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FIRESIDE PHILOSOPHY

By Dr. A. F. Baird, Dean of Applied Science

Engineering is the study and economic application of physical phenomena to the needs of mankind and looking back to what we are told of the simplicity in man's way of living one is struck with the changes which have occurred both in what we consider our needs and the things we have discovered to meet them. Changes which have taken place over the centuries, have not always come gradually, but there have been at times sudden and discontinuous changes which have started a new cycle of stability, like the calm that comes to the earth's surface after the accumulated strain in its crust have resulted in an earthquake. At the present time the rate of change is greater than any in the previous experience of man, and it appears to be still accelerating so there is no lack of prophets who predict that we are at the end of another era.

The production of scientific knowledge has always caused changes of great importance, but the changes lag very much behind the production of science, so that as a rule, the science which is being applied to-day is not the science which is produced to-day, but the science of which the fundamentals were discovered a number of years ago. As the rate of production increases, the period between a scientific discovery and its application diminishes, and whereas it took us fifty years to apply Faraday's discovery of electromagnetic induction, such things as the amplifier tube have been applied on a world wide scale within two decades and at the present time we might be considered as applying generally scientific discoveries of only ten years ago or less.

This rapid change which has been going on in human affairs, having the curious characteristic that it is continuously increasing in rate, may be compared to an autocatalytic reaction in chemistry. An autocatalytic reaction is one in which a product of the reaction increases its rate, so that if you put all the materials in a vessel and start the reaction going, it will begin slowly and then increase in rate and go faster and faster as the product accumulates. Such a reaction ends in a complete conversion of the system into a new form. Sometimes the rate decreases so much that the reaction becomes exhaustive, as the cities of Japan—whose names I can't spell—have recently appreciated. My point is that at the present time, it seems that the very scientific knowledge which we produce tends to increase the rate of change in our way of living, and this is bound to produce a condition of instability for it is certain that change cannot continue to increase at an ever increasing rate indefinitely. This is the thought that is giving concern to all world leaders to-day. There is no doubt in the minds of most people about a complete change coming, in fact it is here, but it may be a benevolent earthquake, I think it is, but we should be prepared to recognize it and realize the futility of clinging too long to the old order.

How does this bear on our educational programme? In this way—that the requirements for a good engineer or other educated person are changing. If you review any of the educational policies of to-day you will find the concern in for things like health education, physical fitness, personality and character training, preparation for living and the enjoyment of the progress of the ages. I write this after returning from the opening games of the basketball tournament in the Beaverbrook Gymnasium. Would our educational authorities of fifty years ago have regarded the playing of basketball of sufficient importance to suspend all lectures in mathematics, philosophy, classics, or science, in order that all on the sidelines might participate in the intense moments of the play on the floor? I think not, even if basketball had been one of the popular games of the day. The roar of enthusiasm from the gallery must have been much the same sound as that in ancient Greece when which spectators cheered the heroes of their famous games, and we still look to and command the culture and learning of the Greeks.

I believe the time is not far distant when a good engineer will get his first division, not because of seventy per cent or over on his examinations only, but because he has developed qualities of leadership, personality and character, which makes his contribution to our civilization worthwhile. Industry is ahead of the Universities in this respect now for that is the way industry grades them. High scholastic standing is desirable and is a measure of one kind of ability, but don't be too discouraged if you find it impossible to be at the top of the class. You may have perhaps something else which is just as saleable.

CAMPUS ENGINEERING STEAMS AHEAD

Wassail Plans "Up In The Air"

- Press Time Flash -

Determined to overcome every obstacle and complete Wassail arrangements, President Logue was at press-time a distraught and harried man.

The stage had been all set for the Engineers great event but a day or so before "W-Day" a hitch developed regarding butter and beer and other necessities of life... However President Otty said in spite of a postponement that the Wassail would be held as soon as a suitable corner could be found.

Despite the fact that only a meagre number of Freshmen had signified their intentions of coming (knute green horns sure don't know the score) all other indications pointed to a record time.

So as your president continues in his frantic search of furnace rooms and W. C. T. U. halls in order to locate a suitable spot remember to be prepared on an hour's notice to attend the event of the year.

