THE EDUCATIONAL HORIZON

PRESENTING NEWS AND VIEWS OF INTEREST TO TEACHERS AND ALL OTHERS SEEKING IMPROVEMENT IN EDUCATION

As the school year is very near its close, and as many pupils will soon be writing the matriculation examinations, this will be last issuse of the Educational Horizon for this term.

Our main thought throughout the year has been to give the teachers and pupils as much help and service as possible. We have tried to provide material which has dealt with many of the problems facing our teaching body and having a direct bearing upon the people of this province.

We are grateful to the publishers, correspondents and all others who helped and encouraged us in our efforts. We can again report the very finest co-operation whereever co-operative effort was needed.

To our teacher readers we hope your summer vacation will come up to your expectations in every respect and provide you with the rest and relaxation which are so essential to the best work when on duty.

BAUXITE

Out of bauxite, a kind of clay, found in United States, France, and British Guiana, the chemist has made aluminum. It is one of the most important metals for wartime uses. Aluminum alloy is almost as strong as grades of steel, yet with one-third the weight of steel, which makes it fine for airplanes. More than 60 per cent of the net weight of an airplane is aluminum alloy. In France it is found at Les Baux, S.E. France, Antrim, U. S. A., W. Indies, and elsewhere. From it aluminum is extracted in the very high temperatures available in electric furnaces at Niagara Falls, L'Argentine (France), Kinlochleven (Scotland).

CORTISONE

In 1949 a new remedy was found that offers hope for arthritics.

This new remedy is cortisone and is a substance produced by the adrenal glands—glands found in man and animals. Very little cortisone can be manufactured by chemists at the present time, however, and there is by no means enough for those who need it. Its use is restricted now to hospitals and clinics. Forty head of cattle must be slaughtered to provide enough cortisone for one daily dose for one patient. The production of cortisone requires thirty-seven operations. This process is the most elaborate and complicated chemical synthesis known to science.

Scientists hope now, however, that it may be possible to make cortisone from an African plant called Strophanthus. It takes five years for the plant to bear seeds, and it is from these seeds that cortisone might possibly be made. B. O. K.

THE VALUE OF CROP ROTATION

1. It maintains the humus supply by means of a grass crop.
2. It restores nitrogen by the growing of legumes. The supply of nitrogen in the soil can be maintained by growing legume crop once in four years.
3. It alternates crops having different root systems and habits of growth, so that plant food is taken from different soil levels rather than only one.
4. It helps to control weeds, fungus diseases and insects. Summer fallow and intertilled crops are very effective in controlling weeds. Many fungi and insects attack only one kind of crop, and by change of crop they are controlled.

MATCHING GAME

Copy the first name in the list No 1. After it write the correct explanation from list No II.

No. I

1. Tundra, 2. Guilds, 3. Sampans, 4. Mob, 5. Boomerang, 6. Tasmania, 7. Blackfellows, 8. Darwin, 9. Station, 10. Copra, 11. Latex, 12.Malays.

No. II

1. A weapon of wood shaped like a new spoon. 2. The people of Java and other near-by islands. 3. A flat stretch of land covered with bogs and marshes in summer and snow and ice in winter. 4. Natives of Australia. 5. The milky sap of the rubber tree. 6. Groups of people who worked together for the good of everyone in the group. 7. Another name for houseboats. 8. A city in Australia. 9. An island off the coast of Australia. 10. The name used in Australia for a herd of cattle. 11. The dried meat of the coconut. 12. Another name for a ranch.

QUIZ (Know Your States)

1. In what large city of the United States can you stand on the river bank and look south into Canada?
2. Where can a man have his foot in four states at once?
3. The centre of what river bed is a state line.
4. Name three state capitals that just missed getting into other states.
5. What state has the longest coast line?
6. How many of the Great Lakes lie entirely within the confines of the United States?
7. What two states are tied in having the most bordering states?
8. In what state do you find the geographic centre of North America?

CANADA

Canada leads the world in the productions of nickel, asbestos, platinum and radium, ranks second in gold, in copper, (imported ore), zinc, and molybdenum, third in cooper, lead, magnesium and arsenic, and fourth in silver. It is the leading nation in the export of base metals. Mining is carried on in every province except P. E. I. Ontario leads by producing over 40 per cent of the total mineral production of the Dominion. Quebec holds second place.

Newfoundland's forests of balsom, fir and spruce, raw materials for pulp and paper mills are in the river valleys and along the coast.

Cellophane was first manufactured in Canada in 1932, at Shawinigan Falls in Quebec.

