he should be found wanting. A man in his position must many times make decisions relating to the use of government funds and be tempted to divert them from their specifically authorized use to some other he may think more worthy. Dr. Hillebrand "leaned backward" in his uprightness and would not countenance any violation of the letter or the spirit of the law. His honesty in these matters was but a further expression of the integrity of purpose that was the great guiding principle of his life, the principle that made him perform a routine analysis with the greatest care, that made him give to any task the best that was in him.

A man of such character and attainments can not avoid membership in scientific societies or escape honorary recognition by the scientific world. Dr. Hillebrand was a fellow of the American Association for the Advancement of Science, a member of the American Chemical Society, of the American Society for Testing Materials, the Washington Academy of Sciences, the Geological Society of Washington and other societies. His election to membership in the American Philosophical Society and in the National Academy of Sciences must be regarded as honors. So, too, was the award of the Chandler Medal by Columbia University in 1916. His address on that occasion, "Our analytical chemistry and its future," is well worth reading by any chemist who may be disposed to regard analytical work as uninteresting and not worthy of a man's best efforts.

The American Chemical Society made great use of Dr. Hillebrand's ability and prestige as a chemist. For years he was an associate editor of the Journal, and with conscientious care read and criticized papers that were submitted to him for his opinion. His criticisms were constructive, and when adverse comment seemed called for he was tactful and considerate of the feelings of the authors. Later he acted in the same editorial capacity for the Journal of Industrial and Engineering Chemistry. During the first years of Chemical Abstracts his abstracts were sent in promptly and they were so carefully prepared as to need no editing.

He served on the society's committees, particularly those that had to do with analytical methods. Until the beginning of this year he was chairman of the Supervisory Committee on Standard Methods of Analysis. No division or section of the society may publish any analytical procedure as a standard without the formal approval of this committee. As its leader Dr. Hillebrand had now and then to bear the brunt of criticism that verged on harshness. He did not let this divert him from the stand he took when he was sure that he was right. On the other hand he was not obstinately dictatorial but would patiently listen to argument, willing to be convinced.

In 1906 he was president of the American Chemical Society. The address he delivered on retiring is one that is worth reading, especially with the thought in mind that he wrote it after a strenuous year of coping with internal dissensions that threatened to disrupt the society. Some of the members most concerned with industrial chemistry felt that their interests were being slighted in the journal, and there was danger that they would form an independent society. The prompt, energetic and tactful action of the leaders in the society, with Dr. Hillebrand at their head, averted this danger by the establishment of the Journal of Industrial and Engineering Chemistry.

With this inadequate and all too brief sketch of Dr. Hillebrand we close. We could not let him pass without a word, but no word can express how we feel about him. No trite and hackneyed phrases can make a stranger know him as he was, or brighten his memory for his friends.

Praise from a friend, or censure from a foe, Are lost on hearers that our merits know.

C. E. WATERS

BUREAU OF STANDARDS WASHINGTON, D. C.

## SCIENTIFIC EVENTS

## THE DRIFT OF THE "MAUD"1

THE following note is based upon wireless messages which have appeared during the last three years in the London Times reporting the progress of Amundsen's vessel, the Maud, in the Arctic. The object of the expedition was to drift in the ice across the North Polar Basin from the coast of Siberia. Amundsen made the northeast passage in 1918-20, but instead of beginning his drift at once, he was compelled to put into Nome, Alaska, in July, 1920. After various delays, the Maud finally sailed from Point Hope on July 26, 1922, but two days later Amundsen left the ship for Point Barrow, to make his unsuccessful attempt to fly to the Pole, and the voyage was continued under the command of Captain Wisting. Herald Island was sighted on August 7, and on August 22 the vessel was frozen in. In a wireless message her position on December 15 was given as lat. 73° 20' N. and long. 173° W. (an error for 173° E.), and she began to drift slowly to the northwest, her position on March 10, 1923 being lat. 74° 2' N., long. 170° 20' In an undated report sent out towards the end Е. of June it was given as 75° 25' N., and 165° E. This

<sup>1</sup> From the Geographical Journal.

