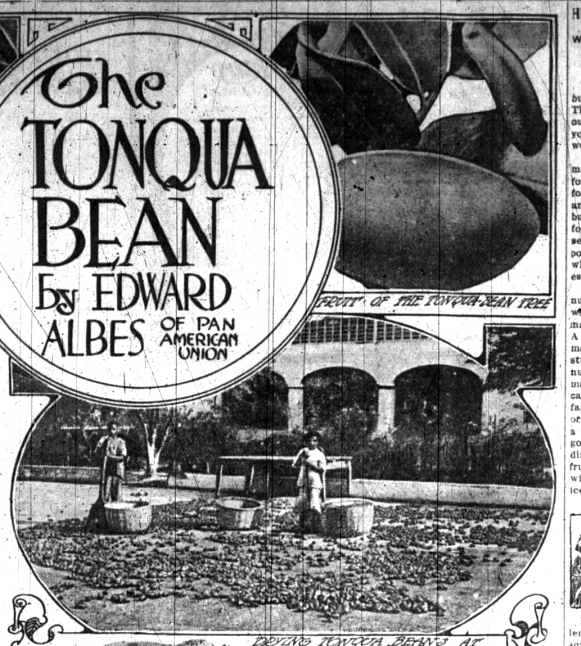
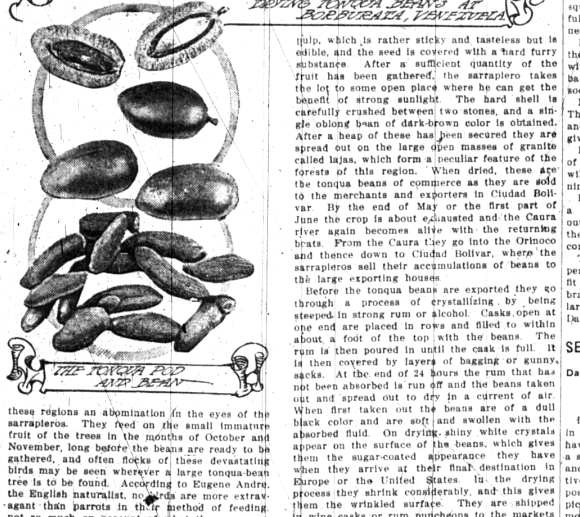
The TONQUIN BEAN

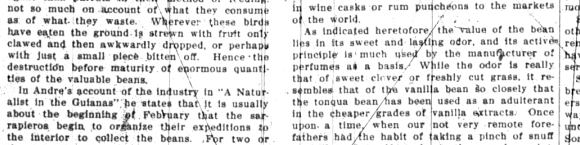
By EDWARD ALBES OF PAN AMERICAN UNION



RECEIVING and FRUIT OF THE TONQUIN BEAN TREE



DRYING TONQUIN BEANS AT BOURBURATA, VENEZUELA



THE TONQUIN POD AND BEAN

THERE is a witchery about the smell of new-mown hay that appeals to humankind of high as well as low degree. There seems to be a tendency to revert to the primitive and bucolic in most of us, however effete and blase our tastes may have become, and the fragrance of the fields gratifies the olfactory nerves of prince and pauper, of the scullery maid and the pampered social butterfly, whose more or less remote ancestors doubtless breathed in the perfume as it rose from the dew-covered, tender grass they mowed with shining blade and gathered with their own strong arms. The attraction of the perfume seems to have lingered even through many generations.

New-mown hay not being always available, and somewhat too bulky for aesthetic use even when it is, the art of the perfumer has been called upon to gratify the sense of smell which longed for this particular aroma; so "new-mown hay" was added to the varied "perfumes of Araby" used as toilet accessories in liquid form, and now "miladv" may inhale the delicious odor from her cut glass scent bottle. Mayhap she pictures to herself the sturdy youth with big, bare arms swinging his gleaming scythe and gathering the sweet young grass which she fondly thinks is the source of the delicious essence she now inhales. But perfumes, like many other things, are not always what they seem. Grass, freshly cut or otherwise, has had nothing to do with the production of the sweet-scented liquid labeled "new-mown hay." The source of the essence is really a bean. Not the prosaic, everyday, commonplace, edible bean of our market gardens, but a bean that grows in that section of the world where once El Dorado, the "Gilded One," was thought to rule in glittering splendor; that fabled land in the fruitless quest of which so many daring, gold-loving adventurers spent money, time, and even lives most lavishly. It is known as the Tonqua, Tonka, or Tonquin bean, said to be so called because it was erroneously thought to have been first introduced into Europe from the Chinese province of Tonquin. However it got its name, the real source of the bean is to be found in the tropical countries of South America, chiefly in the valleys of the Orinoco, Caura, and Cuchivero rivers in Venezuela and in certain sections of Colombia.

