FIRST FLAG OF WORLD

Origin of the National Bannersispan Heads Link

The most ancient national flag in the world is either the dragou banner of China or the chrysanthemum flag of Japan. The former has been used from a very early period, and the latter is as old as the present dynasty in Japan, which is the oldest in the world. Amongst European national flags that of Demmark-a white St. George's cross on a red ground-is the most ancient, having been in use since 1219. No other flag has existed same period as a national emblam, alare older. The Spanish national flag dates only from 1785, and the British in its present form after the union with Ireland in 1801. The Stars and Stripes, the national emblem of the Inited States, is older than the British, for it was first planned and ordered by Washington of Betsy Ross, an upholsterer of Phhiladelphia, and formally adopted on June 14, 1777.

M'ANITOBA'S WEALTH

Great Natural Mineral Resources in Western Province

Sir William Mackenzie, presideat of the Canadian Morthern Railway, said: "The unapped natural resources of Manitoba will stagger the world." When he made this statement he must! have had in his mind the very rich! mineral resources of the province. Some years ago rumors began to drift into Winnipeg of gold finds being made in Northern Manitoba. Then startling reports of the richness of the finds round Race Lake district came to hand, and the publicity given to the camp caused a great deal of interest.

As an example of what can be done in the mining industry, the Porcapine district of Ontario might be cited This campe . W. unknown before 1903, and in seven venin it put out nearly \$19,

IN BACKWARD CANADA

Quaint Waye and Costumes of Islands in St. Lawrence Gulf

A night's sail to the north of Prince dward Island in the Gulf of St. wrence, one happens on the Magred Amherst, Grindstone Entry, Al-Coffin, Bryon and the Bird roup of remance-niled 13so if they were better known hrough the summer months. La rance Demoiselle et La Petite Demoiselle are the two smoothly counded comb actions of mountain and cliff which together with sandbers, miles in length, form the chief landmarks of the approach.

Here in these islands, whose history dates back to the French discovery and session of Canada, one happens on rate things-women in sunbonnets riding in carts, knitting in hand; berry-pickers, ready with a pleasant smile to have their pictures taken; hay-makers, whole family groups, the women and children all helping with the hay while the good weather lasts; little boys sailing toy boats that they themselves have modelied and fitted; men and women wearing homespun garments and homemade shoes of sealskin; basket makers and hookers of gay patterned

READ INSURANCE POLICY

puseholders Careless About Details That Might Mean Loss

The following, or a similar clause. oppears in all policies of fire insurance: "The company is not liable for losses following, that is to say: Where the insurance is upon buildings or their contents for loss caused by the want of good and substantial brick or stone or cement chimnies; or by ashes or embers being deposited, with the knowledge and consent of the assured, in wooden vessels; or by stoves or stove-pipes being, to the knowledge of the assured, in an unsafe condition, or improperly secured."

Nothwithstanding this, in one year in Canada, there were 51 fires from defective and overheated stoves and furnaces; 62 from defective and over heated pipes, chimneys, etc., and 8 live coals and hot ashes. Should insurance companies take advanof this clause, many victims of own carelessness would find emselves without any recompense er their losses.

Disposal of Ashes

During the winter months the disposal of ashes from stoves and furnaces demands attention. Though trany fires are caused by the disposi-In of hot ashes against frame build-1 38, wooden fences, etc., the practe is still continued. Too much care annot be given to the disposal of thes. Either metal containers should to used or the ashes should be placed the a safe distance from anything com-Lustible.

"Calf' Week The terms "cell weed" "cow week." are apilled in many 18.2.4. grout industrial centres three weeks before the Cura

oliday week. in "ealf week" work time and a third, in cek," time and two-thirds and ke up for loss of output caused

LIFE OF A BOOK FROM START TO FINISH

What a Printer's Warehouseman has to Know-Warehouse is an India-....sabie Part in Printing

The warehouse in a printing establishment is the place where the finishing touches are given to the printer's work, and is not merely a packing and despatching department. A warenouseman here has to be something of a stationer, bookbinder, and publisher as well. The duties of a printwithout change for anything like the er's warehouseman vary according to the particular work done by the weekthough there are Royal standards that ly papers. In the first case he will deal with much fancy and small work, from visiting cards, dainty programflag, the Union Jack, was first bown mes, trade stationery, labels and leaflets, and all the varied small jobs required by the public demand.

