cut limestone. The main laboratories will be provided with electrical and mechanical equipment of the most modern and efficient type for experiment and instruction purposes. From the heaviest boilers, prime movers and generators to the most delicate known devices for precise measurement, every type of equipment needed for the study of mechanical and electrical engineering will be the finest obtainable. Special laboratories for research in radio, high voltage work, fuels, refrigeration and other special branches of technology are planned. Drafting rooms, an engineering library, an auditorium seating 500 and equipped with stereopticon and motion picture projectors and an engineering museum are also included in the plans.

THE TENNESSEE ANTI-EVOLUTION LAW

THE Supreme Court of Tennessee on January 15 handed down a decision upholding the constitutionality of the law prohibiting the teaching in state supported schools that man is descended from a lower order of animals. Before reading the opinions, Chief Justice Green made a statement in summary of the results of the court's deliberations, saying, according to an Associated Press dispatch:

> The majority of the court holds the act to be constitutional—Judge Cook, Judge Chambliss and myself. Judge McKinney believes the act invalid and will state his reasons.
>
> Judge Cook and I think the act prohibits broadly the teaching in the schools of the state that man descended from a lower order of animals. Judge Chambliss thinks the act only prohibits the teaching of the materialistic theory of evolution, which denies the hand of God in the creation of man. He will state his reasons.
>
> All of us agree that the judgment herein must be reversed on account of the error of the trial judge in attempting himself to fix a fine of $100 upon Scopes. Under the constitution of Tennessee a fine in excess of $50 can only be assessed by a jury. The jury in this case returned a verdict of guilty, but did not assess the fine and the judge undertook to do this himself.
>
> Since the minimum punishment authorized by the statute is a fine of $100 and no tribunal except a jury can levy such a fine in this state, the error pointed out can only be corrected by awarding a retrial.
>
> All of us agree that nothing is to be gained by prolonging the life of this bizarre case. On the contrary, we think that the peace and dignity of the state, which all criminal prosecutions are brought to redress, will be subserved by the entry of a nolle prosequi herein. Such a course is suggested to the Attorney General.

Regarding the effect of the ruling the majority opinion said:

> As the law thus stands, while the theory of evolution of man may not be taught in the schools of the state, nothing contrary to that theory is required to be taught. It could scarcely be said that the statutory scriptural reading would amount to teaching of a contrary theory.
>
> Our school authorities, are, therefore, quite free to determine how they shall act in this state of the law, and this course of study may be entirely omitted from the curriculum of our schools.

The opinion declares it seems plain that the Legislature only intended "to forbid teaching that man descended from a lower order of animals. The denunciation of any theory denying the Bible story of creation is restricted by the caption and by the final clause."

Justis Chambliss asserted in his separate opinion concurring with the majority decision that the teaching of materialistic evolution only was forbidden by the act:

> It follows that to forbid the teaching of the biblical account of divine creation does not expressly or by fair implication involve acceptance or approval of instantaneous creation held to by some literalists.
>
> One is not prohibited by teaching, either "days" as used in the book of Genesis, means days of twenty-four hours, the literalist view, or days of "a thousand years" or more, as held by liberalists, so long as the teaching does not exclude God as the author of human life.

Justice McKinney's dissenting opinion declared his belief that the statute is invalid "for uncertainty of meaning." He quoted in support of his belief the opinion of the Supreme Court of the United States in the case of Connally versus General Construction Company as follows:

> That the term of a penal statute creating a new offense must be sufficiently explicit to inform those who are subject to it what conduct on their part will render them liable to its penalties is a well recognized requirement, consonant alike with ordinary notions of fair play and the settled rules of law; and a statute which either forbids or requires the doing of an act in terms so vague that men of common intelligence must necessarily guess at its meaning and differ as to its application violates the first essential of due process of law.