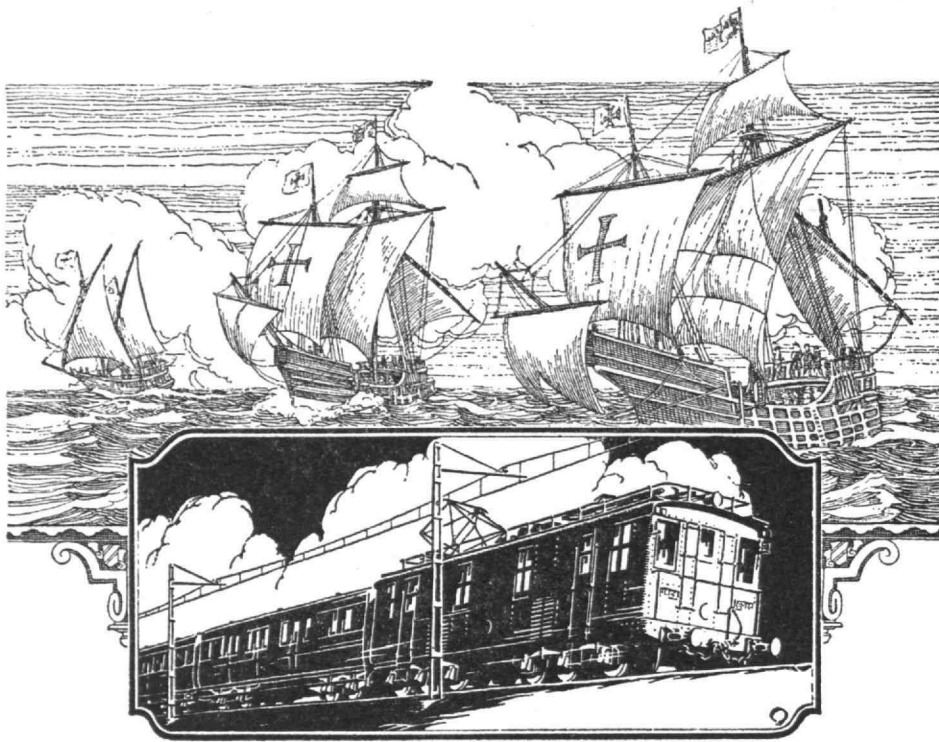


The February
TECHNOLOGY
REVIEW



Samuel Chubb

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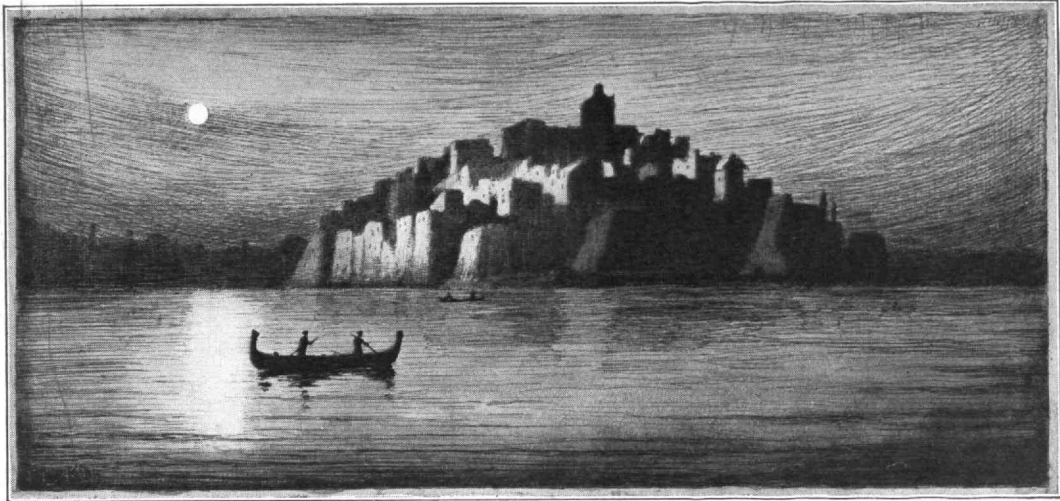
