

maps would give geologists some of the clues they need for finding new petroleum pools and beds of mineral deposits.

These are not the views of a theorist but of a practical scientist who knows whereof he speaks, and who, incidentally, is chief of systems engineering, Office of Advanced Mission Studies, at NASA. The humdrum chores he pictures the satellites accomplishing would, of course, be incidental to the grandiose objectives involved in the multi-billion dollar activities at Cape Kennedy. Pentagon officials probably give them little thought, if any. But what of that? They could turn out to be the real prizes in the space race after all.

Which reminds us of the story about an idle young fellow who was told, by a dying rich relative, of a fabulous treasure buried in his back yard. He dug and dug, but couldn't find it. Every square foot of the place he dug up, but no treasure. But his spade work gave him the idea of converting a useless piece of land into an excellent garden, on the produce of which he lived well fed—if not wealthy and wise—ever after.

Sober Reminder

Again we are reminded by the United Nations Food and Agricultural Organization, in a report of its latest survey, that the gap between the world's well fed and underfed nations continues to widen. The survey showed that 10 to 15 per cent of the world population is undernourished and up to 50 per cent hungry, malnourished or both. The end products are not only misery, disease and economic stagnation, but political instability as well, carrying an explosive potential that is as disquieting, in its way, as the threat of atomic war.

What is most disturbing is the prediction that in the decade ahead, food supplies will have to rise by more than 35 per cent just to sustain today's miserable diet levels in these retarded countries. We worry about farm surpluses in this part of the world, but think of that! Specialists say that if the United States donated its entire food surplus for one year to the hungry, it would be the equivalent of only two teaspoons full of rice every 17 days for each needy person.

And, of course, there are difficulties in channeling even our limited surplus bounty where it is most required. When these bottlenecks are overcome, there is the prospect that food aid may encourage receiving nations to defer steps to increase their own farm output, and act as a drag rather than a spur to progress. The hungry nations need to step up public investment in agriculture, even at the expense of more tempting industrial, road building and education programs. And they must, in some way, solve their overpopulation problem. The FAO terms the latter a social challenge "of urgent priority," but unfortunately it offers no very realistic proposal for coming to grips with it.

Channel Tunnel Plans

We seem to have gotten ahead of the French and British after all in our causeway project. They're still awaiting the results of a study of the chalk bed that underlies the English channel before deciding whether to push ahead with the construction of a tunnel linking England to the continent. The study will be completed in six months. Meanwhile 70 bore holes are being punched into the channel's floor, some of them 300 feet deep, by survey teams working day and night.

Their concern is over how thick and sound the chalk deposits are that the skeletons of fish and shells of snails have built up over the centuries. According to The Times of London, all indications to date are that the chalk layer in which the tunnel would be built contains no serious flaws, that the tunnel is feasible and could be built in five years.

Two construction plans are proposed. One calls for boring a hole through the chalk layer from Dover to a point near Calais—a total distance of 32 miles, 23 miles of it below the sea itself. The other "emersed tube" plan would involve burying concrete tunnel sections in a trench dug straight across the channel.

Financing remains the major hurdle. Britain is in the grip of a balance of trade crisis, and strict spending restrictions have been imposed. But advocates argue that the tunnel would cut cross-channel freight rates by a half and auto rates by a third. Waiting also increases the cost of inflation. In 1960 the cost, including financing, was estimated at \$365 million. In 1963 it had risen to almost \$450 million.



DRAG RACE

A WARNING VOICE

Where The Money Must Come From

Winnipeg Free Press

When medical care is added to contributory old age pensions and many other new social services, the cost of Canada's welfare state will be higher than most citizens yet realize and far more than the politicians admit. In literal fact no one knows the cost, which has been calculated so far in the roughest sort of figures. But at the lowest reckoning the nation has bitten off as much as its economy can conveniently chew, perhaps more.

A society like a private household, must work by some set of priorities because it cannot always have all it wants. First things should come first. Canadian society, though never very clear, in its recent decisions, seems to be choosing welfare as its first priority for the immediate future anyway.

The means of supporting these desirable benefits—that is to say the actual capacity of the productive apparatus—comes second. But in the end it will be the economy, not the state, that must employ the people and provide every dollar of their income. The taxpayers cannot live by cashing cheques on their own collective treasury and taking in one another's washing.

