

WORLD'S LARGEST TEA PLANTATION ANNUALLY PRODUCES OVER ONE MILLION POUNDS OF THE FRAGRANT LEAVES THAT MAKE THE "CUP THAT CHEERS, BUT NOT INEDUCATES" TEA CULTURE IN DUTCH EAST INDIES.

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SINAGAR TEA PLANTATION,
 Tjibadak, Java, June 1.—In an interview which I had at Manilla with Don Carlos Palanca, the millionaire Chinese of the Philippines, he told me that tea could undoubtedly be profitably raised on the highlands of Luzon. There is no doubt but that the plants would thrive on the other islands nearby, and the time may come when we shall raise not only the greater part of our coffee, but all our own tea. We now use about \$10,000,000 worth of tea every year, importing more than \$4,000,000 pounds or about five pounds annually for every family in the United States.

The climate and soil of Java are, as I have said, just about the same as those of the Philippines, and Java is now considered one of the best tea-raising islands of the world. They have been growing tea here for more than 75 years. The Dutch Government began it in the botanical gardens at Buitenzorg, and within five years had government plantations containing half a million trees. They continued setting out tea until the number of trees ran high into the millions, and then gave over the business to private parties.

At present there are vast areas given up to tea-raising. In coming from Batavia to Sinagar I traveled for many miles through mountains covered with tea bushes, and I write these notes in the lap of the two volcanoes, Mount Salak and Mount Gede, in what is perhaps the largest tea plantation of the whole world. In China and Japan the tea is grown in garden patches. There is seldom more than a few acres in one holding. Here the business is one of large estates operated with European capital.

Largest Tea Plantation in World.
 Take this Sinagar estate, for instance. It has about 15,000 acres and is always planting out new tea fields. It has now more than 550 acres devoted to tea and coffee, and it produces more than a million pounds of the finest tea every year. Its output is some like 100,000 pounds of tea per month, and altogether it has produced more than 30,000,000 pounds. The estate has a capital of \$300,000, and it pays dividends of 3 and 4 per cent annually. It has paid as high as 24 per cent, and I don't think it has ever failed to pay well.

The plantation is managed like a great business institution. It has its director, its administrators, bookkeepers and civil engineers. It has a vast system of irrigation, with culverts which would do credit to any railroad in the United States. It knows the constituents of its soil and raises tea on scientific lines. It employs 1400 men all the year around, and at times has 3000 women picking tea. Its annual wage account amounts to \$250,000, and in addition it furnishes its own employees with medicine and rice. The estate has several towns upon it, all subordinate to the director, who is a sort of a patriarch or feudal lord to the whole.

I wish I could take you into the plantation houses of this great tea estate and show you how the Dutch suffer in these backward woods of the East. Here at Sinagar the people live as well as they do in any part of Europe. Their houses are large and airy. They are well furnished and are lighted by electricity. There are automobiles of the latest type. I rode for miles one morning over it on a Sandalwood pony and upon my return was shown a half dozen blooded runners, which were being trained for the races.

Newspapers Daily.
 The American Consul arranged for my visit to the estate through a long distance telephone, and I find that the daily newspapers come every morning. Upon landing at the station of Tjibadak I was met by a carriage with a team of bay horses and an old native coachman, in visor and top hat, and my horse was led to the stable. The estate was over roads lined with palm trees of a dozen varieties, through fields of pale green sugar cane and, higher up, the darker green of the tea.

The director of the estate has both a zoological and a botanical garden about him. He is fond of animals and fond of flowers. Luncheon was served shortly after I arrived and while we were eating, two little red parrots flew in and took their place in the meal. They moved this way and that at the command of the master, one lighting on my head, possibly attracted by the similarity of color, the other alighting on the director's head. It jumped next on the hand of the planter and then fastened itself to his wrist and ate from his hand.

