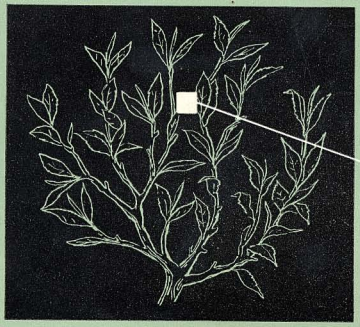
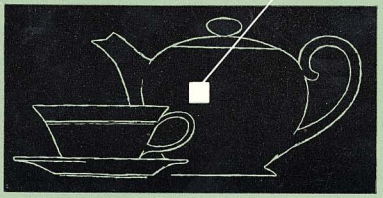
The Lore and Lure of Tea

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Situated in the mountains of Ceylon at an altitude of 6,000 feet and surrounded by thousands of tea bushes, this typical Lipton tea factory produces some of the world's finest quality teas.

The Lore and Lure of Tea

TEA IS AN AMERICAN DRINK. If the contrary seems to be true, it is only because most Americans today can't remember back to the days of 1773 when those of us on this side of the ocean drank as much tea as the English. Granted, tea is not a tradition in the United States as it is in some countries; nevertheless America is the second largest importer of tea in the world. And amazingly enough, statistics show that less than 8% of it is sipped at tea parties.

Next to water tea is probably the most universal beverage of mankind. And also next to water, it's the most inexpensive beverage that we can serve. Today, 25 billion cups of tea are being consumed each year by Americans, at a cost of less than one cent a cup.

Properly brewed tea tastes good. Its brisk flavor soothes and relaxes while giving a new lift to weary bodies and tired minds. Tea is romantic, too. Tea was born in mythical legends. Tea has made history. Tea has built empires. Tea has been a bridge between the East and the West.

What is the origin of tea? Interesting and amusing stories have come down through the ages. One of them comes from China where they claim that the first man to drink tea was the Emperor Shen-Nung, who ruled about the year 2737 B.C. This ruler was a great believer in sanitary precautions. He always boiled all of his drinking water and tried to teach all of his subjects to do likewise.

One day, a few leaves from branches that were crackling beneath the pot fell into the boiling water. A wonderful and invigorating aroma so intrigued the Emperor that he tasted the brew. He found that it tasted even better than it smelled, and legend tells us that the leaves were those of the wild tea plant.

From India comes another story. The patriotic Indians claim that tea was discovered by a Buddhist priest named Darma. Darma lived during the early Christian era and it was his custom to contemplate the goodness of the god Buddha. About nineteen hundred years ago, according to the story, Darma decided to devote seven sleepless years to his contemplation. But along about the fifth year he became sleepy, and in his almost unconscious state he reached out and plucked some leaves from a nearby bush and began to chew



One of the most popular summer beverages in the United States is iced tea. Next to water, tea is the most inexpensive beverage in the world.



Above is the large single-story house of the Bandara Eliya Estate Manager. Most managers spend their leisure time beautifying their homes with gardens.

A team of women tea pluckers, leaving the main factory to begin their day's work of plucking.



on them. The result? New life, a feeling of great invigoration, and, of course, they too were leaves from a wild tea plant.

Now, the Japanese accept this legend from India with a slight modification. They say that when Darma found himself getting drowsy, to keep his eyes from closing he cut off his eyelids and tossed them aside. Where they fell, two beautiful little trees sprang up. And, say the Japanese, these were the first tea plants.

These are the myths, but historians tell us that, as a matter of actual fact, the custom of drinking tea began among the Chinese. The earliest reference to tea in Chinese literature is found in a scholarly work by Kuo P'o who was writing in the fourth century.

It is generally believed that the first tea ever to reach Europe arrived in Holland about 1610. For a number of years all the tea that was imported by sea was brought in by the Dutch, but the year 1618 marked the date that the first tea caravan from China reached Russia by an overland route.

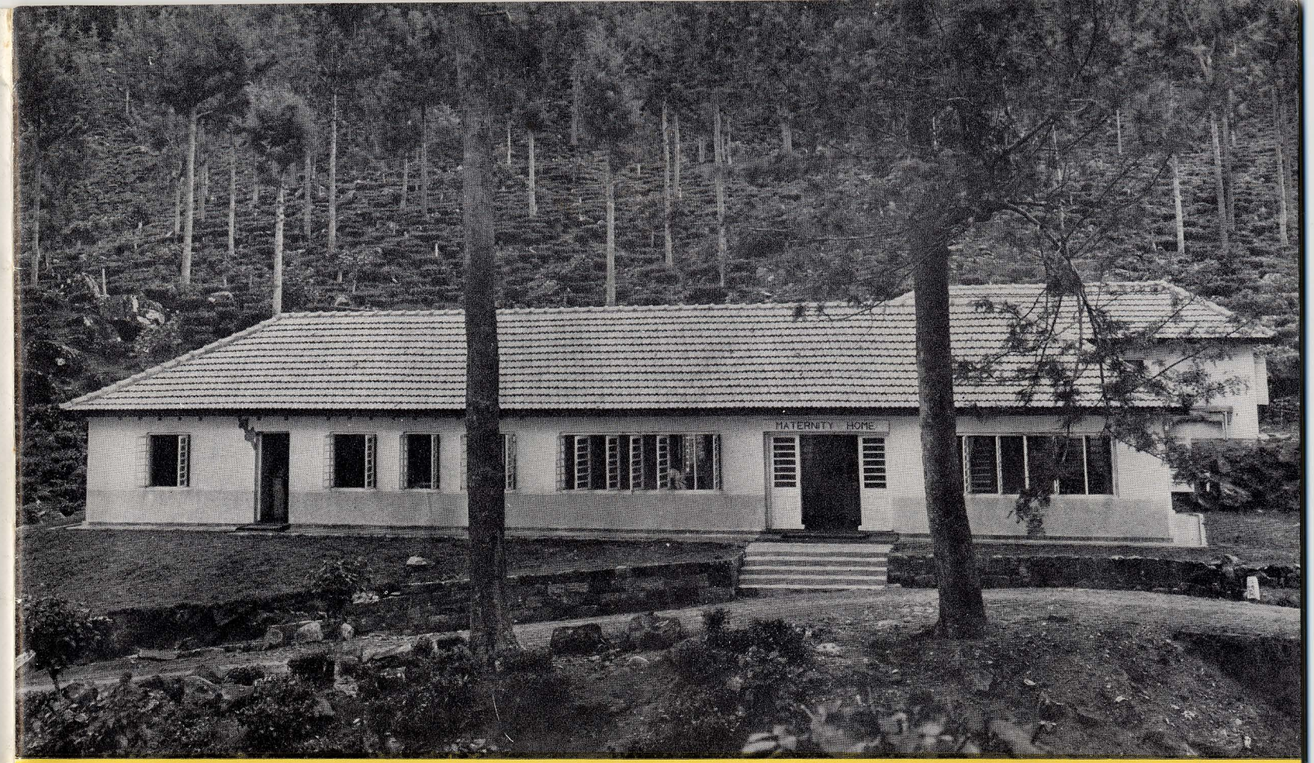
Strangly enough, the tea habit was slow to catch on in England. It was not until 1657 that Thomas Garroway, a coffee-house proprietor, imported a sizable cargo of tea, at the same time issuing an advertisement telling about the virtues of tea, that the beverage began to establish itself as something more than a curiosity.

Tea has a colorful and interesting history, but the highlight for Americans will always be the Boston Tea Party.

Bringing all of this up to date, and because most Americans like current facts, let's take a look at the why's and wherefore's of a cup of tea, today.

Thea Sinensis is the botanical name for the tea tree. By popular misconception this plant is often referred to as a tea bush, but actually it's a tree, and is kept in bush form to facilitate production. When left to grow to full height, the tea tree reaches some 30 or 40 feet.

Although it is a semi-tropical plant and is found in most countries where hot, moist atmospheric conditions prevail, the tea plant's requirements are few and it flourishes equally well in soils ranging from the lightest of sands to the stiffest clays; indeed, as far as is known, this hardy plant will grow in almost any soil that is acid. Tea also requires a reasonable rainfall to survive. But here again, the plant is no weakling and can exist quite happily on 60 inches of rain per year, and at the same time can be found flourishing where 260 inches per year is considered normal.



The maternity home pictured above is located on Lipton's Bandara Eliya Estate. This is but one example of the welfare services provided for all estate workers and their families. Home is kept in spotless sanitary condition and qualified nurses and doctors are in attendance.

Shown below is an interior view of the maternity ward. The idea of placing the baby's crib at the foot of the mother's bed enables the mother to keep an eye on the newly-born infant at all times. Many hospitals here in the United States are reviving this "old fashioned" idea.



Although tea is cultivated as far north as Georgia in the Caucasian Mountains and south to Natal in South Africa, most tea is grown between the latitudes 35°N and 8°S. Here is a list of the major tea producing countries, plus a few where the cultivation of tea has at some time been attempted:

THE PRINCIPAL TEA PRODUCING COUNTRIES OF THE WORLD

INDIA
PAKISTAN
CEYLON
INDONESIA (JAVA and SUMATRA)
BRITISH EAST AFRICA (KENYA, UGANDA, TANGANYIKA AND NYASALAND)
PORTUGUESE EAST AFRICA (MOZAMBIQUE)
JAPAN
CHINA
FORMOSA
U.S.S.R. (GEORGIA)

MINOR TEA PRODUCING COUNTRIES

BURMA
FRENCH INDO CHINA
MALAYA
TURKEY
PERSIA
SOUTH AMERICA (BRAZIL, PERU, MEXICO)
PAPUA
AZORES
U. S. A. (SOUTH CAROLINA) **NOW ABANDONED.**

Tea Estates

To a certain extent the methods of tea production vary throughout the world, but generally tea is cultivated, manufactured, and packed on tea estates, sometimes referred to as gardens or plantations. The layouts of these are, for the most part, quite similar in the major producing countries.

There's one exception – China – the largest tea producing country of all. Here tea is produced in the vast areas of the Yangtze Valley and in the territories both north and south of that river. Although a few modern estates have come into being in recent years, still the largest quantity of tea produced in China is cultivated by the small holder or farmer who maintains a few bushes from which he plucks the green leaf, then transports it to a central factory where it is sold. The factory owner, in turn, processes the green leaf and then sends the finished tea to the large markets of the world.