HEAVY BURDENS Canada has decided through its 11 governments to place heavy additional burdens on the economy in the form of taxes, direct and indirect, visible and disguised. Taxes, however, are not the only burdens. When the state also accumulates huge amounts of capital to finance a pension system, for example, the volume of money left for the use of productive enterprise is mathematically diminished. The mere printing of more money cannot alter the fact, since money is nothing more than a measurement and index of real wealth.

How much real wealth will the nation have five or 10 years hence to pay the rising costs of the state? It will have no more than the economy produces. If it is to produce enough, the economy must be vastly expanded and it cannot be expanded on such a scale without vast capital investment by business.

As the Economic Council says, Canada has reached a point where it requires more investment than any of the Western industrial nations if it is to find jobs for its rapidly increasing population.

None of the political parties appears to have grasped the full significance of this warning. At any rate it has been given scant attention in the debates of Parliament, in recent federal-provincial conferences or in tax policies, federal and provincial. The political process is concentrated far more on the requirements of the state than on the urgent needs of the economy.

UNCERTAIN ECONOMY In the sunshine of a boom or politicians apparently overlook the possibility of a rainy day when all their assumptions would be instantly undermined. Even if the boom continues in-

definitely on its present level, as a result mainly of world conditions, the economy will still need massive capital nourishment and will not get it in adequate volume if the state's appetite is too large.

Now that the nation has committed itself to gigantic governmental expenditures it must begin to reckon its means of payment. Otherwise, Canada could find itself in the position of Britain which, by overloading its economy, is driven to painful retrenchment, even under a Labor government, and cannot entirely support itself, for the moment, without large foreign assistance.

That classic lesson in excessive expectations should not be ignored in Canada.

The Monarch's Cycle

Ottawa Journal

Monarch butterflies ride the vagrant breezes; on outstretched wings they turn and dip, glide downward and sail high. It is a beautiful insect in its cloak of browns and tans, orange, black and grey.

One can always identify the Monarch by the double circle of white dots on the black edges of the four wings. The sharply etched black veins in the shaded colorings of orange, yellow and tan remind one of the pastel beauty of stained glass windows.

If you enjoy new nature experiences, follow the life cycle of a Monarch. You will find the eggs on the underside of a milkweed leaf—about the size of a pin head.

The egg hatches in five days and grows into a handsome, inchlong caterpillar striped with bands of gold, black and white.

For about two weeks it feeds on the milkweed and then weaves a silk cocoon or chrysalis. The cocoon is a thing of beauty; it resembles green cellophane decorated with a row of tiny gold-red dots near the upper ends.

It is oddly stirring to watch a butterfly emerge after the 10-day chrysalis period. The wings break through the covering; in a few minutes a small, dark butterfly clings to the broken cocoon with dark blue feet.

For a few minutes the wings are limp; suddenly they quiver and tremble. Before one's eyes the wings expand and grow. The new-born butterfly parts its wings and moves them back and forth while the wings grow lighter in color.

In an hour or so the Monarch spreads its now large wings and soars away in the sunshine.

Soon they will congregate in flocks and move southward for the winter. Next season they will come back, lay their eggs and nature's cycle will be re-enacted.

CONGRATULATES US

UNITED NATIONS AP: UN Secretary-General U Thant congratulated President Johnson on the Gemini 5 space flight in a telegram made public Monday. Thant said it was a milestone in science that will "benefit all humanity."

An Epidemic On Wheels

By Dr. Theodore R. Van Dellen

Motor vehicle accidents set a new record last year by taking the lives of approximately 48,000 persons. This broke the previous record set in 1963 (43,000) and if the epidemic continues we can expect another hike in 1965. The blame for this mounting toll is the increasing number of cars and drivers.

Everyone seems to know why accidents occur except authorities on the subject. Most of the current information is based on police accident reports. These are not considered reliable because most patrol officers cannot take the time to thoroughly investigate each crash. This would involve a survey of the entire scene with photographs, and a complete report on the condition of the car, nature of the injuries, driving conditions, sobriety, and discussions with the survivors and witnesses. It would have to be done in much the same way that civil aeronautics investigators examine plane crashes.

But it can be done. Several universities and medical societies have projects along this line. A Harvard group found that a combination of factors, usually involving mechanical failures caused by improper maintenance, was frequently responsible. In more than 10 per cent there was evidence to suspect murder or suicide. Suspicious items include removed cotter pins and clamps, brake lines slashed through or hammered flat. Speed law violations and lack of courtesy were not significant causes. Another study showed that more accidents happen on high grade roads in open country, at 35 and fewer between 55 and 70 miles per hour.

