

FOREST'S DEATH KILLS COMMUNITY

A Graphic Lesson in Forest Conservation Furnished by the Town of Cross Fork, Pa.

By Samuel T. Dana, U.S. Forest Service

In the autumn of 1893, before lumbering operations started, perhaps five or six families were living on the site where two years later stood the busy town of Cross Fork, Pennsylvania. For some 14 years, Cross Fork led a feverish existence while the forest wealth was stripped from the surrounding hills. The life of the town was, of course, the big sawmill, which had a daily capacity of 230,000 board feet and was up to date in every respect. In 1897 a stove mill was established there, and various other minor wood-using industries existed at different times. In its prime, Cross Fork had a population of 2,000 or more and was generally known as one



Discovered Ethylene

Dr. W. Esson Brown, of Toronto, another of the group of brilliant young Canadian doctors, who are making important contributions to medical research. Dr. Brown was the discoverer of pure ethylene as a general anesthetic.

of the liveliest, most bustling places in the State. A branch line of the Buffalo and Susquehanna Railroad was built to the town. Stores of all kinds flourished. There were seven hotels, four churches, a Y.M.C.A. with baths and gymnasium, a large, up-to-date high school, two systems of water works, and two electric light systems. But the prosperity of the town was as short lived as the timber supply. In the spring of 1909 the big sawmill shut down for good. From then on the population dwindled rapidly. Fires became so frequent that the insurance companies cancelled their policies. Five-room frame houses with bath were offered for sale for from \$25 to \$35 without finding a buyer. In the winter of 1912-13 the stove mill also ceased operations, and the next fall railroad service, which for some time had been limited to three trains a week, stopped altogether. To-day the total population consists of but 60 persons. If it had not been for the State, which bought up the cut-over lands and has undertaken in earnest the work of reconstruction, the town would be as desolate as the surrounding hills. As it is, Cross Fork is now a quiet little hamlet, the merest shadow of its former self and without hope for an industrial and useful future until the timber grows again.

Botanical Terms.

A certain teacher, proud of the way in which she had instructed her class in botany, told the examiner to call on any scholar and to ask whatever question he pleased on the subject.

It happened that the first pupil selected was a new-comer who had attended only two lectures.

Asked to name some botanical terms he replied: "Please, sir, I know only two—aurora borealis and delirium tremens."

A normal man's heart beats 92,160 times a day.



NO FEAR OF THE BOLSHEVIST MOTH
Britannia—"This good old flag is moth-proof."

Limited Supply.

Mother (to small daughter)—"You have your shoes on the wrong feet."
Small daughter—"Why, mamma, they're all the feet I have!"

Stamps specially printed to commemorate the anniversary of the Portugal-Brazil flight last year have brought the Portuguese Government quite a good sum of money. The stamps were on sale in Lisbon for three days only, and were eagerly bought by collectors.



A Fly.
Fly—"What a pity to waste all that good sugar in home brew!"
Better be silent than speak ill.

The AUTOMOBILE

MOTOR LIGHTS ACT AS A HELP OR HINDRANCE.

Head lights are not placed on an automobile as an ornament. They serve a very practical purpose. One does not have to let his imagination run far to picture the chaos that would ensue if cars were not equipped with head lights.

When an auto owner takes his machine out on the road after dark his head lights display the highway ahead. They help him to find his way without difficulty. They should not hinder other motorists from finding their way. Unfortunately, this latter condition does not always obtain.

In regard to lights, motorists are divided into two classes—the considerate and the inconsiderate. The latter do not dim their lights when meeting cars because of the number of cars on the road and the location of the dimming control switch. This situation requires a driver to constantly lean forward in order to turn the switch, and detracts his attention somewhat from his driving. When driving in the country where dimmed lights are most important the cars that are met in the night are not apt to be so numerous but that the courtesy of dimming lights can be practiced without serious inconvenience.

USING BRIGHT LIGHTS.

Driving at night in the city is an entirely different proposition. Here the street lamps and the electric lamps and electric signs usually give sufficient illumination so that the driver does not need any lights on his car. Of course, to comply with the law he must keep his dimmed lights on or use side lights if his car is equipped with them. No capable driver will use his bright lights except on a country highway.

