

# Story of the Banana



CUTTING THE BUNCH FROM THE TREE

**A**RGUING in support of the existence of an all-directing intelligence in Nature one could select a very satisfactory object-lesson in the banana. Old-fashioned people of an unscientific turn of mind might put it this way: God created the banana to give the world a cheap, nourishing and healthful food.

A skeptical Chicagoan might say, of course, that it was not until the beginning of this century that Chicago knew anything about the banana as something to eat. True enough, but Chicago now eats bananas by the million, just as does nearly every other large city in the world. The fact that banana is a tropical fruit and has to be carried to the colder regions of earth adds rather than detracts from its value as an object-lesson, when taken in connection with other facts which may be summarized thus:

The banana has been cultivated for food from the earliest historical times. It is indigenous to Asia and Africa; it may be indigenous to America or it may have been brought here from Spain in the Sixteenth century. It is now grown in most tropical and many subtropical countries. In a generation the business of distributing it over the world has grown into an industry of tremendous economic importance.

Nature makes the banana a continuous crop. A banana plantation is set in virgin soil, from which the forest has been cut. The plant is a herbaceous perennial which contains about 85 per cent water. The main stem is under ground and is a large fleshy rootstock, called rhizome, which has large eyes after the fashion of a potato. The "trunk" of the "tree" is a compact sheaf of leaf sheaths; sometimes it reaches a height of 40 feet with a diameter of 2 feet and leaves 12 feet long and 2 feet wide. Each "tree" bears one bunch and is cut down in harvesting the fruit. A plantation comes into bearing in about fifteen months. Young "trees," coming up from the parent rootstock replace those cut; plantations sometimes produce for twenty years from a single planting.

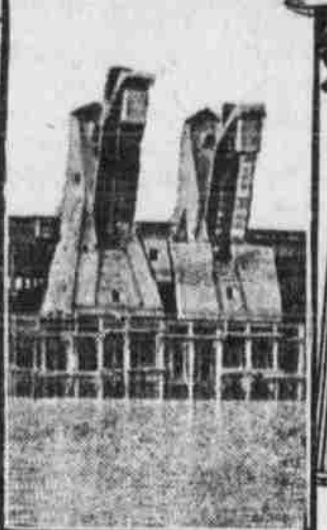
It is stated that the banana, grown on an equal acreage, will support a larger number of persons than will wheat. In food value it heads all the raw fruits. It surpasses many of the vegetables in energy value and in tissue-building elements. In fact, some of the diet experts go so far as to say that the banana gives more food for the same cost than any other fresh fruit or vegetable or fish, meat, milk or eggs.

The banana is so constituted by nature that it is one of the few fruits which reach the perfection in food value when harvested green. It was created to be harvested green. It is always harvested green, even when eaten in the tropics where it grows. Harvested green, it is, until fully ripe, practically a living organism drawing sustenance from its stalk, with sap flowing and tissues changing. It generates heat within itself for the ripening process.

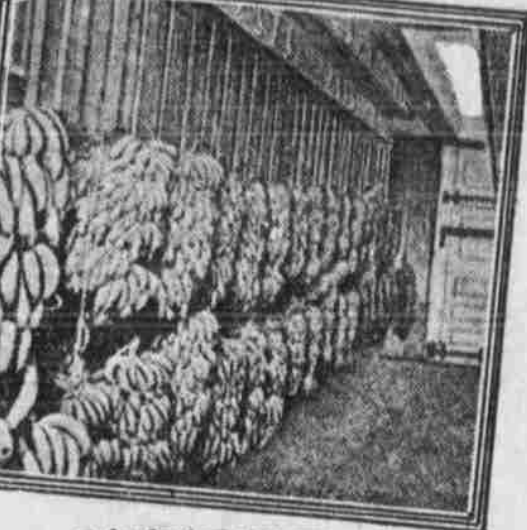
The banana is sealed by nature in a germ-proof package; its glove-like skin protects it from contamination of all kinds.

The banana is so packed by nature that it is transported from plantation to consumer without box, crate or wrapping of any kind.

In the Bulletin of the Pan-American Union for December there is an illustrated article on the banana, especially dealing with its cultivation in Central America and its transportation to the United States, compiled and edited by Philip K. Reynolds of the United Fruit company. In this article the following points are made, among others:



UNLOADING MACHINES AT NEW ORLEANS



BANANA ROOM

Central America offers ideal conditions for banana cultivation. The main mountain backbone runs along the Pacific coast, the lesser ranges to the eastward, leaving wide slopes, river valleys and lowlands on the Caribbean side. It is in this section, a few miles back from the coast, at an elevation of not more than 250 feet above sea level, with its hot days and humid nights and with an annual rainfall of from 80 to 200 inches, that the wilderness of tropical jungle has made way for the greatest fruit farms of the world. All within the past forty years an enormous agricultural industry, with its related interests of railways, stores, docks, villages and hospitals, has sprung up in a region formerly almost uninhabited. Central America may indeed thank the banana trade for by far the most progressive development and constructive influence which have ever reached its shores.

