

To Investors

THOSE WHO, FROM TIME TO TIME, HAVE FUNDS REQUIRING INVESTMENT, MAY PURCHASE AT PAR

DOMINION OF CANADA DEBENTURE STOCK

IN SUMS OF \$500 OR ANY MULTIPLE THEREOF.

Principal repayable 1st October, 1919.

Interest payable half-yearly, 1st April and 1st October by cheque (free of exchange at any chartered Bank in Canada) at the rate of five per cent per annum from the date of purchase.

Holders of this stock will have the privilege of surrendering at par and accrued interest, as the equivalent of cash, in payment of any allotment made under any future war loan issue in Canada other than an issue of Treasury Bills or other like short date security.

Proceeds of this stock are for war purposes only.

A commission of one-quarter of one per cent will be allowed to recognized bond and stock brokers on allotments made in respect of applications for this stock which bear their stamp.

For application forms apply to the Deputy Minister of Finance, Ottawa.

DEPARTMENT OF FINANCE, OTTAWA,
OCTOBER 7th, 1918.

EUGENICS DEFINED

Mr. 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 the best specimens, causing them to contribute more than their proportion to their next generation; that is, to leave them to work out their common 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 the term "eugenics" has been coined. In this stricter definition "eugenics" is concerned specially with the improvement of the human race through marriage and parenthood associated with these are, with the problems of heredity, race culture and race development.

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

aviation.

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 or his trousers or anything else.

He couldn't take an anaesthetic 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.

Western Hotelman

Mr. J. V. Henderson, then of the Windsor Hotel, Montreal, was appointed resident manager of the Macdonald Hotel, Edmonton, when the Macdonald was the latest addition to the chain of Grand Trunk hotels. The Macdonald has a magnificent site in the centre of the city of Edmonton, and overlooks the North Saskatchewan River. Mr. Henderson was connected with the management of Canadian hotel organizations for years, and is well known throughout Western Canada.

Don't omit treating grain with malin. It is cheap insurance against which sometimes has a habit of destroying grain if a fungicide such as formalin is not used on the seed.

Tar Ruins Appearance

Tar is one of the worst enemies of the finish to a motor car and should be taken off as soon as possible. Taken off when it is fresh, the detrimental effect will be noticed, but if allowed to dry it will gradually get in its destructive work of eating down through the varnish coats to the wood or metal. In any case, the new car should shun the freshly-oiled road if there is any way of doing so.

The flock of farm fowls allowed to range over the farm at will catches and eats a great many insects, many of which are noxious. In this way poultry have had a decided influence in controlling insects harmful to fruit and other crops.

AN EXTINGUISHED GEYSER

Hot Lake at Banff is Reached by a Tunnel

Few persons ever heard of a desert geyser, but they are not uncommon. It is said that that beautiful widening of the Mississippi River known as Lake Pepin is really a desert 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 scientists 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 fall would mean a death, is a hot lake below was a novel experience that the tunnel came for him.

ORIGIN OF GYPSIES

The first official recognition of the presence of Gypsies in England is contained in an act prohibiting their itinerancy, dated 1549. Gypsies appeared in Germany, Italy and France early in the thirteenth century, but it is to be supposed that they did not reach England in considerable numbers until the early part of the sixteenth century. The law referred to commanded Englishmen to refrain from all intercourse with the dark-skinned tourists, and during the reign of Charles I. thirteen persons were executed at one assize for having associated with Gypsies. In both England and America, up to comparatively recent times, Gypsies were treated as vagrants, and often persecuted. There are many theories in regard to the origin of Gypsies, but the one most generally accepted is that they are the descendants of low-caste Hindus expelled by Timour about 1398. Despite their association with other peoples, the manners, customs, superstitions, visage and appearance of the Gypsies remain practically the same as when they made their first appearance in Europe five centuries ago, and they continue to make the same pretense of a knowledge of futurity.

ENVIRONMENT OF FOWL

Man and Nature Create New Breeds—
—Climate a Factor—

In our pride we all are apt to look upon ourselves as the creators of the various breeds and varieties of domestic fowls. In a certain sense this view is justifiable, says one writer, but in a more general sense fowls are the product of their environment, and man is but one of the factors, though an essential and important one, of such environment. Man himself is a product of his own environment. Consequently when a Canadian poultry breeder attempts to make a new breed or variety of fowls, he makes such a breed or variety through the effects of environment which has made him. And in conformity to what the environment has made him he creates the new fowl.

Environment also works directly upon the plastic material of the fowls. The Leghorn fowl with its graceful shape, great activity and remarkable prolificacy is a product of the sunny climes about the Mediterranean Sea. Perhaps nowhere else it could possibly have originated. The Dorking is clearly a product of the climate of "the tight little, tight little island." When man's efforts are in harmony with nature's influences he has the best opportunity for success. Man and nature make an irresistible combination. Consequently, in all our efforts to improve the race of domestic fowls we should seek "the line of least resistance." This, we believe, is one of the reasons, if not the reason, why North American fowls are general purpose fowls, why French fowls are table poultry, and why Mediterranean fowls are prolific layers. This, too, is one of the reasons, if not the reason, why most fowls, though of foreign origin, begin to be bred as general purpose fowls when introduced by poultrymen into Canada, and this seems to help to account for the fact that in this country the general purpose fowls lead all others in popularity and prestige.