Saps Run Campus

The first item of business discussed at Wednesday evening's S. R. C. session was the report of Eric Teed on Constitution changes. Apparently we are to have four reps. from each class, plus a five-man executive and the A. A. A. President. The Treasurer would head a five-man Financial Committee. Very little discussion was held, a few spectators questioning Teed on his proposals, and some expression of gratification that his committee was actually working on its appointed task.

Otis Logue was chagrined when questioned for his committee's report on Pat Byrne's Political Club constitution explained that the committee member had been out of town, and he would have a report at the next meeting.

Chief Returning Officer Al Cameron suggested that his assistants be named, so promptly John Barron, Mary Whalen, Ron Haines, and Charlotte Vaughan were named.

Ben McLenahan reported on the activities of the Veterans' Rink Committee, stated that its chief work thus far had been to contact people downtown to see if they were interested. The S. R. C. then set up a Rink Committee.

Johnny Lawrence explained that the swimmers would have to leave Friday night and come back Tuesday in order to swim at Acadia on Monday night, asked for $114, including $40 from the previous uniform budget. His request was granted, so the swimming team journeys off (minus uniforms?)

Queried as to the reason for the night session, Pres. Owens explained that the candidates for S. R. C. for 1947 were going to address the students at Friday noon. Engineering Brunswickan Editor-in-chief Hugh Seely then brought up the matter of just how much the S. R. C. was to contribute to the cost of this newspaper you are now reading (or are you?), explaining that he had been approached by Mr. Owens re publicity for the coming S. R. C. elections, and as you can see on Page 3, came through in grand style, greatly aided and abetted by Neil Elgee in a mad scramble to acquire sixteen photos for the Monday night train. Owens promptly disavowed any knowledge of the transaction, much to the surprise of Seely, Elgee, and others who were in on the situation, and pointed out that if Seely had been at last Friday's S. R. C. meeting he would have learned what was required of him. When it was pointed out that Owens himself had squelched Henry Durost's attempt to bring up the very matter at the aforementioned Friday meeting, things came to a head. Elgee stated that he could not understand all the to-do over a contemplated $70 expenditure, which was obviously worthwhile, so the Council passed the cost of Page 3.

Bill Stephenson, hockey manager, suggested that $129 remaining over and above expenses of the Moncton trip be turned over to the Rink Committee to cover cost of running their campaign, advertising, etc., before the meeting adjourned.

FREE FILM SHOWING

The first Science Film Night, sponsored by the Fredericton Branch of the Canadian Association of Scientific Workers will be held Saturday, March 9, 8.00 P. M. at the Normal School Auditorium.

Program:—Curves of Colour; Looking Through Glass; Spinning Levers; Unseen Worlds (The Electron Microscope); World of Plenty (Food Distribution and Nutrition).

LIQUOR TEST

Connect 20,000 volts across a pint.

If the current jumps it, the product is poor.

If the current causes precipitation of lye, arsnic, slag, alum, and bits of kaolin, the whiskey is fair.

If the liquor chases the current back to the generator—

You've got good whiskey.

Khaki College-England

The Khaki University of Canada in the United Kingdom was established by the Canadian Army in England in the summer of 1945. At the time of its conception, shortly after V-E day, it was anticipated that something of the order of 150,000 Canadian troops would spend the winter of 1945-46 in England. It was the purpose of the Khaki University to provide for these officers and men of the Canadian Army, other than the Occupational Force, an opportunity to begin or continue their university education while awaiting repatriation. The early and unexpected collapse of Japan permitted much more rapid repatriation than was expected, so "Khaki College" was prevented by circumstances from fulfilling the purpose for which it was originally intended.

The University consists of two groups: the residential college, and an extension group studying at British Universities and commerce. The residential college is situated near London and provides two terms of study in the arts and science subjects which correspond to the first two years at U. N. B. Each student does the work of a regular year course in two subjects during each term. This will give credit for four subjects at the end of the second term in April 1946. Examinations in each subject are provided and graded by representatives of the University of London so that course credits will be recognized by any Canadian University.

The enrollment for the first term was about 600, including about 50 women from the C. W. A. C. The number has changed considerably due to repatriation of first term students. The teaching staff was drawn almost entirely from the army overseas. The President, Brigadier Beament of Ottawa, is being ably assisted in administration by Dr. J. R. Petrie, from U. N. B., who is Vice-President.