The bean is the seed of Dipterix odorata, a tree belonging to the leguminosæ or pulse family. The genus dipterix comprises about eight species, all large trees, to be found in the forests of Brazil, the Guianas, Venezuela, Colombia, and tropical South America generally, having no representatives in northern localities. The tree grows from 60 to 90 feet high, with a trunk sometimes three feet in diameter. The iridescent pods are about two inches long, almond shaped, and very thick; the single seed is over an inch long and shaped somewhat like a large kidney bean; it has a wrinkled skin of a shiny black color when ready for the market. The odor, which is remarkably strong, resembles that of sweet clover or new-mown hay, and is due to the presence of coumarin, a concrete crystallizable, volatile, neutral substance, which is soluble in alcohol and ether and somewhat so in boiling water, from which it crystallizes on cooling. The beans are often frosted with crystals of this substance, which show distinctly on their black surface and give them the appearance of being sugar coated.

As stated, the tree is indigenous to tropical South America, but the section which produces the largest quantities and perhaps the best variety of the beans is the region between the Caura and Cuchivero rivers. The watershed between these two streams consists of several mountain ranges of granitic formation, the most considerable of which is the Serrania de Mato. On the right bank of the Caura river mountains of similar formation, of which Turagua is the highest, also exist. The average altitude of these ranges is between 3,000 and 4,000 feet, although there are peaks as high as 6,000 feet. Besides the mountain ranges many isolated hills and large open masses of granite, only a little higher than the surrounding country, are scattered through the forest. The land in the vicinity of these mountains consists largely of granitic grit, and it is this soil that seems to be the most favorable for the growth of the tonqua-bean tree. The trees are not usually found in groves, but grow singly, though small clumps are occasionally found. The gathering of the nuts is thus all the more difficult and arduous. The wood of the tree is remarkably close-grained, very hard and heavy, and of a reddish color. In some respects it resembles lignum-vitæ and is frequently mistaken for it. It is highly prized as a cabinet wood. While cultivation of the tree has been attempted in Trinidad and other of the West Indies to a limited extent, the fact that it takes from ten to twelve years to come into bearing has discouraged any systematic efforts along this line, and the wild product is still depended upon to supply the market. Again the crops seem to be very irregular, and it is impossible to forecast the yield of any particular year. As a rule there is perhaps not more than one good crop in every three years, production in the intervals being so scant that it hardly pays to collect the beans.

In Venezuela the tree is known as sarrapia, and the men engaged in the collection of the seeds or beans are called sarrapieros. Ciudad Bolivar is the center of the tonqua-bean industry of Venezuela, and it is there that the sarrapieros market their product.

One factor which has much to do with curtailing the tonqua-bean crop is the presence of birds in the tropical forests where the trees grow. Especially are the large macaws with their gorgeously colored plumage and the many other varieties of the parrot family to be found in these regions an abomination in the eyes of the sarrapieros. They feed on the small immature fruit of the trees in the months of October and November, long before the beans are ready to be gathered, and often flocks of these devastating birds may be seen wherever a large tonqua-bean tree is to be found. According to Eugene Andre, the English naturalist, no birds are more extravagant than parrots in their method of feeding. Not so much on account of what they consume as of what they waste. Wherever these birds have eaten the ground is strewn with fruit only clawed and then awkwardly dropped, or perhaps with just a small piece bitten off. Hence the destruction before maturity of enormous quantities of the valuable beans.

In Andre's account of the industry in "A Naturalist in the Guianas" he states that it is usually about the beginning of February that the sarrapieros begin to organize their expeditions to the interior to collect the beans. For two or three months thereafter the Caura river presents a scene of animation. Boats of every size and description may be seen making their slow progress up the strong current of the river. Here will be seen a large bongo, or dugout canoe, of several tons capacity, carrying an entire family up the stream and laden with provisions for a stay of several weeks. Again small skiffs, just large enough for the two hard-working paddles and their outfit may be seen making somewhat better progress. Occasionally a flotilla of several boats carrying a larger expedition, consisting of 15 to 20 men, is met with. Progress up the river is slow and frequent stops at the settlements along the banks are made for the purpose of laying in fresh supplies, resting, and having a good time. Many of the sarrapieros are old hands at the business and usually stop at the places leading to the sarrapiales with which they are familiar. They know every inch of the ground and every tonqua-bean tree in the district. Cano Guayapo, Siapure, Temblador, and La Prision are the names of some of the settlements where most of the boats stop. A few of the more energetic sarrapieros push on farther to Cangrejo, but it is hard work getting through the rapids of Mura and Pirita.