Lights should be turned on one-half hour after sundown. During the first hour after this time the lights are usually valueless. Care should be exercised nevertheless to turn on the dimmed lights. This twilight period is the worst time of the day for driving, for it is too light for the lamps to be of much use and too dark to see the road ahead clearly.

A spotlight, although against the law in some parts, has its good points in night driving in the country. Its beams can be thrown ahead of the regular headlight beams, giving just the additional distance of illumination on the road to permit driving safely at a fair rate of speed. When meeting a car the headlight can be dimmed and the spotlight thrown to the right to illuminate the ditch on that side.

In heavy traffic the tail light of the car ahead is a good guide to the driver of the car ahead. Lights that can be tilted down close to the machine are very satisfactory, especially in heavy traffic.

In going around a corner or up a hill headlights are sure to throw a glare in the eyes of the drivers going in the opposite direction. Special care should be exercised in such places.

The most effective protection against glaring lights is a shield of opaque or translucent material placed in the left-hand corner of the wind shield, behind which the blinded driver may hide his eyes. But better than this would be more thoughtful-ness and courtesy by drivers on the country roads at night.

Observation Station Needed.

A more important matter, and one which affects humanity in general, is the necessity of Arctic weather stations from which meteorological conditions may be broadcast. Not only does barometric pressure in the Far North determine the movements of polar ice in trans-Atlantic traffic lanes; it also is a factor in determining the character of weather conditions in the greater part of the northern hemisphere.

The Coast Guard is asking Uncle Sam to provide and equip an observation station where drifting bergs may be noted and their probable position reported. The request certainly is reasonable. The time required for a berg to drift to the Banks is a pretty well determined. Certainly a sailing master will be none the worse off if he knows the number of bergs he is likely to pass either going or coming; and thousands of passengers, knowing that they are safeguarded as never before, will not be made uneasy.



Phone Without a Mouthpiece.
A telephone without a mouthpiece, termed a laryngophone, has been invented in England. The sounds are transmitted from the larynx as shown in the picture.

Mosaics.

You have seen them in Italy, of course; old mosaics chipped and broken and crumbling and picturesque, with here and there a group of little squares and hexagons that have withstood the ravages of time and the elements, fascinating the traveller all the more because of the decay and imperfection of the broken tesserae about it.

"Here's a perfect bit," you say; and you stand wondering at the rest of the mosaic? Better material? Better workmanship? Both perhaps. And your mind goes travelling inquiringly back over the centuries and loses itself in a maze of vague wondering.

You've looked at mosaics elsewhere, too—and laughed at them, no doubt. There's that odd mosaic of health benefits, for instance, that is so fascinating. Here is a person who reads all the patent medicine advertisements in the yearly almanac and buys up most of them because he's sure he has all the symptoms they describe; there is a Montevidean lady sitting at home wrapped in an uncomfortable combination of furs and hot water bottles because she thinks artificial heat highly injurious; there again is an Indian medicine man creating an infernal noise for the purpose of quieting a delirious patient. From all corners of the world contributions are made to this interesting pattern. Parts of the mosaic have crumbled, others are beginning to show signs of wear; and every now and then a marvellous new piece is added.

Have you noticed that little square that a Canadian city has contributed? Solid as any in the wheel pattern, we hope. It is a city that is building the health of its people on the foundation of a vigorous industry. Only a few years ago its record was a little less than moderately good. In 1919, for instance, it lost 116.7 infants under one year of age to every thousand completing the twelfth month of life. That city had, by 1919, begun to waken up, however, and it did a number of things without delay. Of course it began forming an association. It also established an office for the work of the association. And then it took hold of the infant mortality problem. It established a weekly pre-natal clinic where expectant mothers were taught the simple laws of health and personal hygiene, and helped them to develop the habit of conforming to these. It established five Well Baby Clinics to which babies report weekly to be weighed and measured and examined generally, while the mother and the nurse in charge discuss diet and clothing and temperatures and ventilating and other kindred matters. The babies get every possible chance to be healthy and happy and well-trained. But if the nurse finds that she shows signs of departing from the straight and narrow road that leads to a life of health, off he goes to the Sick Baby Clinic, where he is put under the care of a physician. Last year the four trained workers in the baby clinics reached one quarter of the children under five years of age in that city, and made 5,327 visits to the homes of children under supervision.

