

BOATS AND NAVIGATION

Equality of Water Flow Dependent on Forest Cover

It has been urged that in the interests of navigation the Dominion Government should purchase such denuded forest land in the Eastern Provinces as might be necessary to reforest in order to prevent floods and the filling up of streams with sediment. In this connection the report on the Trent Watershed Survey, published by the Commission of Conservation, is of considerable interest. In this region of Ontario, as a result of fires, 150,000 acres are practically a desert and the report urges a policy of forest conservation under Dominion, provincial or municipal control, in order to preserve the usefulness of the Trent Valley canal, in which over \$10,000,000 is invested. There are many such barren areas in the eastern provinces, which with the assistance of the Dominion Government might be made to produce valuable forest crops.

In Canada's disastrous floods and low-water stages have been largely prevented by the timely action of the Dominion Government in setting aside as forest reserves the wooded slopes where the great rivers of the interior of the Dominion have their origin. On the east slope of the Rocky Mountains over 20,836 square miles of non-agricultural land have been thus reserved, for the double purpose of regulating the run-off and of providing a perpetual supply of timber to meet the ever-increasing needs of the prairie settlers. In the Railway Belt in British Columbia smaller reserves have also been set aside, chiefly for the purpose of maintaining a steady flow in the streams on which the fruit-growing industry is absolutely dependent.

Slot Machine Provides Chair

An inventor in San Diego has developed a novel seat for use in parks and pleasure resorts. Normally it is as tipped that it cannot be used, but upon placing a coin in the slot the seat may be tipped back into the usual position, making a comfortable and restful bench. When the occupant rises from the seat it automatically swings forward and locks in a recessed position, from which it can only be moved by the insertion of another coin.

TREATING DISEASES OF HORSES' FEET

Simple Treatment For Common Foot and Leg Troubles

In sore shins the trouble appears as swelling, generally on the front of the cannon bone in young race horses.

It is the result of concussion on hard ground, and much resembles a splint in both cause and treatment, but differs in that it is diffused or scattered over a large surface, whereas a splint is smaller and more confined. A splint, too, is on the side of the bone, while sore shins are always in front. It may be produced by even a single gallop, therefore suspect this if the colt goes lame immediately after a sharp burst of speed, and remember that it will increase with exercise. As in splints he walks soundly but drops when trotted. When examining him, if the hand be passed down the front of the bone he will flinch when the spot is touched. In such an early stage as this, when there is practically nothing to be seen at a mere glance, many jump to the conclusion that the trouble is in the shoulder. Later on a swelling is seen on the front of the bone, but by this time much damage may have been done unless care has been taken.

The treatment is practically the same as for a splint.

- 1. Take off the shoes and give him perfect rest.
2. Bathe with hot water then change suddenly to cold water, and use this freely.
3. Use the same blister as in splints: Biniodide of mercury, two parts; lard or vasoline, eight parts. Jockeys frequently use cocaine to hide this disease just before a race, but they thus intensify the trouble and turn what might have been a simple case into a serious one.

RED ROSE TEA "is good tea"

ADVANCES IN A CENTURY

A century ago a man could not take a ride on a steamboat. He had never seen an electric light or dreamed of an electric car. He could not send a telegram. He couldn't talk through the telephone, and he had never received a typewritten communication. He had never heard the germ theory nor worried over bacilli or bacteria. He never looked pleasant before a photographer or had his picture taken. He never heard a phonograph talk or saw a kinetoscope turn out a prize fight. He never saw through a Webster's unabridged dictionary with the aid of a Roentgen ray. He had never taken a ride in an elevator. He had never imagined such a thing as a typesetting machine, or a typewriter. He had never used anything but a wooden plough. He had never seen his wife using a sewing machine. He had never struck a match on his trousers or anything else. He couldn't take an anesthetic and have his leg cut off without feeling it. He had never purchased a ten cent magazine which would have been regarded as a miracle of art. He could not buy a paper for a cent and learn anything that had happened the day before all over the world. He had never seen a mechanical reaper or a self-binding harvester. He had never crossed an iron bridge.

What is a Heifer?

The question is sometimes asked as to the exact age or condition necessary to transform a heifer into a cow. This is really rather a hard question to answer with finality, but in a prize list from the agricultural society at Johannesburg, South Africa, we find a definition. The prize list says: "The society's definition of a heifer for its show purposes is as follows: 'An animal (female bovine) shall remain a heifer until she attains the age of three years or has a calf, whichever event first happens.'"

Acorns as Human Food

Very little attention has been given to the utilization of acorns. It is well known that they are used as food for cattle, horses, swine, turkeys, and many of several species of white oaks form the food of man. The acorns of white oaks are mostly large and are in general produce fruit very abundantly. The Indians in California always gathered the acorns of the white oak and years of great misery were often caused much misery. The early white settlers of California relied on the crop of acorns as a part of their food supply.