Inadequate highway design plays a role. It is estimated that 8,000 lives will be saved when the federal interstate highway system is completed. Another 15,000 could be saved by wearing safety belts combined with shoulder straps. Reforms in automobile design centering about improved door latches and the steering column also will be helpful.

CRAZY, MIXED UP IDEA Mrs. E.J. writes: Is it true that a woman who is wearing fingernail polish at the time of an attack of coronary thrombosis will fail to respond to artificial respiration?

REPLY This is the most garbled question I have received in a long time. Nail polish has nothing to do with breathing or heart attacks. Furthermore, artificial respiration seldom is needed in treating coronary thrombosis.

TODAY'S HEALTH HINT—Be sure exits are always clear.

A Rash Gamble

By Arch MacKenzie Canadian Press Staff Writer

GDN EDIT P A FAN-GAMBLE

The power of the United Nations is once more on trial over the crisis in Kashmir. The Kashmir crisis, allowed to simmer for years, has erupted into what appears to be the beginning of a full India-Pakistan war that could spread and embroil all Asia if not halted promptly.

Britain, Canada and other Commonwealth countries had hoped that both Prime Minister Lal Bahadur Shastri of India and President Mohammed Ayub Khan of Pakistan would head off the crisis. India has been working behind the scenes to urge both leaders to cool their national pride and move back from the brink of disaster. Attempts towards conciliation have failed. The United Nations now is grappling with the issue and at the moment there is no indication that U Thant, the secretary-general, can wield more influence over the Asian antagonists than Britain or the Commonwealth.

TAKES GAMBLE For the first time there appear in the issue the element of a fatalistic gamble on the part of Pakistan. For years Ayub Khan has tried by various means to get India to agree to some final, acceptable solution to the Kashmir issue. There was some indication that the late Jawaharlal Nehru was edging towards negotiations. The Pakistan president may have believed that Nehru's

successor might be even more ready to get a final settlement. But Shastri has shown he has a backbone of iron. Attempts by Kashmir guerrillas to infiltrate the Indian side of the ceasefire line have been repulsed. There is no doubt among many Western observers that this initial infiltration attempt had the support of Pakistan, which in turn may feel it cannot turn to China for help if the Kashmir flareup should turn into full war.

LOOKS TO MOSCOW India now has moved a step further by invading and seizing strongholds on the Pakistani side of the ceasefire line, perhaps feeling that in the event of full war, New Delhi could count on help from Moscow. Pakistan says it won't allow India's "aggression" to go unchallenged. There appears to be no immediate solution in sight. One hope among British authorities is that Moscow and Peking will make their positions clear. Both India and Pakistan might be less eager for a full showdown if they were told they could expect no help from Soviet or Chinese quarters. There is some question, however, whether China will attempt to discourage Pakistan. Indeed, China may want to encourage Pakistan to settle an old feud with India.

FILL INFILTRATORS

KUCHING, Sarawak (Reuters)—A Malaysian security patrol killed at least eight Indonesian infiltrators in a clash in the Lundu district of Sarawak, a security forces spokesman said Friday.



CASTOR AND POLLUX DUO-1965

A Salute to Our Space Twins Through the clear air, The azure empyrean, The diaphanous veils, The high chill winds, The great filled emptiness Of Space— You sped, encased In Time's cocoon; Ready growing chrysalidae Of another age. Men of Space, wearing a new skin; Men of shining heads and glowing eyes, Extra orbs that held by hands, scan The vast Universe for tracks— Yes, the footprints of God! And slowly His rays do help; And the shining traces lie Clearly marked: Stepping-stones, space-markers Into the New Earth. —W.H. Doucette, CSSR, RCN Shannon Park, N.S.

Advertisement for Sterling Hotel, 374 Harrington St. Halifax, NS. Features: May We Accommodate You? When you are in Halifax the modern, comfortable centrally located Sterling Hotel is the place to stay! Amenities include: Free Parking for 50 Cars, Family and Group Plans, Commercial Rates.

Large advertisement for Nova Scotia featuring two cameras and the slogan 'NOVA SCOTIA Canada's Ocean Playground'. Text includes: 'QUICK AS A WINK', 'Capture the wonder of a child by the sea, a Dad with sand in his hair, a family with fun in their eyes... bring your camera when you visit us this summer.', and contact information for Nova Scotia Travel Bureau.