

those of the United States at all or would produce goods of a type now largely imported. Among the industries are paper manufacturing, lumbering, salting and pickling herring, woodworking, production of minerals such as tin, manganese and chrome ores, fur farming and leather working. Agriculture can supply a substantial part of the new native's food supply, although by no means all of it.

Alaska is potentially richer than Sweden and Finland together, a National Resources Committee report quoted by sponsors of the plan indicates. With an area two-thirds larger and far better endowed by nature than the two Scandinavian countries, it now supports a population 1/165th as large. Half the population is Eskimo and Indian.

The peak of the white population, 31,400, was reached in 1910. Today whites total but 28,631. Many who went north in gold rush days 40 years ago returned; those who remained were frequently single and are now aging bachelors. There are 228 men for every 100 women in the territory. This spells an extremely low birth rate. The World War and the influenza epidemic of 1919 took an unusually heavy toll.

Need Transportation

Because adequately-financed development organizations have been conspicuous by their absence, Alaska has been unattractive to settlers. Greatest Alaska need and its greatest hindrance in the past is the lack of transportation. The tracks of the Alaskan Railroad are less than 800 miles long. Roads are few and far between. Pacific Alaska Airways, Pan American subsidiary, has been having a hard struggle to keep going in a sparse population and a small market.

Eighty-five per cent of employed Alaskans work for the fisheries and canning plants, which are operated during the summer months only. More than half the fishing industry's labor comes from the United States for the duration of work and then returns home.

Almost all the wealth extracted from the territory has been drained out of it by absentee landlords. Money earned by the fishery workers as well, for example, is to a great extent spent in the 'states and not returned to the territory.

The territory, as a consequence, has been a considerable drain on the Federal government. Most communities are unable to raise in taxes the sums which must be spent on them. The settlement company plan grows out of an investigation ordered last spring by Secretary

of Interior Ickes to determine what could be done to alter the situation.

Immigrants, whether American citizens or aliens, would all be carefully selected for the skills and trades needed in pioneer communities. The first large batches of colonists would be preceded by town planners, industrial experts and others with the special knowledge necessary for getting the projects started. The southeastern shore and islands would be settled most heavily because of their

favorable climate, resources and location.

The companies would devote a great deal of money and effort to providing cheaper transportation. This would not only lower the present fantastically high cost of living, but would provide Alaskan industries a means of reaching the market. Present projects for a Seattle-Juneau airline and a U. S.-Alaska highway would fit neatly into the company activities.

Science News Letter, August 26, 1939

AERONAUTICS

C. A. A. Chairman Writes Open Letter to Young Pilots

Urges That "Epidemic of Transatlantic Foolishness" Be Stopped Before More Lives Are Sacrificed

CHAIRMAN Robert H. Hinckley of the Civil Aeronautics Authority took time off from a visit to his Ogden, Utah, home to pen an open letter to the young pilots of America, appealing for an end to the "epidemic" of attempts to fly the Atlantic Ocean in light planes.

Moved by the probable deaths of Alex Loeb and Dick Decker, unreported since they took off from Nova Scotia for Ireland in a light plane on August 11, the C.A.A. chief wrote "let's stop this epidemic of transatlantic foolishness before it goes any further." Loeb and Decker are the third and fourth to lose their lives in such attempts this year.

Flights such as theirs contribute nothing to aviation and serve only to make more difficult aviation's job of presenting itself to the public as a safe form of transportation and sport, he declared.

The text of Mr. Hinckley's letter follows:

Dear Young Pilots of America:

I am writing you today because two more of the young people on whom aviation's future depends have just needlessly and foolishly thrown away their lives in an ill-prepared attempt to fly the Atlantic Ocean. They are the third and fourth so to die this year.

American flying boats have conquered the Atlantic for aviation. Their arrivals and departures are now so regular they rate press notices only if distinguished passengers are aboard. Yet young Decker and young Loeb had to perish. It would have been a miracle had they succeeded. You know why as well as I.

Their plane was so small it could not

carry any gasoline reserve. They had a 25-hour supply for a flight they expected to take more than 23 hours. Commercial transatlantic operators insist on a five-hour fuel reserve for a faster type of plane. Loeb and Decker's little monoplane could not carry proper navigation instruments. They had no radio to guide them or bring them weather reports. They could not know what lay ahead. They did not have adequate training for such a venture. Their way is not the way to fly an ocean. Twenty years of sacrificed lives and effort have proved that.