The varieties of tea produced in China are many and they include most grades of Black, Green and semi-fermented teas. China is, perhaps, better known for those types of tea that have rare and exotic flavors. One of the best-known teas from China is Keemun-Black. When the opening of trade commenced with China, this particular tea rapidly became a favorite in the English market and soon became known the world over as "English Breakfast Tea." This still ranks high in the estimation of connoisseurs. Another Chinese tea, well-known in America, is Jasmine. This is produced in the country districts surrounding Canton. When this tea is manufactured, fresh Jasmine blossoms are placed in with the plucked green leaf and are allowed to remain in the tea during and after processing. This, of course, is a rather expensive method of production and some Chinese merchants, to cut costs, prefer to produce a poorer quality by removing the Jasmine blossoms from the tea after manufacture, using the same blossoms over and over again.

Another interesting type of tea produced in China is Yanlowtung brick tea. This is produced in the central areas of China, the main producing factories being centered around Pachi. Here the tea is ground into dust, steamed under pressure and formed into bricks by giant hand presses. This is generally manufactured for sale in Russia and is quite often transported there by camel.



Here we see a young tea tree. When we compare its height with the man standing next to it, we are aware that it is well on its way to a height of 30 to 40 feet.



Similar in appearance to the orange blossom, a spray of tea flowers has white petals and light yellow centers. Unlike orange blossoms, it has faint fragrance.



A young tea shoot is known as "flush". These three young leaves produce the best quality tea.

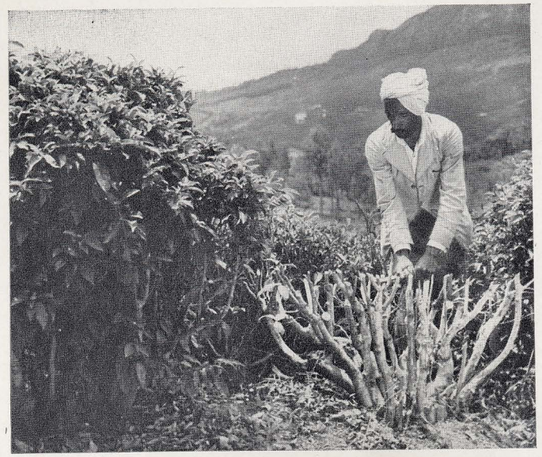


Tea planters no longer have to rely on seeds in order to propagate tea bushes. Today, after years of research and experimentation, planters select cuttings from their best plants and place them in nurseries. These nurseries consist of a series of beds from 4 to 5 feet wide and 30 yards long.

Cuttings are placed in rows 6 inches apart and are protected from the burning rays of the sun by grass and bamboo mats placed on the nursery's skeleton roof structure. They remain in the beds for a period of 3 or 4 months until they are young flourishing plants, ready for transplanting.



The fresh cutting is placed in a small wicker basket filled with soil which is then planted in the nursery. Later, the rooted cutting is taken with its basket out to the fields for transplanting.



Shown above are two tea bushes. The one on the left is in full flush while that on the right is being pruned by the Indian overseer. The pruning will put new life into the bush. This is done only in the relatively cool months of the year when the sap of the tea bush is running low.

Lapsang Souchong is the name for a black tea produced in the Canton area and is well-known among connoisseurs for its tarry, smokey flavor. This flavor is introduced when the tea is dried and the heavy smoke of the wood fuel used in the firing is allowed to permeate the tea leaves thus imparting a wood smoke flavor to the leaves.

The teas mentioned are but a few of the well-known Chinese teas. There are many varieties produced in this immense area. Estimates of the production of tea in China have been made from time to time, but owing to the way in which the tea is gathered, an accurate estimate is out of the question. But it is generally accepted that China produces almost as much tea as the rest of the world put together – anywhere from 900,000,000 to 1,000,000,000 pounds of tea per year.

The Chinese method of cultivation, however, is the exception rather than the rule, and most tea consumed in the West is grown on estates similar to that of Bandara Eliya, one of the Lipton gardens.

Here we see an Assistant Estate Manager visiting laborers who are pruning tea bushes in an out-lying section of the estate.



Pluckers working at the Dambatenne Division of the Lipton Bandara Eliya tea estate are visited by one of the two Estate Assistant Managers who travels on horseback. This estate covers some 1,500 acres of mountainous territory.



Green leaf plucked by the women laborers of the estate is weighed under supervision of head field supervisor. Pluckers are paid bonus according to weight of leaf returned at end of day.

After the tea has been weighed it is then put into large burlap bags and sent by overhead cable to factory. This system of transporting heavy bags relieves native workmen of this disagreeable chore.

GROUP OF TEA ESTATES KNOWN AS DAMBATENNE OWNED BY THE ASSOCIATE COMPANY LIPTON (Overseas) LTD., LONDON

This group of estates, situated in the Haputale district in the hills of Ceylon, is one of the finest, and typical of many in that particular area. Bandara Eliya, the estate which produces the finest tea in the Lipton group, is at an elevation of 6,000 ft. above sea level and consists of some 1,500 acres of planted tea. For the accommodation of the estate manager and his wife, the company provides a house and two smaller houses for his assistants. The coolie labor of the estate is housed in a modern, up-to-date community, consisting of a house for each family, a well-equipped dispensary, a maternity hospital, a nursery and a school.

The factory, centrally situated on the estate, is a lofty, airy building constructed of concrete and steel, very simple in design, but perhaps the finest of its type in Ceylon.

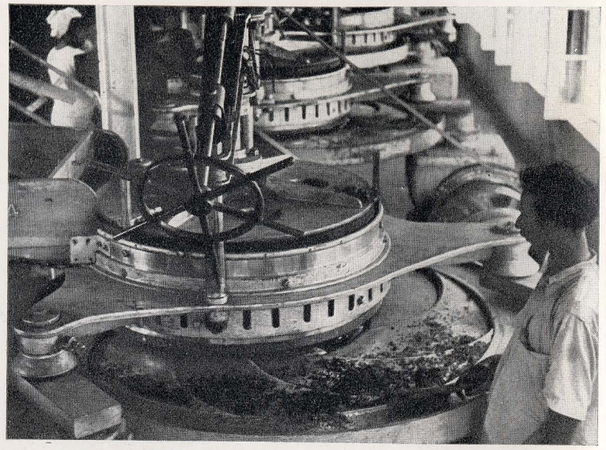
In the early days when the estate was first laid out, the planter had to rely on seeds in order to propagate tea bushes. Today, however, after years of research and experimentation, tea bushes on Bandara Eliya are reproduced by planting small cuttings obtained from the finest bushes on the estate. These are planted in nurseries consisting of a series of beds from 30 to 40 yards long and 5 feet wide. Cuttings are placed in rows 6 inches apart and shaded from the sun's rays by straw and bamboo matting. They remain in the beds for a period of 3 or 4 months until they are young, flourishing plants. From here they are transplanted to the main fields where they grow undisturbed until ready for pruning. During this period, the young bush grows to a height of about 34 inches, then at the end of the year, it is pruned and cut back. When planting tea, bushes are placed 4 to 5 feet apart, averaging 2,000 to 2,500 bushels to each acre. Some 3 or 4 years must pass before new acreage begins to pay for itself.

The bush is very similar in leaf appearance to the common laurel that grows here in the United States. The older leaves of the bush become very hard and brittle, while the younger leaves are softer and reasonably pliable. It is from these young green leaves that tea is manufactured. The finest quality tea is produced from the first two young leaves and the bud on the tip of the shoot—this is known as "flush." Coarser plucking or picking more than the two leaves and bud, results in a finished tea of much poorer quality. However, on this Lipton estate, fine plucking is a *must*,





On arrival at tea factory, freshly plucked green leaf is spread on shelves known as "withering tats". Lofts are on top floors of building. They are made of burlap stretched over wire frames. Leaf remains here until ready for rolling.



Pictured above is a tea rolling machine. This machine twists withered leafs into balls, breaking up leaf cells and releasing juices. Machines were developed upon age-old principle of rolling leaf between palms of hands.

and the coolies employed are trained to pluck only those very fine young leaves at the top.

Generally speaking, the higher altitudes whose temperate conditions retard growth, produce better quality tea. However, soil and the right amount of rainfall plus careful manufacture play the predominate roles in determining quality.

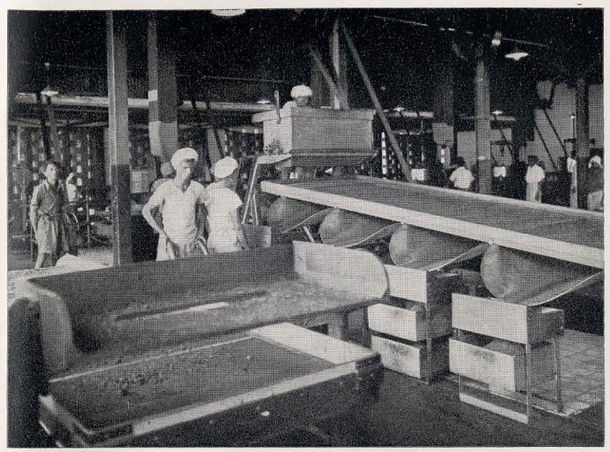
THE PROCESSING AND MANUFACTURING OF BLACK, GREEN AND OOLONG TEA

Although there are many hundreds of different types, and grades of manufactured tea, generally speaking, they fall into one of the following three categories — Black, Green and semi-fermented or Oolong tea. All types of finished tea can be produced from the same tea bush. The difference in appearance and flavor, such as exists in Black, Green and Oolong, is the result of different methods of processing and manufacture, and not in the type of leaf plucked.

