travelled from one end of the tube to the other. These rays—which were called cathode rays—he found to possess certain characteristics; they travelled in straight lines, caused fluoresence of the glass on which they fell, generated heat and were deflected by a magnet. It was later discovered that they would penetrate a thin plate of aluminum and would discharge an electroscope. From this it was argued that the rays were particles of matter in motion and charged with electricity.

In 1895 Roentgen showed that when the cathode rays impinged upon a point rays of a different kind were emitted, the characteristics of these being that they generated little heat, were not deflected by a magnet, but were much more penetrating than the cathode rays To these the names of X-rays or Roentgen rays has been given.

In the light of these discoveries Henri Becquerel, of Paris, who was studying fluoresence, made investigations which showed that the fluoresence of Uranium had characteristics similar to the cathode and Roentgen rays. Madame Curie, a student of the School of Physical and Technical Chemistry, of Paris, took up the study of radio activity. She found the radio activity of the salts of uranium to vary directly with the quantity of uranium, which seemed to prove that the activity was due to that element. From uranium she turned to the investigation of minerals and found that pitchblende, which contained only 90 per cent. of uranium, was eight times as active as uranium itself. This showed that radio activity was not necessarily a property of pure uranium. She then set herself to isolate this impurity by means of chemical reactions and finally a substance intensely radio active, the salt Radium chloride, was obtained.

The radiation from Radium chloride resembles the cathode and Roentgen rays, but when acted upon by a magnet some are deflected towards the magnet, some away from it and some are unaffected, showing that there are three kinds of rays; these have been called Alpha, Beta and Gamma rays. Besides these rays there is a residue of gas called the "emanation." In the tube where radiation is going on Professor Ramsay has found the spectrum of helium develop. Thus the mutability of matter has been shown.

In the physical laboratories of Toronto University it has been shown that all elements possess radio-activity to some degree, and the degree is greater as the atomic weight increases. Perhaps as the atom becomes more complicated it tends to break down and assume simpler forms.

ANNOUNCEMENTS.

The Arts Dance will be held in the Gymnasium next Friday evening, Feb. 5th. Tickets may be obtained at the Undergraduate Union, from W. J. K. Vanston, or at H. H. Love's, 189 Yonge street.

An open meeting will be held in Class Room No. 2 at 4 o'clock on Tuesday afternoon, Feb. 9th. The address will be delivered by Rev. T. R. Robinson, lecturer in psychology, on the subject of "The Novels of Dickens and their Philosophy of Life."

The Medical Society will hold its regular meeting on Friday evening, Feb. 5th. Addresses will be given by Professor McPhedran and Dr. Spragge.

The first debate in the second series of the Intercollege Debating Union will be contested in Osgoode Hall on Wednesday evening, Feb. 3rd. Messrs. M. A. and D. A. McDonald, of Osgoode Hall, supports the affirmative, and Messrs. W. S. Daniels, B.A., and J. T. Knight, of Victoria, the negative on the resolution: "Resolved, that it is the duty of Canada to contribute regular and substantial aid toward the naval defence of the Empire."

The group photograph of the Varsity Editorial Board is now ready for distribution. It may be had at the janitor's office on payment of the price—$1.45.

Owing to the Arts At-home on Friday night, Feb. 5th, there will be no meeting of "The Lit." On the following Friday, Feb. 12th, the final inter-year debate will be held: "Resolved, that the great industrial combinations known as trusts are beneficial to the State," A. H. Sovereign and J. W. Gordon, '05, taking the affirmative, and J. E. Gibson and H. R. Pickup, the negative. R. J. Young, B.A., '02, W. H. McGuire, B.A., '03, and D. S. Dix, '04, will act as judges.

The Philosophical Society will hold its second "open meeting" for the year on Tuesday, Feb. 9th, in Room 2, at 4 o'clock. An address will be given by Rev. T. R. Robinson, B.A., of the Psychological Department, on "The Novels of Dickens in their Philosophy of Life." A cordial invitation is extended to all.

CORRESPONDENCE

To the Editor of Varsity:

Sir,—In view of Mr. Vance's remarks in your last issue, I felt it necessary to point out that the statements in my former letter are perfectly clear and absolutely true. The dinner was the only function of which I had any knowledge or information before the event, and to the best of my recollection the original date fixed in my presence was a Friday. In any case, members of the faculty have many engagements that are not academic, and it is no part of their duty to scan the notices or advertisements in the papers, whether perchance there may not be a college function announced therein; the bulletin board is for undergraduates.

Nor does it at all follow that one will be welcome at every student function. My reason for feeling "like a stranger in a strange land" at such functions was as clearly stated by me, that I was "treated as such"; in other words, I was not, as far as I could see, a welcome guest, nor am I alone among my colleagues in this feeling.

I repeat that if the students desire the presence of the faculty at their functions, they can only have it by invitation. The large attendance of members at the first year reception shows how such an invitation is appreciated, and I feel assured that they would come again, if invited by the same people, because they were made heartily welcome.

It is merely a question of common, every-day civility and courtesy, which the average secretary of undergraduate societies too frequently neglects.

W. H. VanderSmissen.

There was a young man named Willy,
Whose actions were what you call silly;
He went to a ball
Dressed in nothing at all,
Pretending to represent Chili.

—*McGill Outlook.*