

RELATA REFERO

INTERESTING READING AND INFORMATION
GATHERED FROM MANY SOURCES

By Scissors

It costs fifty cents to collect \$100 taxes.

In silk production Japan leads all other nations.

Polar bears have been known to weigh more than 2,000 pounds.

From September 25 until June 1, Dawson, Alaska is isolated from the outside world.

In China an average of only one child out of ten has an opportunity to attend school.

Mexico is preparing to formulate banking laws based on the United States Federal Reserve system.

Work has begun on the New York-New Jersey vehicular tunnel connecting New York City with the Jersey commuter. It will cost about \$29,000,000.

The United States estimates that enough gasoline to operate 2,400,000 automobiles for a year is wasted annually by evaporation due to inefficient storage methods.

A Scotch banker left his two daughters legacies of their "weight in five-pound bank notes." The elder daughter received about \$256,000 while the younger and plumper one inherited \$286,700.

Telephone companies in large cities are abandoning the familiar "I'm ringing them" song of the operator. An "audible ringer" that causes a purr in the ear of the caller is being installed.

The largest diamond in the world, weighing 183 15-100 carats, has arrived in New York from Europe. It is the property of Abou-El-Hamid, former sultan of Morocco, who abdicated in favor of his brother.

For the first time in history flour milled in China is being sold in the European market. A shipment has reached Holland and sales are being sought in other countries. China formerly was a large importer of American flour.

The island of Majorca, one of the Balearic Isles off the coast of Spain in the Mediterranean Sea, is believed to have the finest climate in the world. The temperature remains practically stationary at 76 degrees and breezes blow constantly.

A learned society is puzzling itself over the question of whether a fat man or a lean man is more likely to be a genius. They are stumped by the historical fact that when fat geniuses became lean they lost their greatness, and when lean ones began to take on fat they too suffered.

Those who love to use big words should remember that what is generally accepted as the greatest single piece of American literature ever produced contains, in its 268 words, only 26 words of three or four syllables. The other 242 words are all of one and two syllables, and of this number 196 words are of one syllable!

There is a Needle-and-Thread tree in Mexico. It is the maguay tree, which furnishes a needle and thread all ready for use. At the tip of each dark green leaf is a slender thorn needle that is carefully drawn from its sheath. At the same time is slowly unwinds the thread,

a strong, smooth fiber attached to the needle and capable of being drawn out to a great length.

The word "encore" is really not French in our theatrical use of it, for when the French want a performer to repeat a performance they use the Italian "bravo," which word, by the way, can be applied only to one performer and that a male. We say "bravo" to a woman on the stage—we really should say "brava," and when we acclaim a whole band or orchestra it should be "bravi."

Once we were without flies and mosquitoes. That was away back in the early coal-forming period when the world was gradually taking shape. The only existing insects were those provided with heavy jaws adapted for biting, such as the grasshoppers, the locusts, the praying mantis and others belonging to the order Orthoptera. Uncouth, incomplete in their transformation, they wandered amid the treelike foliage, already flourishing when none of the insects sprung of more complex forms of metamorphosis were as yet in existence—neither butterflies, beetles, flies, mosquitoes nor bees.

A massive iron chain once stretched across the Hudson river as part of our national defense in the Revolutionary war, the chain being placed there at the command of General Washington in order to prevent the British war vessels from effecting a landing in the upper valley of the Hudson. It was set in place April 30, 1778, and remained unbroken till the close of the war. The chain was 1,500 feet long, and each link was two feet in length. The total weight was 186 tons. The sections were linked together. Logs were used to float the chain, which was surface. Heavy anchors were required to keep it in position.

PARROTS THAT KILL SHEEP

Sheep raising in New Zealand is threatened with calamity from an unexpected source—a parrot that attacks full-grown sheep and with claws and beak literally tears its unfortunate victims in pieces. This bird of destruction is called the kea. It is smaller than an English rook, says a New Zealand correspondent of the London Times, and has brilliant, semimetallic sheen of many other colonial birds. Beneath the wings are flame-colored patches. The body is compact and very muscular, but most of the power seems to be centered in the neck, the curved, cutting beak and the strong, tearing talons. The claws will dig into flesh as if it were butter, and one sweep of the beak of a bird that I thought was dead has cut clean across a pair of heavy cord breeches. The kea's flight is as swift as that of a wind-driven pheasant, and it can jump into the air and be off before its screech is ended. But let no mistake be made: the kea is not a sporting bird in any sense—it is treated as vermin and shot on sight.

Strangely enough, the kea is not a wary bird; it sometimes lets human beings approach it closely and has even been known to enter dwelling houses and tents. Frequently keas will stand by in apparent stupidity when their mates are being killed.

Thirty-five years ago this parrot was seen only in the high country of Otago, and the mountain shepherds of the Hawkdun had a legend then of one that killed a sheep. It came north with the herds, and at the time the Mackenzie country was opened it was charged with mysterious killings of sheep that took place more and more frequently. Twenty-five years ago it was seen on St. James and St. Helens, but was unknown on the plain or on the hill station forty miles away. To-

day it has been seen in Blenheim; it ventures to the plains and flies shrieking over Hanmer Springs. At one point by the public road, between Culverden and Hanmer, it slew seventy sheep in a night. Where I was working at Christmas, 1920, it killed seven big Corriedale rams—the strongest sheep in the world—between dusk and dawn, within one hundred yards of the homestead windows.