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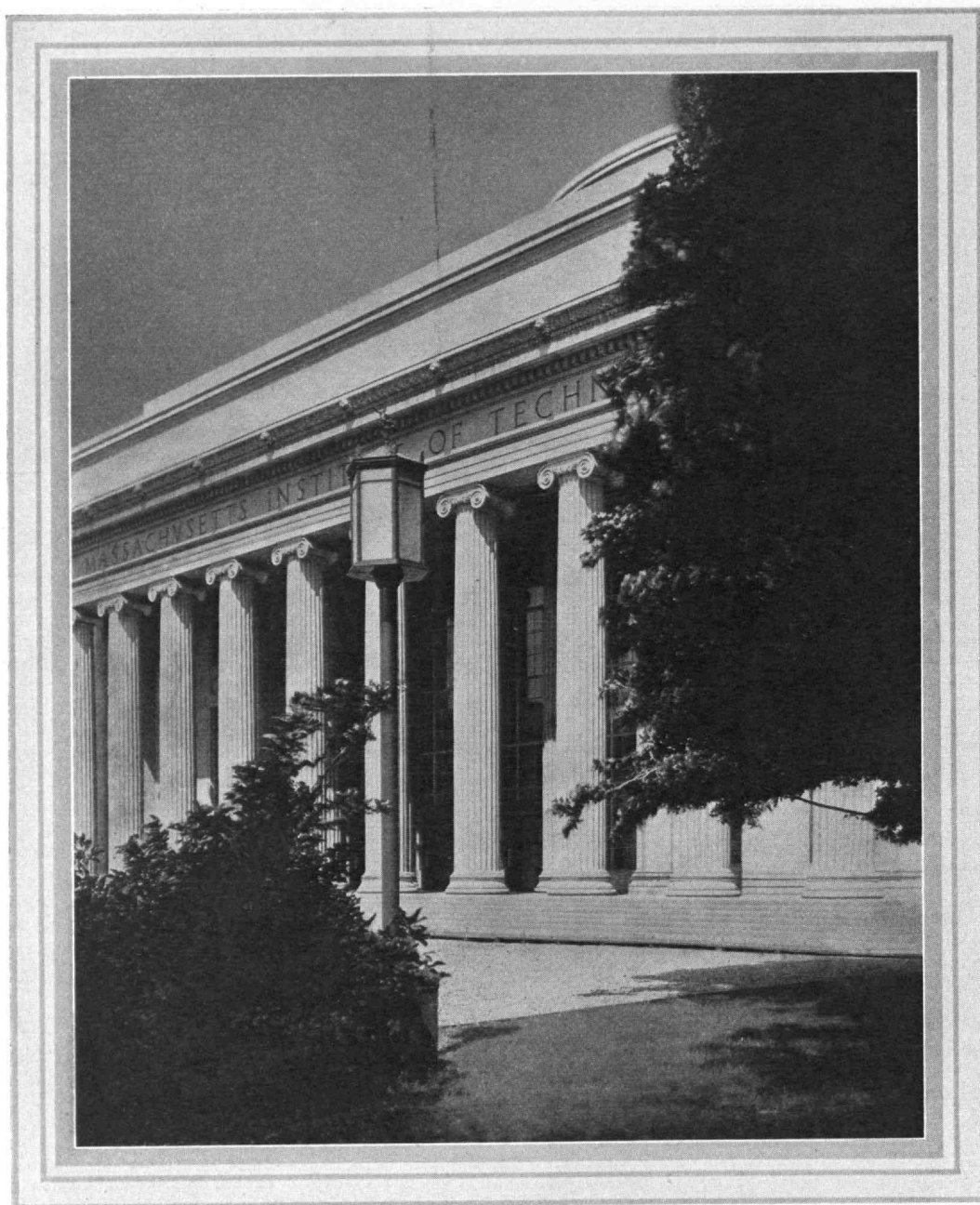
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The TECHNOLOGY REVIEW