Even if they had reached Europe safely, they would have contributed nothing to aviation. Progress in the air does not lie along the path they took. They would have gained a transitory empty glory—that is all. A year from now they would have been completely forgotten.

Willingness to take a chance is one

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of youth's priceless attributes. But there are enough risks worth taking because the common good will be advanced, without looking for useless ones. A corollary of the old saying, "nothing ventured, nothing gained," is the thought, "nothing should be ventured where nothing can be gained."

The future of aviation depends to a great extent on our winning public acceptance of flying as a safe form of transportation and of sport. Loeb's and Decker's ill-fated attempt certainly does not help us to put this idea across.

We have imposed stringent penalties for taking part in and aiding such pointless flights. We intend to enforce them. But something more than mere administration of the Civil Air Regulations is needed.

So, as chairman of the Civil Aeronautics Authority, I appeal to you for your cooperation. Let's use planes only for the purpose for which they were built. Let's fly safely and sanely. Let's stop this epidemic of transatlantic foolishness before it goes any further.

Science News Letter, August 26, 1939

PSYCHOLOGY

Survival of Superstition Laid to School Methods

THE question of what educates a person for successful living is of more importance today than ever before because of the critical state of our civilization not only abroad but here in America. It is fundamental in judging whether our schools and colleges are doing a good job, whether our teachers are using the right methods, whether our people are being trained to think for themselves and tackle their daily problems rationally and successfully.

Worrisome are some of the evidences of failure reported by Prof. Otis F. Curtis of Cornell in a recent address at a scientific meeting. He reports that a professor of a scientific subject in a university of high standing let his son die of appendicitis without even consulting a physician; he had become a faith healer. Another professor with a national reputation in the field of economics recently said: "Vaccination and serum treatments are all bunkum." Chain letters, promising good luck if forwarded and bad luck if the chain was broken, were received from two Ph.D.s, whose "superstitious fears made them uneasy and perhaps even afraid to break the chain." There are many other cases of individuals with extensive schooling who fail to use "common sense." The medicine man, the believer in witchcraft and the voodoo priest practice in our midst today, called by more high-sounding names.

Some of the difficulty lies in the method of teaching, in Prof. Curtis' opinion. No schooling can hope to give the answers to all problems that might arise, but there is much more transfer of the right sort than is commonly recognized. Successful teaching will develop one's attitude or method of approach to a problem; that is, approach with an open mind, without prejudice; an attempt to ascertain all possible facts bearing on the matter; a search for opposing evidence; a critical weighing of the evidence; a recognition of what constitutes evidence; a readiness to recognize possible complexities and contradictory evidence; and perhaps that all the evidence is not yet at hand.

No one subject or field has a monopoly on such training in critical method, but, unhappily Prof. Curtis finds that much of the schooling even in colleges and universities is not of such a nature as to give this training.

Science News Letter, August 26, 1939

PHYSICS

Cosmic Ray Experts Sail For Round-World Test Trip

PROF. Robert A. Millikan, California Institute of Technology Nobelist, is leading a party of cosmic ray research explorers on a round-the-world trip which will not end until early in 1940.

On Aug. 16, Prof. Millikan with his assistants, Drs. Victor Neher and W. H. Pickering, sailed for Australia treasuring a cargo of precious cosmic ray meters and small balloons with which they will probe cosmic ray intensities near the top of the atmosphere. Mrs. Millikan accompanies the party.

The itinerary calls for a route to Australia, Tasmania, the East Indies, India, Egypt, and then to Europe.

Measurements will be made at heights up to 15 miles and more. The instruments will record the temperature and pressure at these great heights as well as cosmic radiation. In India, the scientists will depend upon having their apparatus picked up and returned for study after its ascent and fall. Over the ocean and in less populated regions special apparatus will be employed which records the observations and continuously

sends them back by radio to the scientists on the ground.

If these new instruments prove sufficiently accurate it will be unnecessary thereafter to restrict experiments to well populated regions where there is a good chance to recover fallen instruments and study their records. It will then be possible to investigate the cosmic radiation high up in the atmosphere over land or sea, in the deserts or in the Arctic regions where observations are badly needed.

Much of the journey of Prof. Millikan and his group will take them south of the earth's magnetic equator into a region where cosmic rays have been all too little studied. New and important knowledge of these mysterious, piercing radiations is virtually certain to come from the work of the expedition.

Science News Letter, August 26, 1939

A German inventor has devised a way of making shoe soles "incredibly durable" with a renewable coating mixed with sand or other granular material.

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