Military rank is of no significance on the campus of Khaki College, and has been replaced by a simple shoulder flash and a band to distinguish faculty from students. The students conduct their own affairs under an Administrative Council and are divided into "Houses", each with its own executive. The Houses, and laboratories are named after Governors-General of Canada.

The pedagogic aspect of the Khaki University is noteworthy. It is, in the true sense of the word, a Canadian University both in its staff and its students,—all provinces being represented in both groups. It was provided with a faculty large enough to require no more than 30 students in any one class, which is a striking comparison with the facilities of Canadian Universities, especially at the present time. The organization of courses for Khaki College showed very clearly how little uniformity there is in the curricular of Canadian Universities. If these are ever standardized or a national university established, the Khaki University should provide an excellent model.

DEDICATION

We wish to dedicate this issue of the Brunswickan to all former Engineering students of U. N. B. who gave their lives in the late world conflict.

Richard L. Lee	'32	Albert A. Miller	'41
Charles L. Stevenson	'34	Richard Logie	'41
Ralph F. Davenport	'34	Donald Parker	'44
Vernon E. Sox	'35	James L. Richards	'43
H. Kenneth Corbett	'38	Frank A. Milbury	'44
Lawrence A. Clements	'39	Jack Stewart	'45
R. Reginald Stuart	'41	Leo C. Armstrong	'46

President's Message

This year it was impossible to have the Engineering Dance, Wassail and Brunswickan during one week, but none of the spirit of these three Engineering endeavours was lost; the Dance was held earlier and its substantial profit will go a long way in making the Wassail the usual friendly banquet.

This is the fifth Engineering Brunswickan, of larger size and distinctive blue color, and the credit for this edition goes to the Editor-in-Chief, "Hugh" Seely, and his staff. In attempting to acquaint everyone with our Engineering work, many of our articles are technical but we feel they are enlightening and educational.

Due to the very large Freshman Class, necessitating the opening of Alexander College, we have this year the largest Engineering Society in the history of the University.

During the Annual Meeting of the Engineering Institute of Canada, the Presidents of all undergraduate societies gathered in Montreal to discuss their common problems. The meetings were very successful and the resolutions

OTTIS LOGUE

passed on to the Institute for their action covered employment, salaries, working conditions, courses of study, student papers in the Journal and financial assistance during undergraduate years. This was the first time a meeting of this type has been held but everyone felt that it was a benefit to all societies and should be made an annual event.

Proposed Addition For Civil Building

"Something new has been added," will be the byword of the Civil Engineering students as they climb "Up the Hill" for their 1946-47 session. And what is this new addition? An escalator?—No. Concrete walks?—No. Paved roads?—No, none of these things, but it is another much needed improvement. Yes, an addition to Gods own territory, "The Civil Engineering Building." You Freshmen and Sophomores Civils won't have to go your draughting on your neighbour's back any more.

Due to the terrific influx of new students entering the field of Civil Engineering, an addition to the C. E. Building was proposed, has been approved by the Senate and it is hoped, will be ready for use at the beginning of the fall term.

The plans call for a 45 x 45 foot addition to the right side of the building it being the same height as the present structure. The building material used will be red brick.

On the ground floor of the building the Concrete Lab will be moved from its present position to the present machine shop. The new lab will be constructed in two parts separated by windows. One part will be used for the preparation of concrete test pieces, the other for their testing. The old concrete lab will be remodelled for a modern lavatory.

The boiler room will be enlarged to include the old lavatory. The hydraulic lab, the hall, and the engine room will be unchanged. But from the engine room we will enter into a new and up to date machine shop, which will be much larger than the present one. It will cover all the ground floor of the new addition.

The first floor will remain practically the same as it now, with the exception of the mechanical drafting room, which will be decreased in width to allow for a corridor through the centre of the building as an entrance to the new addition. On the left side of the corridor will be a lecture room with a capacity of one hundred students. On the right side of the corridor the present lecture room will remain the same, but with the new addition, there will be an office, a blue print room and a small lecture room, respectively.

The only extension on the top floor will be an enlargement of the present FRESHMAN DRAFTING room to include all the proposed new addition on that floor. The drafting room will then be able to hold one hundred and twenty-five students, and will solve one of the greatest problems confronting the Engineering staff.