The largest sardine-herring canning industry in the British Commonwealth is situated at Blacks Harbour, N.B., On Canada's East coast is the world's largest lobster fishery. Practically the world's supply of canned lobster is produced in the Atlantic Coast provinces.

At Steveston, B. C., is one of the largest salmon canneries in the world, and at Prince Rupert is the world's largest cold storage fish plant.

Canada is the world's greatest maker of newsprint—that is the paper on which newspaper is printed.

Canada has the world's second largest hydro-electric system. The Saguenay River Ship-Shaw Plant and the St. Lawrence River Beauharnois Plant are the largest of the developments in Canada.

The Province of British Columbia leads in production of lumber for construction purposes, followed by Quebec and Ontario. The Province of Quebec leads in paper production.

PAPER MAKING

Canada has all the things necessary for making peper. They are as follows:

1. Wood. Paper is made from wood and Canada is a land of forests. One and a quarter million square miles of Canada are forested., of which over 800,000 square miles are productive. Of the productive, 435,000 square miles are within the reach of Canadian industry to-day.
2. Power. The falls and rapids of Canada's great rivers supply power needed to run the turbines that make electric power. The plup and paper industry is the largest user of hydro-electric power in Canada.
3. Water Waterways are needed to float logs to mills, and in the mills themselves large quantities of water are used. As much as 250 tons of water may be used to make one ton of paper. Canada is rich in waterways.
4. Markets. Canada is next door to the greatest pulp and paper buying country in the world, the United States.
5. Men. Canada has men of the ability and the training necessary to carry out all the jobs in the changing of wood into paper. In this rapidly expanding industry more and more men are needed. These men Canada can and will provide.

The pulp and paper industry has grdwn to great importance in Canada because she has all of these factors; forests, river routes, water power, mills and machines, men, and markets.

Most important are the forests. Before we can have paper, trees of the forest must be cut down and taken to the mill. This is easy to say, but, to carry it out, much planning and work have to be done.

CURRENT EVENTS

The Lieutenant-Governor of Alberta is John J. Bowlen.

The Director of the European Recovery Plan is Paul G. Hoffman.

The Prime Minister of Pakistan is Liaquat Ali Khan.

The Premier and Foreign Minister of the People's Republic of China is General Chou En Lai.

The United Kingdom High Commissioner to Canada is Sir Alexander Clutterbuck.

The President of Finland is Juho Paasikivi.

Prime Minister of Western Germany is Konrad Adenauer.

The Secretary - General of the United Nations is Trygve Lie.

The first president of India is Rajendo Prasad.

French Minister of Foreign Affairs is Robert Schuman.

India's Ambassador to the United States is Vijaya Lakshmi Pandit

Canada's Ambassador to United States is H. H. Wrong.

Canada's High Commissioner to Britain is Dana Wilgress.

The Post Master General of Canada is Hon. G.E. Rinfret.

Canada's atomic plant is at Chalk River, Ontario.

The population of Canada is estimated to be 13,707,000.

The population of the United States is estimated to be 150,604,000.

The total area of Canada is 3,842,410 square miles.

The area of the United States (including Alaska) is 3,603,187 square miles.

The area of Europe is 3,776,700 square miles.

The winner of the Nobel Physics Prize of 1949 is Dr. Hideki Yukawa.

The Prime Minister of Greece is Nicholas Plastiras.

The leader of the United Mine workers of America is John L. Lewis.

Prime Minister of India is Jawaharlal Nehru.

Minister of Resources and Development (Canada) is Hon. R. H. Winters.

Minister of Citizenship and Immigration (Canada) is Hon. Walter Harris.

Minister of External Affairs, Canada, is Hon. Lester Pearson.

Britain's Foreign Minister is Hon. Ernest Bevin.

The Canadian High Commissioner to Australia is Maj.-Gen. L. R. La Flèche.

The Prime Minister of Australia is Robert Menzies.

The Prime Minister of New Zealand is Sidney Holland.

The Prime Minister of Japan is Shigeru Yoshida.

The Lieutenant Governor of Saskatchewan is J. M. Uhrich.

An Ambassador is a minister of the highest rank sent to a foreign capital to represent his country there.

He has the right to a personal interview with the sovereign or chief magistrate of the country in which he resides.

A High Commissioner is the representative of one country, stationed in another. It has become restricted to the chief representative of a member of the British Commonwealth, stationed in Britain or to the chief representative stationed in one of Dominions.

