

Soundless Auto Soon Says Alberta Chemist

By Pat Mooney

Sports car fans, watch out. An absolutely noiseless car is possible, and, could become common in a decade or so.

Among other advantages, it would have the virtue of needing gas only about as often as present cars need oil changes.

The power for this vehicle would come from the fuel cell, a newly-developed apparatus for producing electricity.

Professor R. N. O'Brien of the chemistry department described today the cell and its possible uses.

GASOLINE, NOT METAL

Like an ordinary battery, the cell uses a fuel to produce electrical energy. However, instead of a metal such as lead or zinc, it can use gasoline. This has a double advantage: gasoline is much cheaper than lead or zinc and it produces about 10 times the number of kilowatts per pound.

Superior efficiency is an added advantage: when producing 20 per cent of its potential energy (output), it is 100 per cent efficient. This percentage drops as the power output increases, but still remains higher than that of a standard battery.

Fuel cells are a flexible power source, and can easily be regulated to produce a higher or lower percentage of their potential. Furthermore, the cell never wears out and never has to be thrown away. Only the fuel supply has to be replenished. For this reason, it is sometimes called a continuous feed cell.

The cell's possible uses in industry are being investigated, and researchers are trying to overcome its few drawbacks.

HIGH INITIAL COST

One of these is the present high initial cost involved, caused by the fact that the catalysts necessary are either silver or platinum, both rather costly metals.

Experiments are being made with cheaper substitutes such as one of the boron-nitrogen compounds. Another disadvantage is that low-temperature varieties of the cell are as yet not very reliable.

However, in view of the fuel cell's numerous advantages as a source of electricity, major companies are con-

sidering its possible commercial and industrial uses. A major Detroit car manufacturer is exploring its capabilities for running cars—they say they will possibly have a fuel-cell operated car in five years. Allis-Chalmers has demonstrated a tractor run by a fuel cell.

PROVIDE EXCESS ENERGY

One of the original proposals for fuel cells suggested their use in nuclear power generation plants. Since the power level in these plants has to be kept constant, fuel cells could be used to provide excess energy required in periods of peak demand, so that one source would never be over-taxed and the power level would not fall below a certain point.

The uses of the fuel cell in smaller ways, such as in the home, are only beginning to be explored. General Electric has developed a fuel cell that will run on methane (the main constituent in Alberta's natural gas). Such a cell could possibly take the place of the furnace.

It could conceivably supply most household electricity. Professor O'Brien said that it "makes possible the best modern technology in heating and lighting." He added that he is convinced that the fuel cell will be one very important method of generating power in the future.

Apparently the American Space Program agrees—the next project, Gemini, is equipped with a fuel cell.

Problems Stem From Pipestem

By Bruce Ferrier

Ah, the cost of sophistication!

When I first set out to become a pipe-smoking man, I knew little of the terrible traumas connected with the enterprise. To me a pipe seemed no more dangerous than any other inanimate object.

I soon found out different.

Complications first arose when I attempted to obtain a pipe. The only one handy had been brutally separated into unequal halves—bowl and stem. Undaunted, I glued them back together.

However, when I first went to use the thing, my drooling state of anticipation caused an unplanned-for accumulation of moisture in the pipe stem. This loosened the glue, and I was left holding the stem as a bowlful of hot dottle cascaded into my pants-cuff.

Repairing the pipe again, I then tried to perfect the peculiar sucking motion common to most accomplished pipe-smokers and bottle babies. Proper completion of the puffing routine requires closing the mouth, closing the throat, filling the mouth with smoke, opening the mouth, and expelling the smoke.

Something went wrong. First I omitted closing the throat; while I was recovering from partial asphyxiation, the pipe went out. Then I forgot opening the mouth—the resulting cascade of ashes obliterated the first 16 lines of my Basketweaving 213 essay.

After I treated the burns resulting from periodic bursts of flames from the pipe bowl, and swept up the tobacco spilled before I discovered that one cannot lean over while clenching a pipe between the teeth, I completed the cleverest maneuver of the evening by closing the lid of the trash can firmly on pipe, tobacco, and hopes of becoming a pipe-smoking man.