Relating to the Massachusetts Institute of Technology

VOLUME XXX



NUMBER 4

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H. E. LOBDELL, '17 Editor
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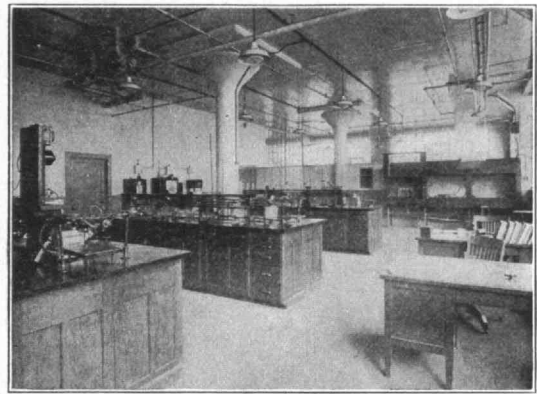
In THE REVIEW for March

☛ Last summer, SETH K. HUMPHREY, '98, braved tsetse flies and old maids on a trip through Africa, and emerged unbiten by either. He contributes an article describing a few of his experiences, written in the breezy manner he used in his recent book, "Loafing Through the Pacific."

☛ Several other articles are mellowing in the archives. One, or perhaps two, of the most likely ones will be fetched out to add to the gaiety and learning of nations.

☛ Besides the usual departments, there will appear a new column, "The Tabular View," intended to give a back-stage glimpse of the editorial sanctum; to give a better understanding of The Review, its policies, and, if possible, its Editors and contributors.

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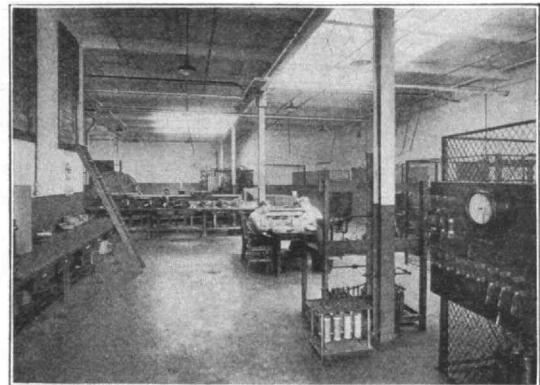


