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"The strongest memory is weaker than the weakest link."

WEDNESDAY, DEC. 1, 1954

Unpredictable Effect

Sir Winston Churchill recently warned the British House of Commons that there were strict limits to the number of atomic tests that could take place on this planet before its atmospheric envelope was poisoned.

Between these mighty contending forces, comments the Hamilton Spectator, is the common man. He has, for the most part, given up trying to make his voice heard.

Unable to find a suitable proving ground in the South Pacific, the United States is said to be considering the north polar region for a test explosion. This new hydrogen bomb is reported to produce a detonation equivalent to 45,000,000 tons of TNT.

All In A Piece Of Rock

The names of Pierre and Marie Curie are generally associated with the discovery of radium. We are reminded, however, by Service d'Information Francais that the name of Curie also evokes for scientists an equally important discovery which for some years has been rich in practical applications.

If we bear in mind that the root piezo in this case means "pressure", we at once understand the importance of the discovery. A quartz crystal pressed between the jaws of a vice spontaneously emits quantities of positive and negative electricity, which appear on each of its facets.

In this form piezo quartz constitutes a marvellous "remote balance" which measures strain. Here is an example: Mr. Mauzin, research engineer at the SNCF (the French National Railway Company), has been able to use quartz to measure the "derailment strain" exerted on a locomotive travelling on a track in a bad state of repair.

The results were astonishing. Transversal percussions of 10 tons were found when a slight strain of a ton was expected. A whole revolution in railway engineering has been brought about by a mere piece of quartz.

In aviation quartz is to be found even in the wing tips of planes, where it is connected to a metallic inertia block. When violent movements are made by the aeroplane, the inertia blocks press on the quartz owing to "inertia" and the quartz then indicates the mathematical acceleration to which this part of the aeroplane is submitted.

In medicine a quartz is used which is cut lengthwise, according to a certain "Curie cut" which gives it a sensitivity 200 times greater than it has normally. Let us examine this T-shaped instrument. It presses a small round point at the end of a quartz on the artery, in the hollow of the wrist. The pressure of the blood is thus registered with such delicacy that the practitioner can distinguish on the diagram the small curve which corresponds to the shutting of the heart valves.

The most striking application of quartz is that of vibrations and consequently ultrasounds. Imagine that a system of electronic lamps acts on the metallic electrodes of a quartz. The latter, functioning in exactly the opposite way to that described above, is going to contract and to dilate very slightly. In so doing it will react on the lamps in such a way that an electric circuit vibrating at a constant frequency will have been set up—a perfectly stable frequency

dependent only on the properties of the quartz crystal.

In the sea, ultra-sounds can be directed in a beam. They reflect back obstacles and warn sailors of the presence of shallows, wrecks, submarines, or shoals of fish! The National Office of French Fisheries has thus been able to procure for the sardine fishers of the Sables-d'Olonne truly miraculous catches at a time when the sardine fishing season is considered to be over.

European Trade

Commenting on North American forecasts of a coming change in the pattern of world trade, the Globe and Mail maintains that such predictions are more than a little in arrears of the facts, unless they mean that even more pronounced changes are in the making.

The most important change already in effect is that European countries, which formerly bought from us on the basis of sheer necessity, are now able to gear their buying to the volume of imports we take from them.

The soft currency world is virtually independent of dollar area supplies of fuels, grains and textiles.

Canada's superior quality in bread grain gives us a partial exemption from their curtailment of dollar trade. Even so, our rate of deliveries has slowed up, and will continue on that basis until our best wheat becomes competitive.

Canada's new job, argues the Globe and Mail, is to develop new products, and new techniques for their manufacture and sale abroad.

Underlying this form of expansion there must be a reappraisal of the uses to which our wealth of natural resources can be put, plus the development of lower-cost production methods. In the meantime, Canada's overseas trade commissioners complain that too little attention is being given to their reports on trade opportunities.

EDITORIAL NOTES

Charlottetown firemen were more admired than envied during Monday night's blaze on Kent Street. The thanks of the City are due to the Parkdale fire department for lending timely assistance.

A Canadian subsidiary company has turned around and bought its parent American company, reports the Financial Post. It seems that it is the Waterman Pen Co., Inc., that fathered the remarkable infant.

The Liberal success in the by-election in third Prince leaves the relative standing in the Legislature what it was. The Progressive Conservatives suffered a double loss, however, the chance of a seat and a candidate capable of winning.

According to the New York Medical College people over 70 may renew their youth like the eagle. The report to the American Medical Association was not precisely in those words, but that is what medical investigators have discovered in this year of grace 1954.

Queen Alexandra, Queen of King Edward VII, was born this date 1844, eldest daughter of King Christian IX of Denmark. From her marriage in 1863 until 1901 she was Princess of Wales. Her second son was King George V. Her eldest brother became King of Denmark, her second brother King of Greece, a sister Czarina of Russia and another sister married the titular King of Hanover.

More than 200 officers and men of the Canadian land forces who laid down their lives during World War II in the defence of Hong Kong, or later in captivity, and who have no known graves will be commemorated along with more than 1,800 other Commonwealth men, by a memorial being erected at Hong Kong by the Imperial War Graves Commission. It will be unveiled by Sir Alexander Grantham, Governor of Hong Kong, on February 20th, next year.



Crashing In

PUBLIC FORUM

This column is open to the discussion by correspondents of questions of current interest. The Guardian does not necessarily endorse the opinion of correspondents.

APPEAL FOR STAMPS

Sir, May I please make an appeal on behalf of the Children's Church at Christ Church, Sutton. Every year we try to give the kiddies a good Christmas party, but of course this is a serious strain on our limited financial resources.

