sealed up in a fine glass tube should not be inserted into the very heart of the cancer, thus acting directly upon the diseased material. Would it not be worth while making experiments along this line?

Yours sincerely, (Signed) ALEXANDER GRAHAM BELL.

BADDECK, N. S., July 21, 1903. Dr. A. Graham Bell,

Baddeck, N. S.

Dear Dr. Bell:

The suggestion which you make in regard to the application of the radium rays to the substance of deep seated cancer I regard as very valuable. If such experiments should be made, I have no doubt they would prove successful in many cases where we now have failures.

Yours sincerely,

(Signed) Z. T. Sowers.

THE RHODES SCHOLARSHIPS.

THE trustees of the will of the late C. J. Rhodes have prepared a memorandum for the information of college authorities and intending candidates for scholarships in the United States, which states that the first election of scholars in the United States will be made between February and May, 1904. The elected scholars will commence residence in October, 1904. A qualifying examination will be held within this period in each state and territory, or at centers which can be easily reached. This examination is not competitive, but is intended to give assurance that all candidates are fully qualified to enter on a course of study at Oxford University. Tt. will, therefore, be based on the requirements for responsions-the first public examination exacted by the university from each candidate for a degree. The Rhodes scholars will be selected from candidates who have successfully passed this examination. One scholar will be chosen for each state and territory to which scholarships are assigned.

The committees and the universities making appointments will be furnished with a statement of the qualifications which Mr. Rhodes desired in the holders of his scholarships, and they will be asked in exercising their right of selection to comply as nearly as circumstances will permit with the spirit of the testator's wishes. They will also be asked to furnish to the trustees as full a statement as possible of the school and college career of each elected scholar, with the special grounds of his appointment, together with suggestions, if desired, as to the course of study for which he is best fitted.

It has been decided that all scholars shall have reached at least the end of their sophomore, or second year work at some recognized degree-granting university or college of the United States. Scholars must be unmarried, must be citizens of the United States, and must be between nineteen and twenty-five years of age. Where several candidates present themselves from a single college or university, the committees of selection will request the faculty of the college to decide between their claims on the basis of Mr. Rhodes's suggestions, and present to the committee the name of the candidate chosen by that college as its representative in the final election.

The president of the state university or college is in each of the following states chairman of the committee of selection for that state:

Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, Wyoming.

The following chairmen have been named for other states:

Connecticut, President Arthur T. Hadley, LL.D., Yale University.

Illinois, President W. R. Harper, Ph.D., D.D., University of Chicago.

Kentucky, President D. B. Gray, D.D., Georgetown College.

Maryland, President Ira Remsen, LL.D., Johns Hopkins University.

Massachusetts, President Charles W. Eliot, LL.D., Harvard University.

New Jersey, President Woodrow Wilson, LL.D., Princeton University.

New York State, President Nicholas Murray, Butler, LL.D., Columbia University.

Rhode Island, President W. H. P. Faunce, D.D., Brown University.

In the following states appointments will be made by the chartered colleges and universities in rotation:

California, University of California, Leland Stanford University, smaller colleges every seventh year.

Maine (the order of rotation yet to be fixed). Vermont, University of Vermont, Middlebury College.

Washington (the order of rotation yet to be fixed).

SCIENTIFIC NOTES AND NEWS.

DR. THEOBALD SMITH, professor of comparative pathology at Harvard University, has gone abroad, with a special view to studying the preparation of vaccine virus, which will hereafter be made at the Bussey Institute, of which Dr. Smith is director, under the auspices of the state of Massachusetts.

PROFESSOR FRANCIS H. HERRICK, of Western Reserve University, has been granted leave of absence for the ensuing year. From August 1, 1903, he will be engaged in scientific study in Europe, and may be addressed at Elmhurst, Bushey Grove, Watford, Herts, England. Dr. C. W. Prentiss, of Harvard and recently of the University of Strasburg, Germany, and Mr. Carl B. Tames, formerly an assistant in the biological laboratory, have been made instructors in biology in Western Reserve University, and will have charge of Professor Herrick's work.

DR. CARLSON has been appointed a research assistant by the Carnegie Institution for the coming year and will carry on his work in connection with the Physiological Laboratory of Stanford University and with its Seaside Laboratory on Monterey Bay. The subject of his investigations is 'The Mechanism of Inhibition of the Heart in Invertebrates.'

MR. CHARLES J. BRAND, who for the past year has been assistant in plant economics at the Field Columbian Museum of Chicago, has been promoted to the position of assistant curator, Department of Botany, in that institution. Mr. Brand is a graduate of the University of Minnesota and secured his

botanical training under Professor Conway MacMillan.

DR. M. P. RAVENEL, of the University of Pennsylvania, has returned from Europe, where he has been making a special study of tuberculosis.

THE daily papers report that Dr. H. C. Parker, of Columbia University, and Dr. C. E. Fay, of Tufts College, now engaged in explorations in the northern Rocky Mountains, have ascended Mt. Hungabee, the height of which was found to be 11,500 feet, and Mt. Goodsir, the height of which was found to be nearly 12,000 feet.

DR. G. C. MARTIN has sailed from Seattle for the Kayak Island to investigate the oil fields for the Geological Survey.

MR. CHARLES W. WRIGHT has left Washington to make, for the Geological Survey, an examination of the placer gold region known as the Porcupine district. This district lies close to the international boundary, a little south of west of Skagway and about twenty miles from tide water at Lynn Canal.

MR. G. MARCONI is expected to arrive in America about the middle of August.

PROFESSOR H. M. SAVILLE is spending the month of July in Mexico on behalf of the American Museum of Natural History. A part of the time will be devoted to the ruins of Mitla in order to complete his observations and obtain additional photographs for the report on the explorations recently carried on there by the Loubat expedition, and to make further studies of Zapotecan antiquities. While he is in the City of Mexico arrangements will be made for an exchange of archeological specimens between the Muséo Nacional and the American Museum.

FRANK M. CHAPMAN, associate curator of mammalogy and ornithology, American Museum of Natural History, is in California collecting material for making a group on the Cadwalader fund. He has an artist with him, who will make a study of the region in which the birds are found. One of the proposed groups will represent the bird-life of the irrigated portions of the San Joaquin valley,