Dr. Turner stated that the furnishing of the new addition will be as modern and up to date as possible, but that some materials are very hard to get and that the students will have to carry on as before until these new materials are procurable.

CO-ED WEEK

Yes, you big handsome males, here it is at last; after many long weeks of waiting and hoping the big event has arrived—Co-ed week—in all the glory, with a full calendar of social events to keep you hopping every night. Now its your turn to sit at home and wait for the phone to ring. Now you know what these gals go thru' waiting, hoping praying — "Oh my there's the phone ringing—oh heck its only Bill wanting to know what Math -problems we have for to morrow". And so it goes—a busy week of entertainment for some, a great week of study for others. Just pray that you're among the former.

For the benefit of freshmen and upperclassmen who may have rusty memories we are listing a few of the main Co-ed week rules which must be strictly adhered to under penalty of—

(1) All social etiquette is reversed i.e. the girl acts as the boy and takes the initiative in all matters.

(2) Such things as girls on the outside, opening the door for men, helping males on with coats, footing expenses, etc., etc., must be carried out fully.

(3) Girls call for boys on all dates and take them home afterwards.

(4) Girls invited in for Chesterfield rugby must leave at a reasonable hour—say three a. m.

(5) Wolf howls are not allowed in public.

(6) Girls must at all times do everything in their power to make the boys feel right at home.

SCHEDULE FOR CO-ED WEEK

Sunday—Church and Hymn Sing. Afternoon walk in Odell Woods. Evening Tea—introduce him to family. (This always makes him feel better.)

Monday: Movie—Lunch (not at Tarts). Spooning.

Tuesday: Dinner at her house (Chicken, if possible). Bridge in evening. If he gets bored, switch to poker.

Wednesday: Basketball in p. m. Co-eds challenge Beavers. (Admission on student pass)—Lunch—Spooning.

Thursday: Intercollegiate Boxing Meet. Take him to the fights. Bring lots of cigs, gum and peanuts—Home (Lunch, if possible).

Friday: Movie or moonlite walk, or if possible, a little house party with corn popping, marshmallow roasting and the like. Spooning, if possible.

Saturday: The Sooper Dooper Dance in the gym. And oh yes—you might take him skiing or hiking Saturday afternoon. (Crock is advisable for dance, especially if taking a forester.

This completes the week and if you have properly planned and budgeted for it, you should wind up with a steady man and a minus bank account.

Date your man—Don't Delay—It Doesn't Pay".

'Chez Frosh'

Saturday night from 8.30-12.00 the Freshmen class will play hosts to all the Upperclassmen in the traditional "Thank you" for their Freshman Reception.

The Freshmen have planned a bang-up evening for all those who take advantage of their hospitality. Couples and stags alike will be admitted on their student passes, to a night of dancing to the music provided by the Merrymakers' Orchestra. The big attraction of the evening will be the floor show imported from Saint John—several gorgeous gals dancing and singing—enough to please the heart of any college man.

The affair is being run cabaret style, including tables decorated in coloured paper and emblazoned "Chez Frosh." Even napkins will be provided by the thoughtful Frosh. The tables will not be reserved, so it will be best if you plan to go, to be there, early.

Singing stars of the visiting show will be Shirley Kinsman and Ethel Richards. Remember, for an evening of dancing and entertainment, CHEZ FROSH.

ATTENTION

"Up the Hill 1946" is away behind schedule, and at its present rate of progress will not reach you until June.

"I might have known".. is.. the comment all of you who read the above statement will make.

BUT!!—WHY IS "UP THE HILL 1946" AWAY BEHIND SCHEDULE?

We'll tell you why! Because of complete lack of co-operation on the part of nearly every student on this campus! You have no hesitation in giving the Year Book staff a slam because they go behind schedule, but what are you doing to help?