The modern banana plantation is a marvel of system and immensity, all the more impressive because of its setting of primeval jungle. In the transformation within a few years from a riotous wilderness of huge trees, palms, vines, ferns and other tropical growth to a vast tract of cultivated land, there is a succession of steps which can scarcely be contemplated by those familiar only with farming operations in the temperate zone. The surrounding country is first thoroughly explored as to its fitness for banana cultivation. Then comes the clearing away of forest and brush, the digging of the main drainage ditches, the building of houses, railroads and tramways and the planting. Then follows the gradual development and extension until vast areas are pouring their product methodically and regularly into the holds of the ships at the loading ports.

The quality and condition of the fruit and its prompt and careful handling are the all-important factors. To dispatch the modern type of refrigerator steamer at regular and frequent intervals, with a cargo of from 40,000 to 75,000 stems of prime, freshly cut fruit, requires a vast area of good producing land, connected with the tropical port by railways whose total length may extend into the hundreds of miles. The railways in turn are fed by a still more extensive system of light tram lines. The fruit in some instances is subject to a railway haul of 70 miles. The riding, work and pack animals required on the farms run into the thousands, and a small army of employees and laborers is constantly engaged. Each plantation must have good telephone communication with its district headquarters and with a central office for the prompt distribution of cutting advices, control of deliveries and operation of the fruit trains. This central office in turn communicates by cable or radio with the head offices and with the ships en route, and every effort is made to have the arrival of the fruit and the steamer at loading port coincide, as well as to have the fruit, after it is cut, put

aboard the ship in the briefest possible time. The whole system forms a most interesting example of organization and attention to detail.

Each plant developed to maturity from the rootstock bears but a single bunch of bananas, which is made up of so-called "hands" or clusters. These hands grow separately in spirals, each containing from 10 to 25 individual bananas or "fingers." Commercially, bananas are classed as ranging from nine to six hands, any bunch having less than six hands not being readily marketable. The standard commercial-sized bunch has nine hands, all bunches with nine or more hands being classed as "nine-hand" fruit.

As fruit of various stages of development is coming on at the same time, a practiced eye is required to select the bunches of proper grade to be cut for shipment. Cutting of the fruit in a given section is done once, and frequently twice, a week. A cutting "gang" usually consists of three men: The "cutter," the "backer" and the "muleman." The "cutter" uses a long pole with a special knife attached to the end. He nicks the trunk of the tree a few feet below the bunch, and the weight of the bunch causes the trunk to weaken and bend where it has been cut. The top of the tree with its bunch of fruit is steadied by the pole to avoid its coming down with a rush and crushing the fruit. It is eased down until within the reach of the "backer," who receives the bunch on his shoulders and the "cutter" severs the bunch from the tree with a machete and cuts off the blossom end. The "backer" immediately carries the bunch on his shoulders to the nearest packroad or tramline, and the "cutter" then cuts down the tree itself near the ground, where it quickly rots, the decayed stalk forming humus which acts as a good fertilizer for the soil.

The loading of the steamer begins immediately upon the arrival of the first fruit train at the port. The cutting orders and the schedule of the fruit trains are so arranged that a continuous flow of fruit to the loading port is insured. The loading of the steamship continues day and night without interruption until completed, cargoes of 75,000 bunches being loaded in 32 to 35 hours.

At all the principal banana loading ports, the cars of fruit are switched to the dock and the bananas carried to conveyors or loading machines, which take the bunches into the holds of the steamship. Each class of fruit, i. e., the nine, eight, seven and six-hand bunches, is usually stowed separately, and stowage plans are prepared, showing the location and quantity of the different classes, to facilitate the proper discharge of the cargo upon arrival. The bunches are stowed on end, resting on the larger end or butt of the stalk, in from one to four tiers or with one or more tiers standing and one or two tiers laid horizontally thereon.

and 1880. Ralph Waldo Emerson was the best known of them, while Thoreau, Channing, Alcott and Margaret Fuller were other well-known members of the circle. The transcendental philosophy might be briefly described as the belief that man reaches his fullest development by fixing his mind upon the highest and noblest elements in life and overlooking the mean and sordid phases. "As a man thinks, so is he." The modern cult of the New Thought derives much of its doctrine from transcendentalism.

**Transcendentalism.**  
This term is a vague one which was applied to the philosophy of the group of American writers which centered about Concord, Mass., between 1850

## DAIRY HINTS

**SANITARY HOUSE FOR DAIRY**  
Necessary Where Milk is Handled, Because of Its Susceptibility to Contamination.

(Prepared by the United States Department of Agriculture.)  
Because of the delicate nature of milk and its susceptibility to contamination by dirt and odors, dangerous to the health of the consumer and likely to cause loss to the producer, a dairy house constructed on sanitary principles and properly located is a necessity on every farm that sells milk.