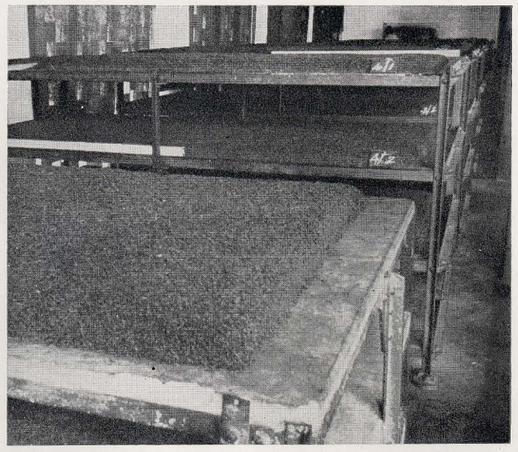
THE STORY OF BLACK TEA

Plucking

Having determined his plucking cycle, the garden manager divides his coolie labor into groups under overseers and they are sent off to those areas of the garden that are ready to be plucked. In most tea



Twisted sticky mass of green leaf is taken from rolling machine and placed in a roll breaker. This machine breaks up moist mass of leaves. They fall according to size through a sifter screen. During this process fermentation begins.



The rolling and sifting process completed, green leaf is spread evenly on these fermenting beds. Tea remains here long enough for oxidation to take place. Green leaf changes from green to a light copper color.

gardens throughout the world, except perhaps in Africa, the plucking of tea is done by women who become extremely adept at this operation. By using both hands, one woman can pluck an average of 70 pounds of green leaf each 8-hour day. The method of plucking is quite simple. The young shoot is snipped between the thumb and first finger and then thrown into a basket carried on the back. At the end of the day, the women carry the baskets to a central collecting point where the green leaves are turned out, inspected, then weighed (under supervision of a male field supervisor) into large burlap bags. These bags are transported by overhead cable to the factory. From this point onwards, begins the process of manufacture.

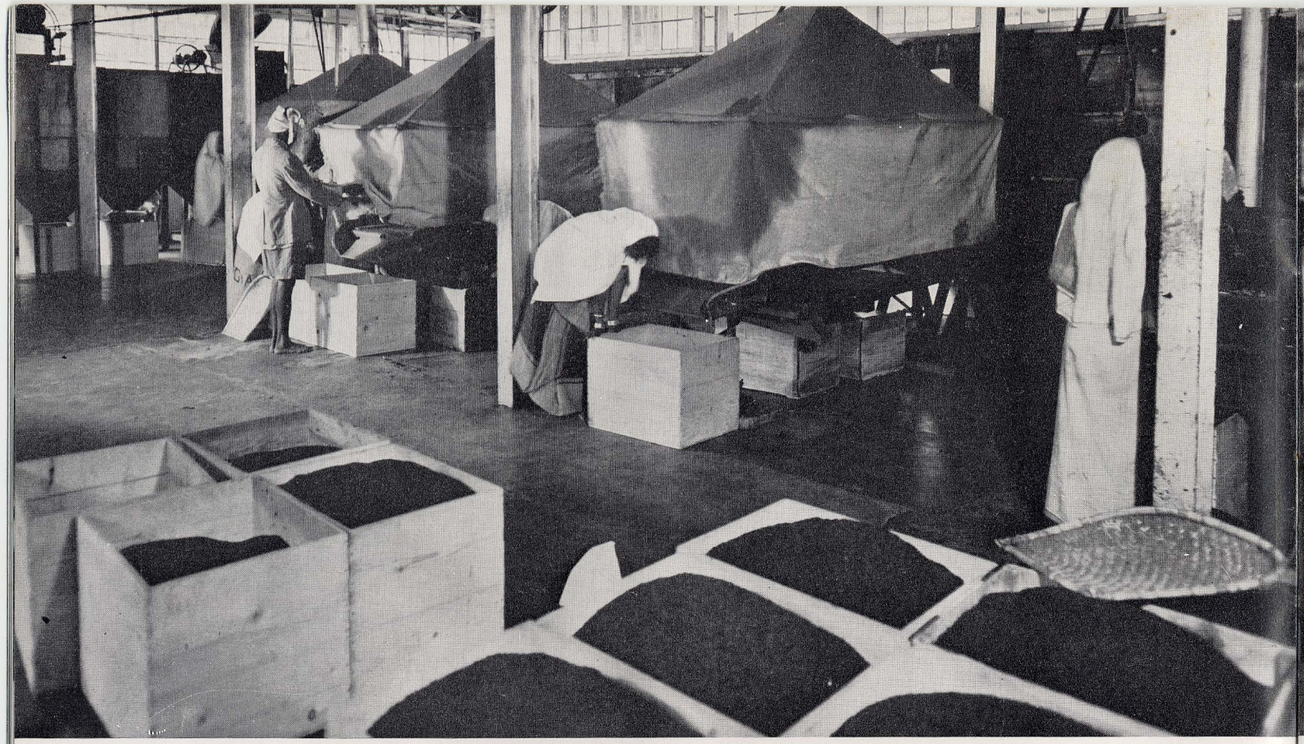
Withering

On arrival at the factory, the green leaf is carried to withering lofts situated on the top floors of the building. Here it is carefully spread on large sheets of burlap over wooden frames called "withering tats." After several hours have passed, the leaves undergo a physical change involving the loss of moisture, and they assume a flaccid condition suitable for rolling. The time taken for this process is determined by the moisture contained in the atmosphere, but generally a good natural wither is secured within 24 hours after the green leaf enters the factory. This process has been speeded up on certain tea estates by what is known as "controlled withering," the correct degree of wither being produced with the use of air conditioning apparatus.

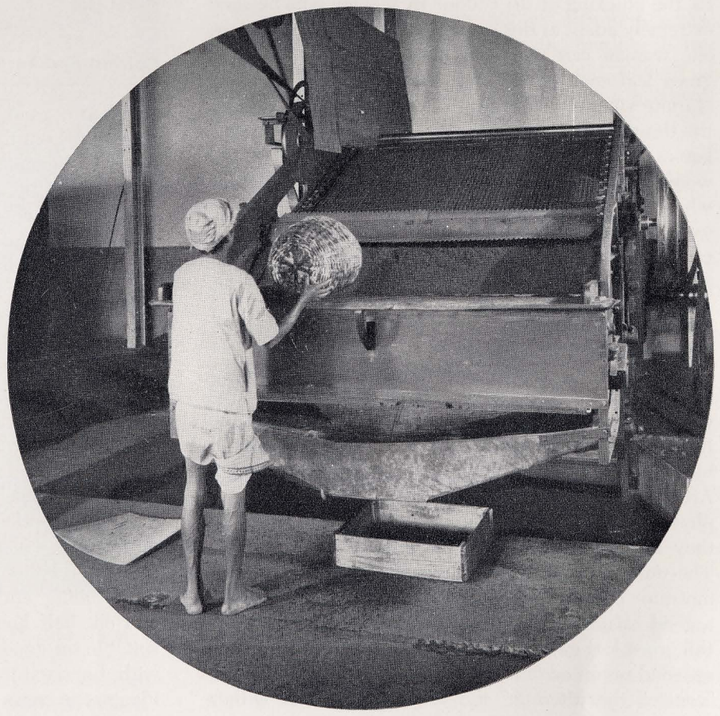
Rolling and Fermentation

When a good wither has been obtained, the leaf is collected from the tats and by means of chutes is carried to a machine known as a roller. The leaf is rolled and twisted by a giant brass cylinder revolving on a flat brass or wooden bed plate. The object of this process is to disintegrate the minute leaf cells and to release their juices and enzymes. These juices, when exposed to the air, begin a process of fermentation wherein oxygen is absorbed causing a slight rise in temperature. The leaf itself changes color from green to a bright copper and the characteristic aroma of tea is now very noticeable.

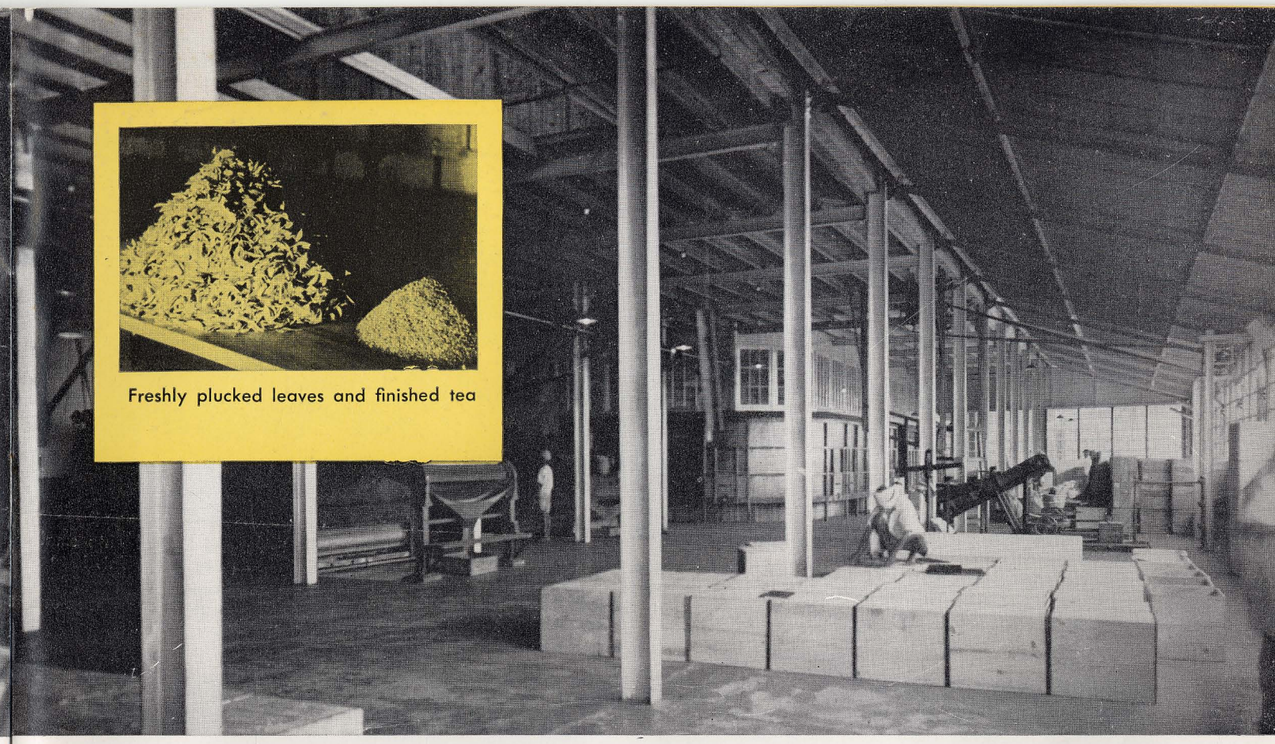
The leaf comes from the roller in the form of twisted balls which have to be broken up to allow for even oxidation and fermentation. To do this, the leaf is placed in a machine called a roll breaker. From these machines, the leaf is taken to the fermenting beds or tables where it is spread evenly to a depth of 2 or 3 inches, and then left to ferment. The time taken for both rolling and fermenting is approximately three and one-half hours. The ideal atmospheric condition suitable for good fermentation is one of high humidity with temperatures ranging between 75° to 80° F. Planters exercise extreme care during this portion of



These are grading machines covered by dust extractors. They consist of a series of sieves which separate the various sizes of tea into different grades. It is here that tea is given its grade or size, e.g. orange pekoe, pekoe, etc. The term, orange pekoe, therefore, refers to a size or grade of tea, not a kind or quality of tea.