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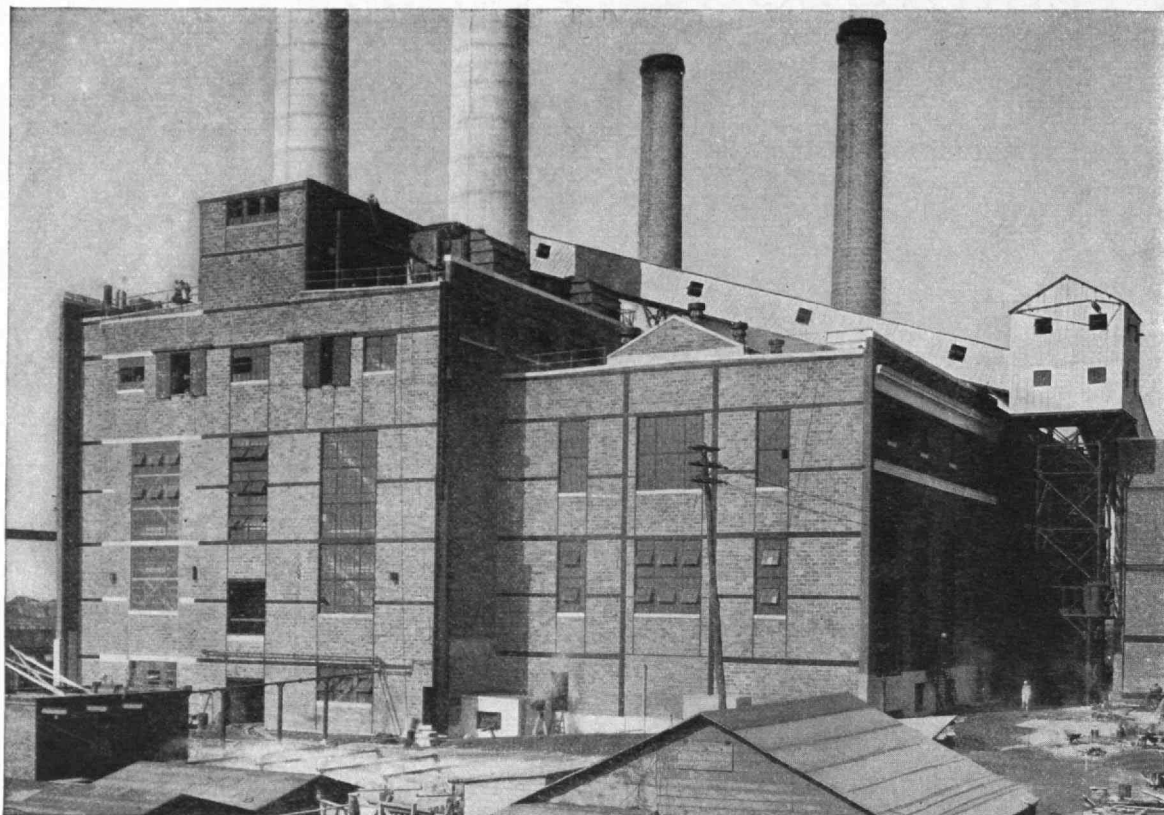
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The TECHNOLOGY REVIEW

VOLUME 30 / FEBRUARY, 1928 / NUMBER 4

The Trend of Affairs

ORVILLE B. DENISON, '11, from 1923-24 Executive Secretary, and since 1924 Secretary-Treasurer of the Alumni Association, has submitted his resignation to take effect June 30. His departure at that time will bring to a close the work of the Association's first full-time Secretary — an office combining the activities of the former part-time Secretary, the field manager, and the much discussed traveling Secretary. Mr. Denison's appointment came in response to the demands created by the ever-growing and more active Association. During his incumbency of office he has made many visits to different alumni groups all over the country and the Association membership has climbed from 4,900 to the present total of 6,534. In his work as Secretary he has made efficacious use of his natural enthusiasm, his contagious affability, and his excellent memory for people. His gusto and ability to entertain have made him an effective liaison officer and a genuine favorite within and without the Institute. The many Alumni throughout the land who have come to know Mr. Denison will join *The Review*, we are sure, in wishing him a full measure of success in the new enterprises he may undertake in the future.

Since the formation of the Association in 1875 there have been ten Secretaries who have carried the burden of its operation, all on a part-time basis save the last. Of this dynasty, the two who by all odds served the longest were Charles R. Cross, '70, in office 1876-1884, and Walter Humphreys, '97, in office 1907-1923. Other Secretaries were George F. Swain, '77, 1884-1888; Frederick W. Clark, '80, 1888-1890; C. Frank Allen, '72, 1890-1892; Harry W. Tyler, '84, 1892-1897; Augustus H. Gill, '84, 1897-1899; Edward F. Miller, '86, 1900-1901; Arthur G. Robbins, '86, 1902-1906. Since the small

meeting in 1875, sponsored by the Class of 1873, when it was founded (there being then about ninety Institute graduates), the Association has grown to be an important and integral part of the Institute, requiring a large organization for its operation. Though the Secretary's duties are manifold, he no longer must count dirty one dollar bills sent in for dues as Professor Miller avers that he did when in office.