As soon as a party has selected a spot as a center of operations, the men build the ranchos or huts which are to be their homes for perhaps two or three months. If the fruit is sufficiently ripe and has commenced to fall, they begin gathering at once. Otherwise they spend the intervening time in locating the best trees and in hunting and fishing. When the fruit begins to fall, everyone gets busy. Men, women, and children all take part in the work of collecting. By daybreak the workers scatter through the forest and no fruit-bearing tree is overlooked. After all the fruit of the trees near to the ranchos has been gathered the men go farther into the forests, sometimes taking supplies with them and remaining absent for a week or two. During this time they sleep in the forest in their hammocks, using plantain leaves or palm branches as a covering to keep dry when it rains.

The fruit of the tonqua-bean tree, or sarrapia, resembles a mango in appearance, has but little pulp, which is rather sticky and tasteless but is edible, and the seed is covered with a hard furry substance. After a sufficient quantity of the fruit has been gathered, the sarrapiero takes the lot to some open place where he can get the benefit of strong sunlight. The hard shell is carefully crushed between two stones, and a single oblong bean of dark-brown color is obtained. After a heap of these has been secured they are spread out on the large open masses of granite called lajas, which form a peculiar feature of the forests of this region. When dried, these are the tonqua beans of commerce as they are sold to the merchants and exporters in Ciudad Bolivar. By the end of May or the first part of June the crop is about exhausted and the Caura river again becomes alive with the returning boats. From the Caura they go into the Orinoco and thence down to Ciudad Bolivar, where the sarrapieros sell their accumulations of beans to the large exporting houses.

Before the tonqua beans are exported they go through a process of crystallizing by being steeped in strong rum or alcohol. Casks open at one end are placed in rows and filled to within about a foot of the top with the beans. The rum is then poured in until the cask is full. It is then covered by layers of bagging or gunny, sacks. At the end of 24 hours the rum that has not been absorbed is run off and the beans taken out and spread out to dry in a current of air. When first taken out the beans are of a dull black color and are soft and swollen with the absorbed fluid. On drying shiny white crystals appear on the surface of the beans, which gives them the sugar-coated appearance they have when they arrive at their final destination in Europe or the United States. In the drying process they shrink considerably, and this gives them the wrinkled surface. They are shipped in wine casks or rum puncheons to the markets of the world.

As indicated heretofore, the value of the bean lies in its sweet and lasting odor, and its active principle is much used by the manufacturer of perfumes as a basis. While the odor is really that of sweet clover or freshly cut grass, it resembles that of the vanilla bean so closely that the tonqua bean has been used as an adulterant in the cheaper grades of vanilla extracts. Once upon a time, when our not very remote forefathers had the habit of taking a pinch of snuff to titillate their olfactories to the sneezing point, the bean was in great demand. Every jar of snuff on the shelves of the wealthy contained several of these sweet-smelling beans, and even in the gold or silver pocket snuffboxes carried by our grandfathers a single bean was usually found to add its fragrance to the pungent powder which gave them such delight. Later the beans were used in pulverized form to give a delightful aroma to smoking tobacco, one use to which they are still sometimes put. A cheaper substitute has been found, however, in the so-called "wild vanilla," found in Florida, and the ordinary grade of smoking tobacco knows not the fragrance of the tonqua bean.

The price of the beans varies greatly and depends largely upon whether there is a good or poor crop. The crop of 1912 was very short and the price rose to $4.87 per pound. According to the commercial statistics of the United States importations during the year ending June 30, 1913, amounted to 733,888 pounds, valued at $1,140,409. These figures are some evidence that the scent of "new-mown hay" is still quite popular in the United States, for the scent is about all there is to the tonqua bean. It lends its fragrance to fine tobacco for the smoker, to fine toilet soaps, to "brilliantine," and other hair dressings and dyes, to dainty cosmetics that softly tint the cheeks and lips of beauty, to flavoring extracts used in confections and ice creams, and to many other things that gratify the sense of smell. Thus has an agreeable odor become an important commercial commodity.

HORSE A GENERAL FAVORITE

From the Very Small Boy to the Grown-Ups, Man's Faithful Servant Is Subject of Admiration.

If a small boy were asked to choose between ownership of a pony and ownership of an automobile he would unhesitatingly choose the pony.