Fermented tea is shown here being fed into a dryer. During this process tea passes through an oven-like chamber which arrests further fermentation by sealing in the natural juices and oils. A temperature varying between 170° and 180° is maintained in the chamber. It is during this process that tea takes on its blackish-brown color.



Freshly plucked leaves and finished tea

To produce one pound of finished tea it is necessary to process four pounds of plucked green leaf. A comparison shows a heap of freshly plucked leaves and the resulting finished tea.

Drying room in Lipton's tea factory at Bandara Eliya. Chests are stenciled with such information as name of estate, grade of tea, net and gross weight, chest and invoice numbers.

the manufacturing process since it is the fermenting of the tea that determines its "body" or "strength."

Firing

The firing or drying of tea is generally carried out in two operations. During these processes, tea passes through an oven-like chamber which arrests the fermentation by sealing in the natural juices and essential oils. A temperature varying between 170° and 180° F. is maintained in the chamber and it is here that tea takes on its blackish color familiar to the tea drinker. The first of the two operations is known as making the tea "three-quarters dry." The second operation is the more important, in that the leaf is submitted to further heat when already dry. This has the effect of "case hardening" the leaf, and it is from this that tea derives its "keeping qualities."

Sorting and Grading

When the finished tea comes from the dryer, it is a mixture of many different sizes, and is separated according to various grades. The tea passes over a series of long rotating sieves which separate it, the spill falling according to size into aluminum foil-lined chests. The usual type of chest is approximately 24" in height and 19" wide holding from 90 to 110 lbs. of finished tea.

The chests are weighed and labeled for shipment. The week's production thus packed, is referred to as an *invoice*. The planter endeavors to send these invoices to the local tea market as soon as possible, since he knows that the fresher the tea is on arrival, the higher price he will receive for it.

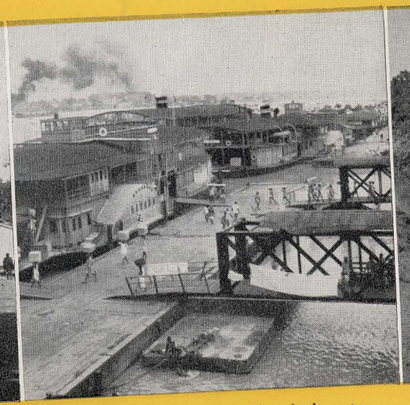
Although all gardens can produce any grade of tea required, generally they build up a reputation for producing certain grades and do their best to turn out those grades which bring the highest price.

Many people are confused about the meaning of the term, orange pekoe. This refers to a size of tea and has very little to do with flavor or quality. There are various sizes of black tea.

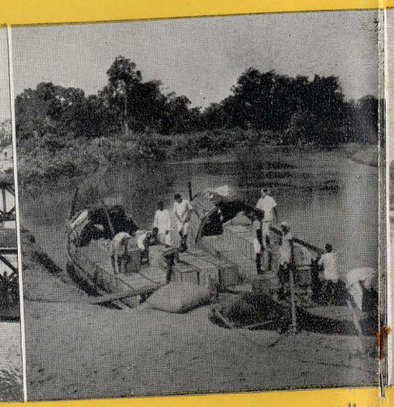
LARGE SIZES	SMALLER SIZES
Orange Pekoe	Broken Pekoe
Pekoe	Broken Orange Pekoe
Pekoe Souchong	Broken Pekoe Souchong, Fannings



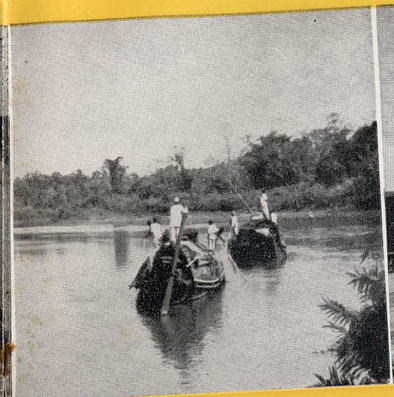
Here we see a modern truck carrying tea chests through a typical main street of a town in the tea planting districts of Ceylon. This tea is destined for sale in Colombo.



Tea chests are head-loaded onto flat-bottomed river steamers by Indian laborers. This is a typical scene on the Brahmaputra River which runs down to Calcutta.



Tea chests are loaded onto small up-country river boats. This is taking place on banks of upper reaches of Brahmaputra River. Chests are loaded directly from tea estates.



The boats set off for their long journey down the Brahmaputra River through Assam Valley to great tea center of Calcutta. This is cheapest method of transporting tea.



The mountainous hill paths in Darjeeling often necessitate pony transport from factory to rail center. In other parts of world, elephants, camels and yaks are used.



Chests of Ceylon tea are ferried out to steamships in Colombo harbor by barge and stowed in holds of steamers in preparation for long sea journeys to the western world.

Processing of Green Tea

The manufacture of Green Tea differs from that of Black only in the fact that when the green leaf is brought in from the fields, it is not withered but is immediately placed in large steamers and heated to about 160° F. This process makes the leaf soft and pliable, ready for rolling and at the same time, it inactivates the leaf's juices and prevents fermentation taking place. The leaf having been thoroughly steamed, it is then alternately rolled and dried until it becomes too crisp for further manipulation. Finally, it is sorted and packed according to size – the finished tea being a pale gray green color. The various sizes of tea that result from this process are referred to as Young Hyson, Hyson, Imperial Gunpowder, Twanky, Fannings and Dust.

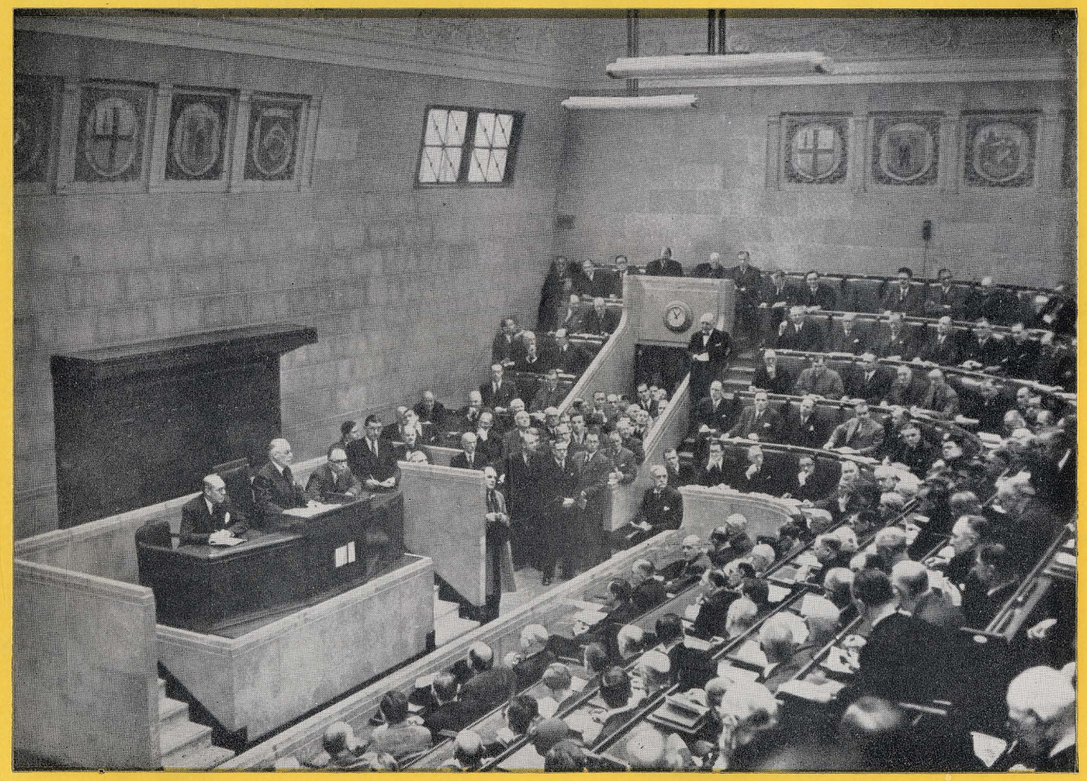
In the days when tea was first introduced to the Western world, green teas were the largest seller. But later, when India and Ceylon competed with China for the world's tea pot, the sale of black tea gradually increased until today, green tea commands a very small position in the tea world. It is curious to note that Americans were quite late in changing from green to black tea drinking and until quite recently, imported large quantities of green tea. It was only at the end of the 1917-1918 War that black tea became increasingly popular.

Oolong Tea

Oolong teas derive their name from the Chinese word Ou-Long, meaning black dragon — and is used in connection with a large variety of teas from the Amoy and Foochow districts of China but more often refers to those teas produced in Formosa. Oolong tea is said to be a cross between black and green tea that is partially or semi-fermented.