MEAT ON THE FARM

More Important That Animals be Healthy Than Extremely Fat

There are a few essential points that should be observed in selecting animals to butcher on the farm. The first consideration should be given to the matter of health in the animals to be used for food. No matter how fat an animal may be nor how fine its form, if it is not in perfect health, the best quality of meat can not be obtained. If the animal is suffering from fever or from any serious derangement of the system the flesh will not be wholesome food. Flesh from animals that have been ill before slaughter is not likely to cure well, and is very difficult to keep after curing. Bruises, broken limbs or like accidents all have the same effect on meat as illness, and unless the animal can be dressed immediately after such accidents, it is best not to use the meat for food. This would be true especially if there has been a rise in temperature of two or more degrees. Such a rise in temperature just previous to slaughter is likely to result in stringy, gluey meat, and create a tendency to sour in curing. Animals that are in poor flesh will not yield first-class meat. While the texture may not be bad in such meat it is essential that a reasonable amount of fat be present to give juiciness and flavor to the flesh. The presence of large amounts of fat is not essential and, in fact, is often wasteful. It is far more important that the animal be in good health than that it be extremely fat. -Andrew Boss.

DR. OSLER ON DRUGS

Eminent Canadian Doctor Not a Great Medicine Giver

Dr. (Sir) William Osler is probably the greatest living authority on the use of drugs in the treatment of disease. At one time a professor in John Hopkins University, Dr. Osler was appointed Regius Professor of Medicine at Oxford University, England, and he is regarded by the doctors of every English-speaking country as a great authority.

Dr. Osler says of diphtheria: "We are still without drugs which can directly counteract the toxin of the disease, and we must rely upon general measures of feeding and stimulants to support the strength. Medicines given internally are of little avail in diphtheria."

Concerning pneumonia, Dr. Osler says:

"Pneumonia is a self-limited disease which can neither be cut short nor aborted by any known means and command. Even under the most favorable circumstances it may terminate abruptly and naturally without a dose of medicine having been administered. There is no specific treatment of pneumonia. The young practitioner may bear in mind that patients are more often damaged than helped by the promiscuous system of drugging, which is still only too prevalent."

Of scarlet fever, Dr. Osler says: "Ordinary cases do not require any medicine. Medical antipyretics are a lot of much service in comparison with cold water."

Of measles, Dr. Osler says: "Confinement in bed in a well ventilated room and light diet are the only measures necessary in uncomplicated cases."

Of whooping cough, Dr. Osler says: "The medical treatment is most unsatisfactory."

Of yellow fever: "Careful nursing and a systematic plan of diet probably give the best results."

Of dysentery: "The treatment of dysentery by topical applications is by far the more rational plan."

Voices Are Growing Deeper

Nowadays there is a noticeable stir in musical centres when a new tenor or soprano is discovered. A baritone or contralto voice, on the other hand however beautiful may be its quality attracts but little notice.

All the great masters agree the soprano are becoming more and more difficult to find, and so rare is a tenor that the possession of such voice has been called a diamond.

AN EXTINGUISHED GEYSER

Hot Lake at Banff is Reached by a Tunnel

Few persons ever heard of a defunct geyser, but they are not uncommon. It is said that the beautiful widening of the Mississippi River known as Lake Pepin is really a defunct geyser or perhaps the crater of a volcano, but the most remarkable one on this continent is near Banff, the Canadian summer resort.

Here is a large cave or chamber within a mountain, and in its centre is a small, hot lake. The domelike roof comes to an apex some twenty feet above the water, and in this is an opening, or vent, two feet or so in diameter, which pierces the rock roof six or eight feet until it reaches the outer air. This is thought by geologists to be an extinct geyser, and that the vent in the roof has been caused by the eruption of the waters.

One reaches this hot pool now by means of a tunnel, but formerly it was necessary to descend through the vent, and a story is told of a distinguished Canadian official who, some years ago, tried to make the descent. Half way down the shaft this corpulent person stuck to the alarm of himself and friends. He remained a fixture for some time, in spite of strong language on his part and various devices used by outsiders for his extrication.

The entrance tunnel was afterwards constructed by the Canadian Government, but the process of squeezing through the hole, leaving some cuticle in the descent, and the knowledge that a slip would mean a drowning in a hot lake below was a novel experience that the tunnel cannot furnish.

LIFE OF PIONEERS

IN THE FORESTS

First Settlers in Ontario Were Happy in Spite of Many Hardships

When the early settlers of this country first took up land and built their shanties, the country being all bush, they cleared the land with the use of an axe by chopping the timber down and cutting it into lengths and burning it, says a writer on pioneer life in Ontario. The ashes were gathered and put into leeches, water was put on them to run off the lye which was boiled down into what they called black salts and taken to market. That was the only way they had of obtaining money till they got their land cleared.

In reference to their houses, the roofs of the shanties were made of troughs, hewn out with an axe. The walls of the shanties were of course made of logs, the cracks being stuffed with moss. The chimney was built of sticks and mortar in a triangular shape; mortar was made of mud and straw tramped by the oxen. There were large flat stones at the bottom of the fire-place.

Bread was baked in a large iron pot with three legs and a lid. Hot coals were put under it and on the lid and it was turned around often. Meat was generally boiled. There were lots of potatoes and vegetables, such as cow cabbage, lamb's quarter, wild plums and currants. The only sugar they had was maple sugar, boiled in iron kettles and cooled in small, axe-hewn troughs.