CAMP OVENS

Not Difficult to Rig up a Good Makeshift

A camp oven is a great convenience and it is easy to make one out of



CAMP OVEN MADE WITH TWO SAUCE PANS

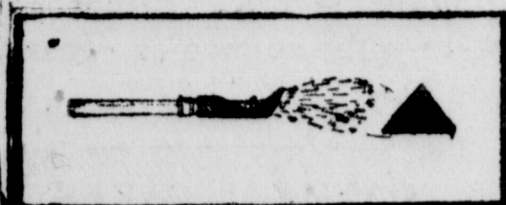
materials that must be used. Two baking pans or ordinary sauce pans or kettles can be used. One of the



CAMP OVEN MADE WITH TWO BAKING PANS

Pans or kettles should be larger than the other so that when inverted it will fit over the top of the other.

Why Buy a Spray Nozzle?



A nozzle for garden hose that throws only a straight stream can be made to spray by the attachment of a triangular piece of wire netting to the end. The base of the triangle is made long enough to permit the ends to meet around the nozzle just below the outlet. This will cause the apex of the angle to bend over the outlet, but at an angle and the angle is sufficient to deflect the water in a fine spray. The netting is attached tightly to the nozzle with wire.

RHEUMATISM CONQUERED

"I have been for the last two years a cripple with Muscular and Inflammatory Rheumatism. I tried almost everything known to medical science to relieve me of the intense pain and inflammation. I sought change of climate in Kentucky and other Southern points without relief. Your manager in this city recommended GIN PILLS and I have since taken eight boxes and am now cured. I consider

GinPills

FOR THE KIDNEYS

the conqueror of Rheumatism and Kidney Diseases.

G. D. Reid.

All druggists sell Gin Pills at 50c. a box, or 6 boxes for \$2.50. Sample free if you write to

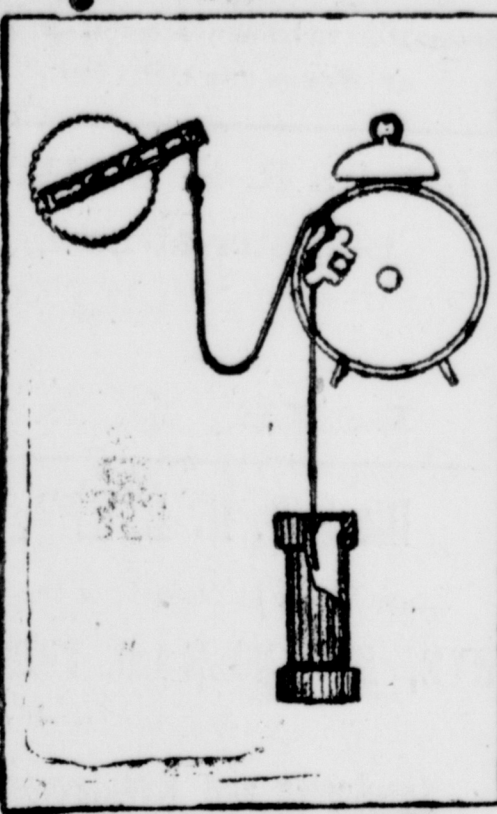
NATIONAL DRUG & CHEMICAL CO. OF CANADA, LIMITED

Toronto, Ont. 76

CLOCK OPERATES VALVES

Time Mechanism Opens Them and Operates Switches, Etc.

A time mechanism for the operation of valves, switches and the like has



CLOCK RELEASES WEIGHT.

been invented. A notched wheel is attached to the object to be operated and a lever is pivoted to this wheel. The lever is in two parts, slidably connected so that the length may be varied as required. A cord attached to the free end of the lever has a weight at its other end. This cord is tightly wound around the key of an alarm clock and suspends the weight on the latter. When the alarm goes off the key revolves and throws off the cord, which allows the weight to drop and exert a downward pull on the lever. This in turn operates the mechanism which opens the valve, or switch, or whatever is to be opened. The same principle can be applied to a furnace door.

FUN FOR LITTLE ONES

Some Little Tricks to Amuse the Children Indoors

Amongst all sorts of amusing experiments which can be made with tumblers, sticks, forks, and spoons, perhaps one of the most favorite ones with children is the penny and tumbler trick.

If you fill a tumbler with water—is full—is it possible without overflowing—and observe the line of the water you will find that in the middle of the tumbler the water is slightly concave—that is, forms a depressed line just as if it had been scooped out. This, which is caused by the natural weight of the water, is however, not apparent to the usual uninitiated, and although the water might, on the edge of the glass, be almost on the point of overflowing, say child can challenge a grown-up person to put in it many coppers without spilling a single drop of water.

To perform this little trick, the copper must be put exactly in the centre and dropped very gently, first inserting the edge in the water. Great will be the surprise of all concerned to see that, according to the size of the glass, five or six coppers can thus be put in until the water in the centre becomes level with the sides, when it of course, the water will flow over.

A most amusing experiment might be tried with a lighted candle.

Take a tumbler half full of very old water and, having lighted the candle, hold it sideways over the tumbler. The hot wax will pour in drops into the water, when the coldness of the latter will congeal the melted wax immediately it touches the surface of the water, thus, creating a rough-edged little ball strangely like the flower known as the "lily of the valley." After a good many of these flowers are produced in this way they are threaded one at the time on a long thin piece of wire, a small knot preventing the lower from slipping through.

The wires are then twisted lightly over each other to form the spray of lilies, which, when mixed with strips of green paper cut and twisted to imitate the long pointed leaves, makes a most charming and interesting arrangement.

You will like its
Fine Granulation

Buy your sugar in these neat 2 or 5-lb. cartons, which you can place directly on your pantry shelves.

Just cut off the corner and pour out the sugar as you need it.

Lantic Sugar

comes also in 10 and 20-lb bags for housewives who like to buy in larger quantities

"The All-Purpose Sugar"



2 and 5-lb Cartons
10 and 20-lb Bags