Later on, while we sat at tea on the wide veranda, two peacocks came up and begged for a bite, and a New Guinea pigeon, a gorgeous bird of sapphire blue as big as a chicken, its head ornamented with an egret's plume, white, with white legs. There was also a cow, but this was smaller and of a reddish fawn color. These cattle are hunted by the planters. My hosts are all great sportsmen. The director-in-chief, Mr. E. J. Kerkhoven, and his son, Mr. A. R. W. Kerkhoven, have each killed their hippopotami, and the manager, Baron van Haackeren tot Walten, has a collection of trophies which would be considered wonderful in our National Museum.

Many Game Trophies.
 He has the skulls and skins of panthers and tigers. He has shot elephants and rhinoceros and deer and other game animals. He tells me that the mountains of Java are full of game, and has suggested that I take a journey with him into the jungle for rhinoceros or go to Sumatra, before I leave, for an elephant hunt.

In a botanical way this whole country is full of wonders, and about the plantation houses there are tropical plants of every description. There are some vast orchids like stag horns, and great green cups as big as a barrel, with ragged-edged leaves which fall down like beards and away in the breeze. There are nutmegs, cinnamon and pepper trees and all varieties of tropical fruits. There are streams running by the house, the music of which lulls you to sleep, and there is a great swimming pool walled with marble, in which you can float under the roof of the sky. The Dutch have their house parties, going for miles from one plantation to another. The daughters of the planters are educated in Europe. Many of them are fine musicians. They all speak several languages, and there are few estates which do not have their music-rooms, reading-rooms and billiard-rooms.

about tea and tea-raising. The tea plants are of different varieties. Some are no higher than your waist, with trunks as big around as your leg. They are the Chinese tea plants which have been trimmed from year to year and kept short. The leaves are like those of the willow tree. They smell like tea, and the first picking from them brings very high prices.

There are other fields, in which the plants are taller and more luxuriant. These are of the Assam or Indian variety, which is now being grown in Ceylon, in the Himalaya Mountains and of late here in Java.

The Tea Nurseries.
 You should visit the tea nurseries, where the tea seeds are set out. They are planted in wet sand and soon sprout, and when they reach eight or 10 inches in height are transplanted in ground prepared for the purpose. They are hoed and kept free from weeds, and are cultivated for two years before they begin to produce tea.

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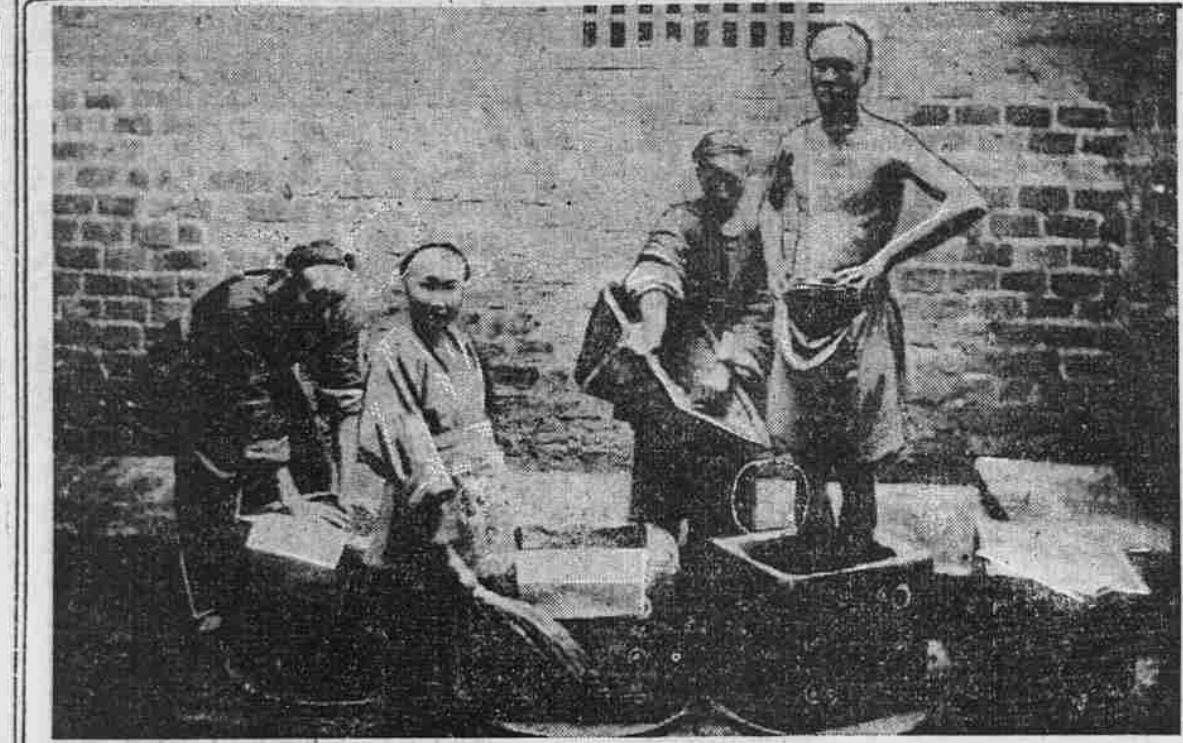
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HOW TEA IS HARVESTED IN JAVA