In the manufacture of Oolong tea there are two distinct processes — the first is done by hand in the tea garden and the second when the leaf reaches the central tea factory. At the garden the leaf is slightly withered in the sun and then the pluckers gently roll the leaf between their hands and a small degree of fermentation is allowed to develop. At a certain stage the leaf is sent to the central factory where it is fired and packed in chests ready for shipment. There are no separate grades or sizes of leaf in Oolong tea as in the case of black or green tea, but there are many varied qualities.

The finished tea is sent down from the tea estates to the local tea market by river, road and rail. Practically every form of conveyance known to man has, at some time or other, been pressed into service to carry tea chests. Quite often in the hills of Darjeeling, tea is head-loaded for many miles over the winding mountain trails. In Tibet, the chests are sometimes carried

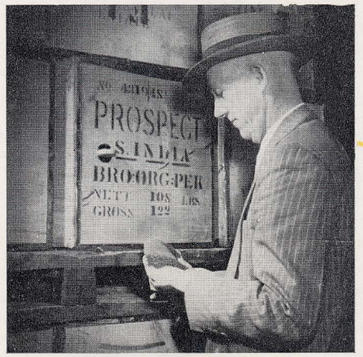


Raw tea is sold to large packing companies in various tea auction rooms of the world. This is the largest of them and was reopened in London after the war.

Owing to war-time restrictions, this market was closed. In pre-war days, approximately 375,000,000 pounds of tea were purchased here annually.



Some of Lipton's recent purchases of raw tea are unloaded at our plant in Galveston, Texas.



U. S. Customs Official takes sample of Lipton purchase for inspection. Before entry it is checked for quality.



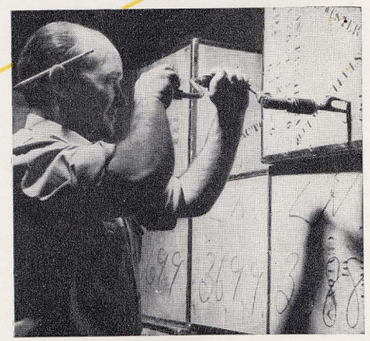
Raw tea comes into our plant at Hoboken via barges which take on chests from ships docked in New York Harbor.



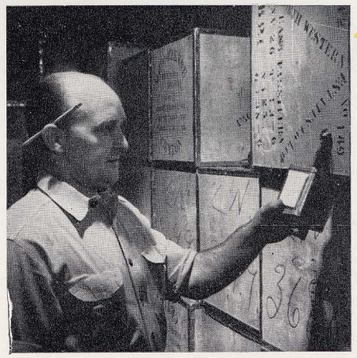
Tea chests are brought onto storage floors at Hoboken having been examined for damage incurred on voyage.



Tins containing samples of every Lipton raw tea purchase are sent to the tea tasting room. Here these tin containers are stored for examination by the Lipton tea experts. Entries showing grade, country and ship's name are made in special stock books.



Using special tool, foreman of Tea Blending staff bores a hole in chest to extract sample.



A quantity of tea is drawn out into a small tin sample box. Chest is immediately sealed with a bung.

by porters through the mountain passes and at other times, that strange goat-like animal, the yak, is used. At various times and in various countries, elephants, donkeys, camels and mountain horses have carried tea to the local tea centers, and more recently during the earthquake in Assam, large quantities of tea were flown out of the stricken area by plane to Calcutta. Generally speaking, however, most tea chests in India are carried in flat-bottomed steam boats down the Brahmaputra River to Calcutta. On arrival in either Colombo, Calcutta, or at one of the other leading tea markets of the world, the tea is placed in warehouses to await the day of sale.

Tea Markets and Auctions

The principal tea markets in the world are London, England; Calcutta, India; Colombo, Ceylon; and Amsterdam, Holland. Although in character these cities are quite different, they all have two characteristics in common. They are all sea ports and are all centers of the tea trade in their respective countries.

The operation of the tea market or tea sale is, perhaps, the most interesting and exciting part of the tea trade. It is here that the large packing companies of the world purchase their requirements of garden tea. They buy either through associated companies in the area or through one of the local brokerage companies. The sale usually begins at 10:00 in the morning and closes at 4:00 that afternoon. During this short length of time, the auctioneer will put up as much as 55,000 chests of tea for bids and will sell that much. Tea buyers at these auctions are supplied with printed catalogues containing the name of the tea estate on which the tea was grown, the grade, the quantity available for sale, and descriptions of the quality of



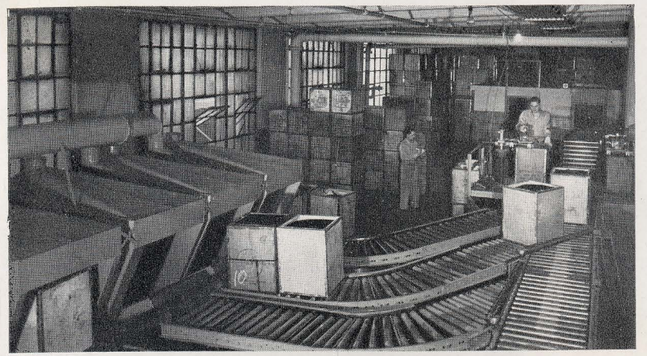
Before preparing formulas, tea experts examine raw teas and record descriptions. Later, they select teas required for blends and make up a small blend which is studied before final bulk formula is determined. Pictured is E. A. Shalders, Lipton's, Manager of Tea Buying and Blending, with one of his assistants. Mr. Shalders who has 40 years of tea buying and blending experience, is one of the world's leading authorities on tea.



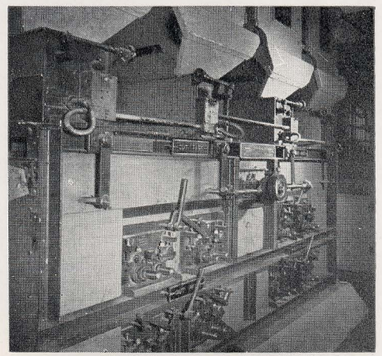
Copies of the formula are sent to storage floors where individual chests of raw tea are pulled out and moved by hand trucks to booster conveyors.



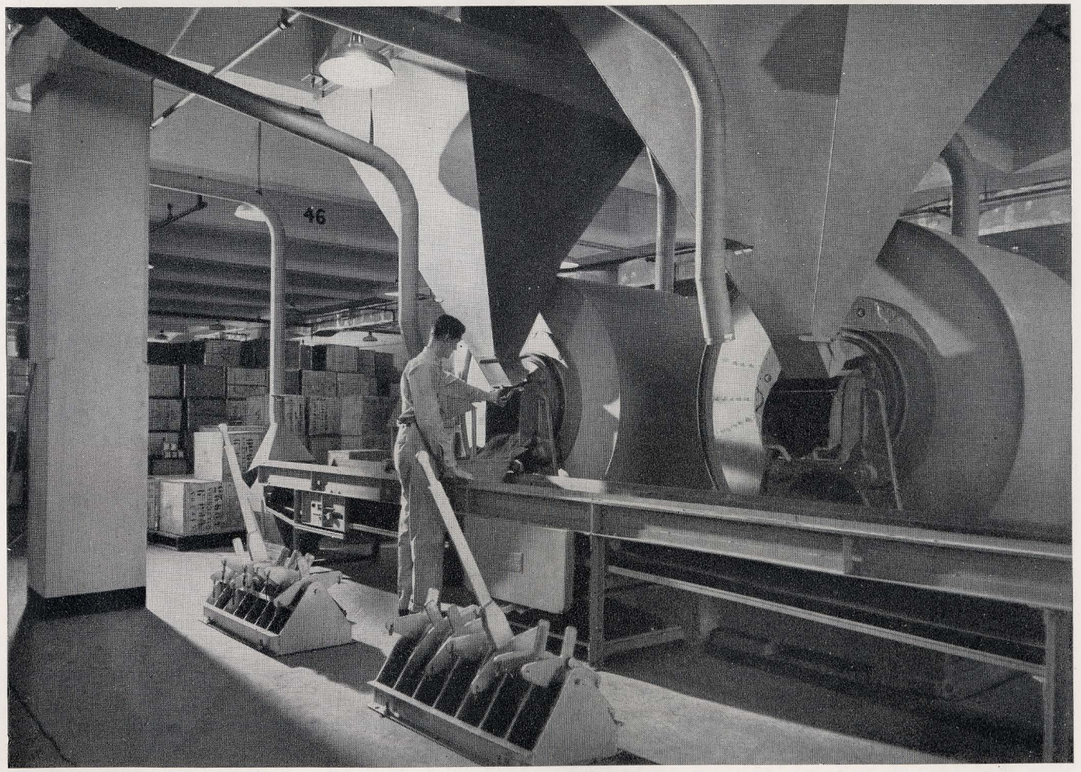
These booster conveyors carry the chests to a platform where the chests are opened with electrically operated circular saws. This process is quick and clean and involves less handling of the heavy chest by the operator.



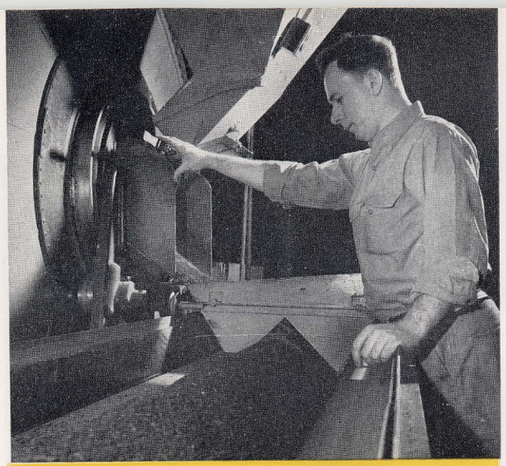
The opened chests are placed on a moving belt and roller system which carries them to a series of hopper heads where the tea is automatically dumped. Operator on other side of hopper removes empty chest and puts it on conveyor to be carried to incinerator.



From the hopper heads tea falls to the floor below where this giant cutting machine cuts and sorts the tea to the required size.

