A FUND of $100,000 is being raised by the trustees and friends of Oberlin, the income from which is to be applied to the reduction of the term bills of needy students. About one-tenth of this amount has already been collected.

THE Commission appointed under the University of London Act, 1898, consisting of Lord Davey (Chairman), the Bishop of London, Sir William Roberts, Sir Owen Roberts, Professor Jebb, Professor Michael Foster and Mr. E. H. Busk, with Mr. Bailey Saunders as Secretary, has commenced its sittings.

THE Montreal correspondent of the New York *Evening Post* states that according to present arrangements the formal opening of the new chemistry and mining building at McGill University will take place on December 20th. There is a possibility, however, that an earlier date may be selected in order to meet the convenience of Lord Strathcona, who wishes to be in Scotland for Christmas day. The Governor-General and the Countess of Minto will be present. The authorities of McGill Un versity have been notified of the loss of between $3,000 and $4,000 worth of chemical apparatus intended for the new chemical laboratories at the University. The goods were shipped by the ill-fated Westmeath, which was lost at sea a short time ago.

DR. JOHN HENRY BARROWS has been elected to the Presidency of Oberlin College. This action was taken by the trustees of Oberlin on Tuesday, November 29th, and the vote was unanimous. Dr. Barrows is widely known as the pastor of the First Presbyterian Church of Chicago, and as the one who pushed the Parliament of Religions at the World's Fair through to its successful end. During the last two years he has been lecturing in Calcutta, India, on the Haskell lectureship of the University of Chicago. Definite word has not yet been received as to his acceptance, but the trustees had assurance that he would accept, before the action was taken.

THE Normal College, New York City, has adopted courses of study by which the students may receive academic degrees. The members of the faculties concerned with the sciences are as follows: Professor Joseph A. Gilette, analytical geometry; Professor Burgess, biology and geology; Emily I. Conant, Ph.D., psychology, and Isabel Camp, Ph.D., pedagogics.

THE Council of King's College, London, have appointed Mr. Ernest Wilson, M.I.E.E., professor of electrical engineering in succession to the late Professor Hopkinson.

DISCUSSION AND CORRESPONDENCE.

A SELF-READJUSTING 'COHERER.'

TO THE EDITOR OF SCIENCE: Van Gulik has shown [Wied. Ann., No. 9.] that, when an oscillating electric discharge takes place across a minute gap between the ends of two fine platinum wires, the ends of the wires are drawn together and remain clinging together after the discharge has ceased.

Upon repeating some of his experiments in a modified form, I am led to the conclusion that such adherence does not always result if the gap be between dissimilar metals.

Advantage may be taken of this to construct a self-readjusting 'coherer.' If a Branly tube be filled with a mixture of tin and aluminium filings it acts normally in so far that, when subjected to the influence of electric waves, its resistance is greatly diminished. When the radiation has ceased, however, its resistance again rises, unaided by any tapping back. A similar result obtains, though the reaction is usually more sluggish, with a pile of alternate disks of aluminium and tin foil.

A. E. LAWRENCE.

COLUMBIA UNIVERSITY,
November 19, 1898.

ADDITIONAL NOTES ON AN APPLE CANKER.

FROM observations made since the publication of the article 'An Apple Canker' in SCIENCE for October 28, 1898, it seems highly probable that *Sphæropsis malorum*, Peck, is not only parasitic on the wood of the apple, but on the wood of pear and quince as well. It would, therefore, seem that a further note on the subject will not be out of place.

In the spring of 1898 specimens of blighted apple twigs were received. It was not determined at the time what was the cause of the

blight, but later the surface of the bark was found to be thickly dotted with the pycnidia of *Sphæropsis*.

On visiting the orchard, which comprised about five acres, was found that the blight had been quite noticeable in 1897. In all cases noticed when once attacked the entire growth of the season had been killed, and in a few instances the disease had extended into the previous season's growth. The dead twigs varied from a few inches to a foot or more in length. But few twigs of the current season's growth were found to be attacked. The growth of the disease on the twigs is determinate, a definite constriction usually separating the dead from the living wood. A few miniature canker spots were found on the smaller limbs, but none were noticed on the larger limbs, as is usually the case. The trees were generally in good condition, and the black rot of the fruit was not specially abundant.

Some pear trees in a door yard about twenty-five rods distant from the orchard were found to be dying. The top of one tree had been entirely removed, while the other trees were a half or two-thirds dead. These trees were also found to be attacked by a *Sphæropsis*, the pycnidia being very abundant on the dead bark. The spread of the disease was from the top downward, a distinct boundary separating the dead from the living wood. A few black shrivelled pears were still attached to some of the dead branches.

A *Sphæropsis* was also found on the twigs of some quince trees that grew by the side of the pear trees. The injury in this case was slight.

At a later date a canker was found on some quince trees in the Experiment Station orchard. Here the appearance of the cankers and their effect was much the same as on apple trees. Pycnidia of a *Sphæropsis* were abundant where the fungus was in active growth. The disease was also found to be abundant in a large qunice orchard, in the vicinity of Geneva, where it has done a considerable amount of damage.

Cultures of the *Sphæropsis* were made from the twigs of the three different host plants, and fruits of the apple, pear and quince were inoculated with material from each of the three series of cultures. *Sphæropsis malorum*, Peck, was produced in each case, while check fruits, punctured but not inoculated, remained sound.

GENEVA, N. Y. W. PADDOCK.

SCIENTIFIC LITERATURE.

Lehrbuch der anorganischen Chemie. Von PROFESSOR DR. H. ERDMANN in Halle, mit 276 Abbildungen und vier farbigen Tafeln. Braunschweig, Vieweg. 1898. Pp. 756.

Professor Erdmann has taken the Gorup-Besanez text-book (1876) as a foundation, but has so changed, improved and modernized the work that it may fairly be considered entirely new.

The printing and illustrations are admirable; particular attention is called to the beautiful colored plates of the spectra of various elements, including argon and helium, which show a wonderful delicacy of tone.

In an introduction of eighty pages the author discusses chemical theory, temperature, gases, atomic and molecular weights, and similar topics. The remainder of the book is chiefly descriptive, yet modern theory is introduced when needed. The striking features of the book are its thoroughness, its completeness, and the particular attention given to technical methods, preparation and experiment. As to thoroughness and completeness the reviewer has not succeeded in detecting the omission of a single fact of importance in inorganic chemistry, which could suitably find place in a book of the size and which was mentioned in chemical journals before 1898.

As to technical methods a few examples must suffice. It is generally known that much or most of the chlorine now made is by electrolysis of aqueous potassium chloride; but that chlorine is technically obtained as by-product in the electrolysis of zinc from zinc chloride, magnesium from carnallite and sodium from salt, will be new to many, as will be the manufacture of hydrochloric acid on a large scale from magnesium chloride and steam: $MgCl_2 + H_2O = MgO + 2HCl$. If we turn to magnesium chloride we learn that, in addition to its use for hydrochloric acid and (as carnallite) for magnesium, 15,000–20,000 tons are yearly exported from Stassfurt to be used in cotton factories instead of oil, as concentrated magnesium