An Embassy is the official residence of an ambassador, and is also applied to the Ambassador and the body of deputies that make up the Ambassador's staff.

IRON

The largest and richest iron-ore deposit in the history of the world has been discovered in Venezuela. The lode is said to contain over a billion tons. This mountain of ore, known as Cerro Bolivar, juts upward 2,000 feet from a great surrounding area of grasslands, the mountain is visible for a great distance.

The discovery presents massive construction problems in order to get use of the ore. A decision is expected soon on whether to transport the ore via the Orinoco River or by railroad to shipping points. The former plan would involve dredging 46,000,000 cubic yards of river bottom to open a cannel 170 miles upstream to a rail leading terminal. The option is a 274 mile, $100,000,000 railroad to deep tidewater at Puerto de la Cruz near Barcelona.

New Delhi: Prime Minister of India and Pakistan reached an agreement to halt warfare between Hindus and Moslems. They have agreed on a bill of rights for minorities and will permit free movement of population between India and Pakistan. W. A.

On April 18th, 1949 the Eire became the completely independent Republic of Ireland.

The President of the Philippines is President Quirino.

India Prime Minister Nehru visited Washington on Oct, 11, 1949.

The first President of Israel is Dr Chaim Weizmann.

NIACIN

One vitamin that does not have a letter symbol is niacin, which is really nicotinic acid. Niacin, a member of the B complex, is important in the use of sugar and starch in our bodies. The best food sources include liver, yeast, bran and lean meats, fish and poultry. Peanuts and whole wheat and enriched white bread and cereals give considerable amounts of this vitamin, too. Without meat, dried yeast, bran or vitamin pills, however, the body does not get enough niacin from peanuts, bread and cereals.

VITAMIN D

Although vitamin D is very important to man's health, there are only a few of our foods that supply it. Small amounts are present in eggs, herring, sardines, tuna, salmon, and very small amounts in butter. The only rich natural sources are to be found in the livers and certain other organs of fish, and in the livers of animals that feed on fish. Very important quantities of vitamin D2 are obtained commercially by exposing ergosterol, obtained from yeast, to the effects of ultraviolet light. Sunlight sets up a process in both animals and certain plants that produces vitamin D. For this reason, this vitamin, which is so important to health, is sometimes called the "sunshine vitamin."

B.O.K.

HOTTEST, COLDEST, WETTEST, DRIEST

The coldest place on earth inhabited by man is Verkhoyansk above the Arctic circle, in Northeastern Siberia. The thermometer there drops to 90 degrees below zero in January, but sometimes rises to 86 degrees above zero in the shade in July, dropping, however, to the freezing point on the warmest summer nights.

The hottest place in the world is the interior of the great Sahara Desert in Africa, where the thermometer rises to 122 degrees.

The wettest place is Greytown, Nicaragua, where the mean annual rainfall is 260 inches.

The place of least rain is Port Nolloth in South Africa, where less than an inch sometimes falls in a year.

MATCH THE FOLLOWING

1. The mosquito that carries the germ of malaria.
2. Anything which removes the hairs from the skin.
3. The part of the intestine immediately below the stomach.
4. A chemical, which, when acted on by ultra-violet rays, provides vitamin D.
5. The part of the blood plasma which forms fibres to assist in checking bleeding.
6. Having foul or offensive breath.
7. Minute groups of cells found in the pancreas, which produce insulin.
8. A vitamin of the B group.
9. An eye specialist who examines eyes and prescribes glasses.
10. A place where two nerve endings come together.
11. Introduced chloroform as an anaesthetic.
12. The first man to learn about stomach digestion by direct observation and experiment.
13. The man who taught the world the art of vaccination and made possible the conquest of smallpox.
14. Discoverer of Radium.
15. He made the famous discovery of X-rays.
16. The man who first used ether as an anaesthetic.
17. The first to use Pasteur's discovery to prevent infection in surgery.
18. Discovered nitrous oxide.
19. The man who proved that germs may cause disease, and infection, as well as spoilage of food.
20. He discovered that the mosquito was a carrier of the disease, yellow fever.
21. A substance that gives colour.

(a) Synapse.
(b) Dr. W. Morton.
(c) Madame Curie.
(d) Duodenum.
(e) Edward Jenner.
(f) Sir James Simpson.
(g) Dr. W. Beaumont.
(h) Lord Lister.
(i) Joseph Priestly.
(j) Dr. Reed.
(k) Halitosis.
(l) W. Konrad Roentgen.
(m) Pigment.
(n) Louis Pasteur.
(o) Anopheles.
(p) Niacin.
(q) Fibrinogen.
(r) Islands of Langerhans.
(s) Optometrist.
(t) Ergosterol.
(u) Depilatories.