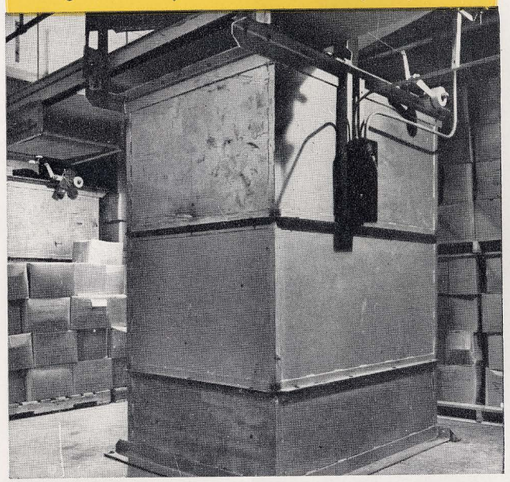


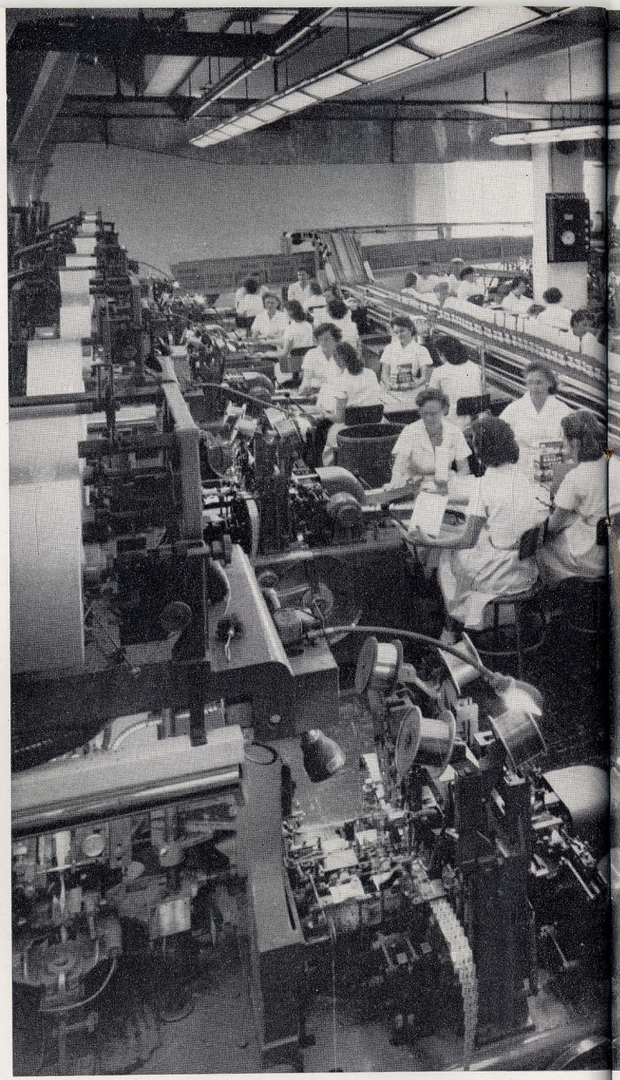
The individual raw teas pass down from the cutting machine into these large mixing drums. Each drum holds over 1,000 pounds of raw tea. After being filled, the drums are set in motion and the tea is mixed according to the specified instructions of the formula. When the mixing is completed, by adjusting the levers shown in the foreground of this photo, the operator can route the tea to any one of a series of storage tanks.



Finished tea flows from Blending Department to a moving belt.

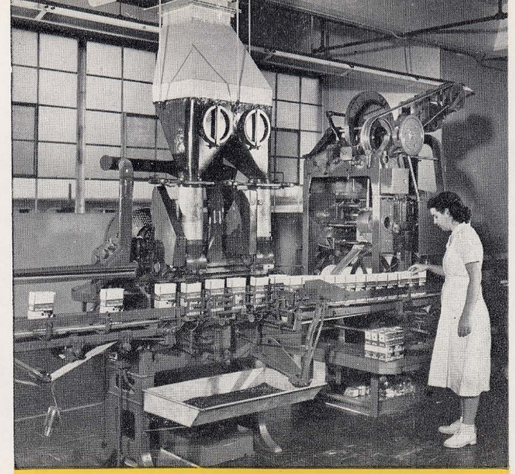
Below is storage hopper situated above packing machine. When tea falls below certain level, series of lights warn operator tank is nearly empty.





This is a typical Lipton Tea Bag production line. Along central moving belt, flow millions of finished tea bags each week.





Shown above is one of Lipton's high-speed packing machines. With the use of a highly efficient dust extracting apparatus, these machines are kept perfectly clean at all times. Finished Lipton packages shown below being packed into shipping cartons.



its liquor. They will have examined small samples of these teas beforehand and will have decided the price they wish to pay for them and have marked their catalogue accordingly.

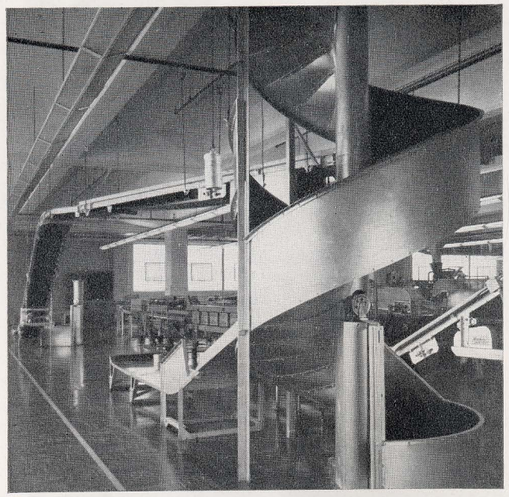
The sale opens with a quiet tap of the gavel from the auctioneer and bidding commences. To the casual observer, from this moment on, all is apparently pandemonium, for everyone in the room appears to be shouting at the top of his voice and cries of "Half" "Hup" "Want some," rise from all quarters of the room. Although this will continue for the next two or three hours, the buyers are quite used to it and may be seen quietly noting the prices and quantities sold in their catalogues. After a while, one realizes the apparent confused shouting in the room is being done by just ten to twelve energetic tea brokers, who are relaying the bids from the tea buyers to the auctioneer and do so by crying out the price they are prepared to pay per pound of tea. As soon as the auctioneer is convinced he has received the highest bid for each particular lot, he bangs on the table with his gavel and the next lot of tea is up for sale.

Separate invoices of tea are sold at the rate of three or four per minute, the bidding advancing approximately a quarter of a cent per pound. Usually, buyers calculate the value of the tea so accurately that prices seldom vary more than a cent per pound throughout the sale, even though the value of those teas on sale may range from 50 cents up to $3.00 per pound.

At the close of the sale, information regarding the price and quantity of tea sold is cabled to all interested parties in the various parts of the world, so that all are kept fully informed as to market conditions. Lipton, during the past 50 years, has built an organization of agencies and associated companies situated throughout the tea world and these companies submit full information relative to market conditions so that we are kept fully up-to-date at all times.

Having purchased his teas, the buyer or agent immediately prepares to ship them to his home port; in the case of Lipton, either New York, San Francisco or Galveston. The chests are generally sent by lighter to ocean-going vessels that carry them to their destinations via the main sea traffic lanes of the world. The main sea route of delivery from India and Ceylon to the U. S. is across the Bay of Bengal to Singapore and then straight across the Pacific to San Francisco through the Panama Canal and up the Eastern coast to New York. In many cases, however, tea has to take the route across the Indian Ocean through the Red Sea into the Mediterranean and across the Atlantic to New York. Ships from all parts of the tea producing world arrive in the American harbors of New York, San Francisco and Galveston to unload their cargo. Lipton has situated its packing plants as close to the dock areas of these cities as possible.

When the teas are received in these ports they are inspected by the United States Government Tea Examiners. To make sure that no impure tea is imported into the country, a standard of tea is selected each



In Lipton's completely air-conditioned tea factory in Galveston, this system of conveyors and spiral chutes carries the finished product right from the production line into the warehouse for storage.



Upon reaching the warehouse, cartons of tea are placed on wooden pallets and stacked by means of automatic lift trucks. All outside shipping cartons are simultaneously closed, dated and sealed.

year that represents the lowest grade in cup quality that can legally be imported for consumption.

Receiving, Blending and Packing

Throughout the years, Lipton has organized a system of receiving, storing and blending tea, which has been found to operate most successfully in all of the Lipton packing plants. This method is the basis of all operations, so a description of the operation in one plant is the same for all.

Raw teas or garden teas are brought to the warehouse from the ship by truck, rail or barge. On arrival, chests are unloaded onto wooden pallets and carried by elevator to storage floors in the upper portion of the warehouse. The chests are then carefully inspected and checked by the Blending Dept. staff and then segregated to previously designated portions of the storage floors. Tea chests are stacked and moved by automatic lift trucks. In Lipton's newest tea plant, Galveston, the entire building is completely air conditioned since the hot moist atmosphere of the south causes tea to deteriorate rather quickly. After the chests have been stacked, small quarter-pound samples are taken from each lot or invoice and sent to the tea tasting room. It is here that the tea enters the sphere of influence of the Tea Taster or Tea Blender.

Tea Tasting and the Art of Tea Blending

A great deal has been written and said about the tea taster and the art of tea blending. Much of it is fact, but a larger part is fiction. A simple way of explaining the tea taster's position is to compare it with that of the buyer of any raw material. Before purchasing his raw material, the buyer must know the quality, durability, origin and, indeed, everything and anything there is to know about the commodity with which he's dealing. This primarily is the tea taster's job when buying his raw tea, and only by tasting the brew, can he ascertain its quality and decide how he will use it.

It has been said that a tea taster, like an artist, is born and not made. The aspiring taster must have arrived in the world equipped with a good sense of smell and an excellent palate; but it must be remembered that, like an artist having completed his training, the tea taster has to gather many years of experience before he can be termed a master of his art.



Lipton Tea goes to market by truck and train. Here a truck is being loaded in a truck bay at one of Lipton's four tea packing plants. It is estimated that turn-over on tea stock occurs nearly every 24 hours.