FARMERS ARE CONSUMERS

Sir, I read your Public Forum every day and I am glad to see that both sides of a problem are published. I read in your paper the other day where the Canadian Consumers held their meeting. I think this is a good organization; it has done good and will continue to do good.

I am, Sir, etc., A FARMER'S WIFE

Old Charlottetown

REMAIN'S TEAMBOAT

On Thursday last, Mr. Tremain's new Teamboat commenced plying between the Queen's Wharf and the opposite side of the harbour. She appears to be strongly and substantially built, and her machinery, which was made at Piccol on purpose, seems to work well.

Sleeping The Winter Away

(Will Barker in Natural History Magazine.)

Now it's the time of the big sleep for the bees, the bears, and even the buds of the plants that shed their leaves. And the intensity of this winter sleep, or hibernation, depends on who's doing it.

The big sleep of the bears, for instance, would probably be considered a mighty severe case of insomnia by the woodchuck. The woodchuck goes in for sleeping in a big way and often puts in a solid six months of it—almost double the time the black bear spends in drowsing the winter days away.

In the North, the woodchuck goes below decks earlier than his kinkfolk in the deep South. In the province of Quebec, long before squaw Winter has warned that the real thing is on the way.

The woodchuck settles down either in a grass bed at the end of his tunnel or in an unlined side chamber. He has an effective way of saying "Do not disturb" to the opossums, skunks, or rattlesnakes that would like to share his snug winter quarters. He buries himself alive by sealing off his sleeping chambers with dirt scraped from the far end of the room.

Once privacy has been ensured, the woodchuck rolls up in a ball, head between his hind legs. Breathing slows down until it almost stops and the pulse becomes faint. The animal gets colder and colder until finally his temperature drops to somewhere between 40 and 57 degrees Fahrenheit.

Death Penalty Abolished

(St. Thomas Times-Journal) Announcement is made that the penalty of death for cowardice during military operations will be abolished by the British defence forces.

The decision of the authorities will give general satisfaction. Shooting a man for cowardice has been military practice in many countries for hundreds of years, and it was put into effect by the British Army as recently as the First World War.

One reason for opposition to the death penalty against soldiers in the field is that it is hard to differentiate between sheer cowardice and a temporary case of nerves. Going into real battle, not only for the first time but on any occasion, even by what are called "battle-scarred veterans" is a trying experience, and to some extent at least, every man is on edge and experiences a nervous feeling.

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PAKISTAN WHEAT

KARACHI (CP) — Final estimate of the Pakistan wheat crop this year is 3,886,000 tons, an increase of more than 50 per cent over the 1952-53 season. Acreage increased by 12 per cent to 10,651,000.

FAMOUS CASTLE

Conway castle in North Wales was built by Edward I in the 13th century.

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NOTES BY THE WAY

The deer hunters are home and if the roll was called, all but a comparatively few of them would be able to answer to their names. —Pembroke Standard-Observer.

Saving the 1948 ads which describe the old family sedan as the very last word in power, comfort and style doesn't turn out to be a very effective answer to the new-car gleam in wife's and children's eyes. —Hamilton Spectator.

Strafford has come a long way since its tentative beginning two years ago. With its Shakespearean Festival on a sound footing and the added attraction of good music, Stratford is on the way to becoming one of our major cultural centres. Its achievement is something of which every Canadian can be proud. —London Free Press.

Women frequently have been referred to as "defenceless" by writers who should know better. Any one who has ever heard a member of the so-called "weaker sex" utter a full-throated shriek or scream will testify to the contrary. It is a soul-shattering experience. If the shrieks or screams are maintained, even for a short period, they are sufficient to rout either man or beast. —Saint John Telegraph Journal.

At best the duel between East and West will go on and on. At best we may hope to coexist with each other without a war for years to come. Our aim must be to stay so strong and yet so open to reason that the best alternative for the Reds will continue to be soft talk and soft actions, however sincere. Eventually we may hope that there will be a real break through by gentle peace and goodwill for the foreseeable future we must settle or less. We must settle for an attitude in the Kremlin not unlike the one we seem to be getting now. —Boston Herald.

When the police are on the hunt for stolen venison it is time for the hundreds of hunters and their friends to hold documentary proof of ownership. How does a man go about proving the venison in his house came off this deer and not that deer? What are the distinguishing marks of one piece of venison and another? Can the hair of individual deer be examined under microscope and distinguished as to individuality? Ah, it's a cruel world that sets a policeman on the trail of stolen venison. —Sudbury Star.

There is a heartening aspect to the preliminary discussions now under way to bring an end to the strike at the Ford Motor Company of Canada, Limited. There are indications both union and company desire to have it ended. The workers have suffered by loss of their pay cheques, by using up their savings, by reducing their normal standards of living, by paying into debt by depriving themselves of things they and their families need. The company has suffered by loss of production, of market prospects and profits. It has seen rivals come out with their smart new models. It knows the greater the head start its competitors get, the greater the difficulty in getting back its share of the market. —Windsor Star.

And Moses and the priests the Levites spake unto all Israel, saying, Take heed, and hearken: O Israel; this day thou art become the people of the Lord thy God. Thou shalt therefore obey the voice of the Lord thy God, and do his commandments and his statutes, which I command thee this day.

dodge out of it and on the spur of the moment he hides or escapes from the scene. If of course he runs in the wrong direction it is liable to start a panicky retreat, especially during the first moments of heavy shelling, therefore, when caught, or he rejoins his regiment as if he had just got lost in the melee, the authorities feel it is necessary to make an example of him. Actually, the supposed coward was simply a man whose nerves were shaken to pieces as the result of a new and terrifying experience, or he suffered from shell-shock as the cumulative result of many such experiences. An understanding commander has sometimes given a supposed coward another chance, and he has proved as brave as any other man in the battalion.

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—Colonial Herald, Sept. 20, 1841.