- "Nef, the Investigator," by Herman A. Spoehr, assistant director, Coastal Laboratory, Carnegie Institution, Palo Alto, Calif.
- Presentation of the bust of the late Alexander Smith by Ulric H. Ellerhusen, by Mrs. Sara B. Smith,
- "Alexander Smith, the Man and Teacher," by W. D. Richardson, chief chemist, Swift and Co.
- "Alexander Smith, the Investigator," by R. H. McKee, Columbia University.
- Presentation of the bust of Julius Stieglitz by Alice Littig Siems, for alumni and friends, by B. B. Freud, of Armour Institute.
- Address of Acceptance by H. I. Schlesinger, of the University of Chicago.

#### 1:00 P. M.

Official Luncheon, Harrison B. Barnard, University trustee, presiding.

#### Afternoon

Inspection of the laboratory.

#### 6:00 P. M.

Official Dinner (informal), H. G. Gale, dean of the Ogden Graduate School of Science, presiding.

### 8:00 P. M.

Scientific program of the dedication.

"Some Present and Future Problems of Chemistry"

## W. D. HARKINS, presiding

- "Physical Chemistry," G. N. Lewis, head of the department of chemistry, University of California.
- "Industrial Chemistry," Charles H. MacDowell, president of the Armour Fertilizer Works, Chicago; George O. Curme, Jr., Union Carbide and Carbon Co., New York.

### TUESDAY, DECEMBER 17

## H. I. Schlesinger, presiding

## 9:30 A. M.

- "Inorganic Chemistry," Charles H. Kraus, head of the department of chemistry, Brown University.
- "Organic Chemistry," M. Gomberg, head of the department of chemistry, University of Michigan; M. S. Kharasch, University of Chicago.
- "Chemistry Applied to Medicine," Carl Voegtlin, U. S. Public Health Service; A. P. Locke, Seymour Coman fellow in chemistry applied to medicine, University of Chicago and St. Luke's Hospital, Chicago.

## 3:00 P. M.

University Convocation, at which honorary degrees will be bestowed.

#### Evening

The dedication ceremonies will be closed by a banquet, probably in Ida Noyes Hall of the University of Chicago, given in honor of George Herbert Jones. After the banquet Professor Stieglitz will give a short address outlining the plans of development for the department. There will also be other speakers.

# COMMANDER BYRD'S ANTARCTIC EXPLORATIONS

As is fully reported in the daily press, more especially in the New York *Times* and the newspapers affiliated with it in the support of the expedition, Commander Byrd safely returned to his base, Little America, on November 29, after a successful flight across the South Pole, during which he surveyed much adjacent territory. The flight was without mishap and everything worked well. The *Times* announced that it had been directed by President Hoover to forward through its wireless station the following message to Commander Byrd:

I know that I speak for the American people when I express their universal pleasure at your successful flight over the South Pole. We are proud of your courage and your leadership. We are glad of proof that the spirit of great adventure still lives. Our thoughts of appreciation include also your companions in the flight and your colleagues whose careful and devoted preparation have contributed to your great success.

As the Associated Press reports, the Antarctic flight was beset with difficulties far greater than those encountered in Byrd's trip to the North Pole, which was made May 9, 1926. The distance of each flight was about the same, 1,600 miles. On the flight to the North Pole and back, made in 15 hours, 30 minutes, there was no stop.

Commander Byrd flew from Spitzbergen to the North Pole over floating ice fields, arising only a few feet above sea-level, with here and there open leads of water. From the edge of the southern ice barrier he flew 400 miles over an accumulation of ice rising 150 feet or more above the sea and then soared over mountains to the polar plateau and back again.

His flight to the South Pole was over a jagged mountain chain with peaks that rise from 10,000 to 15,000 feet. It is a striking demonstration of the conquest of modern methods. Commander Byrd flew from his base on the Bay of Whales to the pole and back in less than a day. Captain Roald Amundsen, the first explorer to reach the South Pole, using dog sledges and starting from a base which was near Little America, required 97 days to reach the pole. The trip there and back, a total of 1,545 miles, was made in 148 days. He left his base October 20, 1911, reached the pole December 14, averaging about 15 miles a day.

An additional grant of \$25,000 to Commander Byrd's Antarctic expedition is announced by the National Geographic Society. This supplements \$25,000 previously contributed by the society toward the scientific work of the expedition. Dr. Gilbert Grosvenor, president of the society, sent the following message to Commander Byrd:

The National Geographic Society has followed the splendid development of your Antarctic project, from which you and the gallant men of your command are contributing so much to world knowledge of geography. Our trustees and research committee have voted to double the society's original grant, therefore an additional \$25,000 is available when desired. La Gorce joins in best wishes for safety and continued success to you and your men.