The announcement of Mr. Denison's resignation came shortly after his departure on a trip to local clubs and associations as follows: January 25, Richmond, Va.; January 27-29, Jacksonville, Fla.; January 30-31, Atlanta, Ga. His February dates are: 1-2, Birmingham, Ala.; 3-4, New Orleans, La.; 5-6, Houston, Texas; 7-9, Dallas, Texas; 10-12, St. Louis, Mo.; 13-14, Nashville, Tenn.; 14-15, Louisville, Ky.; 16, Indianapolis, Ind.; 17-19, Cincinnati, Ohio; 21-22, Columbus, Ohio; 23, Cleveland, Ohio; 24, Buffalo, N. Y.; 25, Rochester, N. Y.



RESIGNED

Orville B. Denison, '11, who terminates his services as Secretary-Treasurer of the Alumni Association on June 30

No. 17 Gramercy Park

INEXORABLE shifting of New York's center of gravity and the passing of a notable club district are reflected in the announcement that the Technology Club of New York will not renew, on May 1, its lease on the old Gerard mansion at 17 Gramercy Park. Rather than sign a lease for five more years, the Board of Governors has unanimously agreed to change to an uptown building, preferably to one in the Grand Central Terminal Zone.

The present location dates back to 1909 when the old Technology Club, inadequately housed and struggling for existence, concluded that its future depended upon the acquisition of better and larger facilities. Accordingly the Board of Governors leased the Gerard property upon its being given up by



JOINT MEETING

On January 4 the Corporation and leading members of the Faculty lunched and convened in Walker Memorial

William Randolph Hearst's Independence League Club.

The house was situated between the Players' and, what was then, the Columbia University Clubs. Obviously it was the club era at Gramercy Park; organizations of variegated types found this unique "bit of aristocratic London" an urbane and convenient environment. Shadows of notable people, once residents in the Park, lurked on the exclusive green, always inaccessible to any but owners of adjoining lots who held the keys to its padlocked gates. An enterprising realtor and man of vision, Samuel Ruggles, wishing to develop the square, in 1845 donated the plot to these lot owners and it has remained theirs despite all attempts of the city to acquire it. Edwin Booth, Peter Cooper, Samuel J. Tilden, Stanford White once held keys. The Players' Club took over Booth's residence; the National Arts Club, Tilden's; the Princeton Club, White's gilded palace.

And now the suction of uptown New York is gradually bringing the club era to an end. The Princeton and Columbia Clubs have already relocated and soon the Technology Club departs for a district less aristocratic and romantic than Gramercy Park but more convenient, businesslike and fashionable. The Terminal Zone is, in the words of Thomas C. Desmond, '09, President of the Club, "the district in which most other important New York college clubs are located," and "where there are more Technology men

. . . than in any other district of like size in the country. . . . Let me simply point out that the decision of the Board of Governors regarding this was unanimous and confirmed unanimously by vote of the Technology Club after a long and full discussion participated in by many of the most active Technology men. Many questions have come to me recently as to how this move of the Technology Club uptown will affect the National Technology Center, to all of which questions I have replied that this move will undoubtedly help forward the National Technology Center . . . at least three years and possibly five years off from practical realization." So further shiftings are to come.



ARTHUR A. NOYES, '86
With George E. Hale, '90, (on
the right). See opposite page

Knight of Dennebrogge

FURTHER recognition of his distinguished service and far-reaching contributions to naval architecture has come to William Hovgaard, Professor of Naval Design and Construction in the Department of Naval Architecture and Marine Engineering, by an order in which King Christian X of Denmark conferred upon him the rank of Knight Commander of Dennebrogge. Some twenty-five years ago he was created a Knight of Dennebrogge, and the highest degree of this order, awarded for distinguished service, now comes coincidentally with his seventieth birthday. It was formally bestowed at a dinner of the Danish Officers Club in New York and was presented in the name of the King of Denmark by Consul General George Beck. Professor Hovgaard was graduated from the Naval Academy at Copenhagen in 1879. He served in the Danish Navy and, in 1882, he was a member of the astronomical expedition which was sent to the West Indies to observe the passage of the planet Venus. A year later he entered