TEA PICKERS AND TEA TASTERS

to produce tea. It takes about six years for a tree to mature, when it should produce a pound every year. Some of the trees on the estate are 40 years old. There are tea plants in Japan whose age is beyond the memory of man.

It is interesting to watch them picking the tea. Thousands of little brown women, dressed in bright-colored sarongs which leave the shoulders and upper part of the breast and arms bare, are moving about among the green bushes. Here they are bending over the plants; there they are squatting down and pulling out the leaves, laying them on great square cloths, in which later on they will bundle them up and carry them on their heads to the factory. The sun glids their skins

a golden brown and their plump, bare arms show out. They are of all ages, some little girls, some young women and some gray-haired. A few are quite pretty, many are ugly, but all are good-natured and very industrious.

As I rode about through the estate, I met gamblers, comfortable until my face tea to the factory. Each woman had a bundle as large as a two-bushel basket on her head, but she walked along perfectly straight until myself and the manager came in sight, when she and her sisters would all duck down or squat while we passed. This is the Javanese method of salutation to the superior. The managers of the estate, who all foreigners are looked upon as superiors, and treated as such.

Men Get Seven Cents a Day.
 I asked as to the wages paid on the plantation and was told that the 1400 men who are employed regularly are paid 7 cents a day and rice. Their hours are from 6 to 12, no work being done after noon. The women receive still less, but many make more at piece work. They

get a Dutch cent a pound for picking. This is equal to 4-10ths of our cent, and some make as much as 25 cents a day, while others make 10 or less. It gives one an idea of the cost of living in Java to know that people can support themselves and be happy on such wages.

The women make the best tea-pickers. The greatest care is required in picking, for the tea leaves are valuable according to their age, the part of the bush from which they come, and the time at which they are picked. The leaves picked early in the morning are said to have a better flavor than those plucked later in the day. The first growth is the best, the young top leaves producing the finest grades of tea.

The tea is cured and prepared for the market on the estate. The factories are not far from the plantations; they are immense one-story buildings, covering acres, with galvanized iron roofs, and walls of woven bamboo. The buildings are floored with stone and are filled with modern machinery. Entering them is like going into a machine shop. Great wheels are moving leather belts about, operating the tea-rolling and drying machines.

The floor is covered with tea. There is an acre of wet green tea leaves lying

upon it. They are spread out there to wilt so that when they are picked up and squeezed they will not crack. The tea, as it comes from the bushes, is withered on this floor and then put into rolling machines which do the work the Chinese and Japanese do by hand. These machines are great steel tables moved about by machinery in a circular motion, with other tables above them moving about in the opposite direction. The tables are so graduated as to roll the leaves about without crushing them.

When the leaves go in they are flat; when they come out they are a spindly-like mixture of rolled leaves. If you put a handful of the green rolls and look at them, you will think you have a lot of little green worms, for they are just like them. After this the tea must be fermented and dried. The latter is done by hot blasts and revolving fans. The result is that the tea which comes out is perfectly clean, not mixed with perspiration, as in China and Japan. The factory makes its own boxes out of Javanese wood. It grades the tea and packs it and ships it to all parts of the world.