So long as the natural unspoiled instincts of the human heart have any power the horse will retain his place in our affections. No machine ever invented by the ingenuity of man can compare in charm with an intelligent, well-trained and affectionate horse. He is not merely a device for getting over ground. He is a companion and a friend. His soft muzzle to your hand is more delightful than the kickback of the starting crank of an automobile.

When the railroad trains displaced the stage coaches the horses did not disappear. Men traveled more and farther. That was all the effect the new mode of locomotion had. And the motorcar has not displaced the horse, either. There are more horses in the country today than there were ten years ago. The new device for going over the ground has made business for itself while leaving the horse undisturbed in his position of supremacy. The indoor horse show is an institution organized long after the automobiles became popular, and the exhibitors are men and women who own motor cars, but they cannot and will not part with their horses. They loved ponies in their childhood, and now that they have become men and women they refuse to deny the instinct which first led them to cherish the companionship of the splendid animal.—Philadelphia Ledger.

May Develop New Industry.

A vanilla-producing plant, vanilla ovalis, has been found on the Island of Mindoro. The bureau of education is investigating the plant with a view to ascertain whether it may be developed commercially in making vanilla extract for trade purposes.

INSULTED.

"Why are you so angry at the doctor?"

"Because when I told him I had a terribly tired feeling he told me to show him my tongue."—Fun.

THE HOME COLOR SCHEME.

"What makes you look so blue, Jenks?"

"My wife's just drawn on me to go to a white sale."

HINTS FOR THE HOUSEWIFE

Well Always to Keep Watchful Eye on the Grocer and Butcher—Splendid Green Salad.

Don't allow the grocer to weigh your butter, lard, etc., in a wooden dish. These dishes weigh from one to three ounces, according to their size, and you are therefore paying for that much wood at the price of butter.

Don't let the butcher weigh your meat and then trim it and charge you for the trimmings that you have paid for. The fat can be rendered into lard and the bones used in soup. The butcher knows that they have a value for when you do not take them he resells them for six or seven cents a pound. Do not be afraid to ask for what is your due and to demand honesty and full measure.

A green salad served with cheese, nuts or eggs, and a French dressing with whole wheat sandwiches, can be made the main course for luncheon. A cheese souffle served with spinach makes meat unnecessary. Beets stuffed with creamed mushrooms and nuts are delightful, and a ring of mashed potatoes filled with creamed carrots and peas will please the most fastidious appetite. A canape, bisque or puree made of fresh vegetables, or a cocktail made of mixed fruits, is a good beginning to either luncheon or dinner. Desserts should be fresh fruits, fruit ices or gelatin dishes, with sponge cake or other plain iced cake.

ALL AROUND the HOUSE

Lemon syrup, made by baking a lemon for twenty minutes and then squeezing out the juice in half a cupful of sugar, is very good for hoarseness.

Remove ink and fruit stains from the floor by washing the stained part with cold water, then covering it with baking soda. When dry, wash off the soda.

Never throw stale macaroons away. They can be crushed and stirred into and sprinkled on top of ice cream, giving it a most delicious flavor.

Rub a little butter under the edge of the spout of the cream pitcher; it will prevent a drop of cream from running down over the pitcher.

Before washing lace curtains, baste a narrow strip of muslin along the outer edge, allow it to remain until the washing and drying process is complete.

To cover jelly glasses, cut letter paper in circular pieces that will just fit inside the glass, dip the paper in brandy, cover with tin covers or large pieces of paper pasted down.—Dallas News.

SERVING THE AFTERNOON TEA

Dainty Appointments Have Much to Do With Its Success—Tasty Cakes for Guests.

If a table or a tea cart is not kept in evidence it is the correct thing to have the appointments brought in on a spacious tray, as a cramped appearance, piled-up cups, etc., is unattractive. If the teacups are unusual or possibly have histories or have been picked up in travels, so much the more charming will be the tea table.

Some like tea one way, some another, and if a hostess wishes to be remembered with gratitude let her have cream, lemon and rum ready to serve, so that she may suit all tastes.

Some people are satisfied with thin bread and butter or just plain crackers as a tea accompaniment, but it always seems a trifle monotonous and uncompanylike to have nothing else. Some hostesses prefer to serve the tiny bread-and-butter sandwich alone with rich fruit cake and a taste of candied ginger for the second cup. But the various kinds of dainty and appetizing sandwiches and little cakes to serve with tea are beyond description.

Ideal Soup Kettle.

One of the woeful aspects of soup making in the pre-enameled-ware days was the cleansing of the heavy iron kettle; for washing a kettle big enough to hold a shin-bone of beef with trimmings was no joke. Today, however, one can have the trim, enameled kettle in any size, light yet strong, and all it needs is hot suds and a good rinsing to make it beautifully clean and sanitary. If, in addition, there is a colander of enameled ware for the straining of the soup into a pan to match, the equipment is ideal for cleanliness, quickness and results.