Making the Book

In dealing with book work, the printer's warehouseman has to bring various kinds of ingenious machinery into play to aid him in his work, such as folding, rolling, and stitching machines. If you look at the back of any volume you will notice that it is put together in so many portions. These consist of sheets containing a certain even number of pages, usually thirty-two, and the first operation in putting a book together is to fold the printed sheets so that all the pages face one another in their right order.

It is very interesting to watch the work of a folding machine as it snaps in the sheets with a jerk, and then delivers them, rapidly folded, and macks them one after the other into a slide tray. A large amount of folding work is done by hand as well, and in this women are very adept. Drawing one edge of the sheet over the other with the left hand, with the right they skilfully and rapidly press the folder, a small piece of shaped bone or wood, along the folded edge, repeating the operation as many times as required. When folded, the sheets of a book have to be collated in proper sequence. To aid the warehouseman to do this rapidly and correctly, each sheet of printed matter is lettered in alphabetical order.

The Work of a Day If they require to be stitched, the papers will have to be passed through the wire stitchers, and then be gathered again to be placed in the cutting machines and their edges trimmed up. Usually, however, with the printing sachines now in use, this stitching and trimming are done during the process of printing. The last operation with which the printer's warehouseman is concerned in connection with the publishing of a weekly periodical is to see the copies derould have visitors by the hundreds | spatched to the wholesale newsagents, after all the parcels have been carefully labelled for their various destinawith a scheduled list is nand, he sees the goods packed into the right vans. and a m his labore are over until next pubushing day

HOW DO THEY KNOW?

The birds know when old King Winter is about to relax his grip or the country. They also ke wher the stramer is on the wane and it is But how do they know?

Ichedules—we look at the almanac Ind count days, and then we say that It such or such a time it will be spring, ir fall or summer, or winter. With as it is a mathematical problem. Without our tables in which are put down the experiences of men we wouldn't know as much about it as the bard does. But again we ask how does the bird know?

CLEAN MILK METHODS

Brush the cow's udder and wipe bith-a dry cloth; use clean water and y with a clean towel.

Milkers should wash their hands with soap and water and dry with towel.

Whitewash the cow stable at least wice yearly.

Feed no dusty feed until after milk

Remove all manure from cow stable wice daily. Keep barnyard clean and have

Manure pile at least 100 feet from the stable. Have abundant windows in cow

stable to permit sunlight to reach the

Arrange a proper system of ven lation for the cow stable. King sys

tter is suggested. Do not use milk from any cows sas exceed of serent or any udder in semmation. Such mil contains

permous numbers of bacteria. Une chundance of ice in water tank for cooling mil.

POISON WARNING

An Attachment to a Bottle Rings a

somebody, the wife, the baby or your



self may get sud denly ill, and somebody will hurry to the medicine case, or the pantry shelf, or wherever the medicine bettles are kept. In the darkness a poison bottle may be

grasped and carried to the sick room, and in the hurry incidental to sudden iliness a dose may be administeredand a funeral held later on! Or there may be medicines that must never be given to children.

Bell bottles-that's by way of warning. Get a number of tiny bells, and fasten a bell to each bottle containing poison or any medicine which may have a serious affect if taken unintentionally. Possibly a good way would be to tie two bells to the prison bottles, to distinguish the very dangerous ones from the others, the taking of which wouldn't be quite so serious. The ringing of the bell will then prevent you from making a fatal mistake.

A Pocket Typewri'er

Just as the pen has veplaced the sword and the fountain pen displaced the ordinary pen of commerce, so the time is probably approaching when the typewriter will send the fountain)en back to the scrap bee.p. Some mart and observing person might state that the time is already, here, s typewritten letters and manuscript have practically displaced those writen' by hand. The fountain pen is still being carried in the pocket, however, and it was against this practice that an inventor has recently directed



its genius, with the result that a pocket typewriter has been evolved. A young German is credited with the perfection of the newest writing device. It is a folding machine that its Mme to fly off to the sunny South maker guarantees to keep in perfect order for three years, and can be We-poor slaves of calendars and carried in the pocket, requiring no time tables and such man-made more space than the average watch or tape measure, and a foot rule combin ed. It is provided with a handle by which it is held with one hand and operated with the other, no desk or table being necessary.