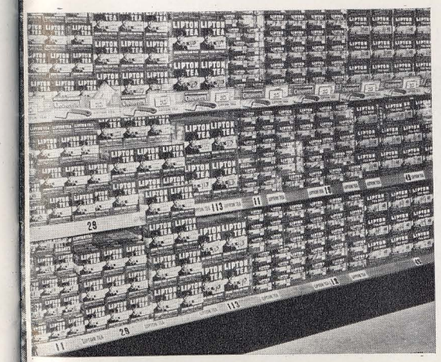
The master tea taster can identify and price to within a quarter of a cent all varieties of tea. Before being termed a "master," he must be able to name by taste alone, many hundreds of different types.

When examining his teas, the tea taster prepares the brew in batches consisting of a dozen to fifty different types in one batch. The tea is weighed with hand scales into pots; boiling water 212° F. is then poured over the tea leaves, the lid of the pot replaced and the brew is allowed to stand for six minutes. After brewing, the pots are placed into small china cups or bowls and the liquor allowed to seep into the bowl. Some add a small quantity of milk before tasting the batch.

The taster when examining his batch, takes careful note of (1) the dry leaf (2) the infused wet leaf and (3) the liquor itself. When examining the dry leaf, the expert will take into account, first, its appearance, noting the manufacture of the leaf, in particular its twist and color, and make sure that it is of a size or standard volume that will fit the package in which it is to go. He then examines the wet leaf (technically known as infusion) for variations in color, for it is from the infusion that the taster ascertains whether or not the tea has been correctly fermented.

Finally, he will taste the beverage itself by spooning a portion of the liquor from the bowl and drawing it into his mouth with a loud noise usually associated with bad manners. It is by this last action that the taster gets an idea of the flavor, and strength of the tea.

Having examined his purchases, the tea taster becomes a tea blender and prepares to blend these teas. He will determine which teas are needed to give body,



Summertime promotions offering a variety of consumer-tested premiums from year to year help to boost Lipton tea sales.



This gigantic window display featuring **brisk** Lipton tea is glamorous, inviting and refreshing even to look at. The window was a feature in the iced tea promotion of Steiden Stores in Louisville, Kentucky. Iced tea was first served at the St. Louis Exhibition of 1904.



Shown above is the equipment necessary to produce five gallons of **brisk** Lipton iced tea for restaurant or other institutional consumption. Steps necessary to make this quantity of iced tea are shown in following photographs.



Five one ounce tea bags of Lipton's special iced tea blend are put into a large earthenware tea pot that has a 2½ gallon capacity, and spigot for serving.



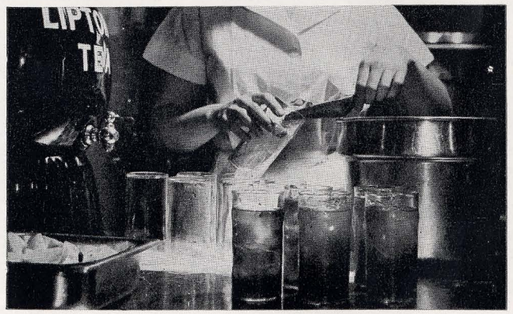
It is essential that **bubbling boiling** water be poured over the tea bags. Tea experts recommend this proportion: two ounces of tea to 1 gallon of water.

color, flavor and strength to the blend, and select those which will enable him to produce an exact replica of his previous blend. He then prepares a miniature blend which is consistent both in quality, color, body and flavor to his standard. Carefully noting the teas he has used, he then writes up a formula which is sent to the blending floors to be produced in quantity.

To do this, individual chests are taken from stock, placed on booster conveyors and carried up to the blending floor. These conveyor systems automatically place the chests on gravity roller belts which in turn carry them to a platform where they are opened with electrically operated circular saws. The opened chests are then carried on moving belts to a large hopper into which they are emptied by automatic dumping devices. Empty chests are placed on moving belts which carry them off to be burned in an incinerator on the floor below. The loose raw tea then falls through the hopper heads and is sifted by moving screens which remove any small pieces of wood or paper that may have dropped into the tea when the chests were opened.

The tea then passes to the floor below, falling over a series of permanent magnets which extract any metallic foreign bodies that may have accidentally gotten mixed with the tea. It then enters a giant cutting machine which automatically sorts out those teas needing to be cut to a size which will fit the package, sifts them and passes them down into giant mixing drums on the floor below. Here, when the requisite number of raw teas, as determined by the blending formula, have entered the drum, the operator throws a switch. The drums revolve and the individual raw teas are mixed to form the blend of Lipton tea as we know it. The blend completed, the operator allows the tea to spill from the drum to a moving belt which carries the finished product to a series of storage tanks situated above the various tea packing machines.

In America there are two methods of packaging tea — cartons or packages, and tea bags. The tea that is packed into cartons, falls through chutes that lead from storage tanks. It is automatically weighed and



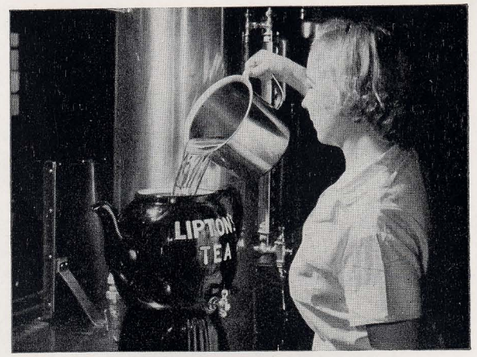
Having brewed or steeped for 6 minutes, the tea bags are removed and the iced tea is ready for serving. It is poured into glasses filled with cracked ice.



An alternate way of insuring that water is at boiling point when poured on tea is this pipe equipment designed by manager of Lipton cafeteria.



This photo and the following picture demonstrate what happens when boiling water is poured into a measure and then poured into the tea pot.



As can be clearly seen, by the time the water reaches the tea bags its temperature has fallen considerably. To make good tea, it is essential that the water be 212° F. when poured over the tea. Tepid water makes flavorless tea.

packed into aluminum foil-lined cartons. These are carried along an intricate system of moving belts and rollers which vibrate the cartons thus helping to settle the tea in the package. The package passes through a series of mechanical operations which close, seal and pass the finished product on to a cellophane wrapping machine. After wrapping, packages are packed by hand into corrugated cartons. These are placed on moving belts that carry them to a mechanism which closes, dates and seals them. The tea is then ready for delivery to Lipton customers.

Meanwhile, tea is passing from other storage tanks to a complex piece of machinery known as the tea bag machine. This machine carefully weighs out the exact amount of tea to be placed in each bag, cuts and seals the bag, staples string to the bag and a tag to the string and the bag is then ejected from the machine. The bags are then gathered, inspected and placed into paper envelopes which are placed in cartons. These cartons are wrapped in cellophane, packed into larger shipping containers, ready for shipment.

Although to us the tea bag is a familiar article, to foreigners it is almost entirely unknown. It is in itself 100% American and only in the past two or three years have other countries begun to take an interest in it. The trade generally concedes that the tea bag was brought into being by a gentleman named Thomas Sullivan who, in the year 1908, was operating a small wholesale tea and coffee shop in the heart of Manhattan's spice district. It was Sullivan's practice at that time to give his prospective tea buyers a small sample of his teas wrapped in small cheesecloth bags. To his surprise, he began to receive orders not for the bulk tea, which these small samples represented, but for the samples themselves. When investigating this unusual occurrence, he discovered that his customers were using the samples to brew themselves their accustomed pot of tea. Possessing that spark of ingenuity associated with Irish-Americans, Sullivan immediately exploited the demand for these bags and the popularity of this way of preparing tea increased rapidly until today, tea bags form approximately 40% of the total tea output of America.

A few years before Sullivan was introducing his tea bags, a young Englishman by the name of Richard Blechynden arrived in this country from India with the intention of promoting the sale of Indian and Ceylon teas at the St. Louis, Missouri Exhibition of 1904. At that time, St. Louis was experiencing its annual heat wave and Blechynden soon found that very few people were interested in drinking hot liquids. By experimenting, he evolved an iced version of tea, brewing it a little stronger than usual and diluting it with ice. Within a few moments of offering this beverage for sale he soon realized that iced tea was going to be a hit. At the close of the Fair iced tea was well



Iced tea is one of the most adaptable and versatile beverages that the hostess or housewife can serve.



Popularity of the tea party is again on the ascendency. Tea is the beverage of friendship and congeniality.

on its way to becoming one of our most popular summer-time drinks.

Throughout that summer Blechynden continued advertising and selling iced tea in various parts of the country. Wherever he went the novel iced beverage was enthusiastically accepted.

Although in America Lipton has only two main blends of tea, our associated companies in London, Ceylon, India, Pakistan and Burma produce many blends of tea packed in various attractive packages. Of these, the Lipton "Pice" packet sold throughout India would probably appear most peculiar to us. This is a small gaily colored envelope containing a tiny amount of tea dust. These envelopes are sewn together to form a string and may be seen fluttering in the breeze decorating the tea dealer's shop in any Indian bazaar. These packets sell to the customer for approximately a half a cent and from it the customer may obtain two or three cups of tea. Lipton in India also sells the same type of tea packed in sealed four-gallon tins, the largest sale for these being in the "up-country" or rural areas of India. It was discovered by an enterprising salesman that the large sale of this tea was due to the fact that people in these outlying districts liked it because the container made a very useful water bucket after the tea had been used.

No Lipton tea story, or indeed any tale of tea, would be complete without mention of the amazing man who built the Lipton organization to one of the largest in the world. We refer, of course, to Thomas Johnstone Lipton. Of his life and his doings, many things have been written, many stories told, culminating in the book by Alec Waugh, *The Lipton Story.*

Although Sir Thomas was born in Scotland, his whole life is typical of the success story we Americans admire most. A story in which hard work and perseverance plus a very definite touch of know-how, inevitably led to ultimate success in this wonderful land of opportunity — America. One little known fact about Thomas Lipton is that, although when his organization began to grow, he permitted many of his junior executives to be appointed by his assistants, every tea expert on his staff was personally selected and chosen by himself. Today, any tea man who can boast that Sir Thomas personally chose him to head up a tea operation, is looked upon as a person who, undoubtedly, possesses extra special qualifications.

Another of Thomas Lipton's principles had to do with the control he exercised over the quality of his products. He had them under his jurisdiction from the moment of purchasing the raw materials to the actual handing over to the customer of the finished product. To do this, he built up a system of grocery stores throughout the British Isles and with this method of selling, insured that his products received careful handling till the moment of sale.