Cecils.

Chop enough cold cooked beef or mutton to make a quart, add one-half cupful of dry bread crumbs, one tablespoonful of chopped parsley, one teaspoonful of salt, one-eighth teaspoonful black pepper. Dissolve one-half teaspoonful of extract of beef in one-half cupful of boiling water, when thoroughly dissolved add to the meat and then two well-beaten eggs. Mold into small balls, dip in egg and cracker and fry in hot fat. Serve with brown sauce.

Ham Muffins.

Cream one-fourth cupful of butter, add gradually nearly three-fourths cupful cold boiled ham, chopped fine with food chopper, also meanwhile a well-beaten egg, then, alternately, one cupful of graham flour and one cupful white flour, sifted with three teaspoonfuls baking powder and a cup of milk. Bake in a hot, well-buttered muffin pan about twenty-five minutes.

When Ice Cream Sticks.

Ice cream is sometimes frozen so hard that it does not come out of the mold easily. When this happens let the cold water run over the outside of the can. The water is so much warmer than the ice cream that it melts sufficiently to start it out, and does not melt it enough to spoil the shape of the mold.

It's a Picnic Getting Ready for a Picnic

If you choose

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Chicken Loaf | Fruit Preserves | Jellies | Apple Butter
Luncheon Meats | Pork and Beans

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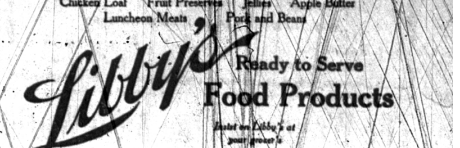

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SUPPLIES ALWAYS ON HAND

British Claim to Have Made Transport System at the Front as Perfect as Is Possible.

When it is mentioned that 2,000 tons of goods—food and other necessities—are sent every day from the base depots to the firing line of the British army, some idea of the gigantic task of the army service will be gathered.

This enormous weight of goods, says Harold Begbie, comes almost entirely from England, for we are not buying in France even so perishable a necessity as milk. Vast stores are brought from England and loaded into sheds at the base depots.

All day by motor lorry and railway truck supplies for the troops are sent out from these base depots to stores as near as possible to the firing lines. And just as reserves are accumulated in the docks, so reserves are accumulated near the front, since an accident to the railways might cut off the fighting soldiers' supplies.

On one occasion there was a delay on the railways of 36 hours, but not only did the soldier at the front get all his food and ammunition, but he did not even have to draw on the reserves I have mentioned; regimental stores were sufficient for his need. Everything goes by clockwork. There is no room for an accident.—London Tit-Bits.

The One Exception.

"Everyone seems to be here for his health," remarked the new arrival at the summer resort.

"Yes, everyone but the hotel proprietor," replied the guest who had been there three days.—Judge.

Common Fate.

Wilkins—I have to dig to live.
Bilkins—Every man does. Down in his jeans?

An Insufficient Supply.

"I want to buy a cow, Silas."
"Well, Hi, I've got one as is a hefty creature. She's got one pint—"
"That ain't enough. I need at least a quart, Silas."

Was Making Signs.

While Jane, the new maid, was taking her first lesson in arranging the dining table, someone in the basement kitchen put something upon the dumbwaiter below.

"What's that noise?" asked Jane quickly.

"Why, that's the dumbwaiter," responded the mistress.

"Well," said Jane, "he's a-scratchin' to get out."—Collier's.

Taking No Chances.

"So you're leaving to get married, Mary?"

"Yes, mum."

"And how long have you known the young man?"

"Three weeks, mum."

"Isn't that a rather short time? Don't you think you ought to wait until you know him better?"

"No, mum. I've tried that several times, and every time the man changed his mind when he got to know me better."

Corn on the Cob
—the Roasting Ear

Is not more delicious than the

New
Post Toasties

In the growth of corn there is a period when the kernels are plumped out with a vegetable milk, most nutritious (roasting ears). As it slowly ripens this hardens and finally becomes almost flinty.

This nutritious part of the corn is cooked, seasoned, rolled thin, and toasted by a new process which enhances the true corn flavour.

Different from ordinary corn flakes, the New Post Toasties have a distinctive form and flavour, and they keep their appetizing crispness even after cream or milk is added.

These Superior Corn Flakes come oven-fresh in tight wax-sealed packages; and they cost no more than ordinary "corn flakes." Insist upon having

New Post Toasties

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