COMPRESSED WRITING

Wonderful Feats in the Art of Ponmanship

In competition for a prize offered by a paper for the best examples of microscopic writing, a reader sent in a fairly readable and exhaustive account of the first voyage of Christopher Columbus and the discovery of America, written on a hen's egg. Another competitor's series of efforts included the Lord's Prayer written on a grain of wheat split lengthwise, and the first chapter of Genesis inscribed within a circle no bigger than a stilling. A French-Canadian sent in Francois Coppee's novel of "Menriette," containing over 19,000 words, written on the back of a cabinet photograph. On the inside of a silver watch case a girl of sixteen had engraved 2,107 words, using a tiny platinum needle dipped in powerful acid. A committee of six examined the various efforts through powerful mi-croscope, and eventually the prise was awarded to a man who sent in the Erst two sheets of a great newspaper estion on a post card.

Chimney Fires For a chimney fire a few pounds of connects with the chimney, the latter has 210 miles of double track. materials are not desirable to use. since they are liable to scatter the burning soot into the room where the fireplace is located.

while making automobile repairs. A enough, the people of Par edif not small particle of dirt on the surface like the boxes for their letters, and

BRIQUETTING LIGNITE

Prairie Provinces Might Adopt New Method and Save Money

Manitoba, Saskatchewas and Alberta contain many millions of tons of sub-bituminous coal and lignite but Some time in the still, dark night the comparatively low heating value of this coal and the fact that it dislite rates rapidly when exposed to the air prevent its economical trans portation for any considerable dislance. In fact, these provinces are now supplied almost entirely by coal from the Crows Nest district in Alberta and British Columbia and from the United States.

In a plant in Denver, Colorado, with a capacity of 500 tons of lignite per day, lignite is distilled, the by-products he saved and the residue is manuctured into briquettes. These bri-Liettes are of very good qaulity, and e suitable for domestic or railway comotive purposes. The lignite is harged into ovens having a capacity if 10 tons each. The ovens are heated by gas flame between the walls. and distillation is carried on for bout two hours without the admison of oxygen from the atmosphere. furing distillation about 100,000 cubic eta of gas, 130 gallons of tar and pounds of ammonium sulphate, are temoved per 10 tons of lignite. Benzol is removed from the gas and the gas is cleaned by electrical precipitation. While the raw lignite only contains 55 per cent. of fixed carbon, the briquettes sverage 84 per cent.

Curtous Sinecures

It will be interesting to know if an ill-round reduction of Government miaries takes place, whether the

When Motor Wisses

motor persists in missing when only a light load is being carried, before resorting to adjustments of the carby retor try making spark geg a mede vider, presuming, of course that the magneto is being used. On the other hand, if the motor misses when there is a heavy load on board, it may possibly be obviated by closing the srark gap slightly.

Why Fowls Need So Much Air Fowls are obliged to throw off much of the waste of the body throug . he lungs, they do not sweat in the sense hat do other animals, but instead ceathe several times faster than grating animals when heated. To kish in good health a hen requires nearly seven times the amount of fresh air in proportion to its size as does a

There is almost as much difference between different families or strains of the "great night." breeds of fowls. Therefore, receive with some allowance the praise or condemnation of any breed.

To decrease the number of accidents a French city is building a street with a separate roadway for each kind of traffic, motor, horse and

Solidified alcohol in the cube form is coming into use in Germany for rooking and other purposes for which small amounts of heat are sufficient. A cooking utensil on the double boiler principle has been patented in

are rermanently attache 1 tog ther. An Englishman has the bu combe to be sewed to women's wats to hold them in place without the use of pine

which the inner and outer sections

TREE THAT OWNS ITSELF

Love of Tree Causes Extraordinary Bequest

At Athens, Georgia, there is a giant white oak tree which no one may buy or sell or cut down; nobody owns the land in which this tree stands. The tree owns itself. It stands on top of one of the hills of the city, and is said to be between 400 and 500 years old. Early in the nineteenth century the owner of the plantation on which the tree stod often used to sit in the shade of the huge oak. Finally, he became so attached to the tree that he made a will which deeded the tree to itself. He wrote: "For, and in consideration of the great love I bear this tree, and the great desire I have for its protection for all time, I convey to it entire possession of itself, and all land on 8 feet of the tree on all sides." And so the tree came to own itself and 8 feet of ground surrounding it.

Eastern Nations' Discovery The Eastern nations, which are far more pestered with files than we are, have discovered how much fles dislike blue. The Arabs treat their houses with a kind of light blue wash, and the Japanese hang curtains of blue glass beads and bamboo at the entrance of their baker and butcher shops. These curtains let the air in. and the flies, should there be any in the room, pass out between the blue beads towards the light, but they do oot re-enter.