And the city has reasons to be proud of its experiment and of the establishment of this new public utility. The education of the citizens thus being promoted has resulted in the infant mortality rate being cut in half within three years. Here are the figures: In 1919 the death rate among infants was 116.7 per 1000 live births; in 1920, 104 per 1000 live births; in 1921, 80.7 per 1000 live births; in 1922, 65.5 per 1000 live births.

That city was London, Ontario. Do you know what contribution your own community is making toward the Canadian section of the world's health mosaic, Social Service Council of Canada.

Dandelions Outlive Lawn Mower.

To see the manner in which lawn plants spread their seed on a lawn kept almost to believe that the power is to reason out a way to circumvent constant menace from the lawn mower. In tall grasses the seed grows up, taking the seed-growing to the top of the stem. The dandelion, however, has its seed heads and kept out the dandelion, formerly sent its leaves almost horizontally.

Why? If you will take a dandelion plant and place it in a glass jar and place it in a warm place and allow it to grow up into the air just above the dandelion in the tall grasses causes the upper sides of the stem to grow more rapidly than the sides, so that they curve towards the horizontal axis and come more upright. In fact, the tall grasses grow up, but the dandelion grows more uniformly erect.

Every day for two years War Service Models were with the recipient's name, Edgewood firm of metal mugs is a record in this work.

Sick of the Palsy.

"Mummy, what's the palsy?"
"Oh, it's a disease, darling, that makes you shake all the time."
"No wonder the poor man was sick of it!"

Reforming an Abuse.

The Cop—"Hey! You ain't allowed to throw bottles at the umpire."
The Fan—"No."
The Cop—"No. You might break one on his dome an' they cost money. Return 'em to the boy an' get half a brick in exchange."

With The Ice Patrol In The North Atlantic

BY JACQUES W. REDWAY

Information from Arctic waters recently noted the presence of an ice barrier one hundred miles in extent hovering in the vicinity of the Grand Banks, the great shoal off the Newfoundland coast. The meaning of the dispatch becomes clearer by a statement that ice of various forms has drifted from Baffin Bay until it is close to the lanes which are traversed by steamships to and from British ports—or possibly that the ice field has intruded upon those routes.

A few years ago information of the sort would have been received with concern and steamships would have approached the danger area with the utmost caution. To-day the sailing master knows the course of safety, and the danger of collision is reduced to a minimum. Information concerning the course of safety has been furnished by the patrol cutters of the United States Coast Guard, according to international agreement.

The routes between the ports of western Europe and those of the north Atlantic seaboard are traversed by a greater number of steamships than ply any other transoceanic route in the world. The number of steamships scattered along the lanes at this season averages between fifty and sixty at any time, going and returning. At the present time the front of the ice field lies practically within cannon shot of every one of them in passing the Grand Banks.

International Safeguard.

On April 14, 1912, the Titanic, one of the biggest ships afloat, crossed the tail of the Grand Banks. When in a position of supposed safety she struck an iceberg and joined the vessels that constitute the greatest ocean graveyard in existence. Other horrors had been shaping public sentiment; that of the Titanic was the climax. An international convention at London in the following year determined upon an international patrol service to cover the danger area, and the American government was requested to organize and manage the patrol. By agreement the expense of maintenance was divided among the signatory powers in proportion to the aggregate tonnage of their ships. Thus was born the most important safeguard to marine transportation ever put into service on the high seas.

At the present time two cutters, each manned by two crews, are employed. Each vessel is on duty in the danger area two weeks at a time. The relief cutter begins its service almost immediately on leaving port for the danger area, collecting information from every possible source. On reaching the vicinity of Grand Banks search progresses all along the possible position of the ice field as far south as the 43d parallel—that is, about as far south as the latitude of Portland—in order to find and report upon the position of ice. The experience of the past has shown that the limits of dangerous ice—that is, of icebergs—vary much from year to year; they change greatly even during the season. Once in the danger area the chief business of the patrol is to broadcast information concerning ice and fog to approaching vessels. Thereby the master of a steamship leaving a north Atlantic port has all the information necessary to decide upon a course that is safe, so far as ice and fog are concerned.