METAMORPHOSIS

Mature insects, or adults, only, have wings. Once an insect has developed its wings there is no further growth and no more moulting. Little flies never grow into big ones. All growth, therefore, takes place during the immature stages.

Immature insects often differ greatly in appearance and in habits from the mature insect. The change they must undergo during maturation is called metamorphosis. Accordingly to the amount of change that takes place the species can be placed into two groups as follows:

(1) Incomplete metamorphosis. The immature insect, or nymph is very similar in shape, and usually in habits, to the adult except that it is smaller and has no wings. It is active from the time it escapes from the egg until it is mature. There are three stages in its development: egg, nymph, and adult. Grasshoppers and dragonflies are examples of insects in this group. (Crickets and bugs).

2. Complete metamorphosis. The structures, and usually the habits, of the immature insect, or larva, are so different from those of the adult that it is usually impossible to recognize that they really are the same insect. The transformation of a larva into an adult is so great that it can take place only if the insect is in an almost inactive condition. This necessitates an additional, or pupal, stage in the development of these insects. The four stages are: egg, larva, pupa, and adult. Butterflies, moths and flies are examples of insects of this group. (Bees, wasps, beetles).

Since in the pupal stage they are very helpless the larvae of many insects spin around themselves a solid felting of silk before they pupate. This is known as a cocoon, and it must not be confused with the pupa which is inside it.

When an insect has developed from the egg stage through the growing stage and has become an adult that is ready to lay eggs it has completed its life cycle.

The majority of insects have one generation a year; others, such as the house-fly, may have ten or more generations in a year. A few species, of which the wire-worms and white grubs are examples, require about four years to complete their life cycle, while the cicada requires seventeen years.

CHARACTERISTICS OF BEEF CATTLE

The beef breeds have certain general features which mark them as distinctly different from dairy cattle. In form, ideal beef cattle are deep, broad and low-set, with bodies smoothly and thickly covered with firm flesh. In general appearance they must be thick and blocky, and the conformation should be rectangular. Additional characteristics of the beef type are:

(1) Large muzzle with big, open nostrils; (2) plenty of width between the eyes; (3) a prominent but placid eye; (4) short neck with well-filled neck-vein; (5) smooth shoulders, well covered with flesh; (6) large heart girth indicative of a good constitution; (7) good spring of ribs to provide a large feed capacity; (8) loin wide and heavily covered with flesh; (9) thick through the thighs and low in the twist with meat carried well down to the hocks; (10) fine in the bone, yet strong and large enough to carry the animal easily when in high condition of flesh.

This Department is conducted by the Prince Edward Island Teachers' Federation. Contributions are welcomed and should be addressed to Millar MacFadyen, 81-2 Felling St., Charlottetown.

Brigadier Coke To Visit Here

Brigadier W.L. Coke, O.B.E., Director General of Medical Services for the Canadian Army is slated to arrive in the Maritimes on June 11 for an extensive tour of R.C.A.M.C. units and establishments throughout Eastern Army Command, Major General H.W. Foster, C.B.E., D.S.O., command chief, said here yesterday.

One of Canada's outstanding military medical men, Brig. Coke will survey existing facilities in both active and reserve units for peacetime training of medical corps personnel and care of active force personnel.

As a part of his tour, he is scheduled to attend the 81st annual meeting of the Canadian Medical Association in Halifax from June 19 to 23 where he will present military aspects of the profession.

Lt.-Col. R.B. Murray, Eastern Command medical officer, will accompany Brig. Coke throughout the Maritimes and will serve as secretary to the section of the armed forces during the association meeting.

Lt. Col. S.W. Cavender, United States Army medical liaison officer will join the group in Moncton, N.B., on June 14 and proceed with them to Prince Edward Island, Nova Scotia and Newfoundland.

During the tour of New Brunswick, Major A.S. Cowie, N.B. Army Area medical officer will conduct Brig. Coke and his party. Major J.M. Flendel, Newfoundland Area medical officer, will perform a similar duty when they visit his province.

Commenting on the forthcoming visit, Col. Murray said that no great changes were expected in the military medical organization of the Maritimes. He pointed out that Colonel Harold Shaw, well known pathologist and medical consultant of Charlottetown, P.E.I., had recently been promoted to his present rank and now fills the first east coast appointment of advisor to command headquarters on modern medicine and surgery in relation to the armed forces. Brig. Coke will visit Col. Shaw during the course of his tour, he said.