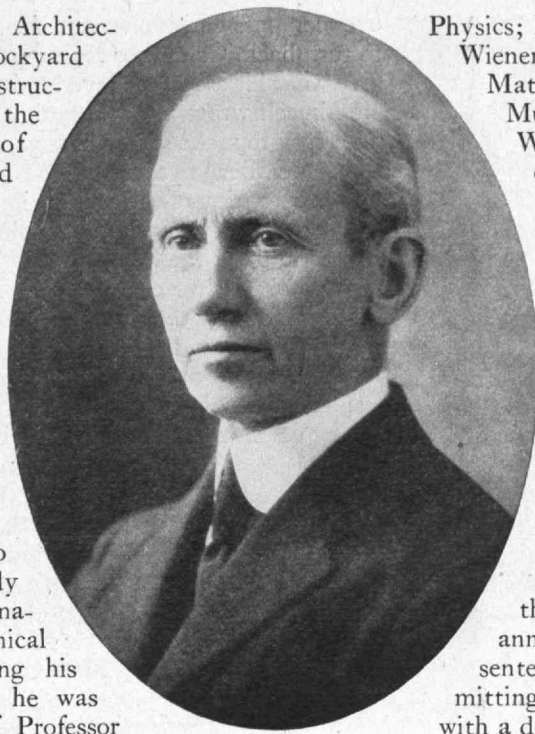
the School of Naval Architecture of the Royal Dockyard at Copenhagen as instructor in technology at the Dockyard School of Naval Architects and Engineers. The following year he was appointed yard manager at the famous shipyard of Burmeister and Wain in Copenhagen. In 1898 he was promoted to the rank of Commander in the Danish Navy. In 1901 Professor Hovgaard was sent to this country to study the question of submarines and other technical matters and following his return to Denmark he was offered the Chair of Professor of Naval Design and Construction at the Institute. Thus began an association which has continued for over a quarter of a century and by which he now finds himself the third ranking member of the Faculty, being junior only to Davis R. Dewey and Harry W. Tyler, '84.

Professor Hovgaard was called as an expert witness at the inquiries into the *Titanic* disaster and the torpedoing of the *Lusitania*. He was on duty in the Bureau of Construction and Repair in the Navy Department at Washington in 1917 and 1918 and later was a consulting expert for the Navy. He was technical adviser to the court which investigated the loss of the U. S. S. *Sbenandoah*.

Professor Hovgaard is well known for his work in the interest of the American Scandinavian Foundation of which he was one of the founders and of which he has been a trustee since 1912. He was elected Vice-President of the Foundation last year.

Meetings Galore

CHOOSING the general academic vacation period between Christmas and New Years, many of the nation's professional scientific societies held meetings. Most important of these was the ubiquitous one held in Nashville, Tenn., at which Arthur A. Noyes, '86, presided. There the fifteen sections of the American Association for the Advancement of Science and thirty-five affiliated societies held forth with a six-day series of discussions on the sciences from agronomy to zoölogy. Many Technology Alumni and members of the instructing staff participated, either as officers or as authors of papers. Among these were Gerhard Dietrichson of the Department of Chemistry; Robert B. Sosman, '04; Edwin B. Wilson, formerly Head of the Department of