The regulations of the different states vary, but it is usually found desirable to have such building a short distance from the barn, or, if it adjoins the stable, to have only an outside entrance. Prompt removal of the milk to facilitate cooling and prevent contamination is always necessary. A concrete, brick or the house with asbestos or slate roof, although comparatively costly, is fireproof, durable and sanitary and requires few repairs. Other materials that may be used are stone, cement blocks and wood.

The floor of the milk house is particularly important, and concrete, because of its ability to withstand moisture, decay and wear, is the best material. Although dressed tongue-and-groove lumber may be used for the inside walls, cement plaster makes the best finish. Light is important, and window space should be equal to at least 10 per cent of the floor space. To keep the air sweet and dry good ventilation is needed. In some climates windows and doors will provide it, but in most localities other means, such as a ventilating flue, will be found necessary. Flies and other germ-carrying insects must be kept out with screens so arranged that they will not interfere with the operation of the windows and doors.

Plentiful supplies of cold and hot water, for cooling and for cleaning and sterilizing, are a necessity if a high-class product is to be turned out. The unavoidable spilling of milk and the use of quantities of water demand an adequate drainage system that will carry the waste well away from the house. Most local and state health departments have specific regulations on this subject.

All of these problems of dairy-house construction are discussed in detail in Farmers' Bulletin 1214, "Farm Dairy Houses," just issued by the dairy division of the United States Department of Agriculture. Copies of



A Good All-Around Milk House for Dairies.

which can be obtained free of charge. In this bulletin plans and pictures are given in nine types of houses, suitable for farms having from ten to several hundred cows; for dairies where milk is sold in cans or bottles or is made into butter; and for those using hand or power machinery. Those who are interested in any particular plan may obtain blue prints from the division of agricultural engineering, bureau of public roads, United States Department of Agriculture, Washington, D. C.

**SOY BEAN HAY AS ROUGHAGE**  
Tennessee Station Finds It Superior to Corn Stover in Producing Milk and Butter.

The Tennessee station compared soybean straw and corn stover as roughage in the production of milk and butter. The ration containing soybean straw was found superior to that containing corn stover. This ration produced more pounds of milk and butter fat and produced them more cheaply than the cornstover ration. In every case there was less loss in milk and butter fat during the feeding of soybean straw than during the feeding of corn stover. It was concluded from these tests that soybean straw is a valuable addition to the roughage in the feeding of dairy cows.

**PROTECT YOUNG FRUIT TREES**  
Mice Can Be Discouraged by Trampling Down Snow—Rodents Burrow in Grass and Refuse.

Protect young fruit trees from mice. Wire screens about the trees are good. Tramp the snow well about each tree. This will often discourage the mice working around it. They like to burrow in grass and other refuse near the tree under the snow and eat the bark.

# WRIGLEY'S P-K



This new sugar-coated gum delights young and old.

It "melts in your mouth" and the gum in the center remains to aid digestion, brighten teeth and soothe mouth and throat.

There are the other WRIGLEY friends to choose from, too:



**Attack Premature.**  
"Why did you strike this haberdasher's clerk?"  
"Your honor," said the large, uncouth person, "he showed me a collar and said it was a 'perfect dear.'"  
"Well," snorted the judge, "what did you hit him in the store for? Couldn't you wait until after closing time and catch him in an alley."—Birmingham Age-Herald.

**Thousands Have Kidney Trouble and Never Suspect It**  
Applicants for Insurance Often Rejected.

Judging from reports from druggists who are constantly in direct touch with the public, there is one preparation that has been very successful in overcoming these conditions. The mild and healing influence of Dr. Kilmer's Swamp-Root is soon realized. It stands the highest for its remarkable record of success.

An examining physician for one of the prominent Life Insurance Companies, in an interview on the subject, made the astonishing statement that one reason why so many applicants for insurance are rejected is because kidney trouble is so common to the American people, and the large majority of those whose applications are declined do not even suspect that they have the disease.

Dr. Kilmer's Swamp-Root is on sale at all drug stores in bottles of two sizes, medium and large. However, if you wish first to test this great preparation send ten cents to Dr. Kilmer & Co., Binghamton, N. Y., for a sample bottle. When writing be sure and mention this paper. Advertisement.

**Weakness of the Sex.**  
It isn't at all unusual for a wife to stay longer on her honeymoon than her husband—Judge.

The medium should always be in good spirits.

## Western Canada Offers Health and Wealth

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## Oldtime Roller Skates

Early in the Eighteenth century the good people of Holland were in the habit of making hurried errands on skates, but on far more primitive skates than are sold today even by the smallest shops. It was quite an art to navigate the Dutch skates of those days—they were heavy and had only two wheels. The rest of Europe never thought of using them until J. A. Plimpton, a New York inventor,

## Oldtime Roller Skates

took hold of the idea. The first thing he did was to put four wheels on each skate. Then he invented rubber springs, and, finally, in 1823, he put his innovation on the market in such form that it immediately became popular and soon was sold everywhere as one of the favorite toys.

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