The complete itinerary for the group includes:

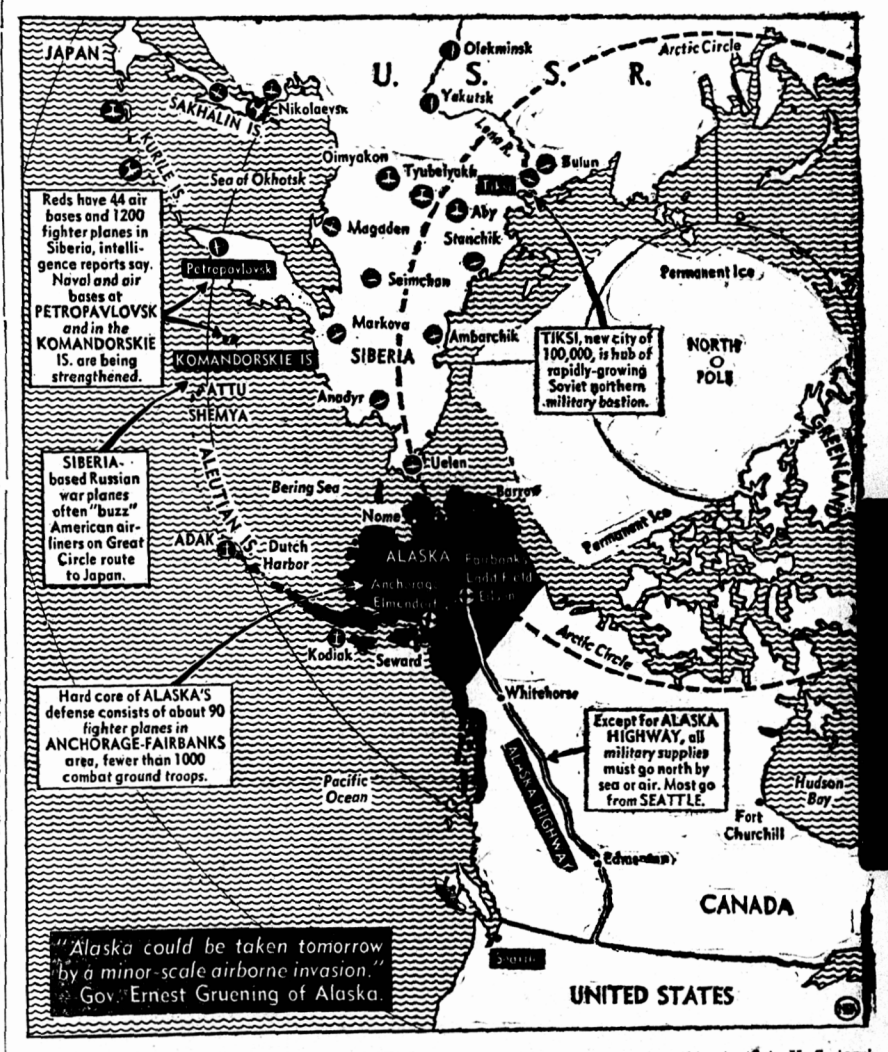
Fredericton, June 11; Saint John, June 13; Moncton, June 15, Charlottetown, June 15-16; Halifax, June 17-25; Sydney, June 26; St. Johns, Nfld., June 27 to July 2.

LANGUAGE UNCHANGED

The present Icelandic language is little different to that spoken and written at the time of the country's colonization in the ninth century.

PARKDALE SCHOOL, GRADES 8 and 9

Back Row (left to right): Jean MacGregor, Margaret Williams, Olive Newman, Alan Burns, Jean Murphy, Borden Myers, Shirley MacKay, Lydia Sims. Front Row: Shirley Clay, Catherine Walters, Joyce Gallant, Kaye Weir, Arlene Gregory, Lois McGee, Foster Burke. —C. E. Burke, Photographer



"WEAKEST LINK" IN U. S. DEFENSE SYSTEM?—Alaska's appeal for statehood and her need for more adequate military defenses — including a "tighter" radar screen — are being considered by Congress at this time. Meanwhile, Soviet Russia's ever-growing military might in far eastern Siberia becomes more and more a threat to this strategic U. S. territory. The Newsmap above shows how growing masses of Soviet air bases confronts the Alaskan frontier, which General Eisenhower called the "weakest link in our entire security system."

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