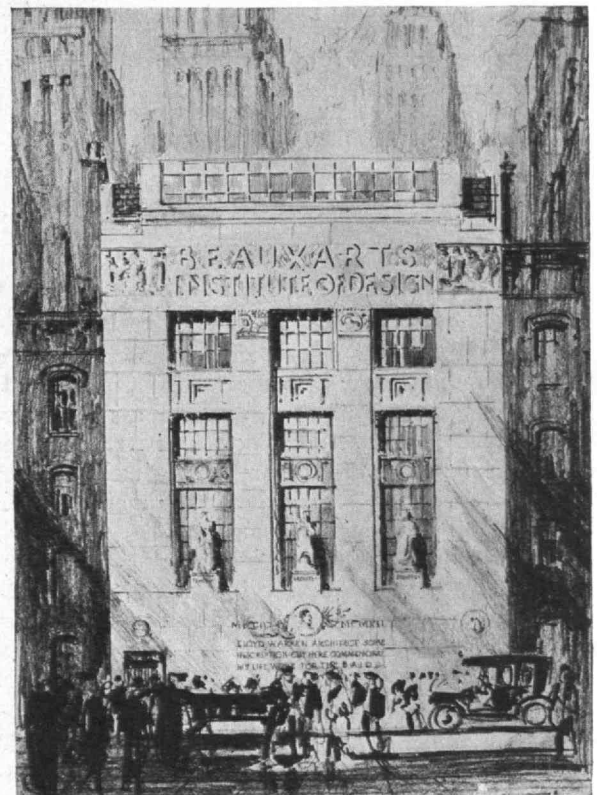


WILLIAM HOVGAAARD
Made Knight Commander
of Dennebrog by the King
of Denmark

Physics; Professor Philip Franklin, Professor Norbert Wiener, and Dirk Jan Struik of the Department of Mathematics; Thorndike Saville, '17; Robert S. Mulliken, '17; Albert Sauveur, '89; Professor Waldemar Lindgren, Head of the Department of Geology; and Frank B. Jewett, '03. Several other organizations held concurrent meetings in other cities. The Race Betterment Conference met at Battle Creek, Mich., and heard, among others, a paper by Professor John W. M. Bunker of the Department of Biology and Public Health; the Society of American Bacteriologists met in Rochester, N. Y., hearing papers by C.-E. A. Winslow, '98; Max Levine, '12; Edwin J. Cameron, '18; and David L. Belding, a special lecturer in the Department of Biology and Public Health. Professor Samuel C. Prescott, '94, Head of the Department, attended.

In New York, during the week of January 9, the Institute of Radio Engineers met for its annual conclave. Richard H. Ranger, '11, presented a paper describing his method of transmitting photographs by radio and accompanied it with a demonstration similar to the M. I. T. Radio-Newspaper which he showed to the convention of the Technology Clubs Associated last June.

Meeting in Cleveland, Ohio, the Geological Society of America heard papers by three members of the Institute's Department of Geology: Professors Lindgren, Joseph L. Gillson, '21, and Frederick K. Morris.



Louis H. Dreyer

WINNING DESIGN

By Frederic C. Hiron, '03, for the new building of the Society of Beaux Arts Architects in New York

Achievements Recognized

CHARLES G. ABBOT, '94, internationally famous for his studies of the sun's activity,* was appointed Secretary of the Smithsonian Institution at Washington by the Board of Regents on January 10. For years he was Assistant Secretary, becoming Acting Secretary upon the death of Charles D. Walcott, last February. Dr. Abbot assumes executive responsibility for the destinies of this important organization at a critical period. Its field of activity has broadened considerably in recent years, and, two days after Secretary Walcott's death, the group known as the Establishment of the Smithsonian Institution met to decide whether the work should be curtailed or the endowment increased. Undoubtedly the Smithsonian Institution that contributed so much to knowledge under the guidance of Joseph Henry, Spencer F. Baird, Samuel P. Langley and Charles D. Walcott will "go strongly on" under Secretary Abbot.

The 1926 Edison Medal Committee of the American Institute of Electrical Engineers made its award to William D. Coolidge, '96, "... for the origination of ductile tungsten and the fundamental improvement of the x-ray tube." Almost simultaneously with this award to Dr. Coolidge came another from the Federal Courts which pronounced invalid his ductile tungsten patent. Dr. Coolidge refused the medal, and the Committee reluctantly acquiesced. The 1927 Committee, meeting last December, awarded the medal to Dr. Coolidge a second time, "for his contributions to the incandescent electric lighting and the x-ray arts." This time he accepted it.

From Cross-Staff to Gyro-Compass

METHODS of navigation, from the crude cross-staff and simple compass used by Columbus to the sextant and the gyro-compass of today were described in the second Society of Arts Popular Science Lecture, given on January 13, 14, 15 by Professor George L. Hosmer, '97, of the Department of Civil and Sanitary Engineering.

