death will be deplored by all systematic botanists, as well as by all who knew his genial personality."

Dr. Ferdinand Braun, of Germany, who shared the Nobel Prize in 1905 with Guglielmo Marconi, for distinguished achievements in the invention of improved methods of wireless telegraphy, died on April 14 at a Brooklyn hospital. Death was caused by a heart attack induced by an overdose of morphine, which Dr. Braun is alleged to have taken before arriving at the hospital, to ease pain from an intestinal disorder from which he had been suffering for three years. Dr. Braun was born in Fulda, Germany, in 1850. He came to this country in 1914 as a witness in litigation between the Marconi Wireless Company and the German company which built and operated the wireless station at Sayville, L. I.

Mr. H. J. Helm, formerly deputy-principal chemist of the British Government Laboratory, has died at the age of seventy-nine years.

UNIVERSITY AND EDUCATIONAL NEWS

Mr. J. C. Lincoln has presented to Oberlin College the Mary McKenzie Lincoln Scholarship Fund, to be used in paying the term bill of some young woman, a student in Oberlin, who desires to continue her studies at the summer school of the Marine Biological Laboratory at Woods Hole.

Through the will of the late Henry Janeway Hardenbergh, of New York, Rutgers College has received Mr. Hardenbergh's library in architecture and the sum of $20,000. Mr. Hardenbergh designed and erected Geological Hall and the Kirkpatrick Chapel, and two years ago carried out the remodelling of the chapel.

Announcement has been made that President Wilson has directed the War Department to establish an infantry unit, senior division, of the Reserve Officers' Training Corps at Columbia University.

At the University of Buffalo medical school, Dr. Edward W. Koch has been appointed professor of pharmacology and Dr. Wayne J. Atwell, professor of anatomy, both on a full-time teaching and research basis.

Miss Phyllis M. Borthwick, lecturer in physics at the Ladies' College, Cheltenham, has been appointed assistant-professor of physics and chemistry at the Lady Hardinge Medical College for Women, Delhi.

DISCUSSION AND CORRESPONDENCE

NOTE ON A REVERSE CONCENTRATION CELL

In the Nernst theory of the concentration cell the solution tension of both electrodes is assumed to be the same, but the electrode in the more concentrated part of the electrolyte is supposed to have its rate of solution retarded by the back "osmotic pressure" of its own ions.

Another possible way of regarding the phenomenon is to suppose that the electrode in the solution of higher specific inductive capacity always goes into solution faster than the other, and hence becomes the anode. From this point of view, the solution of metallic salts in water lowers the specific inductive capacity of the water, and hence the electrode in the more concentrated solution of the concentration cell becomes the cathode.

A concentration cell for demonstration purposes is often made by pouring water carefully upon a concentrated solution of stannous chloride, so that the two liquids do not mix, and placing a rod of tin in the two solutions. The tin will rapidly dissolve in the dilute solution at the top, and crystals of tin will be deposited from the concentrated solution at the bottom.

If, instead of pouring water upon the concentrated solution, a solution of stannous chloride in ether be poured upon it and the two solutions be shaken together, most of the salt in solution will go into the water and only a little will remain in the ether and water at the top. Thus the tin ions are highly concentrated in the water and are very dilute in the ether, and their "osmotic pressure" is correspondingly greater in the water than in the ether. Notwithstanding this difference of concentration, if the tin rod be placed in the two solutions, ions will dissolve off it in the