Furniture in those days was made with nothing but an axe and an auger. The chairs were benches with four pegs for legs. The bedstead consisted of a pole at each side and two poles at each end driven into holes in the four upright posts. The bottom of the bed was made of slabs split with the axe, the same as the floor of the shanty.

The women would card wool, spin it and someone in the neighborhood would weave it into cloth, which made beautiful dresses and men's suits. They made their pens for writing out of wild bird's feathers, not having any geese or turkeys.

Through all the hardships the people were very happy. They had church service in their homes turn about. The preacher would come to have service once in three weeks. The women went to church with their aprons and sunbonnets on, and everybody brought their babies. Later on they built churches out of logs and planks.

People were very hospitable and by person travelling through the country, such as for flour, etc., would call in and stay where night overtook them. Some times at night the floor would be almost covered with people lying with their feet to the fire.

THE OLD PLUG HORSE

Don't make fun of the plug. He may be slow and awkward and never get to the stable until dark, but he is the fellow who in the end will bring home the coin, says Bert Walker. The plug horse that pulls the harvester all day in the field puts more money in the bank for the honest farmer than a race horse that goes out and turns a half in 9:50 flat and then loafers for two weeks waiting for another race to be matched. The old plug goes out in sunshine and storm and pulls in a few dollars every week, but the race horse waits for the day when the track is good and then generally loses more than he wins. Just so with the man. Fix your faith to the plug who keeps steadily at it; the fellow who gets up every morning and does so much and is ready to do it again next day. It lays up more shining dollars in the bank than the swift sport who lays around all summer waiting for luck to come along and turn a stream of silver into his pocket. One cackling Plymouth Rock hen is worth a dozen screaming eagles when it comes to paying off the mortgage. The plug is the fellow who steadies the ship and acts as ballast when the boat begins to rock. The plug is the fellow who lives contentedly and long, and when he passes away the local papers say, "He leaves his family in comfortable circumstances."

EUGENICS DEFINED

Sir Francis Galton's definition of eugenics is "the study of agencies under social control, that may improve or impair the racial qualities of future generations, either physically or mentally." He has also defined eugenics as "the science which deals with all influences that improve and develop the inborn qualities of a race." He appears, however, to have referred more particularly to hereditary influences, for in this connection he adds: "The aim of eugenics is to represent each class or sect by its best specimens, causing them to contribute more than their proportion to their next generation; that is, to leave them to work out their poisonous civilization in their own way." Another high authority has drawn a clear distinction between "race improvement through heredity" and "race improvement through environment" for which a new term "euthenics" has been coined. In this stricter definition "eugenics" is concerned specially with the improvement of the human race through marriage and parenthood, associated, as these are, with the problems of heredity, race culture and race development.

CHARMED BY BLACK MAGIC

Englishman Said a Neighbor Spelt Over Him

A man applied to the magistracy at Union Hall, England, for redress of various injuries inflicted upon him by a person who, he said, had long held him in subjection by the power of witchcraft. The person complained of had for some time been his opposite neighbor, and although it had been his constant study not to offend him, being well aware of the influence he possessed with the powers of darkness, yet he had, in some way or other, been so unfortunate as to incur his displeasure, and severely he had suffered for it both in person and property, as the wizard had at different times destroyed his clothes, tainted his provisions, prevented the smoke from ascending the chimneys, soured the liquor in his cellar, and on various occasions, when the complainant had been under the necessity of going out to business, had so fascinated his powers of vision that on his return home all his efforts to discover his own door had proved ineffectual, and he had frequently been under the necessity of applying to his neighbors to conduct him home.

WHEN BIRDS MIGRATE

Woolly-birds Invention to Prevent Devastation of Flocks

Every spring thousands of migrating birds are dashed to death on the lighthouses that surround the British coasts.

A Dutch naturalist has invented a contrivance to prevent this destruction, and experiments are being made with it at the lighthouses at St. Catherine's, on the coast of the Isle of Wight, and the Caskets, in the English Channel. Both of these are on the principal migration route, and annually account for the loss of great numbers of birds.

The naturalist takes the view that the birds are not stunned or killed by the impact with the lantern, but are attracted to the light, and keep circling about it until they perish. He accordingly has devised a series of resting-places, which fit on the lantern itself.

Experiments already conducted show the value of this invention, in one instance reducing the mortality from thousands of birds nightly to a hundred during the whole migration period.

The Generous West

An immigration man persuaded N. F. Lamborn, a native of Denver, to visit Saskatchewan some three years ago. He did so and bought a 2,300 acre farm near Herschell, Sask., and he now has sufficient money to allow him to live in comfort for the rest of his life. He bought 2,300 acres for \$12 an acre and sold the farm for \$55 an acre, getting \$126,500 for the land he bought for \$27,600. He had 1,340 acres in flax his last year on the farm. This crop netted him \$37,300; he got 27,000 bushels of flax for which he obtained \$1.40 per bushel. Mr. Lamborn made his living for three years and in addition cleared a profit of some \$150,000.