course was likely to take the Maud well north of the New Siberian Islands. Up to August it had coincided fairly closely with the drift of the Jeannette under De Long, 1879-81. Had the Maud continued to the northwest, past the De Long Islands, she would ultimately have followed the approximate course of the Fram, which in 1894 had been frozen in to the west of the New Siberian Islands; but during Septemper and October a strong "northwest" (? northeast) gale of long duration was encountered which carried her more to the south and west. Thus on September 6, 1923, the position of the Maud was 76° 16' N. and 163° 30' E., and towards the end of October it was 75° 10' N. and 159° 30' E. She was now drifting closer to the New Siberian Islands (on December 18 her position was 75° 14' N. and 158° 46' E.), and this may have opened the pack. The last message received from Captain Wisting stated that the Maud was clear of the ice on August 9, 1924. This probably means she was then in open water, and had been navigating in the ice for perhaps a month previously. Her position on that date was 76° 25' N. and 143° 20' E. The next position given was that for August 27, when she is described as having passed Laptev Strait, and being then 7 miles from Cape Baranov, "having been compelled, from the impossibility of rounding the New Siberian Island, to turn and go west of Kotelni Island," the most westerly of the group. The attempt to drift across the North Polar Basin had therefore been abandoned, and the remainder of the message makes it clear that Captain Wisting was attempting to return to Bering Strait.

Cape Baranov is in lat. 69° 40' N. and long. 164° E.; the Maud was evidently trying to sail past it eastwards, but ice probably pressed against the coast and no passage was possible. She then turned north towards the Bear Islands, off the mouth of the Kolyma. The position of the Maud, when the final message was despatched on November 9, was given as 4 miles north of Four Columns Island. This must be the Chetyirekh-Stolbovoi Island (Lighthouse Island) of the Admiralty Chart, in 70° 40' N. and 162° E. (In Nordenskiöld's "Voyage of the Vega," vol. 1, p. 428 (English transl.) a reference is made to four columns of rock on Lighthouse Island.) The Maud has therefore failed to reach Bering Strait, and is probably once more frozen in near Lighthouse Island. Captain Wisting says that the Maud, which had on more than one occasion been subjected to heavy ice pressure, had sprung a small leak, and also that there was only sufficient motor oil fuel left for a day and a half. An aeroplane was carried on the Maud, but little success attended its flights. Trials were made on June 5 and 12, 1923, but on June 22 it was damaged in attempting to take off, and on July 16 it was completely wrecked through a forced landing. Scientific observations have been carried out continuously and successfully, particularly with reference to the tidal currents.

## THE BALTIMORE MEETING OF THE AMER-ICAN CHEMICAL SOCIETY

THE sixty-ninth meeting of the American Chemical Society will be held in Baltimore from April 6 to 10. The first day will be devoted to registration and council meetings. On the morning of the second day a general meeting will be held which will be addressed by the Governor of Maryland, the Mayor of Baltimore, Dr. James F. Norris, president of the society, and Dr. Neil Gordon, chairman of the Maryland section of the society. The following days will be devoted to divisional meetings which will be held in the chemistry building at the Johns Hopkins University. There will be several excursions and a number of social features are planned.

All divisions and sections, except the fertilizer division, will meet at Baltimore. The divisions of industrial and engineering chemistry, physical and inorganic chemistry, organic chemistry, and chemical education will hold special general programs on Tuesday afternoon in halls adjacent to hotel headquarters.

In these general sessions the program of the division of industrial and engineering chemistry will consist of general papers, such as "The future of industrial synthetic organic chemicals in the United States," by Charles H. Herty; "Chemistry and the leather industry," by Allen Rogers; "A quarter of a century of chemistry in rubber," by W. C. Geer. Arrangements for full discussion of these papers are being made.

The division of organic chemistry has invited the biological, cellulose, dye, medicinal products, and sugar divisions to join with it in a general program. The paper offered by the division of chemistry of medicinal products by Dr. Edwin C. White, of Baltimore, on "Dyes used as tests of liver function," will be presented at this time. Additional papers will be announced later.

The division of chemical education offers for the general program a symposium on "The place of the electron in the teaching of chemistry," R. A. Baker presiding.

The petroleum division will participate in the symposium on corrosion with the industrial division and will present a list of papers on petroleum technology A dinner for the division is announced for 6 o'clock on Thursday evening.

The sugar division will specialize in papers particularly affecting the refining industry. This is especially desirable, as one of the largest sugar refineries in the country is situated in Baltimore.