The Japanese are now producing about 40,000,000 pounds of tea annually, not including what they raise in Formosa. Their methods of cultivating and curing are different from those of Java. The plants are set out in hedges, and they look much like hedges of boxwood, each from three to five feet high and about two feet wide. The hedges run parallel from one side of the field to the other and often in terraces one above the other.

The most of the Java tea is green. Much of it is sun dried, and this is of a green color. Other teas are dried in copper cylinders or pots, and sometimes indigo and soapstone are mixed together in the drying pans to give them a green tinge. The tea is all picked by girls, who get from 10 to 15 cents a day for about 12 hours' work. They bring the leaves to the houses of the planters, where they are fired and steamed.

The work is not complete, however, until they are refired again in the factories at the seaports. During my stay in Yokohama and Kobe I went through some of the largest of the tea-firing godowns. The firing is done in great pans, about 30 inches wide and 30 inches deep. These pans are fitted into a brick ledge, with charcoal fires under them. The tea is put into the pans by Japanese girls, who are often bare to the waist, and who lean over the hot pans, and with their hands roll and knead the drying tea.

A Moist Process.
 It is very warm in the factories, and the fires make it warmer. Fearful drops of perspiration come out of the backs, chests and arms of the tea workers, and it would be strange indeed if they did not now and then drop down into the leaves which they are preparing for our palates. It takes about an hour to fire one lot. After firing, the finer teas are picked over, leaf by leaf and then packed up for shipment to the United States.

The most of the tea of the world, however, still comes from China. The total product amounts to something like 60,000,000 pounds, and the Chinese raise about two-thirds of this amount. Their product is in the neighborhood of 30,000,000 pounds, tea being raised in nearly every province of the empire. I have seen tea there which sold for \$25 a pound, but this is consumed entirely by the mandarins and none of it comes to the United States. Tea which costs \$50 a pound is not uncommon among the rich Chinese, and I have heard of tea leaves which have brought as much as \$50 a pound, and even more. The difference in the tea is largely in the district in which it is raised. There is one little section of Formosa which produces the most delicious of tea, and there are regions south of the Yangtze-Kiang where the tea is almost worth its weight in gold.

The central tea market of China is at Hankow, about 700 miles up the Yangtze-Kiang. I spent some time in going through the factories there not long ago. The tea comes in by water from all parts of the empire. Hankow is a great center of navigation, and there are thousands of barges always moving toward it up and down the various rivers, over the Poyang and Tungting Lakes and through the numerous canals.

In Hands of Russians.
 A large part of the business is in the hands of the Russians, who ship by steamer down the Yangtze and around through the Mediterranean and Black Seas, to Odessa, and also by caravans of camels across the Ural. While there I saw them making brick tea for the Russian markets. This was done in large factories. The tea leaves were ground up and steamed, until they became soft and mushy. They were then pressed into bricks and dried by steam, so that they came out as hard as chocolate, the fine varieties looking for all the world just like the little cakes of sweet chocolate sold in our groceries.

The Chinese tea which is sold in the United States is cured much in the same way as the Japanese tea, quite as little regard being paid to cleanliness. The tea is fired by hand, and some of it is packed in the boxes by the bare-footed coolies, who tramp the tea down with their feet. The wages of the tea workers in China are almost as low as in Java, and it is doubtful whether they can do anything at tea raising without Chinese cheap labor. About Fuchow, south of Shanghai, the tea pickers get 10 cents and upwards per day, the children being paid less. Much of the tea is raised in the hills, and there are 40,000 men and women who do nothing else but pack tea on their backs over the mountains to the ports. Their wages are 25 cents a day.

FRANK G. CARPENTER.

OF INTEREST TO WOMEN.

Health and Beauty.

The use of gas to make the hair grow is one of the latest medical discoveries. The gas employed is oxygen. A large cap fits tightly round the head and is supplied with oxygen from a bag which is slung over the patient's shoulders. It is worn for a few hours every day, and the growth of hair was much stimulated, and to produce a more or less luxuriant crop of hair.