EARL PALMER

Palmer Chosen By Christians For Reality

Reality—what it is?

This is the topic of a campus lecture series to be presented by Earl Palmer, minister of the University of Washington Presbyterian Church in Seattle.

The campus Christian groups have chosen Mr. Palmer to present the challenging subject to the university community.

CHRISTIAN REALITY DISCUSSED

The series is intended to discuss a Christian understanding of reality, an understanding of Jesus Christ in history, and a consideration of our present world crisis from a distinctly Christian perspective.

It will try to acquaint students with the essence of Christian thought and interpretation of experience, and to demonstrate its relationship to contemporary problems.

Mr. Palmer is a graduate of political science from the University of California, and of the Princeton Theological Seminary in New Jersey.

He has shown himself to be able to communicate with students in lectures at the University of British Columbia.

REFRESHING LECTURER

His lectures "seemed to be refreshing and free from trite, over-used Christian clichés," according to Marion McFarlane, spokesman for the Christian Group Committee.

He will speak at a faculty luncheon and will meet campus leaders at a smorgasbord supper.

Scholarships Taxable?

WASHINGTON (CPS-CUP)

—The U.S. Treasury Department and Internal Revenue Service (IRS) officials are meeting with college and university representatives to work out new guidelines for taxing fellowships and scholarships given to students.

American Council of Education officials (ACE) were the most recent representatives to confer with government officials about "a complete revamping of taxes on student grants."

A study has been underway since the IRS and Treasury officials were forced into agreeing that students receiving scholarships and fellowships, which included such duties as teaching practical research, did not have to pay income tax on the grants.

DECISIONS WERE FORCED

Their decision was forced last summer by two tax court decisions. One involved a New York University student who was given a fellowship for working on an Army Signal Corps research project; the other, a Vanderbilt University student received similar aid for another research project.

In both cases, the courts ruled that the students did not have to pay income tax on the fellowships granted for the work. Officials said the ruling would apply to such cases until new tax legislation was completed and proposed to Congress.

SUITS DROPPED

As a result of the ruling, hundreds

of suits pending against students who have refused to pay income taxes on such grants have been dropped; in some cases, refunds have been made.

The temporary ruling upset a section of the 1954 tax code, requiring students to pay income tax on grants of money for part-time work such as teaching or research.

Exempted under the code were specific cases where the work involved led to the award of a degree; cited were such cases of practice teaching for students seeking education degrees.

But the court ruling held that the work the students were doing was part of earning their degrees.

Liberals Shot Own Leaders At Party Meet

There was a political target practice in Pybus Lounge Wednesday.

Dave Hunter, provincial Liberal leader, J. Harper Prowse, national Liberal vice-president, and Alan O'Brien, provincial party organizer, allowed 20 campus Liberals to grill them on all political issues.

Mr. Hunter indicated that the lowering of the voting age to 18 was favored by the party, and that younger Liberals would find much for them to do. He also stated that he would show that men recently out of university could win provincial seats.

Mr. Hunter also stated that, if the party would work for the next four years, it has a very good chance of defeating the provincial government.

NEW RESOLUTION
Mr. Prowse informed the meeting that a resolution would be introduced at the Provincial Convention to be held this weekend, suggesting that the party study the advisability of lowering all aspects of the legal age to 18.

Stolen Coffin Stops Coughin'

By Lawrence Samuel

Who stole the coffin with the flip-top lid?

Someone stole the coffin with the flip-top lid.

The frats stole the coffin with the flip-top lid.

At least Professor A. W. Eriksson thinks the frats may have stolen the coffin with the flip-top lid. At least someone stole it.

The coffin was on a poster in Room 218 of the new Education Building. It warned of the cancer danger from smoking. Another poster was burned—by cigarette tips.

The posters were brought from England by Professor Eriksson when he returned from a recent trip. The stolen poster won second place in a contest of professional artists trying to fight the spread of cancer through smoking. They were also featured in an article in a recent *Time*.

FILTER
Player's

The best-tasting filter cigarette