The ice, which swirls about in the choppy waters of the north Atlantic, takes various forms. The field of frozen sea water breaks into huge cakes—the work of winter storms and high winds—forming floe ice. Sometimes the sharp friction of gale winds drives the ice into long windrows that pile up fifty, sixty or even one hundred feet high. In time the pack ice breaks and floats into the area of Grand Banks. The broken masses of the pack, tumbled and contorted in out-lying areas, are not especially dangerous to navigation; they go to pieces quickly. Steamships which have struck them bow on have rarely suffered much damage from the impact.

Iceberg Menace.

An iceberg is a different proposition. Icebergs are the products of Greenland glaciers; and most of the icebergs that float to Grand Banks are broken from

the glaciers whose fronts are in the fjords of the west Greenland coast—as a matter of fact, most of them originate in Disco Bay. The front of the glacier is pushed out into deep water—far enough so that the uplift of the water breaks it off. Berg ice is the densest and most solid form in which ice exists. Tremendous pressure has squeezed the air out of it and has given to it a resisting power that is not possessed by any other form of ice. A steamship ramming an iceberg drawing several hundred feet of water has little chance of escape if striking it under full speed. Not even an ice-breaker can withstand a collision with such an object. The Titanic crumpled and broke at the impact.

Reaches Grand Banks.

Floes and masses of pack ice are the first to appear within the area of the Grand Banks. This ice may be formed anywhere from Baffin Bay to the waters off the Labrador coast. The ice field may break as early as the latter part of January—usually by February. It is over the banks in March and April. It is quickly broken into sludge of the sort that fills the ferry slips after a winter cold wave. The icebergs are in evidence in April, May and June. They usually hover about the Banks until they melt, but occasionally they drift further south.

One important fact has been fairly well established. The amount of field ice floating through Davis Strait is directly in proportion to barometric pressure in the region north and east of Hudson Bay. The greater the barometric pressure the stronger are the offshore winds which drive the field ice away from the shore and into open water.

The Arctic Ocean is almost an enclosed basin. Its widest outlet lies between Greenland and Europe. The ocean itself is comparatively small, but its waters embrace approximately one-third of the land of the northern hemisphere. The rivers of the great northern plains of the two continents pour their waters into it; still more, ice from the moisture of the air, accumulating during the long Arctic winter, melts and adds to the volume during the Arctic summer.

East Greenland Current.

The greater part of the accumulated waters is crowded against the Greenland coast and forms the East Greenland current. This current, however, does not discharge directly into the north Atlantic; most of it flows around the south of Greenland into Baffin Bay. There it joins local movements and finally flows out through Davis Strait and the Labrador current.

The Labrador current carries the ice which constitutes the greatest menace to ocean travel and commerce. The description here given represents the most recent information obtained by the Coast Guard patrol. Why does and bergs hover about the Banks is a question which can be more correctly answered today than a few years ago. In the area roughly limited by the 43d parallel to the south the wind drift of the Gulf Stream checks a further southerly drift of ice. Although in this latitude the Gulf Stream has lost its own inertia of movement, its drift possesses the inertia of strong and constant southerly winds, and the force of these is sufficient to arrest further progress of drifting ice; it supplies also the essentials which create the world's greatest fog blanket, which

Limits of Arctic Ice Field.

The area east and south of Newfoundland known as Grand Banks is approximately the area covered by the shifting limits of the Arctic ice field—the ice which drifts southward through Davis Strait in spring and early summer. In the opinion of many marine hydrographers, the great shoal bearing that name is the product of the icebergs themselves, which are carrying to the Banks yearly tons of boulders and gravel, estimated in millions, from the Greenland glaciers. Certain it is that the icebergs born of Greenland glaciers are dropping their loads of rock waste upon Grand Banks year in and year out.