Grand Total of C.P.R.

The Canadian Pacific Railway has grand total of 1,500 miles of double track. Ontario district has a doubletracked mileage of 105. Manitoba fistrict is laid with no less than 643 thrown in at the top is probably miles of double tracks. British columbia district is equipped with pail of sand, earth, ashes, or even coal, 143.90 miles. Alberta district has will be very helpful. If a fireplace 18 miles and Saskatchewan district

The First Letter Box

The first letter box seems to have bee installed in Paris, as a useful part of the first penny post establish-Cleanness must be exercised ed it only country. But, strangely of a gasket will cause it to leak the system was for some years given

WHERE JUNE 21 IS NOON OF THE YEAR

Sounds Strange, But Is True . Pole Novel Facts About Night and Day

We are ant to refer to a day or Lay and a night to indicate a specific period of time without realizing that these terms have a different meaning in different parts of the world. Not everywhere and always does the patural day include 24 hours if meany ed from suprise to sunrise

The fact is that a day is por a fixed number of hours, but the length of la! during which the light of the an illumines any part of the earth In some parts of Norway the day laste from May 21 to July 22 withot interruption. In Spitzbergen the langest day is three and one-half months and the shortest two and a half of actual lght. At Petrograd the longest day 1: 19 hours and the shortest 5. Air Hamburg the longest 'is 17 and the mortest 7, and in London the longest 161/2 and the shortest 8.

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Ball Tong

A STATE OF THE STA

The beginning of the day is not a question of universal agreement. in s been arbitrarily decided by differ out peoples from time to time. That enciont Jews fixed the beginning of Me day at sunrise; with the Umbrians I began at noon, and the Egyptiana ; d Romans fixed the time at midtight, a custom adopted by Canada, the United States, and most of the European countries.

It is a matter of common knowledge that the longest day of the year in June 21 and the shortest December 27 (sometimes the 22nd). This latter is the time when the sun is farthest south on its annual slant over the tropic of Capricorn, making the maxinum declination to the axis of the earth. All over the world this date marks a turning point in duration of the day although in every case it is not the shortest day. In places south of the equator they are enjoying the longest day. At the South Pole on months day, and at the North Pole

RAIN COMES THE LAST

Why the Rain Follows the Thu, ter and Lightning

Why toes a heavy downpour of red often follow a clap of thunder?

Let, as is popularly believed, because
the thunder jostles the cloud particles: together into raindrops. In the violent turmoil between the positive and negative electricity in a thundercloud there will be places where the proraction of drops, by condensation, and their subsequent breaking up proceeds more rapidly than elsewhere. Hence in these places there will be more drops to fall as rain, and also more electrification, the rainfall occurring about the same time as the flash. Wa have, then starting toward the earth. at the same time, light, sound, and raindrops. The light, travelling at a speed of about 186,000 miles per second, reaches us almost instantly. The sound travels far more slowlyabout 1,090 feet per second-but the rain falls much slower still. Thus we observe, first, the lightning, then the under, and then rain.

• Petatoes For Rotation

the great advantage in growing perally with the regular farm retation.

The a three-year rotation," says Harry Broughton of Sarnia, Ontario, "rouse had then potatoes, fall wheat, clovers and then potatoes again. A potate pump leaves the land in excellent condition for fail wheat. My brother, atting for fail wheat. My brother, titles for fall wheat. My brother, who lives near Whithy, had stray-four bushels of fall wheat to the acre fallowing pointoes. In a four-year retailer pointoes will work in as well; total or, fall wheat, eats or harley and

On any well regulated dairy three riod is never neglected. Don't ot the source of income.

HOW TO TRIM A LAMP

Eard oil can be made to burn badly d poor oil can be made to burn well. The following are some rules r getting good service out of the

The wick, to begin with, should the straight down in the oil. Then oil will pass more freely to the lame, and a better light will be obtained. The wick should be cut with as thin an edge as possible. If it has a broad burning surface at the top the flame will be yellow instead of

white. the brass burner, so as not to let air in where air is not wanted. The holes at the bottom of the burner should be left open, so as to let plenty of air in where air is wanted. The wic e should not be turned so high that it will char or smoke. An old the very lots a better light, arough the over one, and a diallow bowl lamp is better for poor grades of ell than a deep bowl lamp.