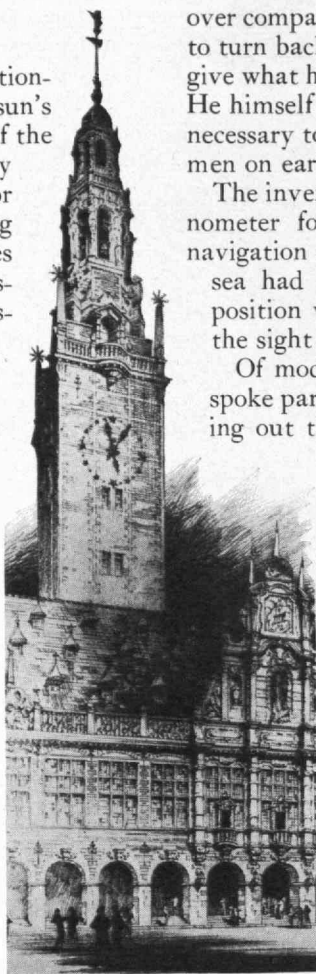
Discussing "The Art of Navigation as Affected by Modern Inventions," Professor Hosmer drew a comparison which showed that instruments of navigation carried by the smallest fishing vessel of today are far in advance of the apparatus at the disposal of Columbus.

Incidentally, getting financial support for his adventure was not the only problem of Columbus' voyage to America. It appears that his sailors grew alarmed

over compass variations from the true north and wanted to turn back. Columbus rearranged the compass card to give what his sailors believed to be a true north reading. He himself wrote in his chronicles that he had found it necessary to make such a change to calm the fears of his men on earlier voyages.

The invention of the sextant in 1731 and of the chronometer four years later revolutionized methods of navigation and the hardy souls who ventured upon the sea had fairly accurate methods of knowing their position when they pushed over the horizon beyond the sight of land.

Of modern navigation methods, Professor Hosmer spoke particularly on the importance of radio in sending out time-signals, compass bearings, and data to guide ships through fog. He spoke, too, of submarine signal devices, depth finders, and of the Sperry gyro-compass, all of which are used in modern navigation.



LOUVAIN MEMORIAL
To U. S. Engineer War Dead
proposed by E. D. Adams, '69

"Aviation in 1927"

COMMERCIAL aviation's worries are being rapidly dissipated and the status and strength of the airplane industry in the United States will be definitely assured a few years hence. "Certainly in another two years, at most, the commercial production will far outweigh the military market in number of units built, if not in total value of the product," writes Edward P. Warner, '17, Assistant Secretary of the Navy for Aeronautics in *The Yale Review* for January as part of an article entitled "Aviation in 1927."

He foresees the time when aircraft purchases by the Army and Navy will, instead of dominating the field, "be insufficient to disturb the equilibrium of the whole structure." In 1926 there were purchased for private flying and commercial use 600 or so planes; in 1927 Professor Warner estimates that this number was probably increased to 2,000. With the opening of new airports and airways becoming more common from month to month, the utility of the airplane for non-military flying will inevitably be expanded, for airplanes are as susceptible to the influence of their special forms of improved highways and service stations as are automobiles.

The article, of course, discusses the significance of the trans-oceanic flights of last summer. While "wholeheartedly applauding those who triumph over obstacles in the interest of science or in the spirit of the explorer, we should not delude ourselves into any supposition that the future of aviation in any sense waits upon the time when a great number of pilots shall have gone and done likewise."

Instead we should seek to develop that knowledge of the airplane's possibilities which is already at hand for "the airplane stands now as a vehicle of comparatively short range. The principles of its design inherently adapt it for short distance operation, and while the range is lengthened from time to time by progress in the engi-

*Dr. Abbot's article "Investigating the Sun" in *The Review* last month describes this work. His article, "A Life of Research," appeared in *The Review* for February, 1927.