The discovery was made at the Oxygen Hospital, Fitzroy square, London, an institution which the Princess Louise patron. The gas is used for the cure of quite a number of diseases. A woman was undergoing the oxygen cure for skin diseases, and one of her arms had for many days been placed in a light airtight box filled with the gas. It was soon noticed that on that part of the arm that was unaffected by the disease the growth of hair was much stimulated, and this naturally suggested oxygen as a cure for baldness. The first experiment was made upon a woman who had completely lost her hair, and it was found that after a few weeks' treatment there was quite a strong growth.

The gas has also been found beneficial for weak eyes, and is used in a similar manner. Thin beef and mutton soups are allowed in moderation, while in others they are strictly prohibited. The great advantage of the Schweininger system over all others is that the reduction is permanent.

According to Schweininger, all watery articles of diet should be avoided as far as possible. Thin beef and mutton soups are allowed. Of bread and farinaceous foods only six ounces a day are permitted. These six ounces consist of gluten or stale bread or dry toast. Water may be taken in moderation between meals. Fat soups, sauces, spices, cereals, macaroni, potatoes, pastry, puddings, pies, cake and milk are on the blacklist. Tea and coffee, with wine, may be used. For desserts, fruit is recommended, the preference being

given to grapes, oranges, cherries, berries and acid fruits. In the matter of vegetables, there is a wide range given—marrows, turnips, asparagus, cauliflower, onions, celery, cress, spinach, tomatoes, radishes, lettuce and greens being permitted.

Common-Sense Recipe.
 An English woman, who has lived in this country for 50 years, still has her clear, bright complexion, and in an answer to the question whether this much-desired beauty was attributed to any particular treatment, she said: "Yes, my dear," while the roses deepened in her cheeks, "not a drop of paint in Winter and Summer, and good, honest soap is my cosmetic. You know I stay in town during all the dust and heat, every day during the Summer. When I come in from down street I am never comfortable until my face is well washed with soap and water as hot as I can bear it, with plenty of fresh hot water to rinse off every trace of soap. In Winter, if I am going into the sharp air, I shade the water from hot to cold."

Household Hints.

"Don't try," says Marianna Wheeler, in the New York World, "to hold baby erect in your lap when you dress him. Let him lie flat on his back or stomach. In putting his clothes on—if properly done—there will be little necessity for lifting him from your lap; a gentle turning and rolling from side to side, slipping the clothes under him, is all that is necessary."

"The flannel band comes first. This is generally of soft, silk flannel, and a careful mother will sew the band on instead of pinning it, for pins are dangerous, as many a baby would attest, if he could. After the belly-band has been adjusted, the silk and wool shirt should be put on. The proper shirt is open down the front and fastened by flat buttons, which will not press into the tender flesh. In putting the sleeves on be careful of the little hands and arms. If the young mother will put her first two fingers in the sleeve and, with the aid of her thumb, stretch the sleeve back over her hand, then grasp the baby's hand with her fingers, the sleeve will be put on with little trouble. In putting on the second sleeve don't try to put the child's arm into the sleeve without bending the elbow. The shirt and lower edge of the belly-band should be pinned to the diaper."

"The barrow-coat is next in His Majesty's wardrobe. This is a very easy garment to adjust. Slip it under the little fellow, raising him gently by his feet; grasp both feet in one hand and raise them not too high, and in doing this be careful that his head does not hang down. When you have adjusted the barrow-coat sew the side that laps over, taking short stitches."

"The pinning blanket has a little band to it, and this band is also sewed together. This is put on next to the barrow-coat. Gathered into a softer and fatter silk pom-pom, the baby dress should open all the way down the back, so that it will not be necessary to slip it on over the baby's head. This is a mistake commonly made. It should always be put on as the belly-band is—over the feet."

"Don't make the dresses of the baby too long. The added length means weight and discomfort. Of course, they must come down over the little one's feet, for the feet must not be cold. The barrow-coat does away with the difficulty here, for the ends of it are kept pinned up, and the feet are in no way exposed."

