

function?' It was voted after debate that no discontinuous function exists.

At the time of his last illness plans had already been made for an anniversary dinner of the club, at which a loving cup was to have been presented to him as a token of the appreciation, felt by the members, of his quarter century of service as president.

No man could have been more closely identified with Harvard University than was James Mills Peirce. Born and educated in Cambridge, he spent there nearly every winter of his life. From the time of his entrance into Harvard College as a freshman in 1849 until the death of his father in 1880 he lived in the college yard as student, tutor and professor.

He was a man of most sweet and friendly disposition, kind to all with whom he came in contact, slow to anger, aroused only by injustice; a man of wide acquaintance and of many friends, most hospitable in his own home, fond of society and given to sociability. A lover of music and widely read in English literature, he was a man of the broadest intellectual interests.

What marked him most was a great faithfulness. He never faltered in his work, he never lost interest, indeed his enthusiasm grew greater from year to year. The welfare and the usefulness of the university were his dearest concern, and for their advancement was given the whole of a long and active life. He died, as we must suppose he would have chosen to die, working to the end.

J. K. WHITTEMORE.

HARVARD UNIVERSITY.

DISCUSSION AND CORRESPONDENCE.

NORTHERN LIMIT OF THE PAPAW TREE.

SOME years ago I was surprised to receive from a correspondent, Mr. Kenyon, of McGregor, Ia., a specimen of the papaw tree found native in the vicinity of McGregor.

Below McGregor on the Mississippi, between Dubuque and Specht's Ferry, quite a number of specimens of this plant were observed. Some years later, while botanizing in the vicinity of Clinton, Ia., the species was found in flower. I have never seen any fruit at any point near here, but feel warranted in saying that the plants are perfectly hardy and do bear fruit. In all of these cases the plants were found growing on the sides of limestone hills. It may be of interest also to note in this connection that the pecan also occurs on the Mississippi at Savannah, Ill., which is somewhat north of the latitude usually given for it. While it is true that the Indian may have been an agent in the dissemination of the seed of the papaw, it was probably also disseminated in other ways.

L. H. PAMMEL.

THE CRAYFISH INDUSTRY.

IN my recent article on 'The Future of the Crayfish Industry,' in SCIENCE, June 29, two errors appear on page 984. The value \$420 in line fourteen should be \$4,200 and the amount of 165,000 in line twenty-two should be 116,400, as *correctly* stated in the statistics of the Bureau of Fisheries.

E. A. ANDREWS.

SPECIAL ARTICLES.

EMISSION OF ELECTRICITY FROM THE RADIUM PRODUCTS.¹

HITHERTO, the rate of decay of the induced activity produced by radium, has not been studied by means of the charge carried away from the active body by the α and β rays.

The following is a brief report of the results of two series of experiments on the charge of electricity carried by these rays.

In the first series of experiments, a metal wire was made active by immersion in radium emanation; and immediately after removal from the emanation vessel, was placed inside a small hard rubber tube, with very thin walls. The outside of the tube was surrounded by

¹ An abstract of a paper read before a meeting of scientists, at the University of Colorado, on May 5, 1906.