It all began with class pictures last fall. Very few of the freshmen turned out for those. Then came our campaign for pictures. Very few pictures or snaps have been turned in. Next our attempt to find out how many wished books, so that we might have some idea of how many should be printed. Half of you ordered books, AND THE OTHER HALF IS GOING TO BE LEFT WHEN THE BOOK COMES OUT, FOR WE ARE NOT RISKING OVERPRINTING. Then graduate writeups. Diligent efforts on the part of the staff got all except five writeups in, although co-operation from the Seniors has been the best of any. Most of you who were asked to go to Harvey Studios have done so, although one of our most prominent graduates has yet to be photographed. The blank space in the book will let you know who he is. For the last two weeks, we have been trying to get organization writeups from every society which wishes to be represented in the Book. We've got about eight. Do the rest of you wish to be included? Where is your writeup?

WE ASK YOU!! WHY IS THE YEAR BOOK LATE?

REPORT FROM ENGINEERING INSTITUTE

by Dr. E. G. Turner
Member of the Institute Council

The increasing popularity of the Applied Science courses is being reflected in the membership of the Engineering Institute of Canada; the total number of corporate members being almost double what it was at the end of the first World War. The corporate membership of the Institute is now nearly 7600 members, and this does not include Juniors and Students. The attendance at annual meetings is setting new records with each succeeding year.

This year the attendance at luncheons and at the annual Dinner, all held on the Normandy Roof of the Mt. Royal Hotel, the first week in February, reached more than one thousand. At one of the luncheons, the Presidents of the Student Engineering Societies from all Universities conferring Engineering Degrees in Canada, occupied places at the head table. Our President, Ottis Logue, was introduced and took his bow. The comment around the writer was that this student assembly made the best looking head table for some time.

The presence of these young Engineers was made possible through the generosity of the Institute in providing funds to meet the railway expenses of the delegates. Since the aggregate cost to the Institute was some fifteen hundred dollars, it was a rather serious innovation from the standpoint of the Finance Committee, but in review, the members of the Council agreed that the venture was well justified by the enthusiastic response.

Of interest to U. N. B. was the presentation of the Martin Murphy prize to Fred Davidson, our 1944 President. This presentation was made at the Annual Dinner, and is for the best thesis submitted to the Institute by Junior and Student members of the Maritime Provinces.

The Institute welcomes the young Engineer, and in 1937 set up a Special Committee, on the welfare of the Young Engineer, under the Chairmanship of the late Harry Bennett, a U. N. B. graduate of the Class of 1908, and a winner of the Rowhun Medal for the highest standing in the graduating Class in Civil Engineering at U. N. B. So well did Harry Bennett administer the affairs of this Committee, that after his untimely death, just before the Winnipeg meeting in 1945, a memorial to his memory was voted by the Institute Council. This memorial is in form of a Fund, the income from which, will provide future scholarships for students in Engineering. The esteem and affection in which all members of the Institute held Harry Bennett is a source of great pleasure and satisfaction to us here at his old University.

Any Engineering student in good standing, at any recognized University in Canada may apply for admission as a Student member. Applications forms are available at the Engineering Office, in the Civil and Mechanical Engineering Building.

Seniors Elect Life Executive

Al Cameron was the successful candidate for Life President of the Class of 1946, defeating his only rival, Ted Owens. Al richly deserves the honor, having been one of our most prominent students (and Engineers) during his four years here.

After a first election had narrowed a field of five candidates to two, John Lawrence and Ottis Logue, Wednesday's poll resulted in victory for John Lawrence, popular Science student. We look forward to an interesting Valedictory this coming Encaenia.

Four candidates were nominated for Life Secretary, and the first election narrowed the field to two, Dorothy Loughin and Eileen Nason. Eileen was the successful candidate, and to her falls the duty of keeping the members of the Class of '46 in touch with one another.

Our congratulations go to Al, Johnny, and Eileen, and we wish them all the best.

- Popular Pin-ups -

Upper Left—Some of our Junior Electricials waiting impatiently for Jimmy's lecture to start.
Centre Top—The old foursome, Graham, Scott, Brooks and Baldwin. All Senior Electricals—hey wait! how did that Geologist Scott get in this Engineering Brunswickan.
Upper Right—Scrub on Lynch boy—With a figure like that you can wear a bathing suit all the time.
Lower Left—Foggy City boys—Fenwick and Crowley—Pride of of the Nurses' Residence—till 10.30 P. M.
Lower Centre—"Flash" Brooks, star of Senior Interclass hockey.
Lower Right—Gandy at work— Don't blow a fuse John.