To Take Spots From Table Linen.
 Coffee—Lay the stained portion of the cloth over a bowl and pour boiling water through it.

Cooking Recipes.

What is commonly known as the mushroom season is at hand, although there is really no special season, for mushrooms may be obtained almost the whole year through. But it is in the early fall that they are most plentiful and at their best. Numerous rules have been given to distinguish the good from the bad fungus, but they are practically valueless to the amateur mushroom gatherer. The only rule which can be relied upon is knowledge of the different varieties, gained by study and experience. The puffballs are absolutely sure, and are to be found in various forms through the meadows from now until late in the Autumn.

Salads and Vinegar Seasoning.
 Few people who enjoy a salad of tomatoes know how vastly they are improved by the addition of a little thyme. This may be added in the form of the powdered leaves spread on the tomatoes and allowed to stand in the ice box for a few hours, or if fresh thyme leaves are to be obtained, they may be thrown into a preserving bottle, covered with vinegar and allowed to stand for a few weeks. After the aroma has been taken up by the vinegar, it is best to strain it off, and for the purpose of keeping the aromatic vinegar, old beer bottles, the kind that have attached rubber-tipped corks, are very good.

It is now considered an accomplishment either for a man or a woman, to be able to make a good salad. The following recipe, clipped from the Chicago Record-Herald, will give a flavored vinegar which will insure a good salad on short notice: A quart of vinegar, one dozen tarragon leaves, half a lemon peel, three heads of garlic from which the skin has been removed, half a green pepper. Let it stand for 10 days and strain, using, in heavy dressing, in the proportion of three parts of oil to one of vinegar. Equal parts of Summer savory, thyme, sage and mint will give a vinegar, a tablespoonful of which may be added to thickened sauces to be used with roasts.

Favorite seasonings for sweets can be expressed and stored against a lean occasion in the same manner, substituting cherry for vinegar. Bits of orange and lemon peel from which the inner skin has been removed, a sprig of mint, a cinnamon stick, as one happens to have an extra bit of flavor from time to time, thrown into the jar of sherry will give an added zest to gelatin jelly or a flavor to punch.

Stewed Peaches.
 There are a few peaches yet in market, and here is a good recipe for the preparation of them for the table: Let the fruit be cold. Give but just time to prepare it before you are ready to serve, so that it may not discolor; pare, cut in quarters, or smaller pieces, if the peaches are large; pile in a glass dish and sprinkle with a wingless of benedictine. Do not sweeten, but pass, when serving, granulated and powdered sugar, thick, unwhipped cream and fresh sponge cake.

Always lay a piece of soft muslin over very fine lace and never touch it directly with the iron. Crochet, tatting, sculpture or Irish or Greek lace should not be ironed, but simply pinned out on a well-covered board, point by point, and left till dry, pulling it out gently with the fingers, if it seems stiff when unpinned.

Household Hints.

Grass—If fresh, dissolve alcohol and rinse; or use Javel water and rinse thoroughly. Paint—Turpentine for coarse goods, benzine or naphtha for fine.

Mildew—Wet with soap suds, lay in sun, spread with a paste of soft soap and powdered chalk and sun it; soak in buttermilk and sun.

Blood—Soak in cold water. For tickling and thick coats, make a thick paste of starch and water; leave till dry, and brush off.

Tar—Soak in buttermilk and rinse in soapy water.

Useful Stray Suggestions.
 Flannel blankets may be successfully cleaned by using borax and soft soap. Put two tablespoonfuls of borax and a pint of soft soap into cold water enough to cover the blankets. When the borax and soap have become dissolved, put in the blankets and let them stand overnight. The next day rub them out, rinse them in two waters and hang them to dry. Never wring them.

To wash chins, begin by boiling two pounds of rice in two gallons of water till soft. Pour this into the tub, and when just moderately warm put the chins in and wash it, without soap. Boil the same quantity of rice and water again; strain off the rice and mix it with warm water, preserving the water in which it was boiled for rinsing water. Wash the chins in the warm water and rice; then rinse in the boiling water in which the rice was boiled.