# DESTRUCTION OF THE NON-MAGNETIC SHIP "CARNEGIE"

THE Carnegie Institution's non-magnetic ship Carnegie was burned as the result of a gasoline explosion in the harbor at Apia, Samoa, on November 30, which killed its master. Captain J. P. Ault.

According to a Science Service Bulletin, scientific records obtained on the voyages of the ship have been mailed back as she touched various ports. As the ship had been at Samoa for several days, it is supposed that all of the latest data had already been mailed, and that none of the scientific records were destroyed. W. C. Parkinson, senior scientific officer under Captain Ault, who has been made acting commander, reported to the institution that the destruction of the ship was complete, and that only the cash and the ship's books had been salvaged.

The main purpose of the Carnegie was to make magnetic observations in all the seven seas. Because the magnetic poles of the earth, towards which the compass needle points, are not at the geographical poles, the compass does not point directly north or south. Instead there is a certain declination for every point on the earth's surface, which is the angle that it deviates from a north and south line. This must be allowed for by navigators of ships and by surveyors on land. As the magnetic poles do not remain in the same place, the declination at any point constantly varies. Previous voyages of the Carnegie had determined these values for the first time in many points in the oceans. In 1915, Captain Ault took the

Carnegie, then on its fourth cruise, around the South Polar regions in the latitudes between 50 and 60 degrees south. During the coming months it had been planned to cover much of the same track, to determine the variations in the last fifteen years. In fact, many parts of the route for the present cruise were planned to duplicate previous tracks, for the same reason.

Though magnetic observations of declination, intensity, etc., were the first purpose of the Carnegie's voyages, and the reason why it was especially built with scarcely a ton of iron or steel in its make-up, to avoid interference with the delicate magnetic instruments, many other researches entered into the program. Observations of the electricity in the atmosphere, of the cosmic rays that constantly bombard the earth from outer space, of the relation of these things to radio reception, of the depth of the ocean over which they sailed and biological studies of the organisms in the ocean were also in progress.

On May 1, 1928, the Carnegie left Washington for what was intended to be a three-year cruise. On board was a crew of 17 and a scientific staff of 7. The first leg was across the Atlantic to England and Germany, where some additional instruments were obtained. Then she sailed to Iceland, south of Greenland, down the Atlantic and through the Panama Canal into the Pacific. Thence she cruised around the Pacific, finally reaching Japan, and returned to San Francisco last summer, having covered 33,000 miles. Leaving San Francisco on September 3, she sailed to Honolulu and then to Apia, covering an additional 8,100 miles. On the rest of the trip, it was intended that she would sail to New Zealand, then across the south Pacific, passing south of Cape Horn to the south Atlantic, and touching at Cape Town, then across the Indian Ocean to Colombo, Cevlon, then to Australia, back to New Zealand, across the south Pacific again, but farther north than the previous voyage, around the Horn, north to Montevideo, Uruguay, and back to Washington by July, 1931.

## SCIENTIFIC NOTES AND NEWS

At the anniversary meeting of the Royal Society on November 30 officers were elected as follows: President: Sir Ernest Rutherford; Treasurer: Sir Henry Lyons; Secretaries: Dr. H. H. Dale and Dr. F. E. Smith; Foreign Secretary: Lord Rayleigh; Other members of council: Dr. E. J. Allen, Dr. C. Bolton, Professor A. E. Boycott, Professor C. G. Darwin, Dr. C. G. Douglas, Sir Alfred Ewing, Professor E. W. Hobson, Sir Frederick Hopkins, Dr. W. H. Mills, Professor E. A. Milne, Sir Peter Chalmers Mitchell, Professor J. C. Philip, Dr. A. B. Rendle, Mr. A. A. C. Swinton, Professor W. W. Watts and Professor C. T. R. Wilson.

Ambrose Sperry, head of the American delegation to the World Engineering Congress at Tokio, has been decorated with the second order of the sacred treasure in recognition of his services for Japanese-American friendship.

The medal of the Holland Society, awarded annually for outstanding performance in literature or science, was on November 26 conferred on Dr. Theobald Smith, head of the department of animal biology of the Rockefeller Foundation at Princeton, New Jersey. The presentation was made by Charles M. Dutcher, president of the society. Dr. Smith was introduced by Dr. L. O. Howard and Dr. Fenton B. Turck.