found: Frequent and often serious, 9; sporadic, 16; seldom found, 16, and disease not reported, 11. A more wide-spread survey would almost certainly add to the numbers in the classes "sporadic" and "seldom found."

The first class, in which the disease is frequent and often serious, includes only nine out of the 41 counties where it is known to occur, and with one exception—the Isle of Wight—these lie to the east and north of London. There is no indication as yet of any tendency for the disease to extend its virulent range westwards. Severe local outbreaks do occur, but they are usually very restricted, and over the greater part of England it is doubtful if the casual observer would be aware of the presence of the disease.

The progress of those trees in which evidence of continued die-back is no longer visible is being carefully watched, according to the *Times*. The number of such "recoveries" is still large, but the fungus usually remains dormant in the wood of the branches. A renewed onset of the disease has already taken place in some of these trees, so that recovery is by no means assured. A limited number of cases are known where all trace of the fungus has gone and the tree appears perfectly normal.

With regard to preventive measures, lopping is only successful if the disease is taken at a very early stage, and even then there is always the possibility of reinfection. Apart from the removal of dead and fallen trees, successful measures have not yet been devised for keeping in check the elm bark beetles, which act as chief carriers of the disease.

Although there is still no definite record of the elm disease in Scotland, some laboratory work has been done on the sickly elms found during last year's survey in that part of the country. Various fungi have been isolated, and work on these is proceeding.

## CENTER FOR POLAR RESEARCH AT CAMBRIDGE, ENGLAND

ACCORDING to a wireless dispatch to *The New York Times,* the new center for polar research was opened at Cambridge, England, on November 16 by Stanley Baldwin, Lord President of the Council, in the presence of many veteran Arctic explorers.

Designed as a memorial to Captain Robert Falcon Scott and as an information center for future explorers, the new building will house the School for Polar Research, which has been in existence at Cambridge for several years. In the words of the director, Professor Frank Debenham, it will make exploration "easier, less expensive and more valuable."

Mr. Baldwin said in part:

This building has been erected as a testimony to aspirations common throughout the world—a desire for adventure, knowledge and research into the secrets of nature.

Every continent and island in the world has its own tales of heroism and fortitude—tales which have come down from generation to generation to stir the hearts of men. Names like Frobisher, Hudson, Perry and Franklin are still a trumpet call to all those whose heart-strings vibrate to the inner call of adventure.

In the South the two names of Shackleton and Scott stand out supreme, but let us never forget the many others whose names have not lived after them, but whose courage and endurance were as great. Arctic and Antarctic exploration is a prolonged war which needs strategy and carefully laid plans for its successful prosecution. The new building provides a venture in study and research for all those going out into the partly known and unknown.

On the front of the building is a bust of Scott executed by his widow. Above it on the frieze are the words, "Quaesivit Arcana Poli Videt Dei"—"He went seeking secrets of the Poles and he sees God." In the forecourt stands a symbolic statue given by Lady Young as a memorial to the five who died with Scott on his last strategic expedition, among them Captain Oates, "a very gallant gentleman."

The facilities of the building include a library, map room, research room, museums and archives containing all available log books, diaries and weather records kept by polar expeditions.

Polar veterans who attended the dedication ceremony, according to the *Times,* included Dr. Jean Baptiste Charcot, leader of two French expeditions to the Antarctic; Dr. Ejenar Mikkelson, Danish Greenland explorer; Admiral Sir George Egerton, who first went to the Arctic almost sixty years ago; Daugard Jensen, head of the Greenland Administration Board; Vice-Admiral Sir Reginald Skelton, chief engineer of Scott's first expedition, and others who served under Scott or Shackleton in Antarctic adventures.

## RESEARCH IN ENGINEERING AT HARVARD UNIVERSITY

THE following is a list of some of the more important contributions which the Harvard Engineering School has recently made through its research activities as given in *The Harvard Alumni Bulletin:*

(1) The investigation of the properties of steam as part of a rational project, with the experimental work carried out in three institutions. This work has been accepted and is now in course of being embodied in the international standardization of accepted values for the properties of steam. It has been the basis for the design of modern high-pressure and high-temperature steam machinery.

(2) The investigation of fans for mixing large vol-