In some parts of the country small bounties were paid for the keas, but the birds did their work so secretly that the sheep raisers were slow to suspect them. Meanwhile the keas increased in numbers and laid heavier toll, and finally the evidence against the winged terror became overwhelming. The farmers and settlers began to destroy the pest, but more and more keas came, and now there is urgent need that the government of New Zealand take drastic measures if the sheep of the country are to be saved.

It is a curious fact that very little is known about the habits of the kea. When and where it nests is a mystery. There is no record of young birds being seen with the ones that attack the sheep.—*Ex.*

HOW LEAD PENCILS ARE MADE

Metallic lead was first used in pencils for making black marks on paper. For that reason they were called "lead" pencils and the name is retained to this day, although all "lead" pencils now are made from graphite or plumbago, a form of carbon found in the earth and having nothing to do with lead.

Graphite was first used for this purpose about three and a half centuries ago. The graphite obtained from British mines was so pure that it gave fairly satisfactory results in writing without any special preparation; all that was necessary was to cut it out into sticks of the proper size and incase the sticks in wood to protect them. For a long time therefore the British nearly monopolized the pencil business of the world.

In 1761 the manufacture of pencils was started in Germany. The industry grew rapidly until within a short time the Nuremberg district became the world's greatest pencil-producing center. Generation after generation, the descendants of Casper Faber, the pioneer in the German pencil industry, have continued in the pencil business.

Shortly before the American Civil war a great-grandson, Eberhard Faber, emigrated to this country where he soon set up in the pencil-manufacturing business. Since that time a number of other pencil factories have been established and American-made pencils supply a large part of the world's demand.

Graphite as it comes from the mines usually contains impurities such as iron oxides, silicates, etc. These have to be removed before it can be worked up into pencils as they would make the finished product gritty and "scratchy." Graphite occurs rather abundantly in the earth's crust but much of it contains too many impurities for use in pencils; that from mines in Mexico, Bohemia, Ceylon and Siberia is considered the best.

The mineral as it comes from the mines is sorted over and the coarser impurities are taken out by hand. It is then reduced to a powder by machines specially designed for that work and then poured into tubs containing water. The heavy impurities sink to the bottom while the lighter graphite remains at the top where it can be easily taken off. Centrifugal machines are sometimes used for separating the graphite from other substances in the ore but the results are not as good as those obtained with water. The final step in preparing the material is to pass it through filter presses.

It is then mixed by machinery with clay that has been refined by similar treatment.

The clay is used for "tempering," the greater the proportion of clay the harder the finished "leads" and the smaller the proportion the softer.

The graphite-clay mixture, when well kneaded together, is molded into leaves and placed, while still plastic, in hydraulic presses. It is forced out of the presses through dies of the size and shape necessary to produce the kind of lead desired. These dies are made of emerald, sapphire or other hard minerals because softer materials would wear away too rapidly.

As the plastic mixture comes forth in a continuous string it is cut to required lengths, ordinarily about seven inches. Compression in this process materially affects the quality of the lead, that subjected to the highest pressures writing best and giving most satisfactory all-around service.

Finally the sticks of lead are baked in furnaces. They are then ready to be given their wooden cases which protect them against breakage and provide a convenient grip for the writer's fingers.

Red cedar has been found the best wood for pencils because it is close-grained, whittles easily and is capable of a high polish. After being cut into slabs about seven inches long, two and a half inches wide and a quarter inch thick the wood is placed in kilns to remove excess moisture and resin. The slabs when properly dried are fed into machines which automatically cut six semicircular grooves in one side of each.

A stick of lead is placed in each groove of a slab and another slab, with glue, brushed over its grooved surface is laid on so that the six leads are covered above and below with wood. The next operation is performed by a machine that cuts the pencils out—six from each block—and works them into the shape desired, round, triangular, hexagonal, etc. A sanding machine then rubs their surfaces down smooth. Some of the cheaper kinds are given no further finish. The better ones, however, are coated with varnish, plain or colored.

In one of the varnishing processes most generally used the pencils pass one at a time through apertures in a machine which automatically gives a coat of varnish to each as it goes through. After the first coat has dried sufficiently the pencils are fed through the machine several more times, being allowed to dry between coats, until the desired finish has been obtained.

The more expensive ones get 10 or more such coats. In another machine-varnishing process the pencils, held in a frame, are immersed in a pan of varnish and then slowly drawn out and dried. For the finest finishes a final hand polishing is given the pencils.

A machine now sands off the ends to remove the varnish that has dried there and sharp knives trim them smoothly. Gold or silver letters may be stamped on by laying on each pencil a narrow strip of gold or silver leaf and then bringing it under a heated steel die which makes the leaf stick to the pencil under the letters on the die. By means of inked dies letters may be printed much the same as on paper, etc.

Nearly all of the pencils made in this country are provided with rubber tips for erasing. In the cheaper grades the rubbers are glued into the wood with the lead. The more expensive ones have metal ferrules to hold the erasers. These ferrules, made of nickel-plated brass, are all machine-made.

In the big factories the erasers are made in great numbers, along with large separate erasers, rubber bands and the like. Eraser rubber, consisting of gum rubber, sulphur and abrasive material, properly cured and vulcanized, is either molded or cut into the form of plugs of the required shape and size.—*Selected.*