His products won for him far more awards and decorations in food exhibitions than he ever managed to obtain with his sailing yachts. Among these were the following:

Chicago Exhibition, 1893, the highest and only award for tea.

Paris Exhibition, 1900, the Grand Prix for coffee and cocoa. (The Grand Prix is the highest honor obtainable). Also the Gold Medal for tea.

St. Louis Exhibition, 1904, Grand Prix and Gold Medal for tea. Gold Medal for cocoa.

The Liege Exhibition, 1905, Grand Prix for tea, coffee and cocoa.

Jamestown, Va. Exhibition, 1907, Gold Medals for tea and coffee (highest honors obtainable).

Amsterdam Exhibition, 1908, Grand Prix and Gold Medal for tea.

San Francisco Exhibition, 1915, Gold Medals for tea, coffee, cocoa and jelly.

San Diego Exhibition, 1916, Grand Prize for tea, coffee, cocoa and jelly.

Calcutta, India Exhibition, 1924, Gold Medal and Certificate of Merit.

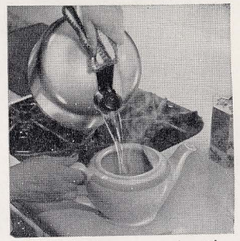
These are but a few of the many awards gained for him by his products. Perhaps the highest of these awards were the Royal Warrants issued by King Edward VII and King George V of England. These war-



Many people experience difficulty in brewing a good pot of tea. Demonstrated below are the simple but essential steps.



Tea kettle is filled with fresh cold water from tap. Best tea kettles are tin plate or copper.



Tea pot is warmed with a little boiling water. Water is then poured out and pot is ready.



Measure one heaping teaspoonful of Lipton tea for each person and one for the pot.



Tea pot is taken to stove and bubbling boiling water quickly poured over tea leaves.



The brew is allowed to stand for 5 minutes before serving.



Hot water added to pot will make sufficient tea for a second serving.



Practice of serving tea during mid-afternoon is standard procedure throughout the Lipton Company. Many companies find that time out for tea is an investment in increased efficiency.



Restaurants throughout the country are being urged to serve tea properly, preferably in a pot and made with bubbling boiling water. Frowned upon is tea bag nestling on saucer beside cup of tepid water.

rants enabled Sir Thomas Lipton to picture on all of his tea packets the Royal Coat of Arms. This is an honor competed for by many, but achieved by very few of the world's merchant houses and is awarded only to those merchants whose products are of the highest quality and whose conduct of business is beyond question.

Unquestionably one of the greatest merchants of all time, Thomas J. Lipton had in addition to ambition coupled with an industriousness given to few — an unerring sense of showmanship.

Even today, seventy-five years later, when, for three quarters of a century the most astute minds in commerce have been at work in this arena, Lipton's merchandising devises are both original and spectacular.

To advertise the hams and bacons for sale in his original shops, he paraded the fattest pigs he could find down the main streets of Glasgow with the words "Going to Lipton's" painted on their sides.

He installed "Fun House" mirrors — those concave and convex contraptions which elongate or broaden the figures of those who peer into them — outside his shops, and the crowds collected — to laugh first at themselves and then at others. Inside, he put magic lanterns which provided endless amusement for small fry, and earned the blessings — and the patronage —

of harassed mothers.

Down one side of Glasgow streets he paraded thin, cadaverous males, each of them bearing a placard which read "Going to Lipton's." Down the other side of the street, moving in the opposite direction and laughing merrily as they went, marched a group of fat, jovial and well-contented citizens ticketed "Coming from Lipton's."

Mountainous cheeses with gold sovereigns liberally scattered within became a Christmas tradition at Lipton's stores. Often weighing several tons, they would be unloaded from a Canadian boat and brought through the streets to his stores by traction engines, and — at least once — on the back of an elephant. Newspaper advertisements heralding the arrival of these mountains of cheddar "warned" all to beware of choking on the gold coins. Unafraid, crowds collected in such number that special police squads were necessary to re-establish order.

Sir Thomas Lipton was a great merchant, a great sportsman and a showman in both fields.

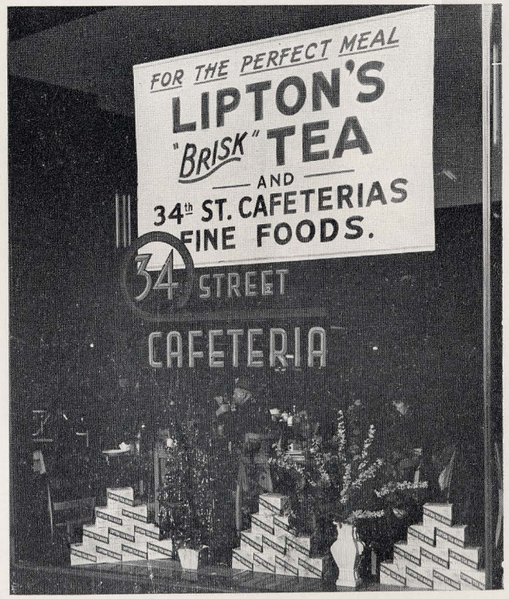
Five different times, with five different yachts named, Shamrock, Lipton tried to win the famous America's Cup from its defenders. Each time he failed. But each time he failed to win, he went up another notch in the hearts of the American people. So great was the regard in which he was held in this country, that when the last of his Shamrocks raced in 1930 there were thousands of Americans rooting for Lipton to beat the American defender. Their love for Tom Lipton even exceeded their regard for national prestige. And thousands of New Yorkers, hearing the news of the old man of 80, standing on the bridge of his yacht, the Erin, telling reporters, "It's no use, I can't win, I can't win," dipped into their pockets and made up a fund to purchase a gold loving cup, presenting it to a man who had won their hearts — for losing.

Today, there is hardly a spot on the globe where the name Lipton is not known. Across the hot sands of the Sahara, in the steaming jungles of West Africa, in the snowy silences of northernmost Lapland, the name Lipton stands for fine quality tea. Indeed, throughout the world the famous Lipton yellow label is, perhaps, the best known blend of tea.

Photos lower half pages 8 and 9; upper half pages 18 and 19; tea auction photo page 19 courtesy of London Tea Bureau.
Photos page 30 by Hi Williams.
Photos top of page 33; and Kiner and Crosby photos on page 34 courtesy of New York Tea Bureau.
Galveston plant photos and ranch photo on page 34 by John Rogers.
Other photos by Thomas Carew.



Recent addition to long line of vending machines is this one which dispenses hot tea with lemon juice, installed in some of New York's subway stations.



Restaurants, cafeterias and other eating establishments are proud to make it known that they serve Lipton tea. This promotion appeared in New York.



Ranch hands consume large quantities of tea the year around.



Ruth Ray, radio commentator, brews Lipton tea everyday at the studio.



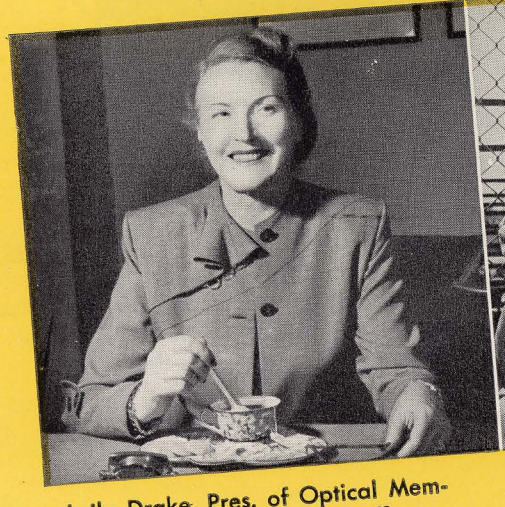
Tom Cleland, brick layer, takes a thermos of Lipton tea on all jobs.



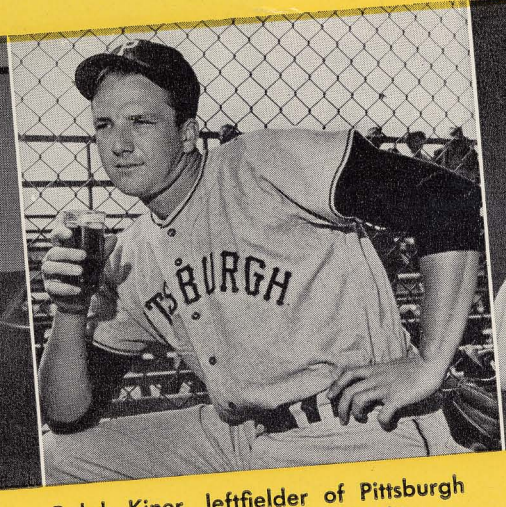
Musicians enjoy tea, particularly between sets. Kenny Gardner, featured vocalist with Guy Lombardo is at mike.



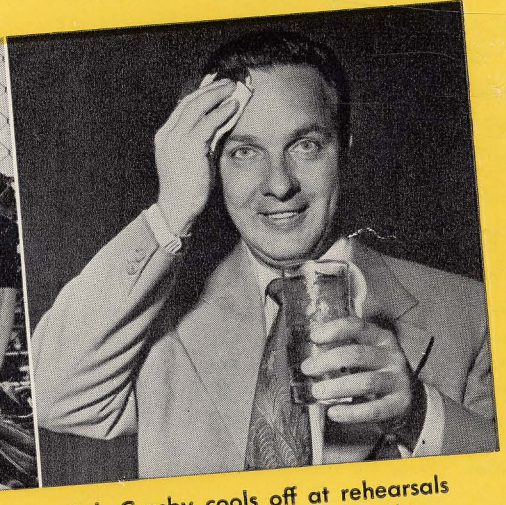
Dancer-comedienne Louise drinks tea with her partner, Harris, and Eddie Davis, right, of famous Leon & Eddie's.



Leila Drake, Pres. of Optical Membership Plan, drinks tea at office.



Ralph Kiner, leftfielder of Pittsburgh Pirates, finds iced tea refreshing.



Bob Crosby cools off at rehearsals with a tall, frosty glass of iced tea.

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